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# An Examination Of Destination Choice Behavior Using Meme Maps, Images and Decision Making Styles

Hilmi Atahan Atadil  
*University of South Carolina*

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AN EXAMINATION OF DESTINATION CHOICE BEHAVIOR  
USING MEME MAPS, IMAGES AND DECISION MAKING STYLES

by

Hilmi Atahan Atadil

Bachelor of Arts  
Yasar University, 2009

Master of Arts  
Dokuz Eylul University, 2011

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Accepted by:

Ercan Turk, Major Professor

Fang Meng, Committee Member

David A. Cárdenas, Committee Member

Pelin Pekgun, Committee Member

Lacy Ford, Senior Vice Provost and Dean of Graduate Studies

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## DEDICATION

I dedicate my dissertation work to my wonderful mother, Reyhan, who stood by me through this adventure. Her constant love and support carried me through this process. I express an exceptional appreciation for her understanding, patience, care and contribution to my personal growth and education. Thank you so much for inspiring me to pursue my dreams.

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I also would like to thank my committee members, Dr. Fang Meng, Dr. Pelin Pekgun, and Dr. David A. Cárdenas, who were all very generous with their time, expertise and patience. Thank you all for agreeing to serve on my committee and for leading me through this journey. I am forever grateful for your support and encouragement. I would also like to thank my friends and colleagues for their moral support.

## ABSTRACT

The purpose of this dissertation is to examine the destination choice behavior of tourists by using meme maps, images and decision making styles. The current article-based dissertation entails three separate studies that utilized data collected from Chinese, Arab, Russian and German tourists. The first article included within this dissertation assesses the perceived importance of the attributes that form destination images based on general vacation experiences and opinions of tourists and compares the expected performance of destination attributes of Turkey in attracting tourists from its emerging markets (like China as well as Arab countries) using modified version of Importance-Performance Analysis.

The second article identifies tourist segments using a factor-cluster approach based on travel Decision Making Styles (DMS) of individuals, and profiles tourist segments and identifies likely differences between these segments using a series of variables such as tourism involvement, destination images and demographic characteristics. The third and the major article of the dissertation advances and transfers the knowledge of Memetics science into the field of tourism and hospitality by creating meme maps of a major tourism destination within Turkey.

Versatile findings of the three studies advance the theoretical understanding of the decision-making behavior of tourists. Moreover, these findings create new knowledge in tourism by reconceptualizing and refining constructs such as memes, DMS and tourism

involvement. Findings also provide invaluable practical management information for destination management organizations (DMOs), and the tourism and hospitality industry. More specifically, the first article verifies that different tourist segments can attach different levels of importance and performance to the perceived destination image of the same destination. Specific practical implications were recommended for the Turkish destination management organizations that want to generate tailored marketing strategies for emerging markets. Moreover, while the second article validates the efficacy of the Consumer Involvement Profile, it concludes that there are attitudinal differences among the DMS tourist segments towards destination image and tourism involvement. Positioning strategies were developed based on the identified key characteristics of the obtained tourist segments. Lastly, the major article of the dissertation also provides significant theoretical and practical implications. There is no certain and well-accepted methodology and statistical procedure to generate meme maps in the tourism and hospitality field. Thus, the major article includes explanation of the employed methodology and statistical procedures in detail to guide the future research on Memetics in the field.

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## CHAPTER 1

### GENERAL INTRODUCTION

International Association of Scientific Experts published the first tourism journal exploring the Tourism and Hospitality (T&H) Research, the *Tourism Review*, in 1946 in Switzerland (Goeldner & Ritchie, 2012). Since then, there has been a growing academic interest for T&H Research. During this 70 years of research, a variety of terms, concepts and models were identified by researchers in order to theoretically develop T&H research. One of the most important and researched concepts during this 70 years of T&H research is travel decision-making (i.e., destination choice, vacation decision-making). Researchers in consumer behavior developed several theories to explore the decision-making behavior concept. Consumer behavior research was mostly under the influence of the Information Processing Theory (Bettman, 1979) until the mid-1980s. Based on this theory, consumers go through five main steps during a decision-making process (i.e., need recognition, search for information, evaluation of alternatives and selection, purchase, post-purchase processes). This theory is still being used by the tourism researchers who support a sequential decision-making process (e.g., Kotler, Bowen, & Makens, 2014).

Nevertheless, tourism decision-making models are almost entirely based on the three grand models of consumer behavior: Consumer Decision Process (Nicosia, 1966), Consumer Behavior (Engel, Kolat, & Blackwell, 1968) and Buyer Behavior

(Howard & Sheth, 1969). According to Gilbert (1991), while these grand models consider consumer behavior as an ongoing decision-making process, they agree that buyers look for, assess and save information in their minds (Sirakaya & Woodside, 2005). These grand models of consumer behavior enabled the generation of foundational models of travel decision-making; for example, two widely used prominent models by Um and Crompton (1990) and Woodside and Lysonski (1989). More specifically, Um and Crompton (1990) claimed that travel decision-making is a process that consists of three stages, namely, awareness set, evoked set and destination selection. Awareness set refers to all ideal travel destinations that an individual might think of, whereas the evoked set consists of those travel destinations that are more reasonable considering one's situational constraints such as time and money. While the former is formed through passive information from the external environment, the latter is developed by the active information that originates from family, friends and past experience. Authors concluded that their theoretical model was very helpful in highlighting the critical role of attitudes in the travel decision-making process. On the other hand, Woodside and Lysonski (1989) proposed that travel decision-making is a categorization process of destinations that influences tourists' destination preferences, intention to visit and final choice. Authors claim that mental categories (e.g., inert set, inept set) form a tourist's destination awareness. For example, inert set refers to brands that an individual has neither a positive or negative assessment, whereas the inept set is formed of brands to which an individual has attached a negative assessment. Moreover, the destination awareness of a tourist determines affective associations which are positive or negative evaluations regarding a

particular destination. These affective associations influence the final choice through preferences and intention to visit.

These and other foundational models of travel decision-making generally postulate that tourists go through a funnel-like selection procedure that gradually narrows choices to the best alternative among all available alternatives. Moreover, these models support that tourists are rational and utilitarian decision-makers with high-involvement due to the high perceived risk in the travel decision-making process. More recent travel decision-making studies, however, paint a different picture; they illustrate travel decision-making processes as dynamic, complex, temporal and contingent processes that include an ongoing evolution during the period of travel planning (e.g., Choi, Lehto, Morrison, & Jang, 2012; Dellaert, Arentze, & Horeni, 2014; Han & Ryu, 2012; Hernández-Méndez, Muñoz-Leiva, & Sánchez-Fernández, 2015; Jeng & Fesenmaier, 2002). Sirakaya and Woodside's (2005) qualitative meta-analysis of decision-making studies revealed that the previously mentioned funnel-like procedure is influenced both by sociopsychological factors (i.e., motives, values, attitudes) and non-psychological factors (i.e., time, pull factors, marketing mix). Nonetheless, how a tourist narrows down the large number of alternatives to choose the final destination and which principles are being used during this procedure are still largely unknown. Furthermore, the relative importance of each factor that influences travel decision behavior has never been fully explored in tourism research (Hong, Kim, Jang, & Lee, 2006).

A recent study by Martin and Woodside (2012) revealed that a funnel-like procedure concept has at least two flaws in its application to travel decision-making. The first flaw is that a travel decision is not a single decision, and it includes a range of sub-

decisions related to destination, transportation mode, accommodations, timing, key activities and budget (Choi et al., 2012; Dellaert et al., 2014; Maser & Weiermair, 1998; Stienmetz & Fesenmaier, 2014). The second flaw is that the majority of consumer decisions are made under limited rationality. For example, Zaltman (2003, p.51) claimed that only five percent of a person's thinking is highly conscious, and the remaining 95 percent is convinced by the decision of the conscious percentage. Even though there have been many empirical attempts to conceptualize travel decision-making behavior, there still remains room for improving the theoretical understanding for this critical concept. Therefore, the overall objective of the current dissertation is to contribute to the theoretical understanding of the decision-making behavior of tourists.

The nomological network chart illustrates the relationships of the constructs that are under investigation and the connection of the three articles in the current dissertation study (Figure 1.1). Major constructs that are under investigation are Perceived Destination Image, Meme Maps, Decision Making Styles (DMS) and Tourism Involvement. Destination image, as a concept that was initially introduced into tourism research by Hunt (1971), plays a significant role in destination choice behavior in the foundational travel decision-making models (e.g., Baloglu & Brinberg, 1997; Sonmez & Sirakaya, 2002; Um & Crompton, 1990; Uysal & Jurowski, 1994). Most of the tourism researchers agreed that the construct of destination image is multi-dimensional and requires future research due to its importance in destination choice and tourist satisfaction (e.g., Baloglu & Brinberg, 1997; Crompton, 1978). While cognitive and affective dimensions of the destination image are well-accepted by researchers, there are also many sub-dimensions of this critical construct. For example, an individual's accessibility

to information (e.g., meaningful information about the destination) and resources (e.g., destination) mostly determine the perceived destination image. Moreover, there is always an uncertainty and corresponding risk in travel decision-making due to the generic nature of tourism products and services (e.g., intangibility, perishability). Therefore, psychological characteristics such as credibility and quality become more important in the destination image (Echtner & Ritchie, 1993). Nghiêm-Phú (2014) synthesized image studies in tourism research and categorized image as perceived image - reflected by tourists, and projected image - desired by various tourism stakeholders. We focus solely on the perceived destination image in the current dissertation study. Especially, the first article of the dissertation includes an applied research to evaluate the perceived destination image.

The concept of meme maps is also vital for assessing the decision-making behavior of tourists. Indeed, cognitive psychology and marketing research consider Memetics as a new paradigm to better understand decision-making in individuals. Memetics, the research area of meme maps, does not support that an individual is completely rational during the decision-making process either, and claims that the unconscious part of the mind also plays a significant role in the decision-making (Marsden, 1998). Even though Memetics has originated from Computer science (e.g., Quillian, 1968) and Cognitive Psychology (e.g., Collins & Loftus, 1975), it has a strong theoretical foundation in the branding, more specifically, in the Consumer-based brand equity research area. Consumer-based brand equity has two schools of highly-influential conceptualizations that were proposed by Aaker's (1991) and Keller's (1993) seminal studies. In Keller's (1993) conceptualization, brand knowledge, stored in the minds of the

consumers, was not only the most critical component for brand equity, but also the most valuable marketing asset of an organization. Furthermore, brand knowledge was formed by brand awareness and brand image in this foundational conceptualization. Keller (1993, p.3) defined brand image as “perceptions about a brand as reflected by the brand associations held in consumer memory”. Based on this definition, in the tourism research context, one can claim that destination images and destination brand associations or meme maps are highly-related concepts. According to Keller’s (1993) conceptualization, the concept of meme maps has three dimensions which are Favorability, Strength and Uniqueness. Krishnan (1996) also included Origin as the fourth dimension in his seminal study, and claimed that meme maps can be measured through these and similar dimensions. Accordingly, we perform an applied research to adopt Memetics into tourism research within the DI concept, and to the best of the authors’ knowledge, for the first time in Tourism and Hospitality Research in the major manuscript of the current dissertation.

Decision Making Styles (DMS), the mental positioning of consumers in making decisions, are critical for the decision-making process as well (Durvasula, Lysonski, & Andrews, 1993). The perceptions, attitudes and habits of the consumers, as well as their final decisions, are under the influence of the DMS. Moreover, the previously mentioned generic nature of tourism products does not only make decision-making behavior unforeseeable, but also makes the concept of DMS more important. Understanding the role of DMS and its influence on the critical factors of decision-making behavior, such as destination image and tourism involvement, can provide a clearer picture of the decision-making process for the tourism researchers. As a concept that has its roots in the social

psychology discipline, tourism involvement can be considered as the psychological state of motivation, arousal or interest between a tourist and tourism goods, as well as, services for a certain period of time (Havitz & Dimanche, 1990; Yeh, 2013). While tourism literature claims that tourism involvement and destination image are highly-related concepts, there is limited research that assesses the influence of tourists' DMS on these critical factors of decision-making behavior. Therefore, the third manuscript includes a market segmentation study by utilizing DMS and evaluating its effect on the destination image and tourism involvement. Short summaries of the articles that form the current dissertation are provided in the next section. These summaries are purposely brief, as each study contains its own abstract, introduction, literature review, methodology, and detailed presentation of the methods and results. In the current dissertation, the terms of "tourists" and "traveler" are used interchangeably.

### **1.1 Dissertation Articles**

The first article included within this dissertation, *An analysis of destination image for emerging markets of Turkey*, aims (1) to assess the perceived importance of the attributes that form the destination image based on the general vacation experiences and opinions of travelers and (2) to compare the expected performance of Turkey's attributes in attracting travelers from the emerging markets (i.e., China as well as Arab countries) using Importance-Performance Analysis. 426 prospective Chinese and Arab travelers were interviewed with structured questionnaires in the data collection process of this article. Emerging markets have become critical for Turkey since the European tourism market does not provide sufficient profits to the tourism industry in Turkey. Based on the study findings, valuable practical implications were recommended for the Turkish

destination management organizations that want to generate tailored marketing strategies for emerging markets. Moreover, theoretically, this study evaluates the efficacy of the IPA technique by only concentrating on perceived importance and expected performance measures. Findings also verified that different segments can attach different levels of importance and performance to the perceived destination image of the same destination. Therefore, research in this area should be an ongoing process. More specifically, future research should take the perceived destination image of other emerging markets into consideration and evaluate them through structural equation modelling techniques to obtain new insights.

The second article, *Exploring the Dark Side of the Decision Making Construct: Styles*, aims (1) to identify and verify traveler segments using a factor-cluster approach based on the travel Decision Making Styles (DMS) of individuals, and (2) to profile segments and identify differences, if any, between traveler segments with respect to a series of psychographic and attitudinal characteristics such as tourism involvement, destination images and demographic characteristics. Another phase of the data collection process that was performed for the previous article provided the data for the second article. Thus, a market segmentation study based on the DMS was performed on the 426 travelers. Even though a noticeable number of tourism studies claim strong association between destination image and tourism involvement, there is quite limited study that evaluates how these critical variables can be effected by individuals' DMS. Performed segmentation studies revealed three traveler segments with different DMS orientations: the Rational, Adaptive and Daydreamer Decision-makers. Identified key psychographic and attitudinal characteristics of these segments enabled the recommendation of tailored

marketing strategies for the destination management organizations. While this study validated the efficacy of the Consumer Involvement Profile (Laurent & Kapferer, 1985), findings also suggested that the tourism involvement construct demonstrates a multidimensional and unstable structure formation in different tourism contexts. This article suggests that other constructs that impact the associations among DMS, tourism involvement and destination image should be further examined in future research.

The third article included within this dissertation, *Destination Neurogenetics: Creation of Destination Meme Maps of Tourists*, is a pioneering study that adopts Memetics to tourism research. Some researchers consider Memetics as a means of explaining the compulsive behavior of yawning (e.g., Bloom, 2000). When an individual yawns in front of other individuals, this certain behavior often spreads to the others naturally and imitates itself while spreading. Yawning behavior becomes irresistible in cases of certain cues being presented to the individuals. Memetics engineers can also present certain cues in order to make marketing messages immortal by generating meme maps. More specifically, tourism marketing researchers can identify and dismantle how tourism and hospitality brands are positioned in the minds of current and prospective tourists by creating meme maps. They can discover the strong, positive and negative memes that form the overall brand meaning (identity). According to Marschall (2012), when someone searches the memory word as a key word in Annals of Tourism Research, which is the most cited journal of the tourism and hospitality industry, the Annals subject index yields almost no results. In addition, to the best of author's knowledge, there is no research that attempts to apply the knowledge of Memetics into tourism research. Based on the previous discussion and previously explained Keller's (1993) conceptualization,

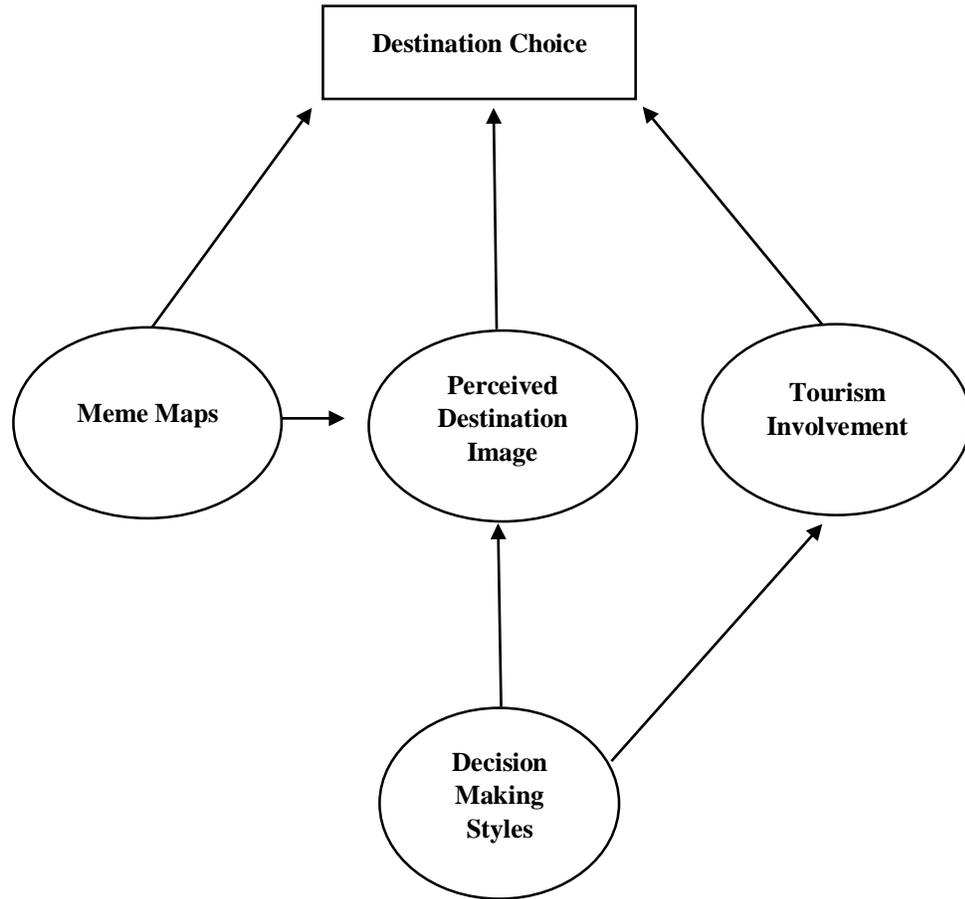
the purpose of the third article is twofold: (1) to identify the overall Destination Image Meme Maps (DIMMs) of Antalya, Turkey and their favorite tourism destination, and (2) to identify and evaluate the similarities and differences in the structures of the previously generated two categories of DIMMs. The data regarding the current study was gathered from two samples consisting of 272 Russian and 262 German tourists visiting a medium-sized city (i.e. Antalya) located in the south region of Turkey. To gather the data, interviews along with self-administered surveys were used for both samples. The data is analyzed via IBM SPSS Modeler 16 Text Analytics and IBM SPSS Statistics 22 software. Specifically, the text analytics feature of IBM SPSS Modeler allowed the identification of meme maps. Virtual representation of the brand associations for a tourism destination demonstrates the most important memes that generate the meme maps for this particular tourism destination. For example, a meme map for Antalya as a tourism destination could be formed by the brand associations created through the relationships among the following memes: Mediterranean Sea, Turkish Hospitality, Nature, Sun, Architecture, Anatolian Culture, Nightlife and Turkish Tea. Turkish tourism organizations might use these particular and many other strongly associated memes in the creation of marketing plans and product positioning strategies. These plans and strategies enable this specific tourism destination to have an increasing number of tourists. A negative node that is formed by several negative sub-nodes can also be modified to generate a more positive overall meme map. The study provided important theoretical and practical implications into the body of T&H knowledge using the Theory of Spreading Activation and Symbolic Interaction Theory as guiding conceptual frameworks.

## 1.2 Definitions

For reader convenience, some of the numerous terms used within this dissertation are defined in this sub-section:

- Emerging markets: In the context of tourism research, one can consider emerging markets as emerging source and destination markets that also carry the connotation of emerging economy in these markets or countries.
- Importance-Performance Analysis (IPA): A research tool to identify and differentiate the strengths and weaknesses of destinations. It employs two crucial criteria that tourists use in their travel decision-making, which are the importance and performance of the destination attributes.
- Decision Making Styles (DMS): Mental orientations describing how consumers make choices (Durvasula, Lysonski & Andrews, 1993, p.56).
- Tourism Involvement: A psychological state of motivation, arousal or interest between a traveler and tourism activities, destinations or related equipment for a certain time (Havitz & Dimanche, 1990; Yeh, 2013).
- Meme: A unit of information that represents our perceptions regarding real (or unreal) world entities.
- Meme map: A generic network which includes memes representing information items (semantic entities) and associations between these memes that express relationships.

### 1.3 Tables and Figures



**Figure 1.1** Nomological network chart

## CHAPTER 2

### AN ANALYSIS OF DESTINATION IMAGE FOR EMERGING MARKETS OF TURKEY<sup>1</sup>

#### 2.1 Abstract

The purpose of this study is twofold: (1) to assess the perceived importance of the attributes that form the destination image based on general vacation experiences and opinions of travelers and (2) to compare the expected performance of Turkey's attributes in attracting travelers from the emerging markets (i.e., China as well as Arab countries) using Importance-Performance Analysis. The data was gathered from a sample of 426 prospective Chinese and Arab travelers during two prominent travel expositions in Dubai and Shanghai using face-to-face interviews with structured questionnaires. Comparative factor analysis and two generated Importance-Performance Analysis grids for each sample provided important insights into the perceived destination image of emerging markets. More specifically, study findings provide valuable practical management information to destination management organizations in Turkey that want to design tailored marketing strategies for emerging markets. Further practical and theoretical implications are discussed in detail.

Keywords: Emerging markets, destination image, importance performance analysis, destination marketing, destination attributes, Chinese travelers, Arab travelers, Turkey

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## 2.2 Introduction

In an era of fierce competition among destinations to increase the number of visitors, emerging markets play a critical role in the development of the national tourism industry. Taleb Rifai, the UNWTO Secretary-General, stresses that the growth in tourism demand will continue to be led by emerging markets such as China (UNWTO, 2014a). For instance, China is currently ranked fourth in the top destinations lists for international tourist arrivals and tourism receipts (UNWTO, 2014b). Naturally, many Destination Management Organizations (DMOs) and researchers from all around the world started concentrating their research efforts on understanding emerging markets. Although research related to the emerging markets is still in its infancy, we have seen a rapid increase in the number of papers published that explore the behaviors of emerging markets (e.g., Jiang, Scott, & Ding, 2014; Lee & Lee, 2009). Of course, there remains room for exploring and enhancing models related to perceived images, decision-making processes and behaviors. So far, we know that the perceived Destination Image (DI) of travelers explains much of the error variance in the decision-making models of travelers (e.g., Dann, 1981; Sonmez & Sirakaya, 2002; Um & Crompton, 1990; Uysal & Jurowski, 1994). Destinations that want to attract more travelers from emerging markets need to assess the perceived DI of their prospective travelers. Conversely, tourism research attempts are quite limited in the evaluation of travelers from emerging markets in regard to the destination attributes in the context of DI. Moreover, tourism researchers underline the need for further research on destination attributes due to the fact that various market segments have different perceptions of these attributes (e.g., Caber, Albayrak, & Matzler, 2012).

Turkey has become a very competitive tourism destination for the last two decades. Turkey's tourism industry has started to advance since the early 1980s. The industry is now one of the major sectors of the country's economy, contributing remarkably to its gross national product (Kozak, Uysal, & Birkan, 2008). According to the World Tourism Organization's Tourism Highlights Report, Turkey ranked sixth and twelfth in the World's top international tourism destinations based on tourist arrivals and tourism receipts, respectively (UNWTO, 2014b). Turkey was visited by almost 38 million tourists in 2013, according to this report. Furthermore, Business Monitor International (BMI) states that the tourism industry in Turkey exhibits signs of healthy growth. BMI forecasts that tourist arrivals will increase by 6.5 million between 2015 and 2018 (BMI, 2015). This successful management of the tourism in Turkey can be positively associated with the increasing promotion and marketing strategies of the Ministry of Culture and Tourism (MCT) and DMOs for the emerging markets. Karamustafa (2000) interviewed major Turkish tourism organization managers and owners in his study. These personal interviews indicated that the European tourism market did not provide any profits to the tourism industry in Turkey. This could be the reason for the MCT's strategic decision to concentrate on emerging markets (Sirakaya, Uysal, & Yoshioka, 2003) such as China and Arab countries.

Emerging market, as a term, was first introduced in early 1980s by economists (Barros-Platiau & Orsini, 2014). Arnold and Quelch (1998) stated that while there is no common definition of emerging market, there are several criteria for a country's economy to be considered as an emerging market economy. Some of these criteria are rapid pace of economic development, stability of a free-market system and economic liberalization

supported by government policies. In the context of tourism research, we can consider emerging markets as emerging source and destination markets that also carry the connotation of emerging economy in these markets or countries. Turkish tourism officials, in their five-year tourism master plan consider China and Arab countries as their emerging source markets since many of the current tourists from Western Europe have visited Turkey multiple times. China and Arab countries are growing source markets for the Turkish tourism industry. China is by far the number one tourism source with an international tourism expenditure of US\$129 billion (UNWTO, 2014b). However, the number of Chinese travelers who visited Turkey in 2013 was almost 139,000 (MCT, 2013). On the other hand, Arab travelers are more willing to travel and, especially, to spend their money in Turkey. For instance, travelers from Saudi Arabia spent 93.7 million euros with a 72% growth rate in 2014, based on the credit card spending database of Visa Europe. Thus, Saudi Arabia ranked fifth in the list of top source markets with the highest tourism expenditures in Turkey (Fortune, 2014). Growth in tourism demand is and will be controlled by the emerging markets (UNWTO, 2014a). There is a research gap for the emerging markets studies in the tourism research. The *Journal of Hospitality and Tourism Management* even invited researchers to work on this area with a special issue, titled “Expanding the Knowledge Base on Emerging Markets,” in 2013. In the current study, we focus on China and Arab countries as the emerging source markets of Turkey.

We decided to undertake this study because there is an obvious research gap regarding emerging markets in tourism research. Thus, the purpose of this study is twofold: (1) to assess the perceived importance of the attributes (or DI items) that form

the DI based on general vacation experiences and opinions of travelers and (2) to compare the expected performance of Turkey's attributes in attracting travelers from the emerging markets (i.e. China as well as Arab countries) using Importance-Performance Analysis (IPA). IPA, which is firstly introduced by Martilla and James (1977), has become a very popular and effective research tool to identify and differentiate the strengths and weaknesses of destinations. It employs two crucial criteria that tourists use in their travel decision-making, which are the importance and performance of the destination attributes. In the current study, we focused on two specific types of importance and performance measures: a) perceived importance and b) expected performance of prospective tourists from the emerging markets for a destination. Many researchers agreed that IPA is a very powerful technique to generate effective marketing strategies (Abalo, Varela, & Manzano, 2007; Chu & Choi, 2000; Deng, 2007; Lai & To, 2010; Martilla & James, 1977; O'Leary & Deegan, 2005; Oh, 2001). Due to the highly competitive nature of the tourism industry, Turkey seeks to increase its market share in emerging markets. Our study findings provide valuable practical managerial information to DMOs in Turkey that want to design tailored marketing strategies for Chinese and Arab travelers.

This research is conducted with the epistemological view of objectivism. In this view, things exist as meaningful entities independent from consciousness and experience that they have truth and meaning residing in them as objects and that careful research can reach objective truth and meaning (Crotty, 1998). Since variables and their relationships can be identified and measured, the authors of the current study approach the topic of interest with positivism as a theoretical perspective. Theoretically, the study explores and

tests the efficacy of the IPA technique in analyzing the perceived DI by solely focusing on perceived importance and expected performance measures. Further practical and theoretical implications are discussed using behavioral decision-theories as the guiding conceptual framework.

## **2.3 Literature Review**

### *2.3.1 Destination Image Concept*

As a concept that is introduced by Hunt (1971) into the tourism literature, Destination Image (DI) has often been a highly investigated tourism research subject (e.g., Fakeye & Crompton, 1991; Sirgy & Su, 2000). It is well-supported that DI is a major concept in predicting travel decision-making and in identifying, as well as, differentiating destinations through positive image (e.g. Gartner, 1993; Sonmez & Sirakaya, 2002; Um & Crompton, 1990). Destinations often compete with each other based on the perceived DI stored in the minds of the travelers (Baloglu & Mangalolu, 2001; Woodside & Lysonski, 1989). Crompton (1979, p.18) defined DI as “the sum of beliefs, ideas, and impressions that a person has of a destination.” Tasci and Kozak (2006) stressed that the terms *image* and *brand* are being used interchangeably in the tourism literature. This issue raises the need to differentiate these associated concepts by defining the brand as well. Brand could be a name, term, sign, symbol, design or mix of all these elements that profile and distinguish a good or service from competing ones (Kotler, 1997). However, the life cycle of a brand depends on its image stored in the minds of current and prospective customers (Cai, 2002). Based on this rationale, in the current study we will also evaluate the Turkey brand by investigating its perceived DI in the minds of travelers from emerging markets.

Majority of the tourism researchers agree that DI is composed of at least two components that are cognitive and affective image (e.g., Baloglu & McCleary, 1999; Echtner & Ritchie, 1993; Pike & Ryan, 2004). While the former reflects a traveler's ideas and beliefs about the destination attributes, the latter represents a traveler's feelings about the destination and the experiences gained at this destination. Furthermore, researchers agreed that the formation of affective image depends on a traveler's cognitive image which makes these two separate components also interrelated (Baloglu & McCleary, 1999; Gartner, 1993; Pike & Ryan, 2004). In further conceptualizations of the DI, researchers proposed different components for this highly researched concept. For instance, Gartner (1993) proposed that the DI is formed of cognitive, affective, and conative components. Conative component is more concerned with the likelihood of a destination selection based on the cognitive and affective images (Pike & Ryan, 2004). Moreover, Echtner and Ritchie (1993) claimed that the DI is formed of attribute-based (e.g., climate, friendliness of the people) and holistic (e.g., mental pictures) components. Authors further stated that each of these main components includes functional (or measurable) and psychological (or abstract) characteristics. Previously mentioned conceptualizations of DI were successfully adopted in variety of the tourism studies (Nghiêm-Phú, 2014). Furthermore, many tourism studies verified the multidimensional structure of the DI construct and the existence of an overall image that is formed by cognitive and affective image (Beerli & Martín, 2004; Sonmez & Sirakaya, 2002). We focus on the cognitive, affective and overall DI dimensions in the current study. Researchers also discovered a variety of sub-dimensions of the DI construct. For instance, Sonmez and Sirakaya (2002) distinguished six sub-dimensions of the affective

image (e.g., Socioeconomic and Cultural Distance) and four sub-dimensions of the cognitive image (e.g., Relaxing Effect). More recently, Kim and Perdue (2011) investigated the impact of cognitive and affective image dimensions on destination attractiveness. The authors discovered two cognitive image (e.g., Quality of Skiing) and three affective image sub-dimensions (e.g., Crowding). As can be seen, the nature of DI concept is complex and multiple. Gallarza, Saura and García (2002) stated that each author aiming to conceptualize the DI tends to have a different DI definition. This situation causes the DI to be a complex concept. Moreover, authors stated that there is a large variety of components or sub-dimensions that form the DI concept. One major factor that conditions this multiple nature of DI concept is the image formation process (Gallarza et al., 2002).

Image formation can be considered as a creation of a mental representation of a destination depending on the information cues transferred by image information agents (or information sources) and personal factors (Gartner, 1993; Gunn, 1972; Tasci & Gartner, 2007). Introduced by Gunn (1972) and categorized by Phelps (1986) there are two types of information sources (or image formation agents) which are primary and secondary information sources. The primary image is constructed through internal information such as personal experience and one's degree of experience with the destination by actually visiting it (Beerli & Martin, 2004; Phelps, 1986). On the other hand, secondary image is generated by the external (or secondary) information sources that also form the induced and organic image. Induced image is obtained from commercial tourism information sources such as tour operators and official web sites of the tourism companies. Moreover, the non-commercial information that a person collects

from that person's friends and family members who were either requested or volunteered to give information regarding destination forms the organic image (Beerli & Martin, 2004; Gartner, 1993). Organic and induced image play a critical role in the formation of the secondary image before the actual visitation of a destination. The current study mostly concentrates on the secondary image of the travelers who had not visited a particular tourism destination.

The construction of the DI in the mind of a traveler mostly depends on the traveler's accessibility to information (e.g., meaningful information about the destination) and resources (e.g., destination). Long ago, Burgess (1978) claimed that the variety, amount and quality of the information that is available to a person tends to determine the image that will be constructed in that person's mind. Burgess (1978) further stated that the perceived DI is mostly generated by the available information to an individual who does not have any personal experience with a destination. Many other researchers (e.g., Beerli & Martin, 2004; Gartner, 1993) also highlighted the importance of available information for the construction of the DI. More recently, Assaker (2014) concluded that accessibility (e.g., prices and availability of information) is one of the factors that has a greater influence on the DI. Furthermore, tourism literature also proposes that easy access to a destination is a critical factor in the formation of the DI. For instance, Chi and Qu (2008) identified the underlying dimensions of DI in their study. Authors reported accessibility (e.g., easy access to the area) as one of the important underlying dimensions of DI. Travelers might have a more favorable DI for a particular destination that promises easy access and problem free vacation arrangements. Further studies also confirmed that

the accessibility to a destination is a critical factor for the DI (e.g., Wang & Davidson, 2010).

Crompton (1978) stated that tourism destination choice is a function of the interface between time, money, skills and the DI. Travel decisions include a high amount of risk because of the special characteristics (e.g., inseparability, perishability) of tourism products (Sirakaya & Woodside, 2005). Jeng and Fesenmaier (2002) indicated that risk is one of the essential components of a person's cognitive system. They stated that a consumer who wants to preserve the current status quo prefers not to choose risky travel alternatives during the travel decision process. Moreover, March (1991) stated that a decision is made by selecting the alternative with the highest expected value among all the alternatives. He further claimed that the focus on the expected value of purchasing a product might be moderated by the perceived risk. Since most of the tourism products cannot be owned rather experienced at a particular destination, in the tourism context, the expected value can also be considered as the expected or perceived quality of experiencing the destination attributes. For instance, Echtner and Ritchie (1993) stated that DI can be rated based on commonly considered psychological characteristics such as expected quality of service. More recently, Sparks and Pan (2009) evaluated values of prospective Chinese outbound travelers regarding destination attributes. Authors reported that quality infrastructure was one of the five destination attributes that was rated as most important. Based on this discussion, we can propose that credibility and quality are two other factors or sub-dimensions that influence the DI, and correspondingly, travel decisions of the travelers.

As mentioned before, variety of sub-dimensions of the DI were proposed and successfully identified by tourism researchers in the previous research. For instance, Beerli and Martin (2004) presented a detailed list of dimensions and sub-dimensions that determine the perceived DI based on their literature review. Our purpose for investigating the dimensions of the DI is not performing another image study which verifies the formerly identified image dimensions; rather, we aim to evaluate the perceived importance and expected performance of attributes and corresponding image components (or factors) that form the DI of travelers from emerging markets.

### *2.3.2 Research Trends in Destination Image*

The DI concept through an IPA approach was investigated in different tourism studies by several researchers. For instance, Joppe, Martin and Waalen (2001) evaluated tourists' perceptions of products and services offered in Toronto via employing a comparative importance-satisfaction analysis by origin of visitors. Their study sample consisted of visitors who were actually visiting Toronto. However, around 92% of these visitors were residing in Canada and the United States. Thus, their study identified the perception differences mostly between American and Canadian visitors. More recently, Caber et al. (2012) aimed to obtain importance-performance scores for the general destination attributes to identify the perception differences toward these attributes among four specific market segments (i.e., German, Russian, British and Dutch travelers). Authors employed Abalo and his colleagues' (2007) revised IPA framework. Another image study was conducted by O'Leary and Deegan (2005). The authors analyzed the image of Ireland as a tourism destination in France. The importance of the destination attributes was compared with the previsit and postvisit performance ratings of these

attributes. Their study sample was composed of French tourists visiting Ireland. Furthermore, Lee and Lee (2009) evaluated the image of Guam by Korean and Japanese travelers using the IPA approach in their cross-cultural comparison study. While none of the previously mentioned DI studies performed a factor analysis on the destination attributes, Lee and Lee identified eight sub-dimensions of DI (e.g., Safety and Cleanliness), and generated the IPA grids by using these dimensions. Their study sample consisted of Korean and Japanese tourists actually visiting Guam.

Yüksel and Yüksel (2001) performed a comparative performance analysis of destination attributes based on tourists' perceptions of Turkey relative to other tourist destinations. Their study concentrated on tourist satisfaction rather than DI, and did not include an IPA framework. The authors collected the data from travelers visiting Turkey, most of whom were British travelers (80%). Furthermore, Okata et al. (2007) applied the IPA to Japanese senior travelers visiting Hawaii. Their study sample was composed of 73 Japanese travelers. The authors stated that the small sample size could not represent the entire population of Japanese travelers as a study limitation. Additional DI studies using the IPA approach were conducted by other tourism researchers (e.g., Lin & McDowall, 2012; Litvin & Ling, 2001; Liu, 2010). While the aforementioned studies proved to be useful in a DI study context, only a few of them concentrated on the DI perceptions of travelers from emerging markets. Furthermore, all of these studies, except Litvin and Ling (2001), evaluated the DI perceptions of travelers who actually visited and/or arrived at a destination. Litvin and Ling presented a destination attribute management model by using Bintan as an example in their study. Only one of the four segments of their study sample consisted of Singaporean travelers who had not previously visited Bintan.

However, the authors stated that Bintan is only a 45-minute ferry ride away from the south of Singapore. In the current study, the majority of the study sample consists of Arab and Chinese travelers who have not been to Turkey.

### *2.3.3 Importance-Performance Analysis*

A clear determination and measurement of the strengths and weaknesses of tourism products and attributes offered by a destination profoundly increase the odds of a destination's success (Chu & Choi, 2000). This identification of the strengths and weaknesses is an inseparable and crucial component of success in today's increasingly competitive environment. Importance-Performance Analysis (IPA) distinguishes strengths and weaknesses via employing a detailed comparison of two pivotal criteria that consumers use in their decision-making process. These criteria are the importance of the attributes and the performance evaluation of the existing offerings related to those attributes (Achterkamp, Robinson, & Moital, 2011; Chu & Choi, 2000). Tourists also use the same two criteria in their travel decision-making prior to their final decision. Therefore, there is a natural and strong bond between IPA and decision-making analysis. In the current study, destination attributes (or DI items) are considered the elements that form the perceived DI of a traveler.

IPA was introduced in Martilla and James's (1977) seminal piece, which provided a successful application of the technique to analyze the performance of an automobile dealer's service department. IPA has its roots in the multi-attribute models that were proposed during the 1970s (Chu & Choi, 2000). It is an easily-applied, low-cost, useful and widely popular technique to measure attribute importance and perceived performance to generate effective marketing strategies (Martilla & James, 1977). It provides a

simultaneous consideration of the strengths and weaknesses of a business or destination to assess and define strategies (Caber et al., 2012; Lai & To, 2010). The main assumption of this special technique is that expectations and the evaluation of the performance for products and services form the customer's level of satisfaction (Chu & Choi, 2000). IPA framework has gained popularity and been successfully applied for different research purposes in tourism and hospitality studies such as culinary tourism (Smith & Costello, 2009), health tourism (Mueller & Kaufmann, 2001), hot springs tourism (Deng, 2007), business tourism (Oral & Whitfield, 2010) and hospitality technology (Beldona & Cobanoglu, 2007).

The original IPA framework has been successfully employed by a significant amount of studies (Sampson & Showalter, 1999). However, there were also many researchers who criticized the original framework and proposed modified and extended versions of it (e.g., Abalo et al., 2007; Crompton & Duray, 1985; Deng, 2007; O'Leary & Adams, 1982; Oh, 2001). For instance, Abalo and his colleagues (2007) proposed an IPA framework in which they placed a horizontal diagonal line on the IPA grid. All the importance and performance values appearing on this diagonal line were exactly the same in that framework. In his tourism research, Deng (2007) presented another revised IPA framework in which he combined the three-factor theory concept, partial correlation analysis and natural logarithmic transformation. Furthermore, Oh (2001) evaluated the validity and reliability of the IPA. In the current study, we employed the original IPA framework that was introduced by Martilla and James (1977). We believe that the original framework is the most accepted and effectively used framework among all the

different versions of IPAs. Besides, most of the researchers and practitioners are very familiar with and agreed on the interpretation of the original IPA framework.

## **2.4 Methodology**

The data was gathered from a sample of 426 prospective Chinese and Arab travelers during two prominent travel expositions in Dubai and Shanghai using face-to-face interviews with structured questionnaires. World Travel Fair (WTF) that takes place annually in Shanghai was the first travel exposition where the data was collected. A variety of international destinations, tourist attractions and travel industry organizations are being exhibited during this leading travel exposition. More than 45,000 visitors and 570 exhibitors participated in WTF in 2014 (World Travel Fair, 2015). The second travel exposition that enabled the data collection was the Arabian Travel Market (ATM) which is staged annually in Dubai. ATM aims to increase the business potential in the Middle East by exhibiting diverse range of local and global destinations, tourist attractions, travel organizations and new airline routes. This leading travel exposition received 412 exhibitors and 26,000 visitors in 2015 (Arabian Travel Market, 2015).

Turkish Ministry of Culture and Tourism (MCT) coordinated the collection of the study data. MCT maintains tourism attachés in both Dubai and Shanghai, and keeps highly visible stands at both expositions. Trained and native-speaking Chinese and Arab tourism agents of the MCT conducted the data by interviewing 600 exposition visitors (n=300 in each country) through structured questionnaires. Each interview was lasted around 15 to 20 minutes. Those exposition visitors who approached to the MCT of Turkey stand were interviewed in the expositions. Since these visitors approached to the Turkish stand to get travel information regarding Turkey, they were interested in

traveling to Turkey at some point in the future. In addition, we asked respondents how interested they are for visiting Turkey in the questionnaire. In both expositions, majority of the respondents indicated that they were interested in traveling to Turkey. Thus, we ensured that the sampled Chinese and Arab exposition visitors were prospective travelers to Turkey. The interviews were conducted in the native languages (i.e., Chinese and Arabic) by the previously mentioned tourism agents. Furthermore, the interview questions were translated from English to Chinese and Arabic and back translated to ensure semantic consistency.

Every third person that approached to the MCT of Turkey stand was interviewed. Moreover, the data collection took part on the weekends and two days of the week during certain hours in an attempt to collect the data systematically. Our questionnaire was formed by two components: 1) Demographic information, 2) Perceived DI 24-item scale. In this scale, we first asked respondents to indicate the perceived importance of an attribute/DI item (e.g., Easy access to the destination) based on their general vacation experiences and opinions. Then, within the same scale, we asked respondents to rate the expected performance of Turkey on the same attributes that form the perceived DI of a traveler.

The analyses of the data consisted of two main steps. The first step involved performing a comparative factor analysis of the Chinese and Arab samples. In this way, we developed and compared DI scales for each sample. The analysis proceeded with calculating the perceived importance-expected performance scores of the DI items. A series of paired-sample t-tests were calculated that allowed us to compare mean expected performance scores with mean perceived importance scores of DI items for each of the

Chinese and Arab samples. This process enabled us to enhance our comparison by performing what we called gap analyses in order to create comparative IPA grids, which can prove to be useful for managers and researchers when evaluating tourists' perceived DI. Thus, in the second step of the analyses, we generated two IPA grids that demonstrate the perceived importance-expected performance grid of DI items and factors for each sample.

## **2.5 Results**

### *2.5.1 Demographic Analyses*

Demographic analyses were performed with an effective response rate ranging from 88% to 97% due to the isolated missing values in some questionnaires. This outcome was normal, since respondents were not forced to select a response for each demographic question. Table 2.1 illustrates the respondents' demographic profiles based on their country of origin. While the Chinese sample had a balanced male (46%) and female (49%) distribution, the majority of the Arab sample was male (64%). In regard to the marital status of the Chinese respondents, 114 of them were married, while 86 of them were single. Moreover, most of the Arab respondents were married (44%). Most of the Arab (54%) and Chinese (37%) respondents had bachelor degrees. We also asked respondents if they or any member of their immediate household ever traveled to Turkey on a leisure vacation or a combined business and leisure vacation. Only 67 respondents indicated that they or a member of their immediate household actually had been to Turkey.

### 2.5.2 Factor Analysis of Perceived Importance-Expected Performance Items

At the first stage of the analysis, an item analysis was performed. Thus, descriptive statistics were run to check the item level distributions for the DI scale, which consisted of 24 items in the importance level. None of the variables had a skewness or kurtosis value above an absolute 1.3 value. Moreover, all standard deviations were less than one. Based on these findings, items were considered normally distributed. The reliability of the scale was also tested and the obtained Cronbach's Alpha value was significantly high ( $\alpha=.95$ ). This obtained value allowed us to interpret the DI scale in the importance level as highly reliable. Moreover, corrected item total correlations demonstrated that there were no items with a negative value. Thus, none of the items needed to be recoded in the scale. According to Comrey and Lee (2013) and Gorsuch (1983), an ideal size for proper factor analysis is five to 10 subjects per variable. Considering the study sample and the findings related to the item analysis, our scale was appropriate for the factor analysis.

At the second stage, a factor analysis was performed by using the principal component extraction method with varimax rotation to the importance dimension of the DI scale for the total sample. This orthogonal type of rotational technique was performed to reduce the complexity of factors via increasing variance of loadings for each factor (Tabachnick & Fidell, 2001). At this stage, factor analysis was performed for the observations collected from the total sample. A cutoff point of 0.45 was established for factor loadings, and three items were removed from the 24-item scale due to cross and low factor loadings. These three items were: (1) high quality tourism infrastructure, (2) destination's commitment to preserving the destination environment, and (3)

destination's overall favorable image in the world community. Factor analysis was rerun with the same extraction and rotational techniques after removing these three items. Four factors were discovered with Cronbach's alpha values ranging from 0.76 to 0.85. These four factors explained 63% of the total variance in the model.

At the third stage, two separate factor analyses for Chinese and Arab samples were run with the same extraction and rotation methods for the generated 21-item scale. Table 2.2 presents the factor analysis results for the Arab sample and compares these results with those gained from the Chinese sample for the perceived DI scale at the importance level. The eigenvalue greater than one rule and the scree plot technique were performed to determine the number of factors. Four factors were discovered with Cronbach's alpha values ranging from 0.72 to 0.88. Almost 65% of the variance was explained in the model. While the fourth factor included two items for the Arab sample; for the Chinese sample, it was formed by three items (i.e., friendliness and hospitality of local people, high quality of services/amenities at the destination, competitive price for overall vacation relative to competitor destinations). The obtained factors are named as (1) Accessibility to Information and Resources (AIR), (2) Overall Destination Image (ODI), (3) Credibility and Quality (CQ) and (4) Competitiveness. Tourism literature related to the DI research area guided us to name these factors (e.g., Baloglu & McCleary, 1999; Baloglu, 2000; Sonmez & Sirakaya, 2002).

### *2.5.3 Perceived Importance-Expected Performance Analysis (IPA) of Destination Image Items*

A comparison of the mean perceived importance and expected performance values of the two samples for the 21-item DI scale is presented in Table 2.3. A series of

paired sample t-tests were performed to statistically compare the associated perceived importance and expected performance attributes for each sample. Three items for the Chinese sample and five items for the Arab sample had insignificant mean differences. In addition to the series of paired sample t-tests, effect size analyses were also employed to check if the gap scores were meaningful within each sample. Cohen's d-equation with the modification of pooled standard deviation (i.e.,  $d = M1 - M2 / \sigma_{pooled}$ ) was used to calculate effect sizes (Cohen, 1992). It is believed that pooled standard deviation provides a better estimate of the effect size (Coe, 2002). Since the gap scores were negative, the obtained effect sizes were also negative. While effect sizes for items ranged between -0.14 and -0.63 in the Chinese sample, the range was between -0.01 and -0.62 for the Arab sample. The interpretation of the effect sizes was made based on the absolute values. The majority of the obtained effect sizes for both samples illustrated a medium effect size, which presents an effect that is visible to the naked eye of a careful researcher, based on Cohen's effect size classification (Cohen, 1992). There were eight items illustrating a small effect size for the entire sample. These effect size analyses enabled us to state that obtained gap scores are not only statistically significant but also meaningful. At the last stage of the effect size analyses, effects sizes between the samples in the importance and performance levels were calculated. While there was only one item with a small effect size, the remaining items demonstrated a medium effect size for the whole sample. Thus, it could be claimed that the differences between samples are not only statistically significant but also meaningful.

IPA results demonstrated a negative expected performance gap for all the DI items, since the mean scores were significantly lower at the expected performance level

for each item. The findings of these analyses were plotted on two IPA grids for each sample. Both grids had four quadrants, which were concentrate here area (Quadrant 1), keep up the good work area (Quadrant 2), low priority area (Quadrant 3), and possible overkill area (Quadrant 4). While importance mean values formed the vertical axes, performance mean values formed the horizontal axes for the grids. The overall mean perceived importance and expected performance values were used to position the vertical and horizontal axes on the grids. In the case of an inadequate amount of variance in the entire mean values or a lack of normal distribution pattern for the importance mean values, median values can be used instead of mean values (Martilla & James, 1977; O’Leary & Deegan, 2005; Oh, 2001). Since we did not experience any of these issues, mean scores were employed for the IPA.

Figure 2.1 represents the importance-performance grid of the perceived DI for the Chinese sample. The grid also illustrates the distribution of the obtained Chinese sample factors. Firstly, all the items of Factor 1 (i.e., AIR) except item number 1 (i.e., easy access to destination) and item number 3 (i.e., easy access to meaningful information) appeared in Quadrant 2. Secondly, the majority of the items of Factor 2 (i.e., ODI) fell into Quadrant 3. While item number 19 (i.e., nature of setting in helping me function comfortably in my daily activities) appeared in Quadrant 1; item 10 (i.e., the overall destination experience offered “fits” my needs) is positioned on the vertical axis between Quadrant 3 and 4 for this factor. The items for Factor 3 (i.e., CQ) spread across the grid and appeared in Quadrants 2, 3 and 4. The majority of the items of Factor 4 (i.e., Competitiveness) fell into Quadrant 1.

Figure 2.2 illustrates the importance-performance grid of perceived DI for the Arab sample. The grid demonstrates the positioning of the obtained Arab sample factors as well. Similar to the first grid, the majority of the Factor 1 items appeared in Quadrant 2. Item number 7 (i.e., a good value for the money spent for my vacation experience) was the only item which fell into Quadrant 3. Furthermore, while most of the Factor 2 items appeared in Quadrant 3, the remaining three items were spread across Quadrants 1 and 2. Among these items, item number 13 (i.e., friendliness and hospitality of local people) was the only item that appeared in the keep up the good work area. The majority of the items in Factor 3 appeared in Quadrant 2. The remaining two items of this factor were item number 17 (i.e., alliance/connection with intermediaries in the tourism sector) and number 18 (i.e., high quality human resources at the destination) fell into Quadrants 1 and 4, respectively. The Factor 4 items appeared in Quadrants 1 and 3.

## **2.6 Discussion and Conclusion**

This study evaluated the perceived importance and expected performance of attributes that form the Destination Image (DI) of travelers from emerging markets with an IPA approach. In the first step of the analysis, we identified four factors through the comparative factor analysis of the DI scale at the importance level. However, the fourth factor had only one item common for both Chinese and Arab samples; therefore, this factor will not be discussed in this section. The obtained first three factors were (1) AIR (i.e., Accessibility to Information and Resources), (2) ODI (i.e., Overall Destination Image) and, (3) CQ (i.e., Credibility and Quality). The AIR factor explained almost 49% of the variance in the data. Furthermore, ODI and CQ factors explained 11% of the variance in the model.

Importance-Performance Analysis (IPA) was used in the second step of the data analysis. The original IPA method, which was developed by Martilla and James (1977), was employed for this particular analysis. Firstly, we generated the IPA grid for the Chinese sample. Most of the items of the AIR factor fell into the keep up the good work area. This indicated that while prospective Chinese tourists attach a high level of perceived importance to the AIR factor, the expected performance of Turkey for this factor is also high. The “easy access to destination” item of the AIR factor appeared in the concentrate here area. Even though Chinese tourists attach a high level of importance to this item, corresponding performance was not sufficient. Ordinary Chinese passport holders are required to have a visa to visit Turkey (GoTurkey, 2015). Moreover, an average flight duration between the capitals of these two countries (i.e., Ankara and Beijing) lasts around thirteen to twenty hours. The number of hours and travel cost might increase due to the lack of travel agreements between the Destination Management Organizations (DMOs) of each country. Issues related to the visa and transportation processes might be negatively influencing the accessibility. Huang and Hsu (2005) stated that time and money are two critical factors that influence travel decision-making. Authors also claimed that long travel distance increases the total travel cost. Therefore, money becomes a more important behavioral inhibitor that might influence the final decisions of travelers. Turkish government decision-makers and DMOs should take the required precautions to increase the expected performance of the accessibility to Turkey attribute. For instance, government can fund the advertising campaigns of the Turkish airline companies that attempt to deliver promotional messages regarding easy access to Turkey. Moreover, the “easy access to meaningful information about the destination”

item of the AIR factor fell into a possible overkill area indicating low importance and high performance scores. However, the perceived importance of this item was very close to the overall mean perceived importance value. This finding might suggest that prospective Chinese travelers still attach a considerable level of importance to this item. Sparks and Pan (2009) found that television programs are the most often used information source by the Chinese people to collect information about a destination. Turkish DMOs should use television as the communication channel to send promotional messages to Chinese target markets. For instance, a promotional message that concentrates on the abundant tourism resources of Turkey can be sent to these target markets via television. The ODI factor mostly appeared in the low priority area for the Chinese sample. Thus, it could be claimed that Chinese tourists interestingly attach low importance and performance scores to the overall DI of Turkey. The items of the CQ factor appeared in the last three quadrants for the Chinese sample. Among these items, the “a good value for the money spent for my vacation experience,” “policies/regulations favorable to tourists” and “high quality human resources at the destination” items, interestingly, were positioned on the low priority area, indicating a low performance and importance. Therefore, it could be claimed that prospective Chinese tourists tend not to attach importance to these items in their perceived DI. Only two items of the CQ factor fell into the keep up the good work area, and these items were “a good variety of activities for tourists at the destination” and “alliance/connection with intermediaries in the tourism sector.” According to Martilla and James (1977), extreme observations might be key indicators in the analysis. A visual examination of the IPA grid suggested that

extreme observations for the Chinese sample were “abundant tourism resources,” “friendliness and hospitality of local people” and “positive image” items.

The previously mentioned findings can be employed to generate further tailored marketing strategies for prospective Chinese tourists planning to visit Turkey. The attributes (i.e., DI items) that fell into keep up the good work area demonstrate the opportunities to gain and sustain a competitive advantage. For instance, AIR as a factor mostly appeared in this area. Turkish DMOs should use the attributes of this factor in their marketing campaigns, positioning approaches and promotion strategies to achieve a competitive advantage. Furthermore, the attributes that fell into the concentrate here area send a warning message to Turkish DMOs. Some of the examples for these attributes are “friendliness and hospitality of local people” and “nature of setting in helping me function comfortably in my daily activities.” Turkish DMOs should perform immediate improvement efforts for these attributes. They can push these attributes into the keep up the good work area by increasing their expected performance levels. In this way, these attributes can also become opportunities for a competitive advantage for destinations and DMOs in Turkey. Moreover, Turkish DMOs do not need to worry too much about the attributes (e.g., policies/regulations favorable to tourists) that fell into the low priority area due to the fact that no additional effort is needed for these attributes in their marketing efforts. However, they should pay close attention to the attributes that appeared in the possible overkill area. Attributes such as “commitment to provide a satisfactory vacation experience” and “prioritization of development and improvement of high-quality destination” indicate a low perceived importance compared to their high corresponding expected performance. Turkish DMOs should better allocate their

resources for these attributes. In this way, the right and sufficient amount of resources (e.g., time, human capital, financial resources) will be invested in these attributes.

Secondly, an IPA grid for the Arab sample was also generated. Once again, the majority of the AIR factor items fell into the keep up the good work area. Therefore, it could be suggested that prospective Arab tourists attach high perceived importance to the AIR factor, and the expected performance of Turkey for this factor is also high in the perceived DI of the tourists. The “a good value for the money spent for my vacation experience” was the only item of this factor that appeared in another area that was low priority. This item fell into the same area for the Chinese sample. Most of the items of ODI appeared in the low priority area similar to the Chinese sample. Thus, interestingly, prospective Arab tourists also attach low perceived importance to the overall DI, while the expected performance of Turkey for this factor is low. Two items of the ODI factor were positioned on the concentrate here area. These items were “safe and secure environment at the destination” and “competitive price for overall vacation relative to competitor destinations.” While the perceived importance of these items was high in the perceived DI, their corresponding expected performances for Turkey were not sufficient. Echtner and Ritchie (1993) considered safety as one of the psychological attributes that influence the DI. DMOs should concentrate on the safe destination promotional message in each marketing strategy that they design for prospective Arab travelers. In this way, the expected performance of safe and secure environment in Turkey attribute can increase significantly. The last item of this factor appeared in the keep up the good work area. This item was “friendliness and hospitality of local people.” About the CQ factor, the majority of its items fell into the keep up the good work area, indicating high perceived

importance and expected performance scores for the prospective Arab tourists. Among the remaining two items of this factor, “alliance/connection with intermediaries in the tourism sector” and “high quality human resources at the destination” items appeared in the concentrate here and possible overkill areas, respectively. The “high quality human resources at the destination” item was the only item which was positioned on the possible overkill area for the Arab sample. Surprisingly, Arab travelers attach relatively low perceived importance to this item compared to its perceived high expected performance for Turkey. Extreme observations for the Arab sample were “abundant tourism resources” and “high level of health and hygiene at the destination” items. The “abundant tourism resources” item was the common extreme observation that appeared in the keep up the good work area for both samples. Therefore, it could be stated that prospective Chinese and Arab tourists attach a high level of perceived importance to abundant tourism resources, while the tourists’ expected performance of this item is also high for Turkey.

The findings obtained from the Arab sample can also be used to create further tailored marketing strategies for prospective Arab tourists planning to visit Turkey. Similar to in the Chinese sample, the AIR factor presented the attributes that indicate opportunities for the creation of a competitive advantage. These opportunities should be of great interest to Turkish DMOs. At the item level, there were more attributes that fell into the keep up the good work area for the Arab sample compared to the Chinese sample. Thus, the current situation naturally indicates more opportunities for the Arab sample. The attributes that appeared in the keep up the good work area for both samples can be considered the key determinants of perceived importance and expected

performance. DMOs can focus on these key attributes to make sure that the destination is able to meet or exceed tourists' expectations. In this way, these tourists will become loyal tourists (Joppe et al., 2001). Furthermore, it is very essential that Turkish DMOs execute the required improvement efforts immediately for those attributes (e.g., alliance/connection with intermediaries in the tourism sector) that appeared in the concentrate here area. No other strategy could be more effective than pushing these attributes into the keep up the good work area. For instance, Arab travelers attached high level of perceived importance to the alliance with travel intermediaries attribute. Based on this finding, we can claim that prospective travelers to Turkey prefer using travel intermediaries (e.g., travel agencies, tour companies) for their travel planning and guiding. Previous tourism research also indicated that first-time travelers often prefer using the information obtained from travel intermediaries in their travel decision-making (e.g., Snepenger, Meged, Snelling, & Worrall, 1990). Therefore, Turkish DMOs should make every effort to increase the expected performance of these travel intermediaries since the corresponding attribute fell into the concentrate here area. Turkish DMOs should identify the needs and expectations of the relevant Chinese and Turkish intermediaries. Then related tourism and marketing policies need to be modified by the Turkish officials in order to effectively manage these intermediaries and increase their expected performance. In this way, this specific attribute can move into the keep up the good work area. Another interesting finding of the Arab sample was the number of items positioned in the possible overkill area. Only one item appeared in this area, and this indicates Turkish DMOs' successful management of the resources for the attributes. As can be seen, Turkey could be considered a *multi-attributed destination*, that is, a

destination with attributes having different levels of perceived importance and expected performance for diverse segments. Pike and Ryan (2004) stated that generating positioning strategies for a multi-attributed destination presents significant challenges for tourism organizations, especially DMOs. However, the detailed findings of the current study can provide sufficient information to overcome these challenges.

The current study differs from the earlier DI studies in a very important aspect. We measured the perceived DI of prospective travelers from emerging markets for a destination to which most of them have never been. Thus, our IPA analysis captured the perceived importance and expected performance scores for the destination attributes. The obtained results demonstrated the efficacy of the IPA technique in analyzing perceived DI by solely focusing on the perceived importance and expected performance measures. This study theoretically contributes to the existing tourism literature based on this aspect. Moreover, our findings had some similarities compared to the previous studies. For instance, Caber et al. (2012), and Lee and Lee (2009) also reported significant differences among their study segments regarding their perceptions of the destination attributes. Moreover, Caber et al. (2012) concluded that application of IPA on a segment basis is the most appropriate method for this particular analysis. Litvin and Ling (2001) stated that a destination has different images for different travelers based on the geographic region in which these travelers reside in regard to the destination decay theory (Bull, 1995). The findings of the current study support all these arguments of the previous studies. Moreover, the scales developed in this study can be further used by researchers who study DI and tourists' perceptions for emerging markets. Academically, the findings of

IPA analysis can also contribute to further research studies focusing on consumer decision-making theories (Chu & Choi, 2000).

Just like any social science study, this study has inherent weaknesses as well. Because of the nature of travel expositions, the acquisition of a truly random sample was almost impossible; hence, we had to resort to the next best alternative of collecting data from a convenient sample. However, the researchers did make a genuine effort in selecting times and days of the week to bring some variability into the data collection efforts. Having said this, the data was collected by a third party (i.e., Turkish Ministry of Culture and Tourism). Thus, authors cannot ensure that the data collection protocol was carefully followed throughout the study. Findings need to be evaluated with these limitations in mind. One cannot generalize the findings to all of Turkey's emerging markets. In this sense, we would describe this study as more of an exploratory work. These limitations should be addressed in future work. Future research should also focus on other emerging markets and evaluate their perceptions regarding DI. Our findings verified that different segments can attach different levels of importance and performance to the DI of the same destination. Thus, research on this area should be an ongoing process. Furthermore, DI and the corresponding travel decision-making behavior of travelers from emerging markets should be investigated through structural equation modelling techniques. In this way, tourism researchers can obtain new insights about the behavioral and attitudinal characteristics of emerging markets.

## 2.7 Tables and Figures

**Table 2.1. Respondents' Demographic Profiles**

Characteristic		Frequency (N=376-414)	%*
<i>Gender (n=407)</i>			
Male	Chinese	103	46
	Arab	131	64
Female	Chinese	108	49
	Arab	65	32
<i>Marital status (n= 376)</i>			
Married	Chinese	114	51
	Arab	90	44
Single	Chinese	86	39
	Arab	80	39
Divorced	Chinese	0	0
	Arab	1	0.5
Widowed	Chinese	2	0.9
	Arab	3	1.5
<i>Education (n= 382)</i>			
High school or less	Chinese	8	4
	Arab	16	8
Bachelor degree	Chinese	83	37
	Arab	111	54
Masters	Chinese	15	7
	Arab	20	10
Ph.D.	Chinese	2	1
	Arab	1	0.5
Associate degree	Chinese	62	30
	Arab	6	3
Vocational school	Chinese	17	8
	Arab	39	19
Other	Chinese	0	0
	Arab	2	1

\*Illustrates the percentage within the each sample (i.e., Chinese and Arab sample).

**Table 2.2 Comparative Factor Analysis of Arab and Chinese Travels' Perceived Destination Image\*\***

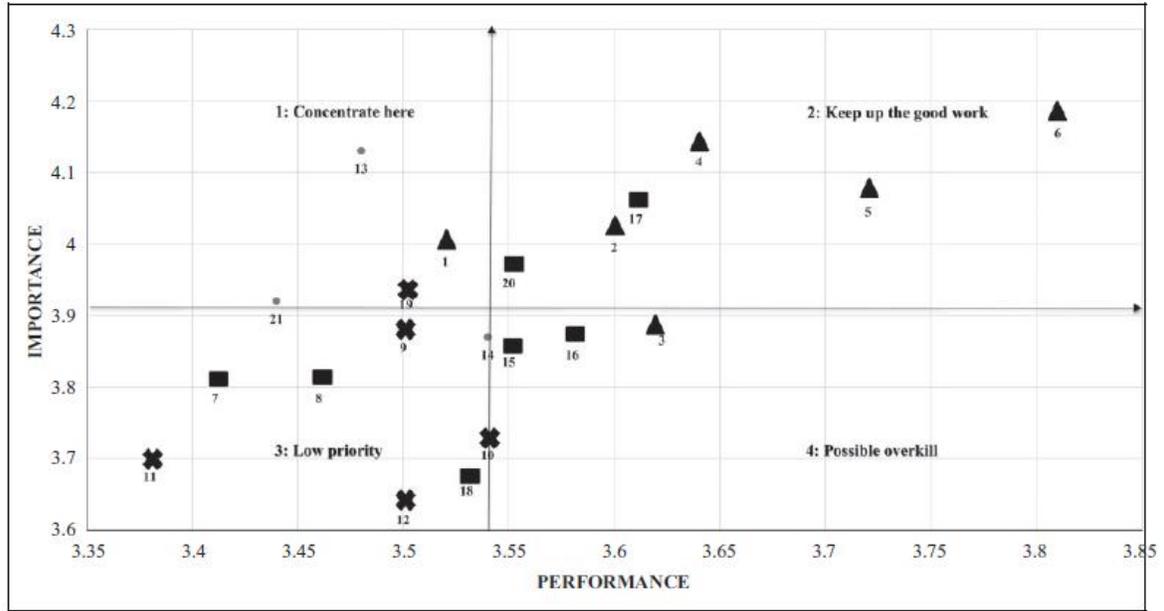
	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Explained Variance (%)	Cronbach's Alpha
<b><i>Factor 1 Accessibility to Information and Resources</i></b>					
1. Easy access to destination	.73	4.37	10.26	48.84	.88
2. Smooth travel to and from destination	.68	4.33			
3. Easy access to meaningful information about the destination	.76	4.30			
4. Problem free vacation arrangement with the destination	.75	4.39			
5. Favorable weather/climate at the destination	.49	4.30			
6. Abundant tourism resources (natural scenery, historic/cultural/heritage site etc.)	.58	4.31			
7. A good value for the money spent for my vacation experience* <sup>3</sup>	.54	4.32			
<b><i>Factor 2 Overall Destination Image</i></b>					
8. Policies/regulations favorable to tourists* <sup>3</sup>	.63	4.14	1.28	6.10	.87
9. Safe and secure environment at the destination	.70	4.47			
10. The overall destination experience offered "fits" my needs	.49	4.29			
11. Positive image	.70	4.36			
12. High level of health and hygiene at the destination	.57	4.29			
13. Friendliness and hospitality of local people* <sup>4</sup>	.55	4.42			
14. Competitive price for overall vacation relative to competitor destinations* <sup>4</sup>	.51	4.29			
<b><i>Factor 3 Credibility and Quality</i></b>					
15. Commitment to provide a satisfactory vacation experience	.63	4.26	1.06	5.06	.85
16. Prioritization of development and improvement of high-quality destination	.68	4.11			
17. Alliance/connection with intermediaries in the tourism sector	.55	4.10			
18. High quality human resources at the destination	.80	4.10			
19. Nature of setting in helping me function comfortably in my daily activities* <sup>2</sup>	.48	4.32			
<b><i>Factor 4 Competitiveness</i></b>					
20. A good variety of activities for tourists at the destination* <sup>3</sup>	.77	4.22	1.02	4.86	.72
21. High quality of services/amenities at the destination	.66	4.26			

Note: KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy = 0.89. n = 139. Cut-off value: 0.45. Three original items were eliminated from the analysis. a. On a scale ranging from 1 = not important at all to 5 = very important. \* Item loaded in the n<sup>th</sup> factor indicated by the "n" number placed near by the asterisk sign for the Chinese sample. \*\*Table presents the factor analysis results for the Arab sample.

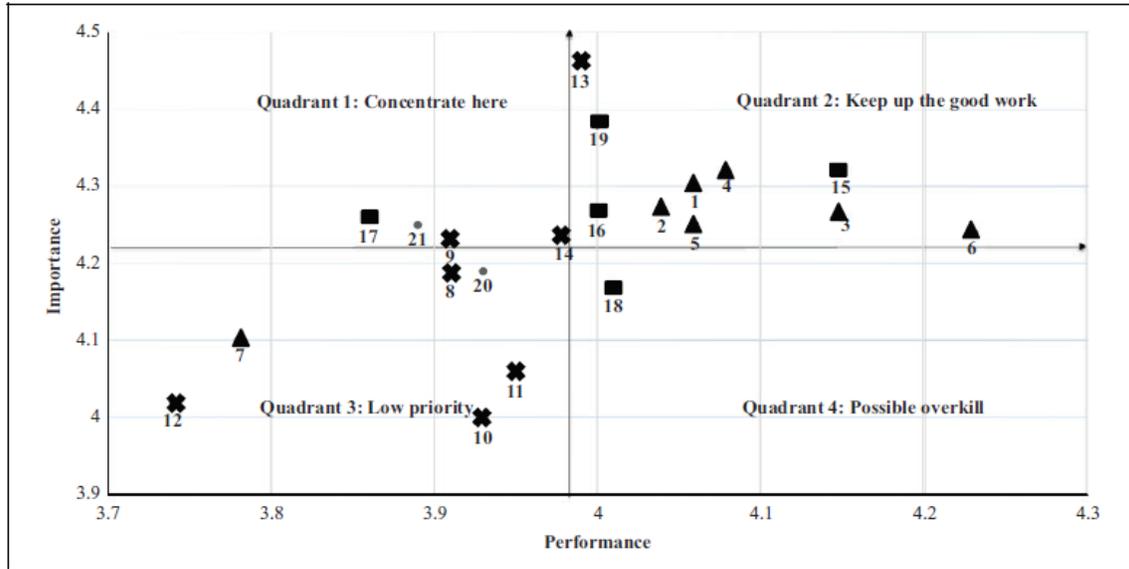
**Table 2.3 Perceived Importance and Expected Performance Gap, and Paired T-test Analyses between Chinese and Arab travelers**

		Performance		Importance		Gap (P-I)	t	p	Gap
		Mean	SD	Mean	SD				Effect Size
Easy access to destination	C	3.52	.99	4.00	1.00	-0.48	-4.99	<b>.00*</b>	-0.48
	A	4.06	.88	4.30	.73	-0.24	-3.18	<b>.00*</b>	-0.30
Smooth travel to and from destination	C	3.60	.95	4.02	.96	-0.42	-4.19	<b>.00*</b>	-0.44
	A	4.04	.79	4.27	.78	-0.23	-3.21	<b>.00*</b>	-0.29
Easy access to meaningful information	C	3.62	.99	3.88	.97	-0.26	-2.50	<b>.01*</b>	-0.27
	A	4.15	.79	4.26	.77	-0.11	-1.49	.14	-0.14
Problem free vacation arrangement with the destination	C	3.64	.95	4.14	.88	-0.5	-4.87	<b>.00*</b>	-0.55
	A	4.08	.85	4.32	.67	-0.24	-3.09	<b>.00*</b>	-0.31
Favorable weather/climate at the destination	C	3.72	.96	4.07	.87	-0.35	-3.57	<b>.00*</b>	-0.38
	A	4.06	.82	4.25	.75	-0.19	-2.39	<b>.02*</b>	-0.24
Abundant tourism resources (e.g. natural scenery)	C	3.81	1.10	4.18	.91	-0.37	-3.37	<b>.00*</b>	-0.37
	A	4.23	.81	4.24	.71	-0.01	-0.19	.85	-0.01
Policies/regulations favorable to tourists	C	3.41	1.01	3.81	1.02	-0.4	-3.53	<b>.00*</b>	-0.39
	A	3.78	.83	4.10	.78	-0.32	-4.11	<b>.00*</b>	-0.40
Commitment to provide a satisfactory vacation experience	C	3.46	1.03	3.81	1.01	-0.35	-3.23	<b>.00*</b>	-0.34
	A	3.91	.78	4.19	.75	-0.28	-4.10	<b>.00*</b>	-0.37
A good value for the money spent for my vacation experience	C	3.50	1.04	3.88	1.02	-0.38	-3.60	<b>.00*</b>	-0.37
	A	3.91	.82	4.23	.69	-0.32	-4.18	<b>.00*</b>	-0.42
Prioritization of development and improvement	C	3.54	1.10	3.73	1.00	-0.19	-1.76	.08	-0.18
	A	3.93	.81	4.00	.88	-0.07	-0.92	.36	-0.08
Alliance/connection with intermediaries in the tourism sector	C	3.38	1.04	3.70	.99	-0.32	-2.96	<b>.00*</b>	-0.32
	A	3.95	.78	4.06	.80	-0.11	-1.45	.15	-0.14
High quality human resources at the destination	C	3.50	1.03	3.64	1.00	-0.14	-1.36	.18	-0.14
	A	3.74	.88	4.02	.83	-0.28	-3.10	<b>.00*</b>	-0.33
Safe and secure environment at the destination	C	3.48	1.04	4.13	1.04	-0.65	-5.41	<b>.00*</b>	-0.63
	A	3.99	.79	4.46	.72	-0.47	-6.58	<b>.00*</b>	-0.62
The overall destination experience offered "fits" my needs	C	3.54	.96	3.87	.95	-0.33	-3.16	<b>.00*</b>	-0.35
	A	3.98	.73	4.24	.71	-0.26	-3.85	<b>.00*</b>	-0.36
Positive image	C	3.55	1.06	3.86	.96	-0.31	-2.67	<b>.01*</b>	-0.31
	A	4.15	.82	4.32	.77	-0.17	-2.37	<b>.02*</b>	-0.21
Nature of setting in helping me function comfortably	C	3.58	1.01	3.87	.98	-0.29	-2.68	<b>.01*</b>	-0.29
	A	4.00	.74	4.27	.83	-0.27	-3.72	<b>.00*</b>	-0.34
High level of health and hygiene at the destination	C	3.61	1.08	4.06	.91	-0.45	-3.96	<b>.00*</b>	-0.45
	A	3.86	.83	4.26	.75	-0.4	-5.12	<b>.00*</b>	-0.51
A good variety of activities for tourists at the destination	C	3.53	1.04	3.68	1.05	-0.15	-1.26	.21	-0.14
	A	4.01	.84	4.17	.75	-0.16	-1.91	.06	-0.20
Friendliness and hospitality of local people	C	3.50	1.02	3.93	.96	-0.43	-3.77	<b>.00*</b>	-0.43
	A	4.00	.88	4.38	.74	-0.38	-4.67	<b>.00*</b>	-0.47
High quality of services/amenities at the destination	C	3.55	.94	3.97	.87	-0.42	-4.09	<b>.00*</b>	-0.46
	A	3.93	.86	4.19	.85	-0.26	-3.41	<b>.00*</b>	-0.30
Competitive price for overall vacation	C	3.44	1.05	3.92	.96	-0.48	-4.10	<b>.00*</b>	-0.48
	A	3.89	.88	4.25	.78	-0.36	-4.37	<b>.00*</b>	-0.43

\*Significant at .05 ( $\alpha$ ) level. C and A indicates Chinese and Arab, respectively.



**Figure 2.1** Importance–performance grid of perceived destination image for the Chinese Sample. Triangle, multiply, rectangle, and dot symbols represent (1) accessibility to information and resources, (2) overall destination image, (3) credibility and quality, and (4) competitiveness factors, respectively.



**Figure 2.2** Importance–performance grid of perceived destination image for the Arab Sample. Triangle, multiply, rectangle, and dot symbols represent (1) accessibility to information and resources, (2) overall destination image, (3) credibility and quality, and (4) competitiveness factors, respectively.

## CHAPTER 3

### EXPLORING THE DARK SIDE OF THE DECISION MAKING CONSTRUCT: STYLES<sup>2</sup>

#### 3.1 Abstract

A stream of recent tourism studies shows strong relationship between tourism involvement and destination images, yet very little, if any, research has tackled the issue of how these critical variables can be effected by individuals' decision making styles. The purpose of this study is twofold: (1) to identify and verify traveler segments using a factor-cluster approach based on travel decision making styles of individuals, and (2) to profile segments and identify differences, if any, between traveler segments with respect to a series of psychographic and attitudinal characteristics such as tourism involvement, destination images and demographic characteristics. Data is gathered from a sample of 426 travelers in Dubai and Shanghai via self-reported surveys. Study findings reveal significant differences among the Rational, Adaptive and Daydreamer Decision-makers segments in their behavioral and attitudinal characteristics with respect to tourism involvement and destination images. The theoretical and practical implications of the findings are discussed within the realm of destination marketing management.

**Keywords:** Decision making styles, travel decisions, tourism involvement, destination images, destination marketing, cluster analysis

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<sup>2</sup> Atadil, H. A., Sirakaya-Turk, E., Meng, F., & Decrop, A. To be submitted to *Tourism Analysis*.

### 3.2 Introduction

Understanding the decision-making process of tourists has always been an essential subject of tourism research since its inception as an academic field (Pizam & Mansfeld, 1999; Sirakaya & Woodside, 2005). To compete effectively in the global market place and generate tourism marketing strategies, Destination Marketing Organizations (DMOs) want to know not only what travelers do on vacation but also how they make ultimate destination choices (Baloglu & McCleary, 1999; Sirakaya & Woodside, 2005). A plethora of studies, with some accuracy, have helped to predict when, where and how tourism decisions are made using a variety of tools, including market segmentation. Consumer behavior researchers profile Decision Making Styles (DMS) to study consumers' shopping behavior and to use DMS to segment markets for product positioning. Within the context of this study "a decision making style refers to a mental orientation describing how a consumer makes choices" (Durvasula, Lysonski, & Andrews, 1993, p.56). Consumers including tourists in the market place interact with businesses and destinations using basic DMS. They utilize these inherent characteristics and mental orientations when shopping, seeking information, and even choosing destinations (Decrop & Zidda, 2006; Sproles & Kendall, 1986). Despite a large number of segmentation studies in tourism, little research concentrates on the importance DMS of travelers and their effect in final purchase decisions. Sproles and Kendall (1986) propose DMS as a basic consumer profile akin to the personality type concept in psychology that continuously impacts consumer decisions throughout their lives. More evidence from general consumer behavior literature indicates that in fact much of the error variation in choice behavior can be explained by different DMS (e.g., Bettman, 1979; Sproles & Kendall, 1986; Walsh, Hennig-Thurau, Wayne-Mitchell, & Wiedmann, 2001). Therefore,

DMS has long been used as a segmentation tool by consumer behavior researchers (e.g., Bettman, 1979; Sproles & Kendall, 1986). Tourism researchers have only recently started to examine the effects and implications of DMS on destination choices. The present study focuses on such effects and implications.

Despite being late in the game, tourism researchers are dedicating more attention to the role of DMS in travel decision-making (e.g., Chang, 2011; Decrop & Zidda 2006; Grabler & Zins, 2002). Travel decisions are not made in a vacuum; consumers vary in terms of their involvement (Cai, Feng, & Breiter, 2004; Gursoy & Gavcar, 2003) and the images they have of destinations (Baloglu, 2000; Goodrich, 1978). Even though extant tourism literature indicates strong associations among DMS, tourism involvement and destination images, there is surprisingly limited, if any, segmentation research that simultaneously assesses the effects of these critical factors. Segmentation studies are useful because they allow managers and researchers to identify travelers with common characteristics and accordingly generate effective marketing and positioning strategies (Bowen, 1998). Therefore, this study explores and tests the relationships among DMS, tourism involvement and destination image using a factor-cluster approach. The factor-cluster approach remains the most popular method in tourism segmentation studies (Formica & Uysal, 1998; Prayag, 2010; Sirakaya, Uysal, & Yoshioka, 2003) despite recent criticism by Dolnicar and her colleagues (see, Dolnicar, 2002; Dolnicar & Grün, 2008) mainly because of its functionality and efficacy in generating market segments. While such criticism of the method itself might be plausible, before working alternatives can be found, the researcher must work with the best available tools. The logic and empirical evidence, not only from tourism but from a variety of fields including

medicine, archeology and psychology indicate that a cluster solution based on all DMS items is likely to produce more complex solutions than one based on fewer items. Thus, the factor-cluster approach is powerful in its parsimonious approach to data treatment; as such one first groups columns (many items) into a reduced set of factors and then further clusters observations (rows) using these obtained factors to delineate fewer clusters that can be profiled more effectively. Hence, criticism about loss of information can be justified on the grounds of generating more a parsimonious solution (Eslick, Howell, Hammer, & Talley, 2004).

The main purpose of this study is twofold: (1) to identify and verify traveler segments using a factor-cluster approach based on travel decision making styles of individuals, and (2) to profile segments and identify differences, if any, between traveler segments with respect to a series of psychographic and attitudinal characteristics such as tourism involvement, destination images and demographic characteristics.

### **3.3 Literature Review**

#### *3.3.1 Travelers' Decision Making Styles*

Durvasula, Lysonski and Andrews (1993) stated that identification and comprehension of Decision Making Styles (DMS) are crucial to effective marketing. Due to the unique characteristics of tourism products such as intangibility, decision-making can be unpredictable and complicated for a potential tourist (Correia, Kozak, & Ferradeira, 2011). Thus, one would expect to uncover a more complex DMS structure in tourism research. In the current study, authors consider a decision making style as a personal trait that influences an individual's decision making and behavior. Many consumer researchers propose the use of DMS as a segmentation tool, as these styles

influence consumer behavior and have enduring impacts on decision-making (e.g., Bettman, 1979; Sproles & Kendall, 1986; Walsh et al., 2001).

Around three decades ago Sproles and Kendall (1986) introduced the Consumer Styles Inventory (CSI) to measure the characteristics of multidimensional consumer decision-making in marketing research. Many researchers consider CSI as the most comprehensive taxonomy of DMS (e.g., Correia et al. 2011; Peng, Bilgihan, & Kandampully, 2015; Walsh et al., 2001). This seminal study identified the following eight DMS: (1) Perfectionism, (2) Brand consciousness, (3) Novelty-fashion consciousness, (4) Recreational, hedonistic shopping consciousness, (5) Price and value for money shopping consciousness, (6) Impulsiveness, (7) Confusion due to over-choice, and (8) Habitual, brand loyal orientation toward consumption. The CSI scale enables researchers to effectively perform market segmentation based on DMS (Lysonski, Durvasula, & Zotos, 1996; Walsh et al., 2001). Accordingly, in tourism research, Decrop and his colleagues identified six traveler segments based on DMS, namely, rational, habitual, constrained, opportunistic, hedonic and adaptable travelers (Decrop & Snelders, 2005; Decrop & Zidda, 2006).

Specifically, rational travelers' decisions are strongly influenced by risk aversion (Decrop & Zidda, 2006). They start planning vacations quite early by employing well thought-out decision criteria. They collect more information than other traveler segments (Decrop & Snelders, 2005). However, Reyna and Farley (2006) claimed that risk-taking can also be rational if the decision process is coherent, that is, internally consistent. Thus, a traveler might still be considered as a rational traveler as long as he/she is intentionally taking a particular risk during the travel decision-making process. The rational travelers'

segment presents similar characteristics to some segments that were identified in general consumer studies. For instance, perfectionistic consumers of CSI also shop very systematically and cautiously. The confused consumers due to over-choice segment in CSI is formed by rational decision makers. The confusion can also be caused by a too detailed search among alternatives resulting in information overload (Sproles & Kendall, 1986). Compared to rational travelers, habitual travelers are controlled by their habits due to their personalities or to structural factors (e.g., owning a holiday house) and present moderate involvement and a routine orientation in travel decision-making (Decrop & Snelders, 2005; Decrop & Zidda, 2006).

Social adjustment plays an important role in the decision-making process for constrained travelers, which is another traveler segment identified by Decrop and his colleagues (i.e., Decrop & Snelders, 2005; Decrop & Zidda, 2006). Heavily relying on social environment, the constrained travelers are similar to the recommendation-oriented users indicated by Grabler and Zins (2002). Personal (e.g., age) and situational constraints (e.g., house moving) also highly impact these travelers' decisions (Decrop, 2005; Decrop & Snelders, 2005). The segment of "price and value for the money shopping consciousness" shows similar characteristics to the constrained travelers (Correia et al., 2011). In addition, the opportunistic travelers segment is almost opposite to the rational travelers' segment in many ways. For example, opportunistic travelers minimize their vacation planning process and do not think a lot about vacation details. Moreover, instead of employing well thought-out decision criteria in making vacation decisions, they wait for social or financial opportunities before finalizing their choices (Decrop & Snelders, 2005; Decrop & Zidda, 2006).

Hedonic and adaptable travelers are the last two segments suggested by Decrop and Zidda (2006). Hedonic travelers attach more importance to emotional drives than pragmatic concerns such as availability of time and money for taking a vacation. Pleasure and emotional arousal are strongly developed by these travelers when they think or talk about vacations. Due to emotionality, the impulsiveness aspect of decision-making influences these travelers, making their final decisions very unpredictable (Decrop & Snelders, 2005). Correia and her colleagues (2011) claimed that hedonic travelers show similarities to confused consumers due to the over-choice segment of the CSI. Lastly, adaptable travelers are highly influenced by pragmatism, so they make more realistic vacation decisions based on their context/situation according to the pragmatism concept. Situational inhibitors, such as limited financial sources, significantly impact their decision process (Decrop & Snelders, 2005; Decrop & Zidda, 2006).

The concept of DMS has often been used in the segmentation studies in tourism literature (Correia et al., 2011). Reid and Crompton (1993), in their seminal study, proposed a taxonomy of DMS leading five decision-making paradigms (e.g., Hierarchy-of-effects, Dissonance-attribution hierarchy) based on level of involvement and ability to differentiate between attributes. Moreover, Grabler and Zins (2002) distinguished six segments (i.e., Highly pre-defined, Accommodation-oriented, Recommendation-oriented, Geography-oriented, Price-oriented, and Individual traveler) to provide guidelines for an automatic recommendation system. However, their study lacks a sufficient quantitative approach to identify the true nature of the segments. Bargeman, Joh and Timmermans (2002) proposed a sequence alignment method for panel data to develop a typology of vacation behavior. This study reported eight segments on different aspects of vacation

decision behavior. The classification method was suitable for discovering the sequential aspects of panel data. More recently, Chang (2011) evaluated the impact of novelty-seeking and risk-perception behavior on holiday decisions and food preferences. Two market segments were recommended, namely, organized comfort-seekers and explorers. Nevertheless, while this study focused on two specific dimensions of DMS (i.e., novelty-seeking, risk-perception), it ignored other DMS identified in marketing and tourism research. Moreover, Correia, Kozak and Ferradeira (2011) assessed the relationship between culture and DMS. While their study did not perform marketing segmentation analysis, the findings indicated that culture traits influence the DMS of travelers. Very recently, Peng, Bilgihan and Kandampully (2015) examined the DMS of college students. Authors conducted a survey research and identified the following five DMS among the college students; hedonistic, habitual, price conscious, confused by over choice, and brand conscious. Their study was based on the CSI scale (Sproles & Kendall, 1986) within the casual dining restaurants context.

While aforementioned studies proved to be useful in different study contexts, such as travel recommendation systems and tourists' dining preferences, they seem to fall short in different aspects, such as research design, efficacy of the employed classification method and the number of DMS being investigated. Actually, Decrop and Zidda's (2006) study appears to be the most promising study for the following reasons: a) their classification method is developed based on a previous study by Decrop and Snelders (2005) that employed grounded theory methodology, b) they developed a DMS scale that captures most of the DMS dimensions and c) they successfully validated the proposed traveler typology, which was first generated from a qualitative approach, through survey

data using factor and cluster analyses. Even though, travel decision-making has been one of the most frequently examined topics in the field of tourism and hospitality, we know relatively little about the DMS of travelers. On the other hand, DMS has been heavily studied in the marketing and customer behavior disciplines (e.g., Durvasula et al., 1993; Sproles & Kendall, 1986; Walsh et al., 2001). Thus, previously mentioned and recent tourism and hospitality studies on DMS (e.g., Correia et al., 2011; Peng et al., 2015) mostly cited marketing and customer behavior studies in their literature reviews; a clear indication of limited DMS study in our field.

### *3.3.2 Tourism Involvement*

As an evolving concept in social psychology, involvement has been widely studied in consumer research and tourism literature (Bojanic & Warnick, 2012). Tourism involvement can be defined as a psychological state of motivation, arousal or interest between a traveler and tourism activities, destinations or related equipment for a certain time (Havitz & Dimanche, 1990; Yeh, 2013). It is well-documented that individuals significantly differ with respect to information processing and decision-making behavior based on their level of involvement. More specifically, when individuals are involved, they pay more attention, perceive a higher importance and more risk than when they are not involved (Laurent & Kapferer, 1985; Zaichkowsky, 1986).

Researchers have introduced different types of involvement to better conceptualize the involvement concept. For example, Houston and Rothschild (1978) introduced a distinction between situational involvement and enduring involvement. The former is related to a specific situation such as a destination choice behavior whereas the latter reflects a permanent or long-term interest about a product/service. Mittal and Lee (1988) proposed the dichotomy of brand-choice involvement and product involvement.

Whereas product involvement refers to consumers' continuous level of interest in a product category, brand-choice involvement reflects consumers' motivation to make the right brand choice. Furthermore, Beatty, Homer and Kahle (1988) made a distinction between ego involvement and purchase involvement. Ego involvement concentrates on the importance that individuals attach to a product based on their self-concepts.

Customers tend to purchase products and services that they consider as matching images of themselves or self-concepts (Morrison, 2010). On the other hand, purchase involvement is related to the concern of an individual for the purchase itself and is considered as a sub-category of situational involvement. Additionally, researchers have suggested a variety of other involvement types, such as product-centered, subject-centered and response-centered involvement (Finn, 1983), as well as affective and cognitive involvement (Park & Young, 1986).

Relevant measurement scales of involvement have also been generated, such as the Personal Involvement Inventory (PII) (Zaichkowsky, 1985), Consumer Involvement Profile (CIP) (Laurent & Kapferer, 1985) and Purchase Decision Involvement (Mittal, 1989). Among them, PII and CIP scales are considered milestones by researchers (e.g., Gursoy & Gavcar, 2003). The PII scale, developed by Zaichkowsky (1985), supported a unidimensional structure of involvement. However, other studies (e.g., Dimanche, Havitz & Howard, 1991; Havitz & Dimanche, 1997) reported that employing a unidimensional structure for the involvement is not appropriate due to the multidimensional nature of this construct. Accordingly, CIP, developed by Laurent and Kapferer (1985), proposed four major dimensions based on their literature review and empirical quantitative analysis that the authors performed. These dimensions were 1) "imporsisk," which consisted of

perceived importance of (or interest in) the product and risk consequences, 2) sign value attached to a product, its purchase or consumption, 3) pleasure (or hedonic) value of the product, and 4) perceived risk probability related to product mispurchase. More specifically, Havitz and Dimanche (1990) stated that an individual consumes a tourism product or service for its sign value so that she or he can belong to a group of superior status or differentiate her/himself from others. Furthermore, risk probability focuses on the possibility of a mispurchase, whereas risk consequences concern the perceived importance of negative outcomes in case of a mispurchase (Gursoy & Gavcar, 2003).

Dimanche and his colleagues (1991) were among the first scholars who applied CIP to tourism research by translating the original French scale into English. The authors investigated the multidimensional nature of the involvement construct in a tourism and recreation context. Their findings, especially the obtained factor structure was significantly different from the original study. Pleasure and perceived importance loaded on a single factor, which was then named the importance-pleasure dimension. Moreover, they reported that sign, risk consequences and risk probability dimensions are formed as distinctive factors. The CIP scale was also used in other tourism studies. For instance, Kim, Scott and Crompton (1997) investigated the associations among involvement, commitment and future intentions in the context of bird watching. Gursoy and Gavcar (2003) tested the CIP scale on international leisure tourists to gain better insights into the involvement concept. More recently, Yeh (2013) evaluated the relationship among tourism involvement, work engagement and job satisfaction in the lodging industry.

Dimanche, Havitz and Howard (1993) emphasized that involvement is a central variable to explain decision-making. Many researchers also supported the critical role of

involvement in the decision-making process (e.g., Broderick & Mueller, 1999; Cai, Feng, & Breiter, 2004; Gursoy & Gavcar, 2003; Laurent & Kapferer, 1985; Reid, 1990). In addition to these, Reid and Crompton (1993), introduced a taxonomy of DMS based on travelers' levels of involvement; a clear indication of the importance of involvement on the DMS. Decrop and Snelders (2005) explicitly stated that while former DMS studies in tourism and hospitality research solely concentrate on decision-making behavior itself, these studies ignore other variables such as tourism involvement. After considering the previous literature review on DMS in the current paper, we can also claim that the majority of DMS studies in the field ignore the relationship between DMS and tourism involvement. An exception to this is the seminal studies of Decrop and Snelders (2005), as well as, Decrop and Zidda (2006). For example, low, strong and no levels of involvement were identified for previously mentioned Habitual, Hedonic and Opportunistic DMS traveler segments, respectively (Decrop & Snelders, 2005). Therefore, traveler segments that were identified based on their DMS in the study, differed regarding their attitudes towards involvement, which influenced their final decisions. While this is an important finding, there is an obvious research need to confirm that DMS traveler segments differ regarding their attitudes towards involvement. Based on the previous discussion and especially Dimanche et al.'s (1991; 1993) studies, the following four null hypotheses are generated to guide this study. Many tourism researchers such as Bojanic and Warnick (2012) agreed that Dimanche, Havitz and Howard effectively employed and adopted the CIP scale to cluster travelers and to predict their attitudes and selected behaviors.

*H1 Sign:* There are no differences among the decision making styles groups regarding the attitudes toward the sign value.

*H2 Importance:* There are no differences among the decisions making style groups regarding the attitudes toward the importance-pleasure value.

*H3 Consequences:* There are no differences among the decision making styles groups regarding the attitudes toward the risk consequences.

*H4 Probability:* There are no differences among the decision making styles groups regarding the attitudes toward the risk probability.

### 3.3.3 Destination Image

Early theoretical and empirical models of tourist decision-making behavior (e.g., Baloglu & Brinberg, 1997; Sonmez & Sirakaya, 2002; Um & Crompton, 1990; Uysal & Jurowski, 1994) proposed that travelers' perceived destination image explains much of the error variance in destination decisions. Positive images of destinations can be considered as differentiating factors among competing destinations. Therefore, the tourism success or failure at many destinations mostly depends on the images held by visitors and the images' effective management (Fakeye & Crompton, 1991; Sirgy & Su, 2000). Although image studies are abundant in number, the fluid nature of images and the limited research on destination image from the DMS perspective make this particular study meaningful.

Since Hunt (1971) brought image concept to tourism literature, it has drawn extensive research attention (e.g., Baloglu & Brinberg, 1997; Sonmez & Sirakaya, 2002). Destination image makes an essential contribution to the formation of destination brand and its success in the market. Furthermore, destination image has an impact on tourists'

destination choice (Tasci & Gartner, 2007; Tasci & Kozak, 2006). The fact that the terms “image” and “brand” are being used interchangeably leads to confusion in the tourist destination context (Tasci & Kozak, 2006). Therefore, it is important to differentiate these two interrelated concepts. Image can be defined as the set of beliefs that consumers hold about a particular brand, while brand is a name, term, sign, symbol or design (or even a combination of all of these) that is used to identify and differentiate goods and services (Kotler, 1997). With this clarification in mind, destination image can be defined as “the sum of beliefs, ideas, and impressions that a person has of a destination” (Crompton, 1979, p.18). Even though the image and the brand of a destination are two different terms, the brand’s existence depends on the image formation of a destination (Cai, 2002).

Perceived destination image comprises both cognitive and affective elements (e.g., Baloglu & McCleary, 1999; Gartner, 1993). Cognitive image represents an individual’s knowledge and beliefs about the destination attributes, whereas affective image is formed by an individual’s emotions for the destination and the experiences provided at the destination (Baloglu & Brinberg, 1997; Baloglu & McCleary, 1999; Gartner, 1993). Previous tourism research confirmed that an individual’s affective image depends on his or her cognitive image. Therefore, even though there is a distinction between these two image dimensions, they are interrelated in nature (Baloglu & Brinberg, 1997; Gartner, 1993). Furthermore, as destination image is a multidimensional construct, when cognitive image and affective image come together, they form a global impression about a destination named the overall (or holistic) destination image (e.g., Baloglu &

McClearly, 1999; Beerli & Martin, 2004). The current study focuses on both the cognitive and affective image, as well as the overall destination image.

A variety of destination image dimensions and corresponding sub-dimensions were identified by tourism researchers. For instance, Sonmez and Sirakaya (2002) identified six sub-dimensions of the affective image, such as Perceived Value of Vacation, and Local Attractions and Hospitality. Furthermore, the authors identified four cognitive image sub-dimensions, such as Safe and Hospitable Environment. A recent study conducted by Kim and Perdue (2011) focused on the influence of cognitive and affective image dimensions on destination attractiveness and highlighted two dimensions of cognitive image (e.g., Quality of Community) and three dimensions of affective image (e.g., Fun and Comfortable Atmosphere). Another important dimension or factor that influences the formation of destination image is a traveler's accessibility to resources such as meaningful information about a destination or destination itself. Burgess (1978) explicitly stated that a perceived destination image of a traveler is mostly determined by the diversity, size and quality of the information that is accessible to this particular traveler. More recently, Assaker (2014) reported that accessibility (e.g. prices and availability of information) is one of the factors that has a larger impact on the destination image. Similar to meaningful information, destination itself needs to be accessible as well. A destination, which offers easy access, smooth transportation and problem-free vacation arrangements, will be reflected by a more positive destination image in the minds of the travelers (Chi & Qu, 2008; Wang & Davidson, 2010). Moreover, it is well-reported in tourism and hospitality research that unique characteristics of tourism products such as intangibility and variability add a high level of

risk into travel decision-making behavior (Sirakaya & Woodside, 2005). An important indicator of the level of perceived risk is the expected quality of a tourism product and/or service; as the expected quality increases, the level of perceived risk decreases (March, 1991). This expected quality is directly related to the reputation in the context of a purchase decision regarding a tourism destination. Keane (1996, p. 1545) explicitly stated that “sustaining quality in tourism destinations can be described as seeking to maintain a destination’s reputation.” Thus, quality and reputation is also an important factor that impacts the destination image of travelers. Rather than verifying the previously confirmed image dimensions, this study aims to empirically test attitudinal differences of DMS traveler segments toward the perceived destination image.

Extant research reported that image is an essential concept in predicting consumer behavior, and a positive association exists between image and behavioral intention, which is highly likely to lead to a final decision-making behavior (e.g., Baloglu, 2000; Goodrich, 1978; Scott, Schewl, & Frederick, 1978). However, as Decrop and Snelders (2005) claimed, and we agreed, that majority of DMS studies in our field ignore other variables. Similar to the tourism involvement, destination image is also another variable that is ignored by these DMS studies. Tourism literature suggests that there are attitudinal differences between the traveler segments based on their perceived destination images. For example, Correia, Oliveira and Silva (2009) identified three segments of golfer tourists and reported heterogeneous perceived destination images among these three segments. More recently, Liu (2014) even performed traveler market segmentation based on the destination image of Taiwan’s inbound visitors; supporting that traveler segments differ based on their perceived destination image. Prayag (2010) explicitly stated that

market segmentation is one of the most common approaches that tourism researchers utilize to evaluate the destination image. Previous studies on DMS reported that the attitudinal characteristics of the DMS traveler segments differ from each other (e.g., Decrop & Zidda, 2006). Thus, one might also expect to identify differences in the attitudes of DMS travel segments regarding their perceived destination image. Based on this rationale, the following null hypothesis is generated.

*H<sub>5 Image</sub>*: There are no differences among the decision making styles groups regarding the attitudes toward the destination image dimensions.

### **3.4 Methodology**

The data was collected during two major travel expositions that are World Travel Fair (WTF) and Arabian Travel Market (ATM) in Dubai and Shanghai, respectively. WTF had more than 45,000 visitors and 570 exhibitors in 2014 (World Travel Fair, 2015). Moreover, 26,000 visitors and 412 exhibitors participated in ATM in 2015 (Arabian Travel Market, 2015). Self-reported questionnaires enabled the collection of the data in these travel expositions. The questionnaire of this particular study included travel DMS, tourism involvement and destination image scales, as well as demographic characteristics. The travel DMS scale included 19 items adopted from Decrop and Snelders (2005) and Decrop and Zidda (2006) using a 5-point likert scale (1=strongly disagree, 5=strongly agree). The tourism involvement scale consisted of 14 items (e.g., Dimanche et al., 1991; Laurent & Kapferer, 1985) using a 5-point likert scale (1=strongly disagree, 5=strongly agree). Moreover, destination image was measured with 24 items (e.g., Sonmez & Sirakaya, 2002) using a 5-point likert scale (1=not important at all, 5=very important). Authors are well aware that tourism involvement and image are context-dependent constructs. We intentionally set a particular context which is taking a

vacation in a destination for the destination image and the tourism involvement scales. Thus, the study respondents were initially instructed to answer the related questions within the context of taking a vacation at a destination. The scale items were also phrased accordingly to reflect the related context.

Turkish Ministry of Culture and Tourism (TMCT) organized the data collection process including the training of personnel, provision of booth at selective locations of the expositions and verification of researchers' instructions. While TMCT keeps tourism attachés in both Dubai and Shanghai, ministry maintains highly noticeable stands at both expositions. A total of 600 international visitors (n=300 in each country) were interviewed via structured questionnaires by trained tourism ministry agents of the TMCT. Tourism agents conducted the interviews. The duration of the interviews was between 15 and 20 minutes. Agents returned a total of 426 completed and usable surveys with a response rate of 71%.

No randomization of the sample was attempted as it was not possible to create a representative sample using any of the probability sampling methods. However, alternate days, times and weekends with different quotas were used to ensure some degree of variation in data collection. Thus, the reader is advised to keep this limitation in mind when interpreting the results and its implications. The analyses were done using SPSS Statistical package 21 and included three main steps: (1) performing factor analyses on DMS, tourism involvement, and destination image items, (2) identification of cluster groups via a K-means cluster analysis algorithm and discriminant analysis by employing factor mean scores obtained from the DMS factors, and (3) performing MANOVA to profile each cluster based on the behavioral and attitudinal differences among the

obtained traveler segments with respect to tourism involvement and destination image factors.

### **3.5 Results**

#### *3.5.1 Demographic Characteristics*

Demographic analysis was performed with an effective response rate ranging from 88% to 97% due to the isolated missing values in some demographic questionnaires. Since respondents were not forced to select a response for each demographic question, this was an expected finding. The sample had 234 male and 173 female respondents. The age distributions for the total sample were as follows: 18-24 (11.5%), 25-34 (51.6%), 35-44 (21.8%), 45-54 (12.3%), 55-64 (1.9%), 65 and older (0.7%). While 47.9% of the total respondents were married, 39% of them were single. The majority of the respondents (45.5%) had a bachelor degree.

A factor analysis of the 19-item travel DMS scale was conducted to examine the DMS dimensions. Item analysis was initially performed in order to check the item level distributions for the DMS scale. None of the variables had skewness and kurtosis values above absolute value of one. Moreover, obtained standard deviations values were less than 1.2. Thus, scale items were considered normally distributed. Moreover, the reliability of the DMS scale was also tested, and the obtained Cronbach's  $\alpha$  value was significantly high ( $\alpha= 0.80$ ); indicating a reliable scale. Comrey and Lee (2013) and Gorsuch (1983) stated that an ideal size for proper factor analysis is five to 10 subjects per variable. Based on our study sample size and the previously explained item analysis, it was found that the DMS scale was appropriate for the factor analysis. A Principal Component Analysis (PCA) extraction method with Varimax rotation was used in the

factor analysis. This orthogonal type of rotational technique was performed to reduce the complexity of factors via increasing variance of loadings for each factor (Tabachnick & Fidell, 2001). Obtained high Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value (0.82) also indicated the appropriateness of the data for the factor analysis.

The eigenvalue greater than one rule and the scree plot technique were performed in order to determine the number of factors that needs to be extracted. Accordingly, five factors were identified with the Cronbach's alpha values ranging from 0.60 to 0.77 (Table 3.1). These five factors explained 57% of the total variance in the data. The factors were labeled as following based on the relevant literature (e.g., Decrop & Snelders, 2005; Decrop & Zidda, 2006; Sproles & Kendall, 1986): (1) Adaptability, (2) Rationality, (3) Impulsiveness, (4) Social Adjustment and (5) Pragmatism. Conducted exploratory factor analysis provided authors factor mean scores that are needed to perform a factor-cluster approach which will be explained in detail below.

### *3.5.2 Identification of Market Segments*

Following the factor analysis, a K-means cluster analysis algorithm was conducted to identify segments of travelers based on attitudinal items related to DMS. At the beginning of the algorithm, a series of possible solutions for three-, four-, five- and six-cluster solutions was performed. The three-cluster solution was considered more meaningful with an adequate number of cases in each cluster. Factor mean scores were calculated through raw item scores in each factor to differentiate agreement levels toward factors (Table 3.2). All the factors were statistically significantly different from each other based on the means difference test ( $p < 0.05$ ). For instance, Table 3.2 demonstrates that Cluster 1 had the highest agreement level (mean=21.22) for the rationality factor on a

scale from 5 to 25. This scale was based on the summation of the numerical values assigned to scale points. More specifically, while a respondent can select strongly disagree (1) for all the five items of the rationality factor (sum=5), another respondent can select strongly agree (5) for these items (sum=25). The same method was used to determine the scale range for the rest of the factors. The performed factor-cluster analysis approach was adopted from the segmentation study of Sirakaya, Ingram and Harrill (2008). On the contrary, Cluster 3 had the lowest agreement level (16.25) for the rationality factor. Furthermore, whereas Cluster 2 had the highest factor mean score (15.08) for impulsiveness, the factor mean score of Cluster 1 (10.67) was the lowest on a scale ranging between 4 and 20 for the same factor. In terms of the pragmatism factor, Cluster 2 had the highest level of agreement (8.29) for this factor on a scale from 2 to 10. On the other hand, the travelers of Cluster 3 presented the lowest level of agreement (7.41) for the same factor. Moreover, while Cluster 2 had the highest level of agreement (19.25) for the adaptability factor, factor mean score of Cluster 1 (10.97) was the lowest on a scale ranging between 5 and 25 for the same factor. Lastly, Cluster 2 also had the highest level of agreement (11.51) for the social adjustment factor on a scale ranging between 3 and 15. As it can be seen, notable attitudinal differences among the clusters were discovered (Table 3.2). Based on these analyses, Cluster 1 (20.1% of the sample), Cluster 2 (20.4% of the sample) and Cluster 3 (42.4% of the sample) were respectively labeled as Rational Decision-makers (RDMs), Adaptive Decision-makers (ADMs) and Daydreamers.

### 3.5.3 Discriminating Factors

The accuracy level of classification of cluster memberships can be evaluated by performing discriminant analysis. Accordingly, two canonical discriminant functions were calculated for DMS factors during the discriminant analysis. A chi-square test was conducted to assess the significance of the resulting discriminant function. The obtained discriminant function was statistically significant ( $\chi^2= 565.80$ ,  $p<0.001$ ). Furthermore, a Wilk's lambda test and a univariate F-test were performed to distinguish the significance of each of the five DMS factors. Standardized canonical discriminant function coefficients were used to identify and interpret the relative contribution of each factor to the discriminant function. Adaptability (0.86), Impulsiveness (0.50) and Social Adjustment (0.48) factors were found to be the most contributing items to the function. A moderately high canonical correlation (0.78) was obtained for the model ( $p<0.001$ ). Thus, this model explained a significant relationship between the functions and the dependent variable. The classification results matrix of respondents is illustrated in Table 3.3. The attitudinal discriminant functions showed significant results in classifying RDMs, ADMs and Daydreamers. Overall, 92.1% of the 354 grouped cases were correctly classified, indicating a very high accuracy rate of the cluster analysis. More specifically, 88.4% of RDMs, 79.3% of ADMs and 100% of Daydreamers were correctly classified into their respective segments.

### 3.5.4 Factor Analysis of Tourism Involvement Profile

Factor analysis was performed by using the Principal Axis Factoring (PAF) extraction method with Varimax rotation to generate the major dimensions of tourism involvement. PAF assumes an implicit underlying factor structure and is commonly used

in research (Sharma, 1996). Prior to the factor analysis, an item analysis was performed to evaluate the item level distributions for the Tourism Involvement scale. While all the standard deviation values were less 1.1, skewness and kurtosis values were less than absolute value of 0.8; a clear indication of normal distribution of scale items. Cronbach's  $\alpha$  value of 0.82 also indicated that the Tourism Involvement scale is reliable. Considering the same rationale for the ideal sample size of Comrey and Lee (2013) and Gorsuch (1983) that was previously explained, the Tourism Involvement scale was also considered as appropriate for the factor analysis.

A cutoff point of 0.45 was established for factor loadings, and three items were removed from the 14-item scale due to cross and low factor loadings. These three items were: (1) It is really annoying to purchase a vacation that is not suitable, (2) When I purchase a vacation, it is not a big deal if I make a mistake, (3) When I face a variety of vacation choices, I always feel a bit at a loss to make my choice. Factor analysis was rerun with the same extraction and rotational techniques after removing these three items. Obtained high KMO value (0.75) also indicated the appropriateness of the data for the factor analysis. After performing the eigenvalue greater than one rule and the scree plot technique, three factors were discovered with Cronbach's alpha values ranging from 0.69 to 0.78 (Table 3.4). These three factors explained about 61% of the total variance in the data, and were labeled as (1) Sign, (2) Importance-Pleasure and (3) Risk perception, based on Dimanche et al. (1991) and other relevant CIP literature (e.g., Laurent & Kapferer, 1985).

### 3.5.5 Factor Analysis of Destination Image

Similarly, a factor analysis was conducted by employing the Principal Component Analysis (PCA) extraction method with varimax rotation to identify the destination image dimensions. Six items were removed from the 24-item scale due to cross and low factor loadings (e.g., High quality tourism infrastructure, Good variety of activities at the destination). Initially performed item analysis indicated no issues against the normal distribution of the items, similar to the findings of the previous factor analyses. The reliability of Destination Image scale was once again tested. The obtained Cronbach's  $\alpha$  value of 0.92 demonstrated that the Destination Image scale is highly reliable.

Considering our sample size, the results of the item and reliability analyses, it was found that Destination Image scale is appropriate for the factor analysis. As the result, following the eigenvalue greater than one rule and the scree plot technique, three factors were identified and explained 61% of the total variance in the data (KMO= 0.91). Cronbach's alpha values ranged from 0.85 to 0.87 (Table 3.5). Factors were named as (1) Accessibility to Resources, (2) Quality and Reputation, and (3) Overall Destination Image, based on the previously discussed destination image literature (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Sonmez & Sirakaya, 2002).

### 3.5.6 Profile of Market Segments

MANOVA was performed to profile each cluster of decision-makers based on the attitudinal differences among the generated traveler segments with respect to the previously identified tourism involvement and destination image factors (Table 3.6). Before proceeding with the MANOVA, we evaluated the assumptions that are central to this particular statistical technique, and no significant violation of assumptions was

found. For example, assumption of *homogeneity of variance* among the dependent variables (i.e., involvement and image factors) was tested through Levene's test. Levene's test results demonstrated insignificant p-values ( $p > 0.05$ ) supporting the assumption of equal group variances. Even though, *equal sample sizes* assumption was partially violated due to the larger number of respondents that appeared in the Daydreamers cluster, this violation is believed to have no negative effect based on the principles of Central Limit Theorem (Glass & Hopkins, 1996). As another assumption, *homogeneity of covariance* was also tested via Box's test of equality of covariance (IBM, 2016). Results revealed that observed covariance matrices of the tourism involvement [ $F(5,701) = 0.936, p = 0.468, \text{Wilk's Lambda} = 0.906$ ] and destination image factors [ $F(9,549) = 1.562, p = 0.154, \text{Wilk's Lambda} = 0.927$ ] are equal across groups. No violation was observed since the obtained p values were insignificant. Moreover, no violation of the multicollinearity was observed either.

There were statistically significant differences between the three clusters based on the tourism involvement factors; Sign ( $F_{2, 349} = 10.730, p < 0.05$ ), Importance-pleasure ( $F_{2, 349} = 8.565, p < 0.05$ ), Risk perception ( $F_{2, 348} = 39.779, p < 0.05$ ). More specifically, regarding the sign factor, both RDMs (Mean = 10.20) and Daydreamers (9.52) agreed less with the sign factor compared to ADMs (11.25). Furthermore, RDMs (16.83) and ADMs (16.47) agreed more with the importance-pleasure factor than Daydreamers (15.45). About the risk perception factor, all of the clusters differed statistically significantly from each other. While ADMs (14.93) provided the highest agreement mean score, RDMs (10.92) had the lowest one. Moreover, there were also statistically significant differences between the clusters regarding destination image factors; Accessibility to Resources ( $F_{2,$

$F_{2, 286} = 6.837, p < 0.05$ ), Quality and Reputation ( $F_{2, 278} = 6.404, p < 0.05$ ), Overall Destination Image ( $F_{2, 280} = 7.385, p < 0.05$ ). More specifically, regarding the accessibility to resources factor, RDMs (Mean = 26.48) attached the highest level of importance to this factor compared to the other two clusters. Moreover, RDMs (25.22) provided the highest importance mean score for the quality and reputation factor, whereas Daydreamers had the lowest mean score (22.75) for the same factor. Lastly, RDMs once again attached the highest level of importance (26.42) to the overall destination image factor in comparison to the levels of importance attached by ADMs (23.72) and Daydreamers (24.26). The employed Bonferroni post-hoc test also validated that there were statistically significant differences among these three traveler segments regarding their attitudes towards destination image and tourism involvement factors ( $p < 0.05$ ).

Cross-tabulation analysis was also performed to identify the differences between clusters on demographic characteristics. No significant differences were found in terms of gender, age, education level, marital status, and income level. The three clusters were only statistically different in the number of vacations taken per year ( $\chi^2 = 33.02, p < .001$ ). Specifically, Daydreamers had proportionally more travelers that took three to five vacations per year than other clusters. RDMs had proportionally more travelers who took one to two vacations per year, whereas ADMs had more travelers who took three to five vacations per year within the cluster.

### **3.6 Discussion and Conclusion**

This study explored and tested the relationships among Decision Making Styles (DMS), tourism involvement and destination image constructs with a factor-cluster approach. More specifically, we assessed the attitudes of traveler segments, which were

identified based on their DMS, towards the dimensions of tourism involvement and destination image. Initially exploratory factor analyses were performed to identify the underlying factors of the study constructs. Five factors were identified for the DMS construct: (1) Adaptability, (2) Rationality, (3) Impulsiveness, (4) Social Adjustment and (5) Pragmatism (e.g., Decrop & Snelders, 2005; Decrop & Zidda, 2006; Sproles & Kendall, 1986). The Adaptability factor was formed by items presenting the opportunism, social adjustment, impulsiveness and variety-seeking. On the other hand, factor analysis of tourism involvement scale revealed three factors, which were named as (1) Sign, (2) Importance-Pleasure and (3) Risk perception, based on Dimanche et al. (1991) and other relevant CIP literature (e.g., Laurent & Kapferer, 1985). However, unlike Dimanche et al.'s (1991) four distinct factors, this study identified only three factors. Gursoy and Gavcar (2003) also reported a three-factor tourism involvement solution, which was formed by interest/pleasure, risk probability and risk importance dimensions. Nevertheless, the present study validates the efficacy of the Consumer Involvement Profile (CIP) developed by Laurent and Kapferer (1985) within the context of taking a vacation at a destination. The last factor analysis was performed for the destination image scale and distinguished the following three factors: (1) Accessibility to Resources, (2) Quality and Reputation, and (3) Overall Destination Image (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Sonmez & Sirakaya, 2002).

Three clusters were identified based on the DMS factors and labeled as Rational Decision-makers (RDMs), Adaptive Decision-makers (ADM) and Daydreamers. Statistically significant attitudinal differences with respect to DMS factors among the three clusters were discovered. Firstly, 20.1% of the sample was formed by travelers that

are clustered as RDMs. Based on the study findings, travelers of RDMs cluster collect all available information regarding a destination a long time ahead indicating a strong rationality. Thus, participating in impulsive behaviors such as often changing holiday plans is against their personality. These travelers pay attention to pragmatic concerns such as availability of time and money for taking a vacation in a moderate level. Moreover, RDMs demonstrated lower levels of agreement with the social adjustment and adaptability DMS factors compare to the other two clusters. Since adaptability factor had items, such as “searching for information about new destinations is generally a waste of time,” that are against the rationality factor, this finding was meaningful. Furthermore, RDMs prefer not to rely on others to make their travel decisions.

Secondly, 20.4% of the sample was formed of travelers who categorized as ADMs. Travelers of ADMs cluster demonstrated higher levels of agreement with impulsiveness, pragmatism, adaptability and social adjustment with DMS factors compare to the other two clusters. On average, this cluster had a moderate level of rationality. Thus, travelers in this cluster tend to participate more in impulsive behaviors such as unpredictable holiday choices while fully considering their pragmatic concerns. Moreover, opposite to the RDMs, travelers of ADMs highly prefer to rely on others such as partners, parents and friends in travel-decision making. Due to their high agreement with the adaptability factor, one would also expect travelers of ADMs to participate more in opportunistic behaviors such as choosing a destination according to the products that remain available in a travel agency. Lastly, the majority of the travelers tended to be Daydreamers (42.4% of the sample). These travelers showed less rationality and pragmatism than the other two clusters, and presented on average moderate levels of

impulsiveness, adaptability and social adjustment. Thus, travelers of Daydreamers cluster tend to refrain from following a rational travel decision making process and to ignore pragmatic concerns such as availability of time and money. Moreover, one would also expect these travelers to have unpredictable holiday choices. The accuracy of the classification of cluster memberships was successfully tested via a discriminant analysis in which 92.1% of the 354 grouped cases were correctly classified. Therefore, the first purpose of the study was accomplished as to identify and verify traveler segments using a factor-cluster approach based on travel DMS of individuals.

The second purpose of the study was to profile segments and identify differences, if any, between traveler segments with respect to a series of psychographic and attitudinal characteristics such as tourism involvement, destination images and demographic characteristics. Five null hypotheses were generated in the literature review process of the study (i.e.,  $H_1$  Sign,  $H_2$  Importance,  $H_3$  Consequences,  $H_4$  Probability,  $H_5$  Image). However, we needed to combine  $H_3$  Consequences and  $H_4$  Probability due to the identified tourism involvement factor structure, which was different from the factor structure reported in Dimanche et al. (1991). More specifically, while risk consequences and risk probability dimensions are formed as a common factor in the current study, they were formed as distinct factors in Dimanche et al. (1991). These results suggest that the tourism involvement construct demonstrates a multidimensional and unstable structure formation in different tourism contexts. Generic characteristics (e.g., intangibility, variability) with varying levels for different tourism goods and services might cause this unstable structure formation (Morrison, 2010). Therefore, the following new null hypothesis is generated and  $H_3$  and

$H_4$  are excluded from further analyses after the factor analysis of tourism involvement profile:

$H_{6 Risk}$ : There are no differences among the decision making styles groups regarding the attitudes toward the risk.

Accordingly, MANOVA was performed and revealed significant differences between the three clusters with respect to their attitudes towards tourism involvement and destination image factors ( $p < 0.05$ ). Firstly, RDMs were more likely to agree with the importance-pleasure dimension of the tourism involvement. Thus, travelers of RDMs cluster attach higher importance to the vacation, and value the pleasure nature of vacation more compare to other clusters. These travelers do not agree with the risk perception of involvement such as uncertainty and complexity of travel decision-making behavior. Several tourism studies reported that risk aversion strongly impacts the decisions of the rational travelers (e.g., Decrop & Zidda, 2006). RDMs of the current study might still be under the influence of risk aversion, whereas their risk perception might decrease due to their highly rational travel-decision making process. These travels might prefer to be highly rational not to consider travel-decision making as complicated and uncertain due to their strong dislike of risk perception. Furthermore, RDMs attach high levels of importance to all three destination image dimensions, indicating that they value destination images and these images are critical for them when making travel decisions.

Secondly, travelers of ADMs cluster were more likely to agree with the sign and risk perception dimensions of involvement than other clusters. Thus, ADMs agreed more that travel decision is uncertain and complicated compared to RDMs. Moreover, travelers of this cluster highly agree that their vacation decisions reflect their self-concept. These

travelers were also more likely to attach moderate levels of importance to accessibility to resources, and quality and reputation dimensions of image. Thirdly, Daydreamers provided the lowest agreement on the sign and importance-pleasure dimensions of the tourism involvement, as well as attached lowest importance to perceived destination image in terms of accessibility to resources, and quality and reputation dimensions. A summary of previously mentioned and all other key characteristics of these three clusters is illustrated in Table 3.7. The employed Bonferroni post-hoc test also validated that there were statistically significant differences among these three traveler segments ( $p < 0.05$ ). Therefore, all the null hypotheses of the study were rejected, including  $H_1$  Sign,  $H_2$  Importance,  $H_5$  Image,  $H_6$  Risk. There are differences among the DMS groups regarding their attitudes toward the sign, importance-pleasure, risk and destination image dimensions. These groups also show distinctive frequency of vacation taken per year. Specifically, Daydreamers cluster was formed of more travelers that took three to five vacations per year.

Unlike Decrop and Zidda's (2006) finding of six traveler segments (i.e., Hedonic, Rational, Adaptable, Constrained, Opportunistic, Habitual), this study identified three traveler segments, which share similar characteristics to Decrop and Zidda's (2006) segments, such as impulsiveness, pragmatism and social adjustment. It is an expected finding since items from their DMS scale was employed in the present study. Having said this, the traveler segments of this study had characteristics similar to previously identified customer segments in different studies. For example, RDMs were similar to the perfectionistic consumers, confused consumers due to the over choice (Sproles & Kendall, 1986), highly pre-defined users (Grabler & Zins, 2002), organized comfort-

seekers (Chang, 2011), rational travelers (Decrop & Zidda, 2006) with respect to their attitudes toward the rationality dimension of DMS. On the other hand, ADMs had similar characteristics with adaptable, opportunistic travelers (Decrop & Zidda, 2006), impulsive consumers (Sproles & Kendall, 1986) and recommendation-oriented users (Grabler & Zins, 2002) regarding their attitudes toward identified DMS factors of the current study. Furthermore, Daydreamers were similar to hedonic travelers (Decrop & Zidda, 2006) and price conscious consumers (Sproles & Kendall, 1986) based on the attitudes regarding the pragmatism dimension of DMS. However, none of these studies evaluated DMS by considering the attitudes regarding destination image and tourism involvement. Previously mentioned findings make a significant theoretical contribution to the tourism research. More specifically, identification of the attitudinal differences among the DMS traveler segments towards destination image and tourism involvement improves our theoretical understanding for the overlooked construct of DMS. Moreover, this study validates the efficacy of the DMS as a segmentation tool for the tourism researchers.

The findings of the study also provide important practical implications for generating effective marketing and positioning strategies based on the identified attitudinal characteristics of the traveler segments for DMOs. More specifically, for RDMs, DMOs should emphasize the importance-pleasure dimension of involvement for taking a vacation in a destination, and avoid the uncertainty in vacation information and purchase process. Moreover, DMOs should focus on building and promoting the destination image, so as to assist RDMs in making travel decisions in a rational, organized way. For example, travel agencies should make sure that there is detailed amount of travel information available for RDMs. Since these particular travelers search

for information and read a lot about a destination a long time ahead, the availability and quality of the information will impact their travel decision-making behavior. For instance, a social media advertisement campaign with a promotional message of “Always a pleasure to visit a specific destination” can automatically attract the attention of the RDMs due to their high agreement with importance-pleasure dimension of involvement. Such advertisement campaign will increase the involvement levels of travelers, especially RDMs, and influence their travel decision-making behavior.

On the other hand, for ADMs, it is more effective to emphasize the sign dimension of involvement, and avoid uncertainty of vacation purchase as well. Many researchers agreed that self-concept influences the vacation decisions (e.g., Morrison, 2010). Thus, DMOs should design the marketing strategies in a way that ADMs will match their self-images with the projected images of the destinations. Moreover, DMOs should encourage travelers who have visited or are visiting a destination to share their travel experiences with their family members and friends. Since travel decision-making behavior of ADMs is highly influenced by their parents and friends due to the social adjustment dimension, marketing strategies should focus on these key players. Once again, social media as a contemporary marketing channel can implement this strategy very effectively. For instance, hotel businesses can offer incentives to the travelers who post user generated content (e.g., a tweet) regarding their travel experience in a destination and share this content with their own networks on social networking sites. This type of content can influence the decision-making behavior of ADMs. Further strategies can also be developed for the ADMs cluster. For example, ADMs tend to make more realistic vacation decisions due to the pragmatism dimension. Thus, any promotion

strategy, tailored for ADMs, should emphasize that visiting a destination is the best offer among the alternatives regarding the traveler's available time and budget. Lastly, the current study enables the generation of marketing and positioning strategies for Daydreamers as well. For example, it is also effective to consider the social adjustment dimension in the generation of marketing strategies for the travelers of this particular segment. Marketing strategies that are generated with a segmentation approach based on the findings of the current study can increase the number of visitors to a destination.

This study had some limitations that lead to future research opportunities. One limitation was the sample size. A study with a larger sample size could have provided more representative findings for the study population and a more balanced number of travelers in each cluster. Furthermore, there are many other constructs that might impact the associations among DMS, tourism involvement and destination image, which should be further examined in future research. The nature of the roles of these constructs, for example the mediating or moderating impact, should be further examined. The main purpose of any market segmentation approach is to identify the most profitable segments (Morrison, 2010). The current study did not gather data regarding the willingness to spend money during vacation behavior of travelers. Such information could enable us to discover which of the identified segments is the most profitable. Future study should also address this limitation.

### 3.7 Tables and Figures

**Table 3.1 Factor Analysis of Travel DMS**

	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Explained Variance (%)	$\alpha^b$
<b>Factor 1. Adaptability</b>					
1. I choose my holiday according to the products which remain available in the travel agency	.77	3.12	4.30	22.64	.75
2. In my household, it is difficult to agree on vacation choices	.67	3.02			
3. Often, I make careless travel decisions; I later wish I had not traveled there	.64	2.55			
4. Searching for information about new destinations is generally a waste of time	.62	2.58			
5. I only think about travel destinations once I am on holiday	.58	2.91			
<b>Factor 2. Rationality</b>					
6. I read a lot about my destination before going on holiday	.74	3.98	2.81	14.81	.77
7. I search for tourism information a long time ahead before leaving	.72	3.82			
8. I seize all opportunities to collect tourist information	.71	3.56			
9. I plan the different aspects of my holiday very precisely	.71	3.50			
10. I carefully compare choice alternatives before making a final decision	.62	3.71			
<b>Factor 3. Impulsiveness</b>					
11. My destination choices result from random discussions or meetings	.71	3.26	1.44	7.58	.61
12. I often have to change my holiday plans because of practical constraints	.62	3.34			
13. My holiday choices are rather unpredictable	.61	3.27			
14. I often choose my holiday destination based on a stroke of heart	.55	2.89			
<b>Factor 4. Social adjustment</b>					
15. For my holiday choices, I rely on my partner, parents or friends	.80	3.17	1.21	6.40	.69
16. I cannot choose my destination alone	.77	2.96			
17. I often wait for the proposition of a parent or a friend before making my destination decision	.61	3.15			
<b>Factor 5. Pragmatism</b>					
18. I adapt my final choice according to the situation	.76	3.80	1.01	5.31	.60
19. I rely on the availability of time and/or money to make my holiday decisions	.74	3.94			

Note: KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy = .82. n = 354. Cut-off value: 0.45 a. On a scale ranging from 1 = strongly disagree to 5 = strongly agree. b. Cronbach's Alpha value.

**Table 3.2 Mean Comparisons of Items by Clusters**

DMS Factors	Scale Range (Lowest-Highest)	Cluster 1 Rational Decision-makers (Strong Rationality, Weak Impulsiveness, Moderate Pragmatism, Weak Adaptability and Social Adjustment <i>n</i> = 86)	Cluster 2 Adaptive Decision-makers (Moderate Rationality, Strong Impulsiveness, Strong Pragmatism, Strong Adaptability and Social Adjustment <i>n</i> = 87)	Cluster 3 Daydreamers (Weak Rationality, Moderate Impulsiveness, Weak Pragmatism, Moderate Adaptability and Social Adjustment <i>n</i> = 181)	<i>F</i> -Ratio	Sig. Level
Rationality	5-25	21.22	20.80	16.25	17.573	0.001*
Impulsiveness	4-20	10.67	15.08	12.65	42.307	0.001*
Pragmatism	2-10	7.87	8.29	7.41	104.575	0.001*
Adaptability	5-25	10.97	19.25	13.27	32.253	0.001*
Social adjustment	3-15	7.63	11.51	9.01	3.476	0.032*

Total valid *n* = 354

\*Significant at 0.05 alpha level.

**Table 3.3 Classification Results**

Cluster	Predicted Group Membership			Total
	1: Strong Rationality, Weak Impulsiveness, Moderate Pragmatism, Weak Adaptability and Social Adjustment	2: Moderate Rationality, Strong Impulsiveness, Strong Pragmatism, Strong Adaptability and Social Adjustment	3: Weak Rationality, Moderate Impulsiveness, Weak Pragmatism, Moderate Adaptability and Social Adjustment	
Rational Decision-makers	76 (88.4%)	0 (.0%)	10 (11.6%)	86
Adaptive Decision-makers	5 (5.7%)	69 (79.3%)	13 (14.9%)	87
Daydreamers	0 (.0%)	0 (.0%)	181 (100%)	181

92.1% of original grouped cases correctly classified.

**Table 3.4 Factor Analysis of Tourism Involvement Profile**

	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Explained Variance (%)	Cronbach's Alpha
<b>Factor 1. Sign</b>					
1. The vacation I buy tells something about me	.78	3.58	3.281	29.83	.78
2. You can tell a lot about a person by the vacation he/she chooses	.69	3.50			
3. The vacation I buy gives a glimpse of the type of person I am	.59	3.44			
<b>Factor 2. Importance-Pleasure</b>					
4. A vacation interests me a great deal	.79	4.07	2.176	19.78	.74
5. A vacation is somewhat of a pleasure to me	.62	4.10			
6. It gives me pleasure to purchase a vacation	.57	3.97			
7. I attach great importance to a vacation	.50	3.87			
<b>Factor 3. Risk Perception</b>					
8. Whenever one buys a vacation, he/she never really knows for sure whether it is the one that should have been bought	.63	3.36	1.207	10.97	.69
9. When one purchases a vacation, he/she is never certain of his/her choice	.63	3.15			
10. Buying a vacation is rather complicated	.60	3.23			
11. If, after I buy a vacation, my choice proves to be poor, I would be really upset	.49	3.19			

Note: KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy = .75. n = 320. Three original items were eliminated from the analysis. Cut-off value: 0.45 a. On a scale ranging from 1 = strongly disagree to 5 = strongly agree

**Table 3.5 Factor Analysis of Destination Image**

	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Explained Variance (%)	Cronbach's Alpha
<b><i>Factor 1. Accessibility to Resources</i></b>					
1. Easy access to destination	.78	4.23	8.37	46.52	.85
2. Smooth travel to and from destination	.76	4.21			
3. Problem free vacation arrangement with the destination	.76	4.30			
4. Easy access to meaningful information about the destination	.75	4.12			
5. Favorable weather/climate at the destination	.62	4.19			
6. Abundant tourism resources (natural scenery, historic/cultural/heritage site etc.)	.51	4.25			
<b><i>Factor 2. Quality and Reputation</i></b>					
7. High quality human resources at the destination	.76	3.84	1.50	8.36	.86
8. Prioritization of development and improvement of high-quality destination	.74	3.92			
9. Alliance/connection with intermediates in the tourism sector	.72	3.94			
10. Commitment to provide a satisfactory vacation experience	.68	4.07			
11. Policies/regulations favorable to tourists	.64	3.99			
12. A good value for the money spent for my vacation experience	.56	4.13			
<b><i>Factor 3. Overall Destination Image</i></b>					
13. Safe and secure environment at the destination	.82	4.34	1.19	6.61	.87
14. Positive image	.74	4.14			
15. The overall destination experience offered "fits" my needs	.65	4.09			
16. Nature of setting in helping me function comfortably in my daily activities	.64	4.13			
17. High level of health and hygiene at the destination	.62	4.22			
18. Competitive price for overall vacation relative to competitor destinations.	.54	4.14			

Note: KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy = 0.91. n = 282. Six original items were eliminated from the analysis. Cut-off value: 0.45 a. On a scale ranging from 1 = not important at all to 5 = very important

**Table 3.6 Difference Tests on Involvement and Image Factors**

Factors	Groups	N	Mean	SD	F	Sig.
<b>Involvement</b>						
Sign (highest possible score is 15)	Rational <sup>a</sup>	85	10.20 <sup>b</sup>	3.19	10.73	0.001*
	Adaptive <sup>b</sup>	85	11.25 <sup>ac</sup>	2.72		
	Daydreamers <sup>c</sup>	180	9.52 <sup>b</sup>	2.73		
Importance-Pleasure (highest possible score is 20)	Rational	85	16.83 <sup>c</sup>	2.82	8.56	0.001*
	Adaptive	85	16.47 <sup>c</sup>	2.61		
	Daydreamers	180	15.45 <sup>ab</sup>	2.83		
Risk Perception (highest possible score is 20)	Rational	84	10.92 <sup>cb</sup>	3.05	39.78	0.001*
	Adaptive	85	14.93 <sup>ac</sup>	3.09		
	Daydreamers	180	12.26 <sup>ab</sup>	2.94		
<b>Image</b>						
Accessibility to Resources (highest possible score is 30)	Rational	71	26.48 <sup>cb</sup>	4.13	6.84	0.001*
	Adaptive	73	24.57 <sup>a</sup>	3.45		
	Daydreamers	143	24.10 <sup>a</sup>	5.07		
Quality and Reputation (highest possible score is 30)	Rational	68	25.22 <sup>c</sup>	4.73	6.40	0.002*
	Adaptive	72	23.49	4.36		
	Daydreamers	139	22.75 <sup>a</sup>	4.77		
Overall Destination Image (highest possible score is 30)	Rational	69	26.42 <sup>cb</sup>	4.32	7.38	0.001*
	Adaptive	72	23.72 <sup>a</sup>	4.59		
	Daydreamers	140	24.26 <sup>a</sup>	4.54		

MANOVA was used to determine statistical differences among groups. Differences among groups are indicated by superscript letters a, b, and c via Bonferroni post-hoc test.

\*Significant at 0.05.

**Table 3.7 Summary of Key Characteristics of the Clusters**

Cluster 1: Rational Decision-makers (Strong Rationality, Weak Impulsiveness, Moderate Pragmatism, Weak Adaptability and Social Adjustment)	20.1% of the sample ( $n = 86$ ) More likely to agree with rationality dimension of DMS than other clusters Less likely to agree with impulsiveness, adaptability and social adjustment dimensions of DMS than other clusters Less likely than ADMs to agree with pragmatism dimension of DMS but more likely than Daydreamers to agree with this dimension Less likely than ADMs to agree with sign dimension of involvement but more likely than Daydreamers to agree with this dimension More likely to agree with importance-pleasure dimension of involvement than other clusters Less likely to agree with risk perception dimension of involvement than other clusters More likely to attach high levels of importance to the identified three image dimensions
Cluster 2: Adaptive Decision-makers (Moderate Rationality, Strong Impulsiveness, Strong Pragmatism, Strong Adaptability and Social Adjustment)	20.4% of the sample ( $n = 87$ ) Less likely than RDMs to agree with rationality dimension of DMS but more likely than Daydreamers to agree with this dimension More likely to agree with impulsiveness, pragmatism, adaptability and social adjustment dimensions of DMS than other clusters More likely to agree with sign and risk perception dimensions of involvement than other clusters Less likely than RDMs to agree with importance-pleasure dimension of involvement but more likely than Daydreamers to agree with this dimension More likely to attach moderate levels of importance to accessibility to resources, and quality and reputation dimensions of image Less likely to attach importance to overall destination image dimension
Cluster 3: Daydreamers (Weak Rationality, Moderate Impulsiveness, Weak Pragmatism, Moderate Adaptability and Social Adjustment)	42.4% of the sample ( $n = 181$ ) Less likely to agree with rationality and pragmatism dimension of DMS than other clusters Less likely than ADMs to agree with impulsiveness, adaptability and social adjustment dimensions of DMS but more likely than RDMs to agree with these dimensions Less likely to agree with sign and importance-pleasure dimensions of involvement than other clusters Less likely than ADMs to agree with risk perception dimension of involvement but more likely than RDMs to agree with this dimension Less likely to attach importance to accessibility to resources, and quality and reputation dimensions of image than other clusters Less likely than RDMs to attach importance to overall destination image but more likely than ADMs to attach importance to this dimension

Total number of correctly classified cases = 326

## CHAPTER 4

### DESTINATION NEUROGENETICS:

#### CREATION OF DESTINATION MEME MAPS OF TOURISTS<sup>3</sup>

##### 4.1 Abstract

Even though Memetics, the study area of meme maps, has been well-studied in the Cognitive Neuroscience and Computer Science disciplines, there has been no research attempt on Memetics in the Tourism and Hospitality field. Seminal studies in the marketing field suggest that the concepts of destination image and meme maps are highly-related. Accordingly, the purpose of the current study is twofold: (1) to identify the overall Destination Image Meme Maps of Antalya, Turkey and their favorite tourism destination, and (2) to identify and evaluate the similarities and differences in the structures of the previously generated two categories of Destination Image Meme Maps. The data was gathered from two samples consisting of 272 Russians and 262 German travelers visiting a medium-sized city (i.e. Antalya) located in the south region of Turkey. This study adopts and enhances the knowledge of Memetics into Tourism and Hospitality research. It also provides significant practical and methodological contributions.

Keywords: Memetics, Meme Maps, Destination Image, Spreading Activation

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<sup>3</sup> Atadil, H. A., Sirakaya-Turk, E., & Baloglu, S. To be submitted to *Journal of Business Research*.

## 4.2 Introduction

A novice to the field of marketing might wonder why polar bears appear on Coca-Cola's labels and advertisement campaigns. One can purchase polar bear toys at Coca-Cola stores, and even meet the "Coca-Cola Polar Bear" character in the World of Coca-Cola in Atlanta, GA (World of Coca-Cola, 2016). Clearly some sort of a relationship must exist between a polar bear and the Coca-Cola brand. What are the first things that come to our minds when we, as the consumers in the marketplace, think of a polar bear? Some of the potential answers to this question might include: unique, friendly, and ice cold. What if one were to ask the very same question for the Coca-Cola brand? It may be surprising to learn that consumers associate or describe the Coca-Cola brand with the same answers they provide for the polar bear. However, according to the science of Memetics, a field of study that originated from Computer Science and Evolutionary Biology, this outcome is not surprising (Dawkins, 1976; Quillian, 1968). The Coca-Cola Company might be subtly implanting a well-planned message in the minds of its current and prospective customers by using polar bear visuals or cues continuously. The Coca-Cola Company is trying to encourage its customers to associate characteristics that are particular to polar bears with its products. For example, through exposure to such branding, a customer may begin to think that a Coca-Cola beverage is as unique as a polar bear. Although anecdotal, this consideration of Coca-Cola's marketing techniques demonstrates the core ideas behind the Memetics approach.

Dawkins (1976) defines a meme as a unit of cultural transmission that includes a piece of information stored in memory. A meme (e.g., unique) can represent our perceptions related to an image (e.g., polar bear image), brand (e.g., Coca-Cola), and all

other real or fictional entities that one can think of (Henderson, Iacobucci, & Calder, 1998; Krishnan, 1996). The Theory of Spreading Activation, one of the foundational theoretical models of Memetics, states that memes are linked to each other in a person's memory through lines. These lines, known as semantic similarity lines, demonstrate the association between pairs of memes (Collins & Loftus, 1975; Quillian, 1967). A meme map may be viewed as a generic network that is comprised of memes and lines between these memes. Seminal articles published in the marketing field enabled the evolution of Memetics knowledge. For example, Krishnan (1996) examined the characteristics of brand associations based on Keller's (1993) consumer-based brand equity conceptualization. In marketing, the term "brand association" is often used to refer to a meme map.

Keller (1993, p.3) defines an image as "perceptions about a brand as reflected by the brand associations held in consumer memory." Even though the image and brand of a destination are two different terms, the brand's existence depends on the image formation of a destination (Cai, 2002). Image formation can be defined as the construction of a mental representation of a destination depending on the information cues transferred by image information agents and personal factors (Alhemoud & Armstrong 1996; Gunn, 1972). Based on parallel literatures between the destination image and Memetics, we can safely postulate that destination images and meme maps are highly related constructs, since they are both generated and evaluated in the minds of the travelers via similar processes. Foundational travel decision-making models explicitly state that travelers' perceived images of destinations play a significant role in their travel decisions, such as

making the choice to return to a previously visited destination (e.g., Um & Crompton, 1990; Woodside & Lysonski, 1989).

Based on the previous discussion and Keller's (1993) image conceptualization, the purpose of the current study is twofold: (1) to identify the overall Destination Image Meme Maps (DIMMs) of Antalya, Turkey, and their favorite tourism destination, and (2) to identify and evaluate the similarities and differences in the structures of the previously generated two categories of DIMMs. The current study is based on the Theory of Spreading Activation and the Symbolic Interaction Theory (Blumer, 1969; Quillian, 1967). The core ideas and propositions of these foundational theoretical models, as well as their relationship to this study, are discussed in the literature review. Although Memetics has been around for over two decades now, researchers still consider Memetics to be a new paradigm that has yet to reach its potential, primarily because of the methodological challenges involved in the conceptualization and operationalization of constructs. The current study is likely the first of its kind to assume this challenge and thereby advance the knowledge of Memetics by applying its tenets to tourism marketing research. The methodology utilized in this Memetics study expands the contents of the toolbox available to tourism researchers by shedding a better light on decision-making processes and consumer behavior (e.g., Lynch, 1996). According to this new paradigm, the role of marketing communication is to design positioning strategies that will activate the most influential and common memes in the brand image meme maps stored within individuals' minds. The detailed implications of this research are discussed using the Theory of Spreading Activation as the conceptual framework. Moreover, since there is no well-accepted methodology and statistical procedure that allows researchers to generate

meme maps, the authors explain the innovative methodology and statistical procedures employed in detail in order to guide future research on Memetics in the tourism field.

### **4.3 Literature Review**

#### *4.3.1 Origins of Memetics*

Berger, Dittenbach, and Merkl (2004, p.219) define an associative network as “a generic network which includes nodes representing information items (semantic entities) and associations between these nodes that express relationships.” A node is a piece of information stored in memory that can represent our perceptions regarding an image, product, or attribute. Associative networks have strong theoretical bonds with semantic networks (Berger, Dittenbach, & Merkl, 2004). Semantic networks were initially invented for computers by R. H. Richens at the Cambridge Language Research Unit in 1956 as an international language for the machine translation of natural languages. Computers obtained the necessary knowledge to perform their tasks and solve problems by using the semantic networks designed by engineers. These computers were able to recall detailed knowledge that had been stored in the semantic networks (Lehmann, 1992). Then Quillian (1968) used the concept of semantic networks to explain the basic principles of human knowledge formation through nodes, their characteristics, and relationships between nodes. After Quillian’s studies (1967, 1968), cognitive psychologists started to study semantic networks to explain a specific conceptual approach known as associative networks (Berger et al., 2004). Generally, cognitive psychologists state that knowledge is stored in millions of associative networks, and these semantic constructions consist of networks, nodes, and associations (Henderson, Iacobucci, & Calder, 1998).

Researchers renamed and modified the assumptions of the associative networks' conceptual approach in Memetics, or the study of meme maps (Lebedeva, 2007). Memetics examined the knowledge of associative networks from a Darwinian evolutionary perspective. Dawkins (1976) introduced the technical term "meme" by shortening the "mimeme" word that comes from a Greek root. He wanted to present a term that sounded a bit like "gene," and thereby created the term "meme" (Dawkins, 1989). Dawkins (1976) defines the meme as a unit of cultural transmission or imitation that includes a piece of information stored in memory. A meme can imitate itself and evolve, similar to a gene. However, it inhabits only the mind of a person and imitates itself by interpersonal communication and artifacts (Williams, 2000). The terms node and meme actually represent the same concept. Similarly, the same concept is represented by the terms associative network and meme map. Thus, memes also represent our perceptions regarding real or unreal world entities (Henderson et al., 1998; Krishnan, 1996). Moreover, a generic network that is formed of memes and lines connecting these memes can be considered a meme map. These lines demonstrate the relationship between a pair of memes (e.g., ice cold, friendly). The width of the lines increases as the level of the relationship increases, and vice versa (Berger et al., 2004; Henderson et al., 1998). Memetics has enabled researchers to develop a deeper understanding of the principles and concepts of the associative networks approach from a Darwinian evolutionary perspective. Marsden (2002) also explains the strong connection between Memetics and associative networks. He stresses that an idea is located in an associative network with the pure meaning of that idea for its holder. The nodes in an associative network present the genes or memes of the meaning. Thus, he explicitly states that memes could be

simply understood as nodes (p.307). As previously discussed, the terms meme and meme map include the terms node and associative network, respectively, in the current study.

#### *4.3.2 Evolution of Memetics Studies in Marketing and Tourism Research*

Seminal articles published in the marketing field enabled the evolution of Memetics knowledge. For example, Krishnan (1996) examined the characteristics of brand associations based on Keller's (1993) consumer-based brand equity conceptualization. In marketing, the term "brand associations" is often used to refer to a meme map. Krishnan (1996) confirmed that brand associations have four characteristics. First, the number of associations equals the total number of memes in a meme map. Second, the valence of associations is the value (positive, negative, or neutral) of a certain meme. While a traveler can attach a positive value to a meme (e.g., rich history), a negative value can be attached to another meme (e.g., traffic congestion). Third, the uniqueness of associations is the ability of a certain meme or meme map to be unique. For instance, a meme map about the image of Paris might have the Eiffel Tower as a unique meme. Lastly, the origin of associations indicates the source of a meme. Travelers use a variety of sources to gather information regarding destinations, tourism, and hospitality organizations. These information sources can be categorized as (1) direct experience with the destination, (2) friends and/or relatives, and (3) advertisements. Krishnan's pioneering study (1996) examined the associative networks of the Nike brand as an example. He stated that consumers associate the Nike brand with nodes such as swoosh, durability, running, Michael Jordan, and even Greek Goddesses (Figure 4.1). Krishnan (1996) concluded that the characteristics of the brand associations he proposed can be used to analyze brand images stored in consumer minds. Henderson et al. (1998)

applied social network analysis to brand associative networks. The authors attempted to examine consumer brand associations and to show their benefits for brand managers. They were able to provide a deeper evaluation of brand associations' characteristics with the help of social network analysis.

Furthermore, Low and Lamb (2000) focused on specific associations regarding image, attitude, and perceived quality. The authors found that popular brands tend to have multi-dimensional meme maps in the minds of the consumers and indicated that well-known brands are stored with improved memory structures in individuals' minds. Around the same time, Supphellen (2000) provided guidelines for the in-depth elicitation of brand associations. This author then concluded that qualitative research approaches, such as the free association method, enable researchers and managers to obtain a deeper understanding of unconscious and non-verbal brand associations in the minds of consumers. Further marketing studies provided significant contributions to the evolution of Memetics research (e.g., Cheng-Hsui, 2001; John, Loken, Kim, & Monga, 2006; Marsden, 2002). Studies on Memetics in marketing research employed a variety of techniques including quantitative, qualitative, and mixed-method approaches. Furthermore, these studies employed a variety of analytical tools such as network algorithm analysis (e.g., Henderson et al., 1998) and confirmatory factor analysis (e.g., Low & Lamb, 2000). A review of the relevant literature suggests that there is no common research method or typical analytical tool that allows researchers to study Memetics.

Application of the associative networks, and especially Memetics to Tourism and Hospitality (T&H) research is quite limited. There are only a few associative networks related studies (e.g., Aziz, Kefallonitis, & Friedman, 2012; Berger, Dittenbach, & Merkl,

2004; Huang, Li, & Li, 2015; Li & Stepchenkova, 2012) in tourism research. The situation is even worse for the application of Memetics. When one searches “Memetics” as a key word in the EBSCOhost search engine under the hospitality and tourism complete category, the subject index yields no results. Among the associative networks studies in T&H research, Berger et al. (2004) proposed an accommodation recommender system based on associative networks and the spreading activation algorithm. Their study mostly focused on developing a tourist information system to ease the decision-making process, which had no relationship with branding, destination, or image concepts, whereas Aziz et al. (2012) investigated the sensory brand characteristics of Turkey by employing semiotics through a survey study. Their study sample consisted of 217 US citizens who have or have not been to Turkey. Depending on the principles of semiotics study, the authors associated Turkey with particular sights, smells, touches, and tastes based on the perceptions of the respondents. Their study focused on sensory brand associations rather than semantic brand associations and thus did not generate an associative network or meme map.

The following three studies are perhaps the first English studies in T&H research that aimed to generate an associative network. Since these studies ignored Memetics, the term associative network is being used intentionally here. Firstly, Li and Stepchenkova (2012) attempted to generate associative networks that reflect different image dimensions (i.e., overall, stereotypical, affective, and uniqueness images) of the United States as a tourism destination as perceived by Chinese travelers. Based on the seminal study of Echtner and Ritchie (1993), the authors asked the respondents three open-ended questions (e.g., What images or characteristics come to your mind when you think of XXX as a

vacation destination?). Their study sample included 1600 respondents who were each interviewed for 30-40 minutes. Respondents mostly associated highly urban, advanced economic development, an open and democratic system, improved technology, and big cities with the United States. The authors stressed that the usage of convenience sampling limited their study.

Secondly, Baloglu, Henthorne, and Sahin (2014) assessed the destination image and brand personality of Jamaica. The authors identified destination-specific brand image and personality characteristics through qualitative questions. More specifically, four associative networks (i.e., general image or characteristics, the atmosphere or mood, tourist attractions unique to Jamaica, and popular tourist activities) were generated in this study via SPSS Modeler text analytics. For example, the general image of the Jamaica associative network was comprised of the following nodes: drugs, exciting, fun, beach, touristy, hot weather, music, poor, and friendly. Moreover, relaxing, fun, friendly, and laid-back were the most apparent nodes that form the atmosphere of the Jamaica associative network. The authors concluded that individuals possess mixed images regarding the image of the same destination. Their study demonstrated promising empirical evidence for the usage of the SPSS Modeler in the generation of associative networks.

Lastly, Huang et al. (2015) explored the perceptions of Chinese travelers in order to generate an associative network for Taiwan as a tourism destination. The authors collected data from 727 respondents through a self-administrated survey and employed both quantitative and qualitative techniques to analyze the obtained data. In addition to sketching associative networks, the authors performed Exploratory Factor Analysis in

order to identify the underlying dimensions of the brand associations. Their overall findings indicated that Chinese travelers' brand associations are highly favorable for Taiwan.

In sum, these three studies provide promising empirical evidence for the application of associative networks knowledge to T&H research. However, none of these studies has taken Memetics knowledge into consideration. Thus, these studies could only provide a limited understanding for the subject of the study.

#### *4.3.3 Theoretical Foundation of the Study*

Collins and Loftus (1975) developed one of the most influential meme map models based on the Theory of Spreading Activation (TSA). This theory depends on Quillian's (1967, 1968) spreading activation theory of human semantic processing that enabled computers to imitate human memory search behavior (Anderson, 1983). The crux of Quillian's theory (1968) is that when a person is reminded of a stimulus or presented with a cue, activation of the corresponding meme occurs. In this way, the activation that the stimulus meme starts then spreads to other memes. This process of memory search is called spreading activation (Collins & Loftus, 1975; Henderson et al., 1998). Collins and Loftus (1975) evaluated the original theory and proposed an extended version of it. In this way, the authors attempted to incorporate the theory into the discipline of psychology (Collins & Loftus, 1975; Quillian, 1967). Based on this theory, a cue intersection is found when a stimulus meme(s) reaches the same corresponding meme. Then the evaluation of a meme map's meaning is processed by an individual. This evaluation influences the behaviors, thoughts, and emotions of the individual. Moreover, Collins and Loftus (1975) suggested that a meme map is comprised of semantic similarity

lines. There will be more links (or lines) connecting two memes if these particular memes have more shared characteristics than other memes available in a meme map. This assumption describes the rationale behind the semantic relatedness concept. Based on this concept, the width of the lines changes in a given meme map. If two particular memes (e.g., croissant, Paris) are highly related to each other, an individual has a higher likelihood of remembering one of these memes (e.g., croissant) when he/she is reminded of the other meme (e.g., Paris).

Many researchers who applied Memetics to marketing research based their studies on the Theory of Spreading Activation (TSA) (e.g., Brandt, Mortanges, Bluemelhuber, & Riel, 2011; Henderson et al., 1998). Conversely, similar to the lack of memory studies, the application of TSA to T&H research is scarce at best. Among these limited studies, Cai (2002) proposed a conceptual model of destination branding. This model was founded on the TSA. The author concluded that the strength and favorability of brand associations, as well as these brand associations' connections to the brand identity, are highly related to the core principles of TSA. The current study also proposes that the formation of brand associations or meme maps can be better understood through TSA. Moreover, Jacob, Guéguen, Ardiccioni, and Sénémeaud (2013) evaluated the tipping behavior of customers towards waitresses and explained their results based on TSA. The authors found that when customers are exposed to altruistic information cues, these cues first activate the concept of altruism leading to further activations in related concepts, such as helping and generosity.

In addition to the TSA, Symbolic Interaction Theory (SIT) can be employed to understand the social foundations of Memetics. SIT asserts that the meanings that

individuals attach to things determine their behaviors towards these particular things. Most importantly, these meanings are derived from social interactions and are under the influence of the symbolic environment (Blumer, 1969; Charon, 1979; Denzin, 2009). A symbol can be considered to be a stimulus that includes a stored meaning and value. An individual's response to physical reality is under the influence of external symbols or stimuli (Rose, 1962; Solomon, 1983). Memetics also asserts that individuals behave according to the meanings that they obtain from stimuli through cue intersections.

#### *4.3.4 Destination Image and Hypotheses Development*

Keller (1993), in his seminal study on customer-based brand equity, emphasized that an organization's most valuable asset for marketing is the brand knowledge stored in the minds of consumers. He proposed that brand knowledge is formed by brand awareness and brand image. The concept of image is mostly adopted as destination image in tourism research, and destination image is a major component of destination brand and its development (Tasci & Gartner, 2007; Tasci & Kozak, 2006). Destination image is traditionally defined as "the sum of beliefs, ideas, and impressions that a person has of a destination" (Crompton, 1979, p.18), and these beliefs, ideas and impressions are reflected by brand associations based on Keller's (1993) conceptualization. Stepchenkova and Li (2014) noticed the strong relationships among brand, brand associations and image concepts. Authors even suggested that destination images and destination brand associations can be considered as two sides of the same coin. In the current study, it is claimed that meme maps or brand associations are antecedents of images whereas images are the byproducts of meme maps. Thus, the generation of travelers' meme maps regarding a destination can thoroughly reflect their destination images for that particular

destination. Based on the previous discussion, a conceptual framework was developed to demonstrate the relationship of the study constructs (Figure 4.2).

Aforementioned seminal studies in the marketing and cognitive neuroscience disciplines claim that well-known brands are reflected by improved meme maps in customers' minds (e.g., Collins & Loftus, 1975; Low & Lamb, 2000). Krishnan (1996) compared high equity to low equity brands in his seminal study, and hypothesized that high equity brands will have a larger number of associations in the related meme maps. He successfully confirmed this hypothesis in his study. Moreover, it is well-documented that customers' attitudes and behaviors towards a particular brand becomes more positive, when the brand is perceived as a high equity brand (Keller, 1993). Thus, within the tourism context, managers would desire their destination's brand image to be reflected a larger number of associations in a travelers' minds. In this way, these travelers' attitudes and behaviors such as revisit behavior will be more positive towards this destination. Based on this rationale, the following research hypothesis was developed:

*H<sub>1</sub>*: The number of associations positively influences travelers' likelihood to return behavior; as the number of associations increase, so does the likelihood of return.

#### **4.4 Methodology**

The data was gathered from two samples consisting of 272 Russians and 262 German travelers visiting a medium-sized city (i.e. Antalya) located in the southern region of Turkey. Self-administered questionnaires were employed for both samples after each questionnaire was translated into German, Russian and Turkish by bilingual speakers and independent professional translators who were hired as the third party.

Thus, authors ensured the semantic consistency of the questionnaire items. A convenience sampling as a non-probability sampling method was utilized. Study questionnaire was formed of two major sections. The first section included questions regarding general and unique memes of the respondents both for their favorite destinations and Antalya, Turkey. Respondents were asked to list the related memes, and to rate them with respect to their characteristics such as valence and origin in this section. These questionnaire items assessing the memes are explained in detail on the following paragraphs of the current methodology section. Moreover, respondents were asked to indicate their likelihood to return Antalya in the future through a 6-point Likert scale question where one is the *highly unlikely* and six is the *highly likely*. Lastly, the second section of the questionnaire included questions regarding the demographic characteristics of the respondents.

56% and 84% of the respondents respectively were female in the German and Russian samples. While slightly more than half of the Russian respondents (51%) had an undergraduate degree, almost half of the German respondents (49%) had a high school or lower level of education. Antalya, as the host city of EXPO2016, is the fourth visited tourism destination in the world with around 300 sunny days in a year (EXPO, 2016). Antalya, known to the visitors as heaven on earth and the Turkish Riviera, is a mature and successful tourism destination. German and Russian travelers represent the top two source markets for Antalya. In 2015, almost six and four millions of German and Russian travelers, respectively, visited Antalya (Turkish Ministry of Culture & Tourism, 2016), though recent political events (e.g., violent tension between Turkey and Russia over Turkish airspace and the Syrian refugee crisis) in the region curtailed tourism activity

significantly. Regarding the analyses of the data, authors performed regression analysis in SPSS 21. The remaining analyses enabled the generation of the meme maps which is explained in detail in the following paragraphs.

Several steps were followed to generate the meme maps in the current study. As the first step, a free association method was performed for the elicitation of the memes. This method is the most common qualitative method as a means for gathering required data for meme map generation. In this method, respondents are simply asked to describe their perceptions regarding a particular phenomenon (e.g., perceived image of a destination) in their own words without any limitations (Boivin, 1986; Krishnan, 1996; Low & Lamb, 2000). In the current study, respondents were asked two questions based on the seminal study of Echtner and Ritchie (1993): (1) Please list all of the descriptive words, thoughts, characteristics, logos, symbols or images that come to your mind when you think of XXX as a vacation destination, (2) Are there any unique things in XXX destination? If yes, please list the unique things that come to your mind that do not exist or are rarely encountered anywhere else but here. General and unique memes were identified, respectively, through the words (e.g., sea, local people) that respondents listed to answer these questions. Respondents needed to answer these questions two times to describe their perceptions regarding Antalya and their favorite vacation destinations. These questions enabled authors to collect the related data for the number and uniqueness of associations; two main characteristics of brand associations that are confirmed in the seminal study of Krishnan (1996) and that are previously explained in the literature review. Moreover, respondents were also asked to provide information regarding the other two characteristics of brand associations: origin and valence of associations. More

specifically, respondents indicated the source of the memes (i.e., direct experience with the destination, what they heard from friends and/or relatives, advertising that they have seen or heard) for the origin of associations question. Furthermore, they rated the overall valence of the memes they provided by selecting one of the following options: bad for the destination, good for the destination, neither good nor bad for the destination. Valence and origin of associations were asked only for the general memes that were provided for Antalya and travelers' favorite destinations. Furthermore, the overall influentiality of the general memes was also assessed through a 5-point Likert scale question where one is the *least influential* and five is the *most influential*. Thus, respondents indicated how influential the memes they listed in their answers were when determining their overall destination image for a particular destination.

IBM SPSS Modeler Text Analytics 16 (Modeler) was employed to generate the meme maps. This particular statistics software has strong text analytic abilities that utilize advanced linguistic technologies and natural language processing. The software can quickly analyze a large amount of unstructured text data, export the most common word(s) and examine their semantic relatedness both in English and German (IBM SPSS Modeler, 2016). Authors first identified the descriptive results for the memes (i.e., mean number of associations, mean influentiality, valence frequency count, origin of associations frequency count) to gain deeper insights regarding the characteristics of the brand associations for the most common memes. Then, the text data was imported into the Modeler software. The software initially performs a text mining procedure in order to extract the common memes (e.g., sea, sun, beach) for a particular meme map (e.g., General Meme Map of Antalya by Russian Travelers). During this text mining procedure,

data screening is automatically performed in order to group synonyms, both plural and singular terms, that refer to the same meme. More specifically, the software runs concept root derivation and semantic network techniques to categorize and identify the common memes (IBM SPSS Modeler, 2016). The first two authors of the study also read all the memes and manually performed a data screening to increase the trustworthiness of this procedure.

After extraction of the common memes, the next step was the generation of the meme maps. The interactive workbench of the Modeler software enables meme map generation based on two criteria: (1) Frequency of memes, (2) Co-occurrence of memes. The values regarding these two criteria are, respectively, illustrated under the #Docs and #Shared Docs sections on the right side of each generated meme map (e.g., Figure 4.3). Co-occurrence demonstrates those pairs of words that are often found together in respondents' answers for a particular question. For example, respondents were asked to list all of the descriptive words that come to their minds when they think of Antalya in this study. If the words *sun* and *sea* are often found together in respondents' answers for this particular question, then the software automatically calculates the frequency of this co-occurrence. Then based on this frequency of co-occurrence value, a line appears between the memes of *sun* and *sea* in the related meme map. The line represents the association between these two memes. The width of the line increases as the frequency of co-occurrence increases, and vice versa. *Sun* and *sea* memes have the strongest association since these memes are connected to each other with the thickest line (Figure 4.3). These memes co-occurred or were found together 59 times in respondents' answers. A previously identified common meme might have a co-occurrence value of 0 with all

other memes. This value states that the particular meme does not have any associations with rest of the memes. In such cases, the particular meme will not appear on the meme map. Furthermore, each meme is represented by a blue dot in the generated meme maps. The size of a particular dot increases as the frequency of this dot increases. For example, since the *sea* meme was the most common meme with a frequency value of 131 for the General Meme Map of Antalya by Russians, the dot of this particular meme has the largest size in the related meme map (Figure 4.3). While the regression analysis was performed on the total sample, the rest of the analyses in the study were performed for each sample of Russian and German travelers separately.

#### 4.5 Results

A regression analysis was performed to determine the predictive power of *number of associations* as an independent variable in respondents' *likelihood to return* dependent variable (Table 4.1). The results demonstrated significant correlations for the *number of associations* variable with the standardized coefficient beta value of 0.70. As a result, the *likelihood to return* model ( $F(1, 115) = 112.355, P = 0.00$ ) was able to explain 50% of the variation in the dependent variable ( $R^2 = 0.50, \text{Adjusted } R^2 = 0.49$ ). Tolerance and VIF values indicated no multicollinearity problems for the model.

After Russian respondents listed all of the descriptive words, thoughts, characteristics, logos, symbols or images that came to their minds when they thought of Antalya as a vacation destination, the most common top five general memes were *sea* (131), *sun* (75), *beach* (54), *nature* (50) and *nightlife* (38). Characteristics of the brand associations for each meme map were calculated considering all memes provided by respondents for a question (e.g., general memes for Antalya). All general memes of

Antalya provided by Russian travelers had a mean number of associations value of 3.90; in other words, the average number of general memes that were provided by Russian travelers for Antalya was almost four. The mean influentiality value of these general memes was 4.39 (Table 4.2). The majority of these general memes for Antalya by Russian travelers originated from direct experience (92.6%) and was considered as good for the destination (98.8%) (Table 4.3). Figure 4.3 illustrates the general meme map of Antalya by Russian travelers. The strongest association appeared between *sea* and *sun* memes with a co-occurrence value of 59. The next four strongest associations were between the memes of *sea* and *beach* (co-occurrence: 38), *sea* and *mountains* (co-occurrence: 18), *nature* and *sea* (co-occurrence: 16), and *sun* and *beach* (co-occurrence: 16). On the other hand, the weakest associations for this meme map occurred between several pairs of memes such as *architecture* and *nightlife* (co-occurrence: 1), *cuisine* and *mountains* (co-occurrence: 1), and *nature* and *nightlife* (co-occurrence: 1).

When German travelers listed their descriptive words for Antalya, the following were the most common top five general memes: *sun* (79), *sea* (58), *beach* (45), *culture* (21), and *friendliness* (14). Furthermore, all general memes for Antalya listed by German travelers had 2.64 and 4.24 values as the mean number of associations and mean influentiality values, respectively (Table 4.4). Similar to Russian travelers, German travelers also stated that the majority of the general memes for Antalya originated from direct experience (83.2%) and were considered good for the destination (77.3%) (Table 4.5). In the generated general meme map of Antalya by German travelers, the top five strongest associations appeared between the following pairs of memes: *sea* and *sun* (co-occurrence: 42), *sun* and *beach* (co-occurrence: 27), *sea* and *beach* (co-occurrence: 10),

*recreation* and *sun* (co-occurrence: 7), and *water* and *sun* (co-occurrence: 6). Moreover, the weakest associations found for several pairs of memes such as *culture* and *mosques* (co-occurrence: 1), *friendliness* and *stores* (co-occurrence: 1), *friendly local people* and *bazaar* (co-occurrence: 1) (Figure 4.4).

Regarding the unique memes of Antalya, *sea* (19), *beautiful climate* (18), *nature* (17), *mountains* (12) and *pamukkale* (7) were the most common top five unique memes listed by Russian travelers. Whereas, the following were the most common top five unique memes listed for Antalya by German travelers: *waterfall* (23), *sea* (19), *hospitality* (15), *culture* (13) and *people* (12). Mean values for the number of associations about the unique memes of Antalya were 2.22 and 2.05 in the Russian and German samples, respectively (Table 4.6). Figure 4.5 demonstrates the unique meme map of Antalya by Russian travelers. The strongest associations were created between the memes of *sea* and *mountains* (co-occurrence: 7), *mountains* and *beautiful climate* (co-occurrence: 4), *nature* and *sea* (co-occurrence: 4), *nature* and *mountains* (co-occurrence:4), and *nature* and *beautiful climate* (co-occurrence: 4). On the other hand, the following were the pairs of memes that illustrated the weakest associations: *beautiful climate* and *local desserts* (co-occurrence: 1), *sea* and *many places to go* (co-occurrence: 1), and *waterfalls* and *architecture* (co-occurrence: 1). Furthermore, the unique meme map of Antalya by German travelers is illustrated by Figure 4.6. Based on the responses of German travelers, the strongest associations were identified between the unique memes of *sea* and *mountains* (co-occurrence: 4), and *sea* and *sun* (co-occurrence: 4). Whereas, examples of the weakest associations that appeared between the pairs of unique memes were

*landscape* and *people* (co-occurrence: 1) and *landscape* and *weather* (co-occurrence:1) on this meme map.

In the last step of the analyses, authors evaluated the memes related to the favorite destinations. When Russian travelers were asked to list their favorite destinations, the followings were the top five most common tourism destinations: *Egypt* (42), *Kemer* (38), *Barcelona* (28), *Marmaris* (27), and *Side* (22). Moreover, the most common top five general memes of the favorite destinations for Russians travelers were *sea* (41), *nature* (27), *architecture* (25), *beach* (18), and *local trips* (17). All general memes of the favorite destinations provided by Russian travelers had the values of 4.78 and 4.04 as the mean number of associations and mean influentiality, respectively (Table 4.7). The majority of these general memes of the favorite destinations by Russian travelers originated from direct experience (64.3%) and perceived as good for the destination (100%) (Table 4.8). Figure 4.7 presents the general meme map of the favorite destination by Russian travelers. The following are the pairs of general memes that present the strongest associations: *sea* and *beach* (co-occurrence: 10), *sea* and *sun* (co-occurrence: 9), *sea* and *nightlife* (co-occurrence: 8), *nature* and *sea* (co-occurrence: 7), and *people* and *architecture* (co-occurrence: 7). On the other hand, *traffic congestion* and *beach* (co-occurrence: 1), *home* and *mountains* (co-occurrence: 1), and *optimism* and *architecture* (co-occurrence: 1) were some of the pairs of memes that illustrated the weakest associations.

Finally, descriptive results for general memes of the favorite destination by German travelers were identified. The top five most common favorite destinations by German travelers were *Majorca* (36), *Istanbul* (19), *Greece* (18), *Bodrum* (17) and *Paris*

(16). The following were the top five most common general memes about the favorite destinations of the German travelers: *shopping* (15), *beach* (8), *cuisine* (7), *people* (7), and *culture* (7). The mean number of associations and mean influentiality values were, respectively, 4.30 and 4.28 for the favorite destination general memes listed by German travelers (Table 4.9). Similar to the previous findings, the majority of the favorite destination general memes originated from direct experience (91%) and were considered good for the destination (80%) (Table 4.10). Figure 4.8 shows the general meme map of the favorite destination by German Travelers. On this map, some of the strongest associations that appeared between the memes were *culture* and *shopping* (co-occurrence: 2) and *weather* and *beach* (co-occurrence: 2). The low co-occurrence values were obtained due to the low frequency counts for the most common general memes about the favorite destinations. The majority of the associations between the memes, such as *castle* and *shopping* (co-occurrence: 1), were weak due to the same reasoning.

#### 4.6 Discussion and Conclusion

A regression analysis was performed to determine the predictive power of *number of associations* in travelers' *likelihood to return* a tourism destination behavior. The regression model enabled the authors to test the related hypothesis. The research hypothesis of the study ( $H_1$ ), which is "the number of associations positively influences travelers' likelihood to return behavior; as the number of associations increase, so does the likelihood of return," was supported ( $P < 0.05$ ). Seminal studies in the marketing and cognitive neuroscience disciplines support the finding that as the number of memes increases for a brand, individuals' attitudes and behaviors towards that particular brand become more positive (Keller, 1993; Krishnan, 1996; Low & Lamb, 2000). Thus, these

individuals tend to make more positive decisions towards that certain brand because they possess richer memory structures in relation to that brand. The current study supports that this hypothesis also works in the travel decision-making context. The Russian and German travelers who provided a higher number of memes regarding Antalya had a higher *likelihood to return* to this destination based on the findings.

Regarding the descriptive results of the generated meme maps, study respondents had higher mean numbers of associations for the general memes of Antalya when compared to those of unique memes of Antalya in both samples. Accordingly, travelers have a higher number of general memes regarding the image of a destination. Unique memes were expected to be less in number due to their unique nature. In both samples, the majority of the general memes originated from direct experience with the destination. This finding could be interpreted as logical since the data was collected in Antalya. However, the authors attempted to identify the influence of other sources (e.g., advertising, friends, and relatives) in the generation of the memes regarding the image of Antalya. The study findings indicate that almost all the general memes about a destination originate from direct experience when travelers have visited that particular destination. Woodside and Walser (2007) proposed that customer experience mostly determines brand strength. Thus, direct customer experience is critical not only for the formation of the meme maps, but also for the brand strength.

The *sea*, *sun*, and *beach* memes were the top three most common general memes of Antalya in both samples. Moreover, the pairs of memes *sea* and *sun*, *sea* and *beach*, and *sun* and *beach* appeared in the top five strongest associations based on their co-occurrence values in both samples. These and all other findings in the general meme

maps of Antalya provide innovative practical implications for the Destination Management Organizations (DMOs) in Turkey. Meme maps demonstrate the real pictures of destination images of Antalya. DMOs can generate positioning and advertisement strategies that concentrate on the identified common memes in the general meme maps of Antalya. For example, a social media marketing campaign with a promotional message that focuses on the *sea*, *sun*, and/or *beach* memes will strongly activate the meme maps of both Russian and German travelers. The promotional message can have visual and audio cues that will trigger the related meme maps. Previously discussed co-occurrence values can show DMOs the next meme that travelers will think of when they are reminded of a particular meme. For example, in both samples, when travelers were reminded of the *sea* meme, they automatically thought about the *sun* and *beach* memes. This information can be very useful in the generation of very costly and critical ad campaigns, such as a million dollar 30-second Super Bowl ad. For example, in a Super Bowl ad campaign on Antalya, Turkey could only provide cues to activate the *sea* meme and use the rest of the available time for providing information to activate memes other than *sun* and *beach*, and thereby more effectively deliver the intended marketing message.

Furthermore, the identified most common unique memes (e.g., Pamukkale, Waterfall) and the generated unique meme maps demonstrate opportunities for gaining and sustaining a competitive advantage for the Turkish DMOs. Promotion strategies concentrating on these unique meme maps will remind Russian and German travelers of the uniqueness of taking a vacation in Antalya. For example, an advertising campaign that delivers a particular promotional message to German travelers can incorporate the

unique memes of *waterfall, sea, hospitality, culture, and local people*. Direct and/or indirect presentation of these memes through different cues (e.g., audio cues, visual cues) will activate the related unique meme maps of travelers. Promotion of a destination becomes more challenging if travelers have mixed images regarding a destination (Min, Martin, & Jung, 2013). The current study identifies the meme maps regarding these mixed images of Russian and German travelers.

DMOs should utilize the findings of the identified general and unique meme maps simultaneously to develop tailored and more effective marketing strategies. For example, an advertisement campaign focusing on *sea, sun, and beach* general memes should also concentrate on unique memes. Since many successful summer tourism destinations can be strongly positioned with the general memes of *sea, sun, and beach* in the minds of travelers, inclusion of unique memes can differentiate a destination from its competitors more effectively. For example, *Pamukkale*, a member of the World Heritage List, is one of the identified unique memes of Russian travelers (UNESCO, 2016). Similarly, *beautiful climate, architecture, and mountains* were some of the other unique memes identified by these travelers. DMOs that want to develop print advertisement campaigns could include several vacation pictures of a Russian couple taken in Antalya and Turkey. For example, while this couple enjoys their time at the beach in the first picture, they could be discovering the unique nature of Pamukkale on the next picture. Such a strategy will store promotional messages related the uniqueness of Antalya in the minds of current and potential Russian travelers in a more effective way.

By taking the related study findings into consideration, DMOs could develop further marketing strategies. For example, *local desserts, bazaar, castle, history, and*

*aspendos* were the unique memes identified by Russian and German travelers but did not appear in the top five common memes. DMOs should also concentrate on some of these unique memes to increase the effectiveness of their marketing campaigns. Moreover, study findings can assist DMOs in identifying differences in the positioning of a destination in the minds of two traveler segments. For example, while Russian travelers associated Antalya with nightlife and nature, German travelers associated it with culture and friendliness. Thus, an advertisement campaign that includes the meme of *nightlife* will be more influential for the Russian travelers since these travelers associate Antalya with the nightlife meme. Interestingly, German travelers did not associate Antalya with the nightlife meme in neither their general nor unique meme maps. If DMOs want to also position Antalya as a nightlife destination in the minds of German travelers, then they should take the required precautions to modify their marketing strategies.

Moreover, the generated meme maps for Antalya provide further interesting findings. For example, the memes *friendliness* and *stores* and *friendly local people* and *bazaar* had the weakest associations in the general meme map of Antalya by German travelers. Some sales representatives and store owners might be persistent enough to convince a traveler to purchase certain products and/or services from their stores. This attitude might be the rationale behind this weak association in the related meme map. DMOs should make sure that German travelers are in a friendly environment throughout their vacation in Antalya, Turkey. The Russian and German travelers in the study provided the memes of *warm*, *fun*, *friendliness*, *happiness*, *optimism*, and *beauty* when they were asked about their perceptions regarding Antalya. These particular memes could also be viewed as human characteristics, since a person can also be warm, friendly, and

optimistic. Thus, these particular memes provide insights regarding the brand personality of Antalya.

The current study also identified the general meme maps of the favorite tourism destinations for each sample. The generated meme maps for the favorite tourism destinations had the highest mean number of associations compared to the mean values obtained for the meme maps of Antalya. This finding also supports the finding that high-equity strong brands will be represented by a higher number of associations (Keller, 1993; Krishnan, 1996). Egypt, Kemer, Barcelona, Marmaris, and Side were the top five most common favorite destinations listed by the Russian travelers. Considering that Hurghada also appeared in the top 10 favorite destinations, Egypt can be claimed as the top competing tourism destination of Antalya for the Russian sample. On the other hand, Majorca, Istanbul, Greece, Bodrum, and Paris were the top five most common favorite destinations indicated by the German travelers. Since Spain and Barcelona also fell into the top 10 favorite destinations for the German travelers, it can be claimed that Spain is the top competing destination of Antalya for the German travelers. The most common general memes identified were *sea, nature, architecture, shopping, beach, local trips, and cuisine* in the related meme maps by the German and Russian travelers. Turkish DMOs can generate promotion strategies by taking these memes into consideration to better position Antalya against the top competing destinations. The general meme map of the German travelers was comprised of more general memes such as *history, sun, people, mountains, and home* for their favorite destinations. On the other hand, the Russian travelers provided more specific memes such as Louvre Museum, Eiffel Tower, and

Bosphorus for their favorite destinations. Thus, it can be claimed that Russian travelers are looking for and/or influenced by unique memes more than German travelers.

The current study also provides significant theoretical contributions by leading the adoption of Memetics knowledge into the T&H field. The Theory of Spreading Activation and Symbolic Interaction Theory support the findings of the study (Blumer, 1969; Charon, 1979; Quillian, 1968). Generated meme maps, identified co-occurrence values, and previously made practical implications depend on the principles of these theories. Researchers consider Memetics as a new but challenging paradigm in destination marketing that has the potential to allow researchers to better understand consumer behavior and decision-making (e.g., Lynch, 1996). In this new paradigm, the role of tourism marketing and marketing communication is to engineer imitating and evolving memes that will spread like a mind virus among current and prospective tourists. While traditional marketing theories rely on the rational choice theory that accentuates the role of the conscious choice of a consumer, Destination Neurogenetics (DNgen), on the other hand, supports the infection of the mind theory rather than conscious choice. Martin (2010) highlighted that there is growing evidence indicating that unconscious thinking influences most decision-making behavior. Accordingly, what Marsden argued long ago (1998) for tangible products, Destination Memetics (DMem) can be a powerful mind-craft tool for tourism behavior studies.

Just like any social science study, this study had some weaknesses. Firstly, the data was collected by a third party. Therefore, the authors cannot ensure that the data collection protocol was carefully followed throughout the study. The respondents were not forced to list a minimum number of memes when they were asked. Consequently,

some respondents provided only one or no memes at all for some questions. Since a convenience sampling method was used in the current study, it was not possible to create a representative sample using any of the probability sampling methods. The identified memes and structure of the meme maps might change based on different variables that were not tested in the current study. For example, variables such as frequency of visit and level of education can influence the structure and characteristics of meme maps. One would expect to generate richer destination image meme maps for those travelers who have been to a certain destination four and/or five times than for those who have visited only once. Future research should also focus on the travelers' images for a destination that they have never visited before. Moreover, researchers can generate the meme maps of other tourism products and services such as lodging organizations, theme parks, sightseeing tours, and guest service. The knowledge of Memetics can be employed in a variety of different research contexts. For example, researchers can generate meme maps of different stakeholders (e.g., residents, tour operators, transportation companies) to better understand the similarities and differences in their projected images of a certain destination.

## 4.7 Tables and Figures

**Table 4.1 Regression Model for Likelihood to Return**

Independent Variable	Standardized Coefficient Beta	<i>t</i> -Value	<i>p</i>	Standard Error	Tolerance	VIF
Number of Associations	0.70	10.60	0.00*	0.49	1.00	1.00

Dependent variable= Likelihood to Return. Overall model:  $F(1, 115) = 112.355$   $P=0.00$ ,  $R^2 = 0.50$ , Adjusted  $R^2 = 0.49$ . Depicts the results for the entire sample.

\*Significant at .05 ( $\alpha$ ) level.

**Table 4.2 Descriptive Results for General Memes of Antalya by Russian Travelers**

Most Common General Memes			All General Memes	
Memos	Frequency	%	Mean Number of Associations	Mean Influentiality*
Sea	131	0.23	3.90	4.39
Sun	75	0.13	(1.90) <sup>a</sup>	(0.86)
Beach	54	0.09		
Nature	50	0.09		
Nightlife	38	0.07		
Mountains	30	0.05		
Climate	27	0.05		
Service	24	0.04		
Hotel	23	0.04		
Vacation	20	0.03		
Comfort	19	0.03		
Local trips	17	0.03		
Architecture	12	0.02		
Happiness	9	0.02		
Warm	9	0.02		
Optimism	8	0.01		
Shopping	8	0.01		
Cuisine	7	0.01		
Affordable prices	7	0.01		
Restaurants	7	0.01		
TOTAL	575	1.00		

<sup>a</sup> Standard deviations are shown in parentheses.

\* On a scale ranging from 1 = *least influential* to 5 = *most influential*

Total number of memes: 68

**Table 4.3 Valence and Origin of Associations for General Memes of Antalya by Russian Travelers**

Valence *			Origin of Associations **		
	Frequency	%		Frequency	%
Bad	0	0	Direct experience	75	92.6
Good	79	98.8	Friends, and/or relatives	4	4.9
Neither good nor bad	1	1.2	Advertising	2	2.5

\* On a scale where 0 = *bad for the destination*, 1 = *good for the destination*, 2 = *neither good nor bad for the destination*

\*\* On a scale where 1 = *direct experience with the destination*, 2 = *what you have heard from your friends, and/or relatives*, 3 = *advertising that you have seen or heard*

**Table 4.4 Descriptive Results for General Memes of Antalya by German Travelers**

Most Common General Memes			All General Memes	
Memes	Frequency	%	Mean Number of Associations	Mean Influentiality*
Sun	79	0.23	2.64	4.24
Sea	58	0.17	(0.93) <sup>a</sup>	(1.03)
Beach	45	0.13		
Culture	21	0.06		
Friendliness	14	0.04		
Port	12	0.04		
Bazaar	12	0.04		
Recreation	11	0.03		
Water	10	0.03		
Friendly local people	10	0.03		
Weather	9	0.03		
Hospitality	9	0.03		
Shopping	8	0.02		
Old town	7	0.02		
Vacation	7	0.02		
Hotel	6	0.02		
Stores	6	0.02		
Waterfall	6	0.02		
Mountains	5	0.01		
Mosques	5	0.01		
TOTAL	340	1.00		

<sup>a</sup> Standard deviations are shown in parentheses.

\* On a scale ranging from 1 = *least influential* to 5 = *most influential*

Total number of memes: 57

**Table 4.5 Valence and Origin of Associations for General Memes of Antalya by German Travelers**

Valence *			Origin of Associations **		
	Frequency	%		Frequency	%
Bad	33	16	Direct experience	144	83.2
Good	160	77.3	Friends, and/or relatives	17	9.8
Neither good nor bad	14	5.7	Advertising	12	7

\* On a scale where 0 = *bad for the destination*, 1 = *good for the destination*, 2 = *neither good nor bad for the destination*

\*\* On a scale where 1 = *direct experience with the destination*, 2 = *what you have heard from your friends, and/or relatives*, 3 = *advertising that you have seen or heard*

**Table 4.6 Descriptive Results for Unique Memes of Antalya by Russian vs. German Travelers**

Russian Travelers				German Travelers			
Most Common Unique Memes *			All Unique Memes	Most Common Unique Memes **			All Unique Memes
Memos	F <sup>b</sup>	%	Mean Number of Associations	Memos	F	%	Mean Number of Associations
Sea	19	0.14	2.22 (1.15) <sup>a</sup>	Waterfall	23	0.13	2.05 (1.37)
Beautiful Climate	18	0.14		Sea	19	0.11	
Nature	17	0.13		Hospitality	15	0.09	
Mountains	12	0.09		Culture	13	0.07	
Pamukkale	7	0.05		People	12	0.07	
Optimism	6	0.05		Beach	11	0.06	
Life	5	0.04		Weather	11	0.06	
Kemer	5	0.04		Mountains	9	0.05	
Waterfalls	4	0.03		Sun	9	0.05	
Beauty	4	0.03		Friendliness	7	0.04	
Architecture	4	0.03		Port	6	0.03	
Forests	4	0.03		Climate	6	0.03	
Choices	4	0.03		Castle	5	0.03	
History	4	0.03		Nature	5	0.03	
Quality	4	0.03		Landscape	5	0.03	
City	3	0.02		Good food	4	0.02	
Fun	3	0.02		Aspendos	4	0.02	
Local desserts	3	0.02		Bazaar	4	0.02	
Many places to go	3	0.02		Family	3	0.02	
Beach	3	0.02		Fun	3	0.02	
TOTAL	132	1.00	TOTAL	174	1.00		

<sup>a</sup> Standard deviations are shown in parentheses.

<sup>b</sup> Illustrates frequency.

\* Total number of memes by Russians: 49

\*\* Total number of memes by Germans: 53

**Table 4.7 Descriptive Results for General Memes of the Favorite Destination by Russian Travelers**

Favorite Destination *			Most Common General Memes **			All General Memes	
Destination	F <sup>b</sup>	%	Memes	F	%	Mean Number of Associations	Mean Influentiality <sup>c</sup>
Egypt	42	0.13	Sea	41	0.14	4.78 (2.05) <sup>a</sup>	4.04 (1.17)
Kemer	38	0.11	Nature	27	0.09		
Barcelona	28	0.08	Architecture	25	0.09		
Marmaris	27	0.08	Beach	18	0.06		
Side	22	0.07	Local trips	17	0.06		
Russia	18	0.05	Sun	16	0.06		
Prague	18	0.05	History	16	0.06		
Pattaya	16	0.05	Nightlife	15	0.05		
Paris	16	0.05	Hotel	15	0.05		
Hurghada	16	0.05	People	13	0.05		
Istanbul	15	0.04	Service	13	0.05		
Belek	14	0.04	Mountains	12	0.04		
Thailand	10	0.03	Shopping	10	0.03		
S. Petersburg	10	0.03	Climate	9	0.03		
Greece	10	0.03	Optimism	8	0.03		
Alanya	10	0.03	Home	7	0.02		
Tunisia	7	0.02	Vacation	7	0.02		
Italy	6	0.02	Comfort	7	0.02		
Bali	6	0.02	Traffic congestion	5	0.02		
Bodrum	5	0.01	Happiness	5	0.02		
TOTAL	334	1.00	TOTAL	286	1.00		

<sup>a</sup> Standard deviations are shown in parentheses.

<sup>b</sup> Illustrates frequency.

<sup>c</sup> On a scale ranging from 1 = *least influential* to 5 = *most influential*

\* Total number of memes: 72

\*\* Total number of destinations: 81

**Table 4.8 Valence and Origin of Associations for General Memes of the Favorite City by Russian Travelers**

Valence *			Origin of Associations **		
	Frequency	%		Frequency	%
Bad	0	0	Direct experience	54	64.3
Good	56	100	Friends, and/or relatives	15	17.9
Neither good nor bad	0	0	Advertising	15	17.9

\* On a scale where 0 = *bad for the destination*, 1 = *good for the destination*, 2 = *neither good nor bad for the destination*

\*\* On a scale where 1 = *direct experience with the destination*, 2 = *what you have heard from your friends, and/or relatives*, 3 = *advertising that you have seen or heard*

**Table 4.9 Descriptive Results for General Memes of the Favorite Destination by German Travelers**

Favorite Destination *			Most Common General Memes**			All General Memes	
Destination	F <sup>b</sup>	%	Memes	F	%	Mean Number of Associations	Mean Influentiality <sup>c</sup>
Majorca	36	0.13	Shopping	15	0.15	4.30 (1.86) <sup>a</sup>	4.28 (0.96)
Istanbul	19	0.07	Beach	8	0.08		
Greece	18	0.07	Cuisine	7	0.07		
Bodrum	17	0.06	People	7	0.07		
Paris	16	0.06	Culture	7	0.07		
Side	15	0.05	Attractions	6	0.06		
Spain	15	0.05	Castle	5	0.05		
Crete	15	0.05	Sea	5	0.05		
Rome	14	0.05	Louvre Museum	4	0.04		
Barcelona	14	0.05	Weather	4	0.04		
Izmir	11	0.04	Transportation	3	0.03		
Kemer	11	0.04	Cleanliness	3	0.03		
Hurghada	11	0.04	Architecture	3	0.03		
Tunisia	11	0.04	Port	3	0.03		
Rhodes	10	0.04	Bosphorus	3	0.03		
Egypt	10	0.04	Restaurants	3	0.03		
Marmaris	9	0.03	History	3	0.03		
Ibiza	8	0.03	Old town	3	0.03		
Cyprus	8	0.03	Bazaar	3	0.03		
Italy	7	0.03	Eiffel Tower	3	0.03		
TOTAL	275	1.00	TOTAL	98	1.00		

<sup>a</sup> Standard deviations are shown in parentheses.

<sup>b</sup> Illustrates frequency.

<sup>c</sup> On a scale ranging from 1 = *least influential* to 5 = *most influential*

\* Total number of destinations: 196

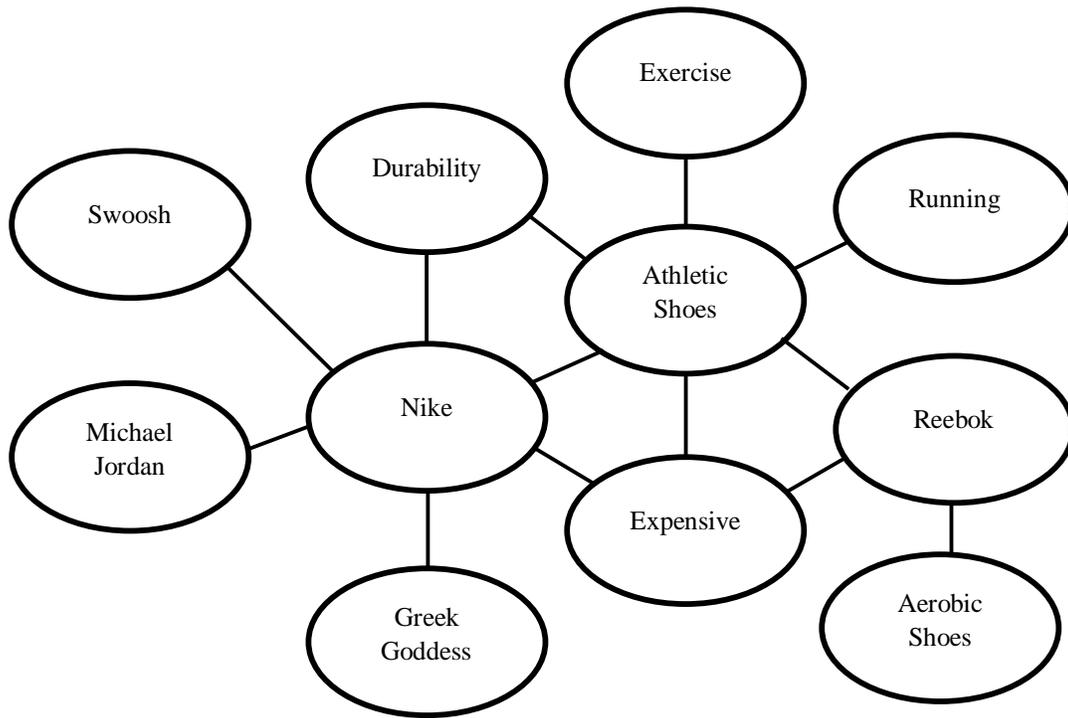
\*\* Total number of memes: 44

**Table 4.10 Valence and Origin of Associations for General Memes of the Favorite City by German Travelers**

Valence *			Origin of Associations **		
	Frequency	%		Frequency	%
Bad	3	0.05	Direct experience	48	0.91
Good	47	0.80	Friends, and/or relatives	2	0.04
Neither good nor bad	9	0.15	Advertising	3	0.06

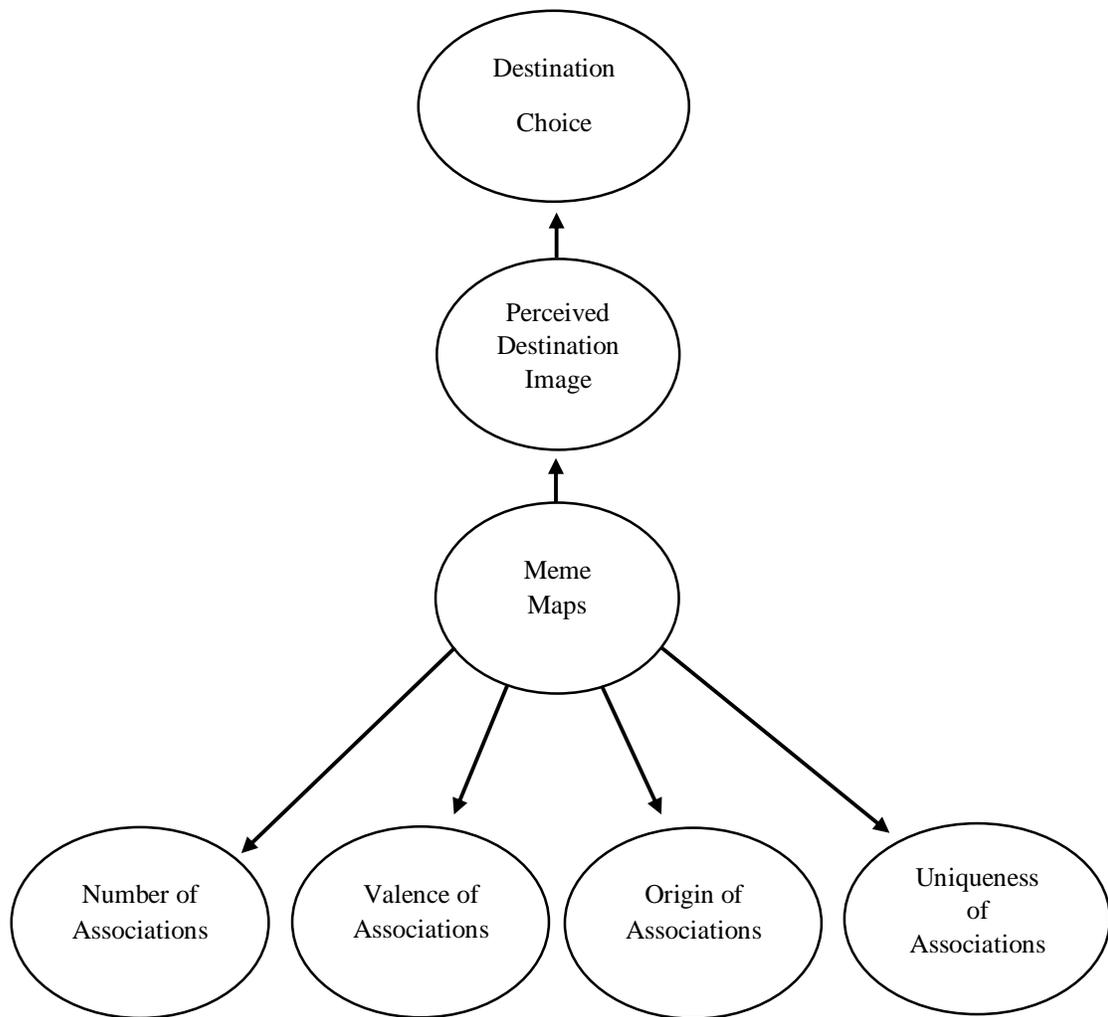
\* On a scale where 0 = *bad for the destination*, 1 = *good for the destination*, 2 = *neither good nor bad for the destination*

\*\* On a scale where 1 = *direct experience with the destination*, 2 = *what you have heard from your friends, and/or relatives*, 3 = *advertising that you have seen or heard*

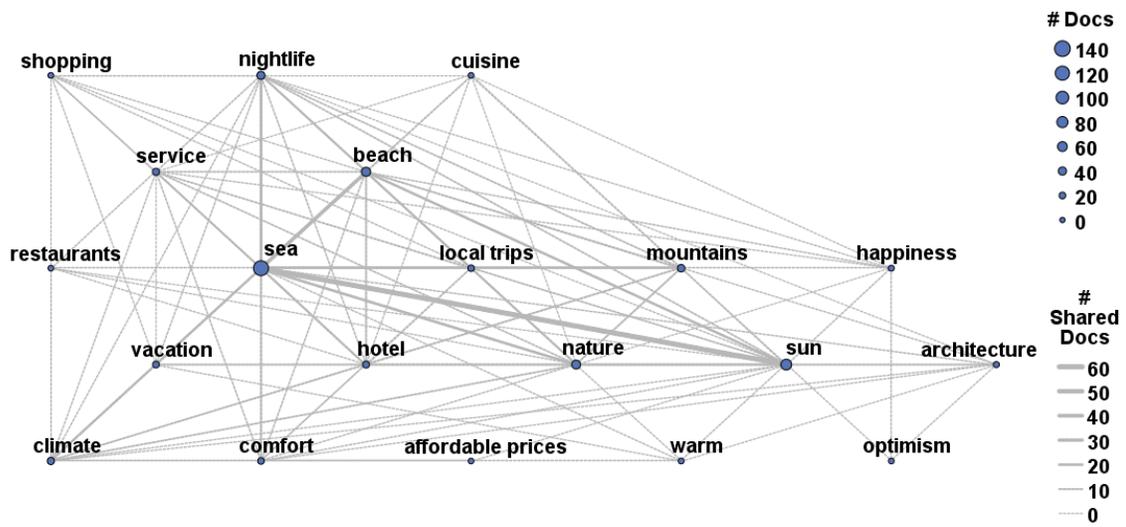


**Figure 4.1** Meme map example\*

\*Source: Krishnan, 1996, p. 392



**Figure 4.2** Conceptual framework



**Figure 4.3** General meme map of Antalya by Russian travelers

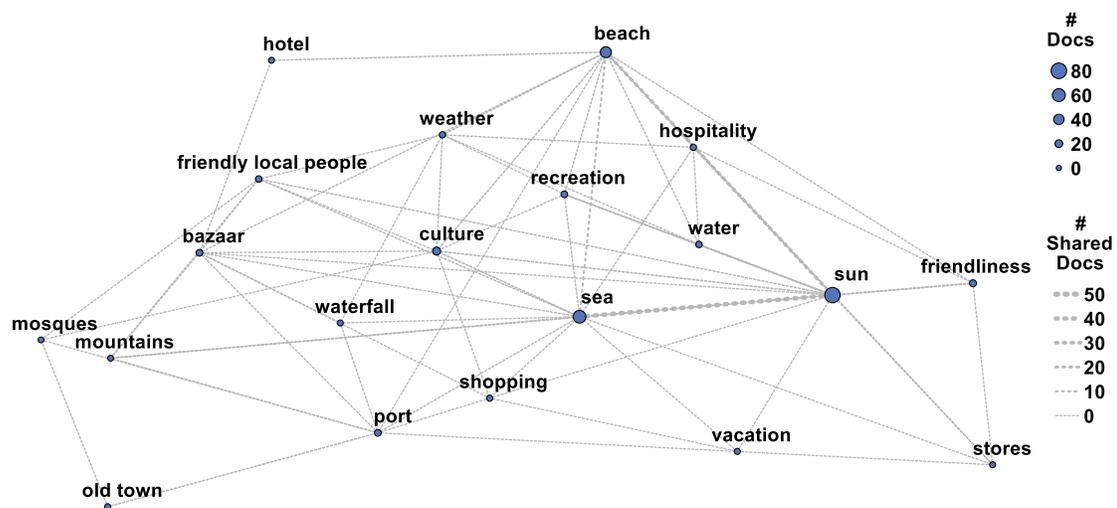
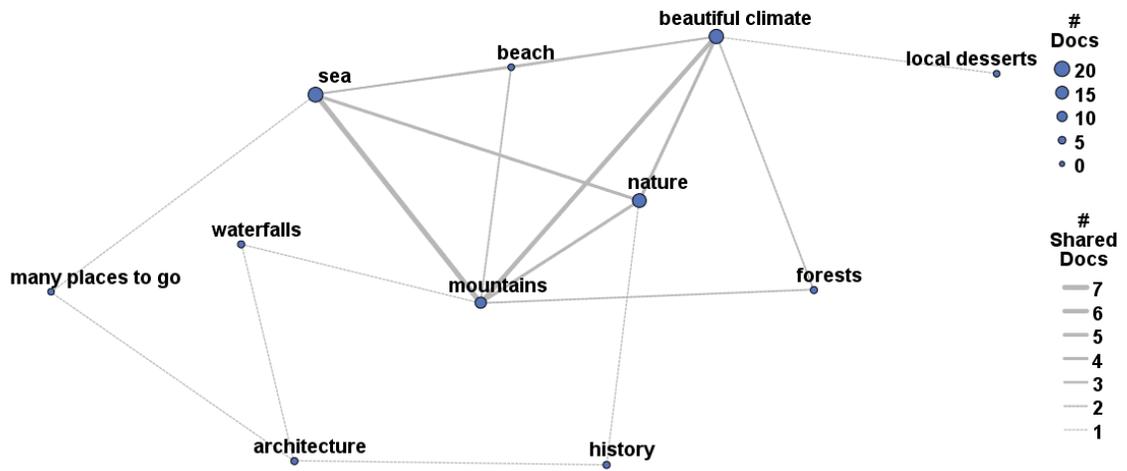
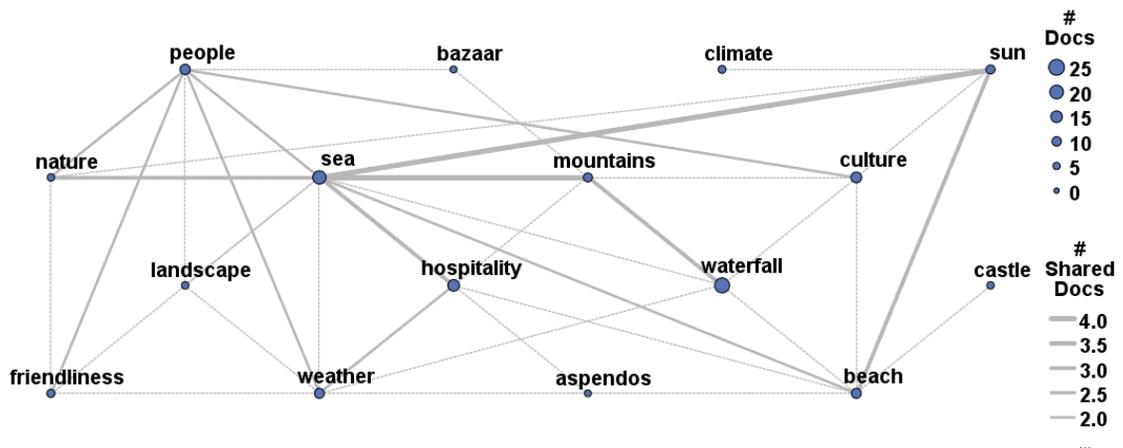


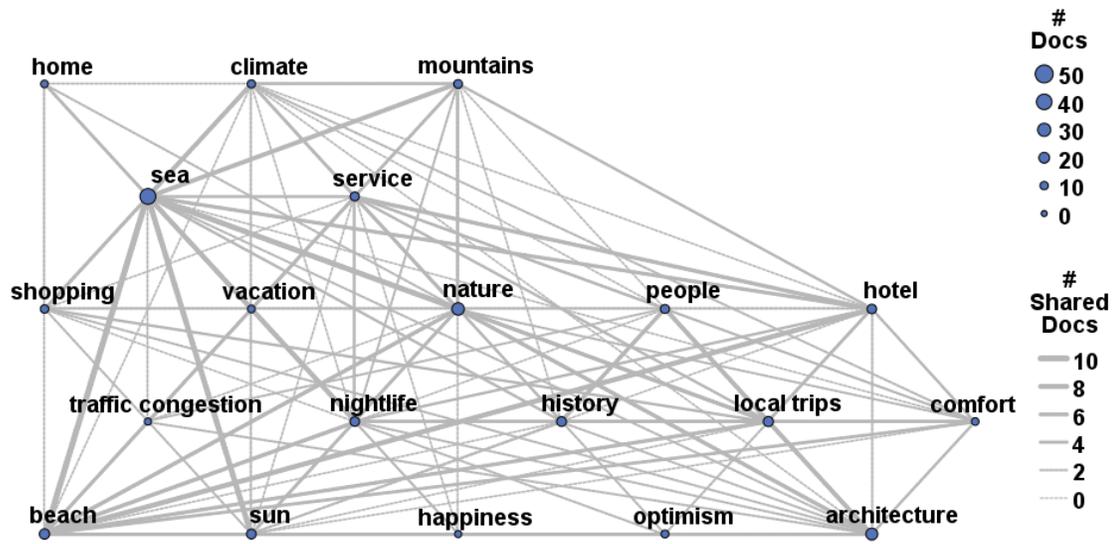
Figure 4.4 General meme map of Antalya by German travelers



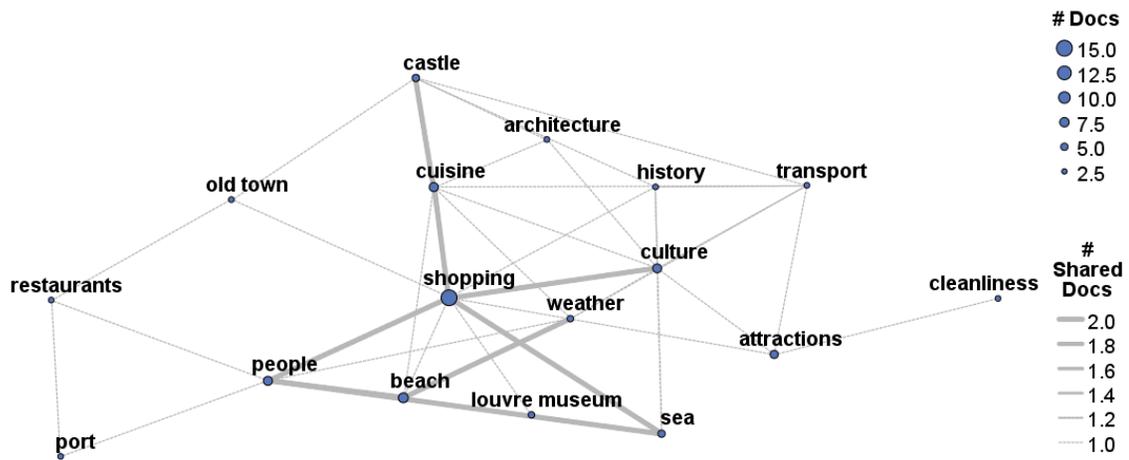
**Figure 4.5** Unique meme map of Antalya by Russian travelers



**Figure 4.6** Unique meme map of Antalya by German travelers



**Figure 4.7** General meme map of the favorite destination by Russian travelers



**Figure 4.8** General meme map of the favorite destination by German travelers

## CHAPTER 5

### GENERAL CONCLUSIONS

The current article-based dissertation conducts three separate but related studies on travel decision-making behavior by utilizing the data collected from Chinese, Arab, Russian and German travelers. The overall purpose of this dissertation is to examine the destination choice behavior of travelers by using meme maps, images and decision making styles. Despite the fact that travel decision-making is one of the most researched concepts in the evolution of Tourism and Hospitality (T&H) research, there is still substantial room for improving our theoretical understanding for this critical concept. Most of the time, graduate students of Social Sciences are being advised to adopt novel forms of knowledge, theoretical models, methodological and statistical approaches into T&H research from more developed disciplines such as Sociology, Anthropology and Cognitive Neuroscience. Such a research effort might improve our theoretical understanding by providing some form of revelation leading a paradigm shift in a developing discipline (Corley & Gioia, 2011).

The current article-based dissertation made such a similar research effort by adopting the knowledge of Memetics into T&H research through its major study. Thus, the major study can be considered as a pioneering study in the T&H research that might change our understanding of travel-decision making behavior. Furthermore, travelers from emerging markets such as China and Arabic speaking countries play increasingly

important roles in the tourism demand in the present time, and their role will still be critical in the near future (UNWTO, 2014a). Thus, we need to continuously assess their perceptions such as perceived destination image that influence their final destination choice behavior. Moreover, Decision Making Styles (DMS), as an overlooked concept in the T&H research, promises variety of research opportunities such as market segmentation. A clear understanding of DMS and their influence on the attitudes of traveler segments might also provide researchers a better understanding of the travel decision-making behavior. The previously explained rationale is the main motivation behind the overall purpose of this article-based dissertation. The next three sub-sections of the conclusion chapter will briefly summarize the theoretical and practical implications of the dissertation articles. These summaries are purposely brief since each article presented its conclusion section in detail previously.

### **5.1 An Analysis of Destination Image for Emerging Markets of Turkey**

The first article, *An analysis of destination image for emerging markets of Turkey*, aimed (1) to assess the perceived importance of the attributes that form the destination image based on general vacation experiences and opinions of travelers and (2) to compare the expected performance of Turkey's attributes in attracting travelers from the emerging markets (i.e., China as well as Arab countries) using Importance-Performance Analysis (IPA). This particular study differs from the previous destination image studies in a very important aspect. It measures the perceived destination image of potential travelers from emerging markets for a destination to which they have never been. For this reason, the perceived importance and expected performance mean scores for the destination were utilized in the IPA. The results validated the efficacy of the IPA

technique in such situation. Thus, the study theoretically contributes to the existing tourism literature by advancing our understanding for the IPA. Moreover, the study findings demonstrated that travelers from different emerging markets (e.g., China, Arabic speaking countries) have different perceived images for the very same destination. Last but not least, the scales developed in this study can also be used in the future research.

IPA grids demonstrated the detailed perceived importance and performance values that are attached to the destination attributes in different areas (i.e., Concentrate here, Keep up the good work, Low priority, Possible overkill) by the prospective travelers of Turkey. These findings assist Destination Management Organizations (DMOs) in Turkey in the development of tailored marketing strategies for prospective travelers from emerging markets. More specifically, the attributes that fell into keep up the good work area demonstrated the opportunities to gain and sustain a competitive advantage. On the other hand, attributes that fell into the concentrate here area send a warning message to Turkish DMOs. For example, “Easy access to destination” and “Safe and secure environment at the destination” appeared in the concentrate here area in the Chinese and Arab sample, respectively. Turkish DMOs should push these attributes into the keep up the good work area by employing immediate improvement efforts. Martilla and James (1977) indicated that extreme observation in the IPA grids can be the key indicators. “Friendliness and hospitality of local people” was one of the identified extreme observations. Generated marketing strategies should also utilize these key indicators as competitive advantages.

## 5.2 Exploring the Dark Side of the Decision Making Construct: Styles

The second article, *Exploring the Dark Side of the Decision Making Construct: Styles*, aimed (1) to identify and verify traveler segments using a factor-cluster approach based on travel Decision Making Styles (DMS) of individuals, and (2) to profile segments and identify differences, if any, between traveler segments with respect to a series of psychographic and attitudinal characteristics such as tourism involvement, destination images and demographic characteristics. This particular study performed a factor-cluster approach based on the DMS of travelers in order to meet its objectives. The identified clusters or traveler segments were named as Rational Decision-makers (RDMs), Adaptive Decision-makers (ADM) and Daydreamers based on their psychographic and attitudinal characteristics. For example, RDMs were formed of travelers who prefer to gather all available travel-related information long before making their final travel decisions. Due to this segment of travelers' high rationality, performing impulsive behaviors such as making unpredictable holiday decisions was highly unlikely. Parallel to these findings, travelers of RDMs take pragmatic concerns such as availability of money and time into consideration when making their travel decisions. Moreover, travelers of RDMs segment demonstrated the lowest level of agreement with the social adjustment DMS construct. Thus, one would not expect RDMs to rely on the recommendations of their partners, friends and relatives in travel decision-making.

This study also proposed four null hypotheses (i.e.,  $H_1$  Sign,  $H_2$  Importance,  $H_5$  Image,  $H_6$  Risk) in order to evaluate if there are any differences among the DMS segments regarding their attitudes toward the tourism involvement and destination image dimensions or factors. The null hypotheses of  $H_3$  and  $H_4$  were excluded from the analyses after the

performed factor analysis of tourism involvement. More specifically, three factors were identified for the tourism involvement construct: (1) Sign, (2) Importance-Pleasure and (3) Risk perception based on the related literature (e.g., Dimanche, Havitz & Howard, 1991; Laurent & Kapferer, 1985). Similarly, three factors were distinguished for the destination image construct: (1) Accessibility to Resources, (2) Quality and Reputation, and (3) Overall Destination Image (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Sonmez & Sirakaya, 2002). Based on the findings of MANOVA, all the null hypotheses of the study were rejected. Thus, there were statistically significant differences among the DMS groups regarding their attitudes towards the previously mentioned dimensions. This article provides theoretical contribution by validating the efficacy of the DMS as a segmentation tool for the T&H researchers. Moreover, identified key attitudinal and psychographic characteristics of DMS travel segments advance our theoretical understanding both for DMS, as well as tourism involvement and destination image constructs.

Important practical implications were also generated based on the findings of this study. For example, it was found that travelers of ADMs segment demonstrated the highest level of agreement towards the sign dimension of the tourism involvement. As Morrison (2010) suggested, self-concept is critical to attract the attention of travelers who select destinations that match their self-concept. Thus, any positioning strategy concentrating on the self-concept of travelers can be more beneficial in increasing the number of ADMs travelers for a particular destination. Overall, the study findings enable DMOs to generate tailored marketing strategies for each identified traveler segment.

### 5.3 Destination Neurogenetics: Creation of Destination Meme Maps of Tourists

The third article, which is the major study of this dissertation, is titled as *Destination Neurogenetics: Creation of Destination Meme Maps of Tourists*. This study aimed (1) to identify the overall Destination Image Meme Maps (DIMMs) of Antalya, Turkey and their favorite tourism destination, and (2) to identify and evaluate the similarities and differences in the structures of the previously generated two categories of DIMMs. A regression analysis was performed in order to test the hypothesis proposed in this study. This hypothesis enabled us to evaluate the predictive power of number of associations in travelers' likelihood to return a tourism destination behavior. Based on the study findings, it was found that number of associations positively influences travelers' likelihood to return behavior. The seminal studies in marketing and cognitive neuroscience reported that as number of associations or memes stored in minds increases for a brand, individuals' attitudes become more positive towards this certain brand (e.g., Keller, 1993; Krishnan, 1996; Low & Lamb, 2000). This particular hypothesis on number of associations had not been evaluated within the Tourism and Hospitality (T&H) research context before. The findings of the current study confirm that this particular hypothesis also works in our field.

This pioneering study makes an important theoretical contribution by adopting the knowledge of Memetics into T&H research. Prior to the generation of meme maps, the characteristics of these maps were analyzed through descriptive statistics. More specifically, number of associations, valence, origin and uniqueness of associations were evaluated. The study findings confirmed the efficacy of brand associations' characteristics, proposed by Krishnan (1996), in analyzing the structures of the meme

maps. The sample was formed of Russian and German respondents. Thus, the analyses were done for each sample separately. For example, *sea* (131), *sun* (75), *beach* (54), *nature* (50) and *nightlife* (38) were the identified most common top five general memes for the Russian travelers. These travelers provided in average, almost four general memes when they were asked to list all of the descriptive words, thoughts, characteristics, logos, symbols or images that come to their mind when they think of Antalya as a vacation destination. General and unique meme maps were generated both for Antalya and favorite destinations of the travelers based on the principles of Theory of Spreading Activation and Symbolic Interaction Theory (Blumer, 1969; Charon, 1979; Collins & Loftus, 1975; Quillian, 1967).

The major study of the dissertation also makes practical contributions to the T&H industry. Destination Management Organizations (DMOs) can generate positioning and advertisement strategies based on the study findings. The generated meme maps demonstrate the critical memes that form the perceived destination image of travelers for a certain destination. These memes, and their relationship (e.g., co-occurrence values) influence the travel decision-making behavior. Positioning and advertisement strategies concentrating on the identified common memes in the generated meme maps will activate the related meme maps. For example, one can design a social media marketing campaign that concentrates on *sea*, *sun*, *beach*, *nature*, *pamukkale* and *nightlife* memes to activate the related meme maps of Antalya for the Russian travelers. DMOs should include visual and/or audio cues regarding the identified unique memes such as *pamukkale* and *architecture*. Such marketing strategies will store promotional messages related the uniqueness of Antalya in the minds of the current and potential travelers of the

destination. Moreover, the study also compared the travelers' meme maps of Antalya with those of favorite destinations. Thus, DMOs that want to better position their destinations against the competing destinations can generate marketing strategies based on the study findings. Last but not least, the major study makes important methodological contributions since there is no certain and well-accepted methodology and statistical procedure to generate meme maps in the T&H research.

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