

**A FACET-BASED TOURISM ADVERTISING RESPONSE MODEL:
ASSESSING MODERATING EFFECT OF TRAVEL DECISION FLEXIBILITY**

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ABSTRACT

Advertising is regarded as one of the most important and effective communication methods in tourism (Kim, Hwang & Fesenmaier, 2005; Morgan & Pitchard, 2001). Researchers have extensively analyzed travelers' responses to advertising exposure based upon a variety of perspectives including the hierarchy-of-effects model, and more recently, the dual process advertising model (Lavidge & Steiner, 1961; Petty, Briñol, & Priester, 2009; Te'eni-Harari, Lampert, & Lehman-Wilzig, 2007). Fundamentally, these models focus attention on the factors effecting the destination decision. However, a number of tourism scholars have argued that travel decision making is a complex/multifaceted process whereby travelers are required to make many sub-decisions rather than a single independent choice of a travel destination (Decrop & Snelders, 2004; Jeng & Fesenmaier 2002). As such, these studies suggest that most tourism advertising response models have been over simplified and therefore, offer little insight into the factors affecting the travel decision-making process (Choi, Lehto, Morrison, & Jang, 2012; Hyde, 2004; 2008).

Further, Belk (1974; 1975), among others (Aqueveque, 2006; Kim & Chintagunta, 2012; Kim & Moon, 2009; Wakefield & Inman, 2003), argued that situational variables explain considerably more variance in consumer response to advertising than individual-related variables. Within the context of travel, Jeng and Fesenmaier (2002) and more recently, Gretzel, Fesenmaier and O'Leary (2006) and Hwang and Fesenmaier (2011) examined the ordering and extent to which travelers are willing to change their travel decisions. Jeng and Fesenmaier (2006) found that, for example, decisions regarding travel party, destination and attractions to visit are not

likely to be changed once made; this finding contrasts to travel decisions regarding restaurants and shopping which are less likely to be firmly planned in advance, and therefore travelers are more likely to change depending upon the situation. Following Jeng and Fesenmaier (2002), it is posited that travel planning is a multi-stage contingent process and because of these various decisions that comprise trip planning are situational whereby travelers may change their trip plan depending the trip decision as well as their involvement, prior knowledge, the number of alternatives considered, and the nature of the travel party. As a result, it is argued that the degree to which travelers are willing to adapt their plans will affect the nature and extent to which they process travel advertising. Based upon these two sets of arguments, this dissertation seeks to: (1) develop a destination advertising response model that incorporates the various facets comprising travel decisions (e.g., places/attractions, additional destinations, accommodations, restaurants and shopping stores); and, (2) examine the role of decision flexibility on the facet-based advertising model. A pilot study was first conducted to test if the theoretical constructs in the proposed tourism advertising response model are valid. The results of the pilot study indicate that most of proposed constructs that form the travel advertising response model and decision flexibility are valid and reliable; however, the analyses indicate that there are two forms of decision flexibility: 1. Pre-trip flexibility and 2. En-route flexibility. Pre-trip flexibility relates to travel decisions/plans regarding places/attractions, additional destinations and accommodations, while en-route flexibility involves decisions regarding restaurants and shopping visited during the trip. Based on the findings of the pilot study, the main study was conducted to test the proposed relationships within the core tourism advertising model. The results of these analyses

indicated that many/most of the hypothesized relationships are supported. Additionally, the moderating effects of decision flexibility on traveler's responses to travel advertising were examined. The results of these analyses indicate that Pre-trip flexibility significantly moderates the relationship between attitudes toward advertising and travel products, whereby high and low flexible travelers tend to have a strong positive attitude toward destination advertising; this compares to middle flexible travelers who have a significantly lower attitude toward the travel advertisements. The results of these analyses also indicate that en-route flexibility has very limited moderating influence on the how travelers perceive travel advertising.

The findings of this study suggest that destination marketing organizations need to consider the various sub-decisions that comprise the travel decision making process. Further, destination marketing organizations need to take into account the degree to which potential travelers are willing to change their trip plan in that it appears to substantially influence a crucial aspect of traveler's response to advertising; these findings are especially important as travelers have begun to use mobile technology to guide their travel decision which, in turn, should enable destination marketers to develop customized advertising strategies depending on the various travel products purchased.

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DEDICATION

*This dissertation is dedicated to my parents,
Young Wan Park and Cheong Im Lee*

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CHAPTER 1

INTRODUCTION

Advertising has been recognized as one of the most efficient and persuasive communication methods for tourism destination marketing organizations (DMOs) to interact with current and prospective visitors (Belch & Belch, 2004; Crouch, 1994; Ducoffe, 1996; Pratt, McCabe, Cortes-Jimenez, & Blake, 2010; Weilbacher, 2003). As a result, tourism organizations in the United States typically spend a large proportion of their budget on advertising (USTA, 2009). However, with the global economic crisis, tourism demand, spending, and employment have all experienced significant declines which, in turn, have resulted in considerable pressure on public sector funding (Ritchie, Molinar, & Frechtling, 2010; Sheldon & Dwyer, 2010). Indeed, USTA (2009) reports that the average state tourism office budget for 2009 decreased by 3.5 percent as compared to the previous year, and that it is the first time that the growth of the annual tourism budget has declined in the past five years.

Based on the current situation, it is argued that understanding travelers' responses to advertising is a critical research and policy issue (Faulkner, 1997; Shields, 2006). A number of studies have been conducted to understand how advertising works through examining the psychological factors (e.g., cognitive and affective responses) that influence a consumer's attitude and eventually, actual behavior (MacInnis & Jaworski, 1989; Petty & Cacioppo, 1986; Vakratsas & Ambler, 1999). The results of these studies suggest that consumers pass through a series of steps including cognition and affection, and conation (Lavidge & Steiner, 1961; Reed & Ewing, 2004; Vakratsas & Ambler, 1999). Most tourism advertising studies have been developed based on this hierarchy-of-

effects assumption (Morgan & Pitchard, 2001) and have shown that these factors affect information search and, in turn, actual travel behavior (Burke & Gitelson, 1990; Siegel & Ziff-Levine, 1990). More importantly, however, the previous models of the destination advertising have focused attention on a single issue only: tourist's destination choice. (e.g., Kim, et al., 2005; McWilliams & Crompton, 1997; Pratt, et al. 2010; Walters, Sparks, & Herington, 2007). A number of researchers recognized the fact that travel is a complex process. That is, travel behavior is not singular and defined by the destination decision but rather consists of a number of sub-decisions including accommodations, restaurants, activities, and shopping stores and so on, which form overall travel experience (Dellaert, Ettema, & Londh, 1998; Hyde, 2004; Moutinho, 1987; Woodside & MacDonald, 1994). Moutinho (1987) argued that "there is more involvement in a travel decision than in purchasing some specific items. There is a range of subdecisions to be considered in relation to: destination, transportation, accommodation, activities, budget, reservations and so forth" (p.27). In this vein, several studies assessed the sequence in which the elements of travel decision-making are chosen and suggest that the choices of the elements are interrelated and evolve in a decision process over time (e.g., Fesenmaier & Jeng, 2000; Hyde, 2004; Woodside & King, 2001). Although researchers have acknowledged the importance of considering multifaceted characteristics of the vacation decision making process, there has been no empirical study to develop the destination advertising model that includes the multi-travel facets.

Furthermore, behavioral psychologists argue that human behavior, including response to advertising, must be explained within the environment in which the behavior exists. Indeed, Meyers-Levy and Malaviya (1999) argue that due to the complex process

of persuasion behavioral change is determined by the interrelationship between situational and individual factors (Verbeke, 2008). Ward and Robertson (1973) also stated that “situational variables may account for considerably more variance than actor-related variables” (p.26). This view is consistent with the popular assumption that judgments are sensitive to many contextual and situational influences (Forgas, 1995; MacInnis & Jaworski, 1989; Payne, Bettman, & Johnson, 1993).

The travel literature has discussed the importance of travel-related situational factors including individual (e.g., involvement and prior knowledge) and trip characteristics (e.g., travel party and number of alternatives) and argued the potential influence on information acquisition and evaluation behaviors (Hwang, Gretzel, Xiang, & Fesenmaier, 2006a). In particular, tourism studies indicate that highly involved travelers are likely to use more criteria, search for more information and sources, process information in greater detail, and make more inferences (Cai, Feng, & Breiter, 2004; Park & Kim, 2010). Additionally, travel groups that include children or older people tend to perceive higher risk in their trips, and therefore they are more likely to search for more information and use a greater number of sources in order to reduce the risk. This research also indicates that travelers seeking variety may consider a greater number of alternatives and are more likely to search for travel information and spend more time on evaluating alternative plans.

Recent studies indicate that travelers’ information search behaviors have been changed along with the development of information technology that provides location-based services (Berger, Lehmann, & Lehner, 2003; Gretzel, et al., 2006; Kramer, Modsching, Hagen, & Gretzel, 2007). That is, new media technologies provide “more

detailed scripts of potential journeys; aiding tourists to coordinate their touristic activities more efficiently; making touristic representations more negotiable and ready for immediate transmission/sharing” (Jansson, 2006, p.29). As a result, travelers are more likely to delay or change their decisions at the consumption moment because they can obtain personalized information anytime and anywhere, which leads people to become more flexible to change in their situation. Within this context, the notion of flexibility refers to one being willing to modify one’s plan in response to unfolding situations while taking a trip, which reflects one’s mental commitment to achieve the most travel satisfaction accompanied with continuous information search (Hwang & Fesenmaier, 2011; Scott, Osgood, Peterson, & Scott, 1979). Based upon these studies, it is argued that decision flexibility is an important situational factor affecting information search, and in particular, travelers’ responses to tourism advertising. Specifically, this dissertation hypothesizes that decision flexibility plays a key role in searching for travel information as well as evaluating and using the information obtained. However, limited research has been conducted that explains the role of decision flexibility in the travel information search processes, especially in the use of travel advertising.

Thus, the first goal of this study is to develop a travel advertising response model that incorporates the range of decision (facets) that comprise a trip rather than just focusing solely on the destination decision. A second goal of this research is to define and describe decision flexibility within the context of travel planning and to examine its role in moderating travelers’ responses to tourism advertising.

1.1 Study Goals and Objectives

The traditional tourism advertising model focuses on the direct relationship between advertising exposure and the decision to visit the destination. However, several studies in tourism suggest that travel differs from many ‘products’ in that it involves a number of decisions including destination decision, trip members, travel route, attractions to visit, etc. Thus, the first purpose of this study is to develop a tourism advertising response model that includes a range of travel related decisions as well as those factors that reflect cognitive and affective responses, attitude, and intention to purchase a variety of travel products that are advertised by destination marketing organizations.

With the development of information technology, a traveler’s decision-making style is becoming more flexible which may substantially affect the travel information search process. Drawing from adaptive decision behavior (Payne, et al., 1993), this dissertation attempts to define and identify the notion ‘travel decision flexibility’ as a situational factor that may affect the advertising response process. Thus, the second purpose of this study is to define travel decision flexibility and examine the role of decision flexibility within the proposed travel advertising response model.

1.2 Definitions of Terms

Table 1 provides the definitions of constructs included in the theoretical model of this study.

Table 1. Definitions of Terms

Constructs	Definitions
Advertising	“The nonpersonal communication of information usually paid for and usually persuasive in nature about products, services or ideas by identified sponsors through the various media” (Bovee & Ahrens, 1989, p. 485)
Cognitive response	A thought generated in response to persuasive communication (i.e., advertising in this study) that constitute an individual’s beliefs about the object and therefore, triggers an attitude change (Petty & Cacioppo, 1981)
Affective response	An emotional response (e.g., moods and feelings) evoked by an advertising that represent an individual’s degree of preference for an entity (Batra & Ray, 1986)
Attitude toward advertising	“A predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion” (MacKenzie & Lutz, 1989, p.49)
Attitude toward product	A positive or negative evaluation of advertised products
Behavioral intention	The likelihood of performing an action such as the likelihood of purchasing advertised products (Ajzen & Fishbein, 1980)
Flexibility	Level of willingness to change their plan (or decision) that may make in early stage in order to maintain or achieve ideal levels of satisfaction (Decrop & Snelders, 2004; Hwang, 2004)

1.3 Organization of the Dissertation

This dissertation is organized into seven chapters. Chapter 2 provides the relevant literature about advertising models in consumer behavior research, situational factors affecting information search behavior and decision flexibility from two different perspectives (i.e., individual trait and situation/circumstance). Chapter 3 proposes a series of hypotheses based upon the literature in marketing, advertising, and tourism. Chapter 4 describes the methodology including: (1) research design, (2) data collection, (3) research procedure, (4) measurement, and (5) data analysis. Chapters 5 and 6 present the results of

model evaluation and hypotheses testing. Conclusions and implications for theory development and the practical implications are discussed in this chapter.

CHAPTER 2

LITERATURE REVIEW

This section reviews the theoretical foundations of advertising and then discusses the importance of situational factors in influencing information search behaviors and advertising response. In addition, the notion of decision flexibility is discussed from two different perspectives (i.e., individual and situational flexibility). Specifically, the first section provides an overview of the general advertising model whereby two main psychological factors (i.e., cognitive and affective response to advertising exposure) mediate the relationship between advertising exposure and attitude toward advertising, which in turn, leads to attitude toward the advertised products and intention to purchase the products. A number of situational factors that influence the advertising response are then discussed including involvement, prior knowledge, and travel group. Finally, the third part of this review examines the concept of decision flexibility and its potential role in consumer and travel decision making.

2.1 The Basic Advertising Model

Consumer response to advertising has received much attention from marketing researchers (Batra, Myers, & Aaker, 1996; Rossiter & Percy, 1997). Advertising is defined as “the nonpersonal communication of information usually paid for and usually persuasive in nature about products, services, or ideas by identified sponsors through the various media” (Bovee & Ahrens, 1989, p.485). The aim of advertising is to maintain or increase the brand (or product) awareness through conveying information or creating positive emotional response to form or change brand (or product) attitude (Rossiter &

Percy, 1997) and to persuade consumers to adopt a certain brand, product, or service (Meyers-Levy & Malaviya, 1999). For several decades studies have been conducted to understand how advertising works. Most advertising researchers have agreed that Elmo St. Lewis in the late 1800s and early 1900s first proposed a systematic process of advertising in the personal selling context, naming the AIDA model (Attention – Interest – Desire – Action) (Barry, 1987). He suggested that sales people had to attract attention, maintain interest, create desire, which then results in some form of product purchase (see Figure 1).



Figure 1. The AIDA model

The AIDA model evolved into the hierarchy-of-effects model that provided a strong foundation for advertising evaluation. Following AIDA, the “hierarchy-of-effects” implies that advertising influences consumer purchase decisions by creating a series of successive responses from consumers. Lavidge and Steiner (1961) proposed a six-stage model including awareness → knowledge → liking → preference → conviction → purchase. This model assumes that advertising generally does not bring about an immediate behavioral response or purchase, but rather a series of effects must occur with each step fulfilled before the consumer moves to the next step in the hierarchy (i.e., from

initial awareness of a product or service leading to interest and preference until actual purchase) (Belch & Belch, 2004). Lavidge and Steiner (1961) identified three functions of advertising based upon psychological concepts, and postulated that cognition causes affection which eventually leads to conation; these are cognitive stage (awareness and knowledge) → affective stage (liking and preference) → behavioral or conative stage (conviction and purchase). There are several researchers who advocate the hierarchical framework on the basis of Lavidge and Steiner's idea. For example, Colley (1961) proposed DAGMAR (Defining Advertising Goals for Measured Advertising Results) and suggested that the ultimate objective of advertising should be to carry consumers through the four stages – from awareness, comprehension, and conviction to final purchase – rather than focusing on sales alone.

The hierarchy-of-effect model (especially Lavidge and Steiner's model) has been considered for more than a century with little change to its essential AIDA structure (e.g., Barry & Howard, 1990; Bendizlen, 1993; Olney, Holbrook, & Batra, 1991; Preston & Thorson, 1984; Yoo, Kim, & Stout, 2004). However, several advertising researchers have criticized the hierarchy-of-effects model in terms of its basic assumptions and empirical evidence (Barry & Howard, 1990; Huey, 1999; Moriarty, 1983; Preston, 1982; Weilbacher, 2001; Vakratsas & Ambler, 1999). Specifically, Vakratsas and Ambler (1999) reviewed 250 studies that examined how advertising works and classified these studies according to the model and theory applied. The authors concluded that "... the concept of hierarchy (temporal sequence) on which they are based cannot be empirically supported" (Vakratsas & Ambler, 1999, p.38).

Huey (1999) also argues that advertising does not follow a series of steps, but rather is a continuous process toward purchasing adoption. Following Huey's (1999) study, some researchers (e.g., Cramphorn, 2004; Eichenbaum & Bodkin, 2000; Gordon & Ford-Hutchinson, 2002; Hall, 2004) conclude that affect may actually precede cognition, and/or that it is intrinsically interwoven with how we think about advertising, rather than a type of linear effect (cognition → affection). Holbrook and Hirschmann (1982) proposed a hedonic experiential model arguing that "Abandoning the information processing approach is undesirable, but supplementing and enriching it with ... the experiential perspective could be extremely fruitful" (1982, p.138) and that decision making is driven as much by emotions as by knowledge and reasoning (Damasio, 1994; 1999; 2003). Based upon this research, Vakratsas and Ambler (1999) and others (Mehta, 1994; Olney, et al., 1991; Park, Stoel, & Lennon, 2008; Petty, Cacioppo, & Schumann, 1983) proposed a general model of advertising (see Figure 2). The following section briefly discusses the key elements of the general advertising model including cognitive, affective, and conative components.

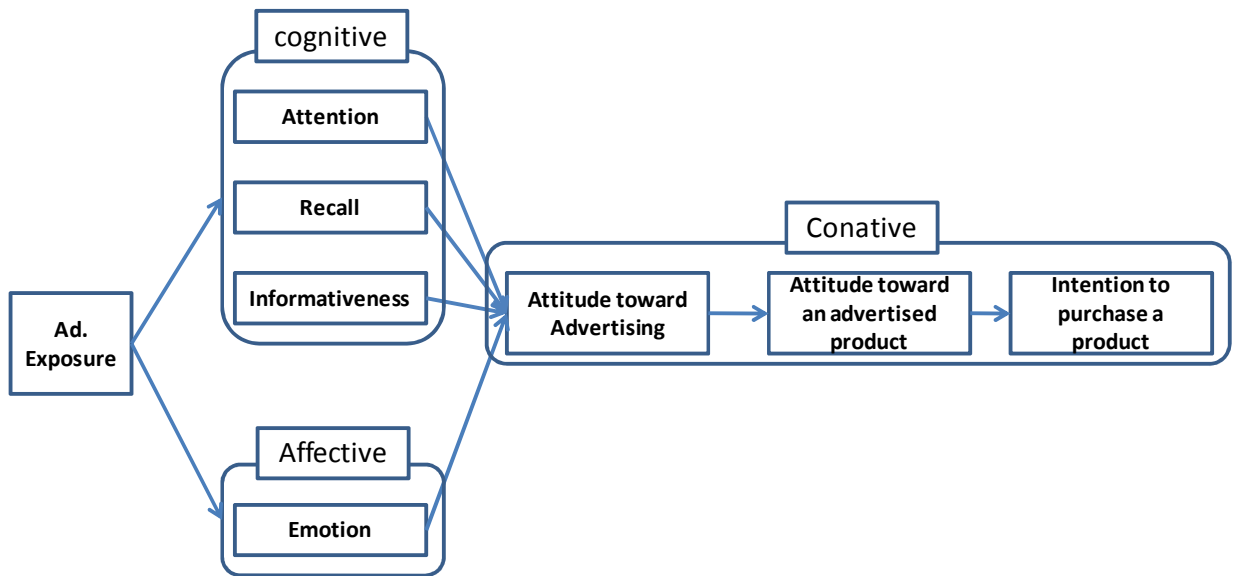


Figure 2. The General Advertising Model

2.1.1 Cognitive Response

Information processing theory proposes that persuasion is a function of people's reflections on, and cognitive responses to, the content of a message (Greenwald, 1968; Wright, 1980). Cognition relates to information or an idea that consists of the intellectual, mental, or rational states. Based on information processing theory, this study argues that three constructs (i.e., attention, recall, and informativeness) reflect cognitive response and are explained below.

Attention

Attention, defined as the amount of cognitive resource being used, has been consistently recognized as a central construct to most advertising response models (Heath & Feldwick, 2008; Milosavljevic & Cerf, 2008). In particular, the AIDA model postulates that attention is the first step in the persuasion process when advertising is

exposed (Vakratsas & Ambler, 1999). Further, most hierarchy-of-effect models suggest that attention is the initial step to go to a higher level of process. Kahneman (1973) indicates that attention is a cognitive response whereby it can be an equivalent term with thought (Mackenzie, 1986). Pieters, Warlop, and Wedel (2002) found that when consumers pay more attention on advertising, they are more likely to improve brand memory. Additionally, Rossiter and Percy (1997) proposed the ALEA model (Attention, Learning, Emotion, and Acceptance), arguing that the advertising process is initiated by attention responses to diverse elements of advertising.

Recall

Recall has also been recognized as one of the most important measures in cognitive advertising response based upon the idea that it generates and sustains product/brand awareness (Willke, 1993). Several researchers describe recall as “the mental reproduction of some target item experienced or learned earlier” (Bagozzi & Silk, 1983). Stapel (1998) concludes that recall provides an objective indication of the level of interest an advertisement can produce. In terms of the cognitive response model, it is argued that advertising effectiveness depends on how much consumers understand and remember the message, and eventually, purchase the advertised product (Laskey, Fox, & Crask, 1995). Due to the elapsed time between message exposure and purchasing behavior, advertising is required to work through a consumer’s memory (Ehrenberg, Barnard, Kennedy, & Bloom, 2002) as memory makes the linkage between advertising inputs (i.e., message) and outputs (i.e., consumer behavior) (Ambler & Burne, 1997; Dens & Pelsmacker, 2010). Haley and Baldinger (1991) observe that “[P]ersuasion and

recall ... are likely to remain primary evaluative measures in the foreseeable future” (p.30). Importantly, however, Krugman (2000) found that recall does not perfectly measure the extent to which people memorize the contents of advertising. He and others (Wells, 2000) suggested that it is important to examine how meaningful the message is and how well the brand name (or item) registers in people’s minds. They proposed two different methods to measure recall: aided and unaided recall. In the aided recall, a respondent is asked by showing a picture of the advertisement with the sponsor or brand name blanked out. In contrast, in unaided recall, only the product or service name is provided (Batra, et al., 1996).

Informativeness

Informativeness refers to the ability of advertising to effectively provide relevant information (Oh & Xu, 2003). Marketing professionals view advertising as an informative and persuasive tool for stimulating demand (Crouch, 1994). From the informative perspective of advertising, numerous researchers have shown that advertising informativeness is strongly correlated with the value of advertising to consumers (e.g., Chang & Kinnucan, 1991; Ducoffe, 1995; Soley & Reid, 1983; King, Reid, Tinkham, & Pokrywczynski, 1993; Stewart & Koslow, 1989), and that the informative content of advertising is the best predictor to form brand attitude (Li, Daugherty, & Biocca, 2002; Mitchell & Olson, 1981), and in turn, this significantly influences consumer behavior (Aaker & Stayman, 1990; Abernethy & Franke, 1996; Mela, Gupta, & Lehmann, 1997). Klein (1998) argues that products regarded as experience goods (e.g., travel products) can become search goods when the consumer can obtain critical and useful product

information prior to the purchase decision making. In particular, consumers can build indirect experience from content and stimulus of diverse advertising information such as text, images, and videos. That is to say, the risk inherent in product choice can be greatly reduced as consumers gain increased knowledge about the available alternatives (Bettman & Park, 1980).

2.1.2 Affective Response

Emotion is considered to be one of the well-known responses to advertising stimulus. The influential work by neuroscientists such as Damasio (1994) and LeDoux (1996) indicates that emotion is essential to rational thinking and human behavior. Indeed, they argued that emotion may dominate cognition such that they are the most important factors affecting the advertising process (Poels & Dewitte, 2006). There are two types of emotions where one refers to “lower-order emotions”, including uncontrollable and spontaneous emotional reactions (LeDoux, 1996; Zajonc, 1980). These types of emotions primarily engage in pleasure and arousal reactions that do not require cognitive assertion. The second type of emotion depends on deeper cognitive processing of the situation, referred to as “higher-order emotions”. These emotions are more complex than lower-order emotions and need to be consciously labeled (Rossiter & Bellman, 2005). Heath, Brandt, and Nairn (2006) examined the effect of emotional and rational contents on brand favorability within the television advertising context and found that emotional content in advertising significantly relates to favorability (or attitude toward brand).

2.1.3 Conative Response

The cognitive response theory argues that spontaneous thoughts (or cognitive response) provoked by exposure to advertising message can perform direct indicators for attitude formation and/or change (Greenwald, 1968). Several advertising researchers have estimated the relationship between the cognitive thought elements (i.e., attention, recall, and informativeness) and attitude toward advertising. For example, Mackenzie (1986) identified that the attention referring to the amount of mental effort allocated to a task is a core factor influencing the attribute evaluation (Wu, Wei, & Chen, 2008). Maumbe (2006) stated that attitude as a prerequisite to make people purchase a product promoted includes a positive relationship with message recall (Haskins, 1964; Simon & Arndt, 1980). Lastly, a number of advertising studies indicate that informativeness is an important factor contributing to a consumer's perceived evaluations on advertising and, in turn, attitude toward advertising (Ducoffe, 1996; Park et al., 2008). Ray and Batra (1983) suggested emotions, as a set of learning from advertising message, have a direct effect on advertising effectiveness as affective executions bring about more positive judgment of advertising message (Bower & Cohen, 1982; Olney et al., 1991). Based upon the conative response referring to attitude formation toward the advertisement and the product, and the intention to purchase the product, each element comprising conative construct (i.e., attitude toward advertising and product, and intention to purchase advertised products) is discussed.

Attitude toward advertising and product

An attitude toward an object can be defined as an individual's internal evaluation

of it. Specifically, Fishbein and Ajzen (1975, p.222) stated that “A person’s attitude is a function of these salient beliefs at a given point in time” where salient beliefs are those activated from memory and considered by person in a given situation (Fishbein & Ajzen, 1975; Olson, Kanwar, & Muderrisoglu, 1979). Based on this definition, attitude toward advertising can be regarded as an important construct affecting advertising effectiveness, product/brand attitude, and purchase intention (MacKenzie & Lutz, 1989; Durvasula, Andrews, Lysonski, & Netemeyer, 1993). Lutz (1985) outlined five antecedents of attitude toward advertising: (1) advertising credibility, (2) advertising perceptions, (3) attitude toward the advertiser, (4) attitude toward advertising in general, and (5) mood. Many advertising researchers have focused on the attitude toward advertising in general, describing “predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion” as a principal notion of current advertising attitude (MacKenzie & Lutz, 1989, p.49). This research indicates that attitude plays an important mediating role between exposure to information/message and behavioral change (Lutz, MacKenzie, & Belch, 1983; MacKenzie, Lutz, & Belch, 1986; Petty, Priester, & Briñol, 2010). That is, exposure to an advertising message for a specific brand first affects one’s attitude toward the advertising, which then mediates the attitude toward the brand that refers to recipients' affective reactions toward the advertised brand (Lutz, et al., 1983; Mitchell & Olson, 1981; Shimp, 1981). Subsequently, behavioral intention is formed as a consequence of this attitude formation (Batra & Ray, 1986; Brown, Homer, & Inman, 1998; Brown & Stayman, 1992; Burke & Edell, 1989; MacKenzie & Lutz, 1989).

Purchase Intention

Purchase intention denotes the likelihood of performing an action (Howard & Sheth, 1969). Ajzen and Fishbein (1980) and Fishbein and Ajzen (1975) proposed the expectancy-value model, arguing that behavioral intention is composed of the relative weighting of attitude toward behavior and subjective norm. From an advertising perspective, it can be argued that a strong attitude and subjective toward a specific item featured in advertising would affect one's intention to purchase the advertised products or service. According to the hierarchy-of-effects model, conative measures are used to predict the behavioral response resulting from advertising or marketing stimulus. It includes several types of behavioral intentions such as searching for additional information or purchasing a product (Brucks, 1985; Hoch & Ha, 1986). Of them, the most widely used conative measure in advertising effectiveness research is purchase intention (Andrews, Craig, Akhter, & Muehling, 1992; Beerli & Santana, 1999).

2.2 Situational Factors, Travel Information Search, and Advertising Response

A number of studies have applied the general advertising model within a wide range of purchases and communication situations (Bagozzi & Silk, 1983; Reed & Ewing, 2004). Other studies, however, indicate that the general advertising model is not useful because information search is often constrained by different situations such as the information environment or external constraints (Adelman, 1981; Batra, et al., 1996; Belk, 1975; Hornik, 1989; Josiam & Hobson, 1995; Lehmann & Pan, 1994; Rokeach, 1968; Simonson & Tversky, 1992), and they conclude that situation is a vital source of variation in consumer response. Belk (1974) defined situational influences as those

arising from factors that are particular to a specific time and place, and include physical surroundings, social settings, time, task (type of decision to be made), and antecedent states (moods and physical conditions). Gretzel, Hwang, and Fesenmaier (2006) proposed a behavioral framework that describes how different personal and travel-related factors influence travelers' information processing, evaluation, and search behaviors. Specifically, the nature of information searched is determined by two main factors: the structure of the decision task to be accomplished, and the context in which this trip decision is to be taken. Thus, the structure of the decision task and information needs depend on the decision frame which, in turn, defines the decision-making process. Within this context, the decision frame includes the specificity of the decision to be taken, the extent to which travel planning is implemented, and the importance of decision criteria when making a destination decision; situational constraints, on the other hand, include travel party, length, origin, purpose, and activity.

Based upon this framework, travel situation can be categorized into two types – psychological-based and trip-based characteristics. Psychological-based situations (e.g., involvement and prior knowledge) have been regarded as crucial elements within tourism and advertising literatures (Brucks, 1985; Ferrari & Dovidio, 2001; Gitelson & Crompton, 1983; Park & Kim, 2010; Vogt & Fesenmaier, 1998) in that they determine the amount of cognitive effort that consumers devote toward the attention and comprehension procedures which, in turn, are required to evaluate relevant issues or products (Bettman & Park, 1980; Celsi & Olson, 1988; Petty, et al., 1983; Wicks & Schuett, 1991). Within trip-related characteristics (e.g., travel purpose and travel group composition), travel group is one of the most important situational factors as it relates to

perceived travel risk (O’Leary, Field, & Schreuder, 1974; Roehl & Fesenmaier, 1992). The following discusses the role of these key situational factors in travel information search.

Travel Involvement

Studies indicate that involvement in travel planning affects a number of elements in decision making and information search (Carneiro & Compton, 2010; Havitz & Dimanche, 1990; Laurent & Kapferer, 1985; McColl-Kennedy & Fetter, 2001). From the social psychological perspective, involvement has been defined as the degree of internal state of motivation, arousal, or interest (Havitz & Dimanche, 1990; 1997; McWilliams & Crompton, 1997). According to cognitive involvement, involvement refers to the extent of cognitive elaboration that occurs in a communication process (Liu & Shrum, 2002). It is different from enduring involvement that people have with an object such as product involvement. Rather, it is a situational construct which initiates and finish within the communication process and is similar with elaboration process concept developed by Batra and Ray (1985). This perspective suggests that products differ in terms of levels of involvement, depending upon persons and situation. For example, as the perceived risk involved in the decision task increases, situational involvement rises accordingly and, in turn, travelers are more likely to engage in external information search (Murray, 1991). Further, travelers who are highly involved in travel planning have a tendency to use more criteria, search for more information using more sources, process relevant information in detail, make more inferences and develop attitudes that are less likely to change (Cai et al., 2004; Celsi & Olsen, 1988; Fesenmaier & Johnson, 1989; Manfreda, 1989; Perdue,

1993).

Prior Knowledge

In the marketing literature, prior knowledge has been largely described as a cognitive domain factor that determines decision making and information search behaviors (Alba & Marmorstein, 1987; Baker, Hutchinson, Moore, & Nedungadi, 1986; Park, Mothersbaugh, & Feick, 1994; Rao & Sieben, 1992). A number of different studies have found the relationship between prior knowledge and information search behavior to be positive, negative and U-shaped, depending upon situation. A positive relationship suggests that as travelers acquire more knowledge, they will be more actively involved in information search because they are easily able to interpret information and obtain the benefit from that (Kerstetter & Cho, 2004; Carneiro & Crompton, 2010). In contrast, a negative relationship suggests that the more knowledge a traveler can obtain, they are less likely to search information as they have enough internal information to make decisions (Gursoy & MacCleary, 2004). Several studies found an inverted U-shaped relationship, arguing that people are more likely to search information when they have moderate level of knowledge (Punj & Staelin, 1983; Alba & Hutchinson, 1987; Moorthy, Ratchford, & Talukdar, 1997).

Travel Group

The composition of travel group has been regarded as an important explanatory variable affecting information search in tourism (Hwang, Gretzel, Xiang, & Fesenmaier, 2006a; 2006b). In terms of the social setting aspect, studies indicate that travel party

composition affects group dynamics, which then have important implications for the travel planning process. Fodness and Murray (1999) indicated that the choice of information search strategy varies as a function of the travel group composition, and confirmed the powerful effect of the presence of children as shown on consumer behavior in other product categories (Wilkes, 1995). Additionally, several studies indicate that the travel group including children is significantly more likely to use detailed travel information about the destination (Gitelson & Crompton, 1983; Luo, Feng, & Cai, 2004; Snepenger, Meged, Snelling, & Worrall, 1990).

2.3 Flexibility in Consumer and Travel Decision Making

Travel requires many decisions which are planned, decided upon and realized throughout the trip. The following literature discusses the notion of flexibility as a type of situational factor, and identifies the role of flexibility in decision making and information search and, therefore, influence on travelers' responses to tourism advertising. Flexibility has been examined in the decision-making context whereby people adapt to changes in the environment (Kahn & Lehmann, 1991; Payne, 1982). One area of research considers flexibility as a personality trait whereby highly flexible people differ from less flexible individuals in terms of anxiety, openness, curiosity, and proactiveness. A second research stream considers situational-based flexibility whereby people's preference, appraisal of uncertainty, and choices can be influenced by changes in the task environment. The following section discusses each of these research streams in detail.

2.3.1 Individual Flexibility

A number of studies, as summarized below in Table 2, have examined a range of constructs whereby individual flexibility and adaptive behavior are considered as a personality trait (e.g., Griffeth, Gaertner, & Sager, 1999; Parker, Wall, & Jackson, 1997; Schunn & Reder, 2001).

Table 2. Summary of Findings related to Individual Flexibility

Authors	Concept	Description
Raudsepp (1990)	Individual Flexibility	Explore diverse approaches to a problem Adapt to and deal with changes & unexpected situations
Connor (1992)	Individual Flexibility	Have tolerance for ambiguity Feels empowered during change Believes change to be a manageable process Modifies one's own assumptions or frame of reference Only needs short time to recover from ambiguity
Griffeth, et al. (1999); Rosse & Hulin, (1985)	Adaptive Response Model	Process an individual enacts in altering attitudes and behaviors relative to the organization
Schroder (1989)	Conceptual Flexibility	Able to identify feasible alternatives or multiple options in planning & decision making Hold different options in focus simultaneously Evaluate pros and cons
Schunn & Reder (2001)	Strategy Adaptivity Approach	Adaptiveness of individuals to different situations Found individual differences in adaptivity were predictive of performance of task performance
Pulakos, et al. (2000)	Adaptive Performance	Handling uncertain situations, solving problems creatively, learning new tasks and adjusting change

Source: Adapted from Jones (2005)

Raudsepp (1990) and Connor (1992) have proposed definitions of individual flexibility. Raudsepp (1990) conducted interviews with senior managers and psychologists to obtain an idea about individual flexibility in the workplace. Raudsepp (1990) identified a flexible individual as one who can explore a variety of approaches to a problem, adapt to and deal with changes and unexpected situations, and have a tolerance for ambiguity. Further, Connor (1992) argues that a flexible person has a sense of being empowered during change, believes the change to be manageable, adapts one's own assumptions, and needs a short time to recover from adversity. Definitions regarding individual flexibility offered by two scholars above seem to be similar, which specifically discusses adapting to and being comfortable with change and exploring and altering assumptions in response to different situations.

Griffeth, Gaertner, and Sager (1999) developed the Adaptive Response Model (ARM) to explain how people adapt to a certain circumstance such as a change in policies of an organization. Flexible individuals are willing to change their perceptions, attitudes, and behaviors in response to various events so as to adjust the dynamic environment. More recently, Schunn and Reder (2001) argued the adaptiveness of individuals to situations and used the 'strategy adaptivity approach' to individual differences of cognitive function whereby people are systematically different in their ability to adapt strategies. Their study found a significant relationship between individual adaptation and overall task performance, and cognitive capability, including reasoning ability and working-memory capacity. In summary, this stream of research argues that individual flexibility is an attribute of one's personality which is reflected in their proactiveness and a tolerance of ambiguity. That is, flexible people do not see

environment as something to which they should passively respond but as something they actively shape (Raudsepp, 1990). Less flexible people who have the upright, rigid, and/or obsessive-compulsive characteristics tend to see changes or challenges in the environment as threats rather than opportunities; and, they have little openness to the new, the unexpected, or the unpredictable.

2.3.2 Situational Flexibility

An analysis of the literature, however, indicates that situation-based flexibility is a dominant factor affecting the decision-making process and focuses on people's response or reaction to situational change. The underlying idea of this research is that preference judgments, appraisal of uncertainty, and choices among all of the alternative courses can be influenced by changes in the task environment. That is, the decision making and choice behavior is adaptive in nature (Einhorn & Hogarth, 1981). Park and Lutz (1982) suggest the dynamics in consumer choice through proposing a three-stage contingency decision plan consisting of pre-search, after-search, and post-choice processes. The results of the study indicate that individual decision making follows a hierarchical and contingent decision process. Specifically, the choice process reveals a bounded stability of decision process in which decision criteria used at an earlier decision state is replaced by other decision criteria at a later stage due to learning during alternative search and deliberation periods (Rummelhart & Norman, 1978).

Table 3. Summary of Studies related to Situational Flexibility

Authors	Concept	Description
Payne, Bettman, & Johnson (1992a,b; 1993)	Contingent decision behavior	Diverse strategies in making a decision contingent upon problem (task and context variables) and social context (group membership)
Benjaafar, Morin, & Talavage (1995)	Strategic value of Flexibility	Rising value of flexibility in sequential decision making when initial uncertainty exists and/or future information is expected
Walsh (1995)	Flexibility in purchasing	Based on the expected utility maximization, flexibility is a desire at the consumption occasion due to the uncertainty about future consumption utility
Kahn & Lehmann (1991); Simonson (1990)	Decision making among assortments Variety seeking	Evaluating assortment in terms of consumer's flexibility for future choice and the effort required to remove the unacceptable alternatives
Guo (2006; 2010)	Consumption flexibility	Purchasing different products together (multiple buying) when consumption utility uncertainty exists
Fesenmaier & Jeng (2000)	Travel decision flexibility	Time when travelers make multi-decisions in their travel planning The centrality of the travel decisions in travel planning

Payne, Bettman, and Johnson (1992) support the notion of multiple strategies in judgment and choice whereby it argues that the decision heuristics that individuals use depend on the trade-off between accuracy and cognitive effort. Adaptive decision process results in either the change of decision rules to diminish the size of an alternative set into a cognitively manageable level. For a large set, a decision maker typically facilitates non-compensatory rules while for a smaller set a decision maker employs compensatory rules. That is especially true when the size of an alternative set exceeds the decision maker's information processing capacity. In this case, the individual will work less hard in order

to arrive at a final choice as quickly as possible, otherwise the compensatory rule is employed to arrive at a more accurate choice decision (Einhorn & Hogarth, 1981; Payne, 1976; Payne et al., 1993; Payne, Bettman, & Johnson, 1992b; Shanteau, 1970; Tversky, 1969).

One of the strategies based upon economic choice theory is that a decision maker will prioritize things that need to be done and make decisions regarding how to allocate the available resources based on the perceived importance, and resolve the complexity using a sequential decision process. The resolution process can be revealed as a "time-phased" structure or hierarchy (Benjaafar, et al., 1995). It is argued that the degree of adaptivity is highly related to the centrality (i.e., importance) and rigidity (or flexibility) of beliefs and attitudes towards a decision object at a particular point of time.

Furthermore, researchers suggest the flexibility of deferred decisions provide additional criterion (as opposed to value and utility of a decision) to examine the interactivity and dynamics of decision behavior. Benjaafar, et al. (1995) examined the strategic value of flexibility in a sequential decision-making behavior and suggested that “flexibility limits the risks of an early commitment to an alternative [decision] when the value of this alternative [decision] is not known with certainty. A flexible position also allows greater responsiveness to future events by taking greater advantage of the learning ...” (p.438).

Adaptive behavior can also be explained by variety seeking behavior (which refers to a number of alternatives) (Kahn, 1995; Guo, 2010). Consumers’ tastes change over time. That is, they may not know at the purchase occasion which alternatives they will prefer at the prospective consumption time (Walsh, 1995). Hence, consumers are likely to “take actions now that maintain future options for acting when future

preferences are clear” (March, 1978). Kahn and Lehmann (1991) provide empirical evidence consistent with the idea that consumers prefer flexible over inflexible choices whereby the uncertainty about future consumption utility exists and consumers make an effort to ensure the uncertain utility of alternatives (Guo, 2006; Hauser & Wernerfelt, 1990; Simonson, 1990; Xie & Shugan, 2001). Walsh (1995) concludes that varied sets of alternatives increasing expected utility are desirable under certain situations due to consumers’ desire for flexibility at the future consumption occasion. Accordingly, a series of experiment studies indicates that the choice strategy is susceptible by a certain situation representing the number of alternatives (Shields, 1980). Further, the information acquisition phase of decision making becomes more attribute-based as the number of alternatives increases (Payne & Braunstein, 1978). As Payne et al. (1993), and Wright and Barbour (1975) mentioned, a decision maker intuitively recognizes that a large size of potential choices raise his or her chance for an optimal choice (Walsh, 1995). Reibstein, Youngblood, and Fromkin (1975) conclude that perceived flexibility is increased as the number of options in the choice set increases because consumers can experience additional utility from multiple items in the choice set (Kahn, Moore, & Glazer, 1987; Broniarczyk, Hoyer, & McAlister, 1998).

Thus, it can be argued that decision flexibility in consumption is essential either because the consumer would like to avoid decision conflict and thus puts off the ultimate choice (Simonson, 1990), or because the consumer is vague about future preferences (Koopmans, 1964; Kreps, 1979). In other words, consumers may have an inducement to purchase a varied assortment in order to maintain consumption flexibility whereby the decision as to which product to purchase for a particular consumption is, in fact, delayed

until the varieties' consumption utility becomes known (Guo, 2010). Therefore, it can be argued that flexibility in decision making is reflected by the delay of decisions to gain information as an effective means for dealing with uncertainty about their consumption utility (Hart, 1951).

Several tourism researchers have examined flexibility in travel decision making, which can be defined as tourists' level of willingness to change their plan (or decision) that is made in the early stage in order to maintain or achieve ideal levels of satisfaction (Decrop & Snelders, 2004; Hwang, 2004; Hyde & Laesser, 2009; Jeng, 2000). Flexibility in travel decision making reflects the level of centrality of travel decisions along with the continuum of salience, the degree of commitment, the amount of time a person spends thinking about it, and the level of uncertain utility for future consumption. Flexibility can be obtained by loose planning with which travelers do not always plan out every aspect of a trip in advance. The rigidity of a trip itinerary varies from one facet of the trip to another and from one person to another (Jeng, 2000). Studies conducted by Fesenmaier and Jeng (2000), and Jeng and Fesenmaier (2002) introduced the notion of flexibility and found that travel decision is a hierarchical and complex process, which requires the solution of multi-decisions or facets including destination, accommodation, length of trips, travel party, attractions to visit and so on (Hwang, Gretzel, Xiang, & Fesenmaier, 2006a; 2006b; Moutinho, 1987; Jeng & Fesenmaier, 2002). They proposed three stages of travel decision-making process (core, secondary, and en route) and identified the different level of flexibility based upon timing when decisions are made in the entire planning process. Core decisions are usually planned ahead of time and are not flexible to change, such as travel budget, length of trip, travel party, primary destination, and

accommodation. Secondary decisions are considered before, but have the potential to be changed. For example, decisions allocated to secondary destinations, activities, attractions, and trip route can be included as secondary decisions. En route decisions, on the other hand, are more likely to be considered during the trip and should be flexible, such as gifts/souvenirs purchasing, rest stops, food stops, and shopping. Importantly, they identified that travelers possess different perceived importance on the different stages (i.e., core, secondary, and en route stages) of decisions, and the level of importance is consistent with the level of behavioral flexibility to change (Jeng & Fesenmaier, 2000; Hyde & Laesser, 2009).

Decrop and Snelders (2004) found that travelers tend to be adaptable in their trips whereby they show the tendency to have numerous types of vacation decision-making processing. Specifically, travelers who employ opportunistic strategy are likely to be highly adaptable; they do not have well defined decision criteria, destination preference, and are open to numerous alternatives. They rely on incidental learning (or information search) more than intentional way. Recently, based upon the conceptual framework of the travel decision-making model developed by Jeng and Fesenmaier (2002), Choi, et al., (2011) attempted to estimate information use patterns across the overall course of the travel planning process. They concluded that travelers tend to use different information sources and have different levels of preferences in information sources depending on different stages of the travel planning process that indicates a different perceived level of flexibility to change decisions. Jun, Vogt, and Mackay (2007) applied case-based planning theory that emphasizes the flexible occasion during a trip (i.e., plan revision) to examine the information search and travel product purchase. However, the research just

focused on pre-trip context, which provides limited attributes to explain information search behavior of entire travel planning with regard to flexibility.

2.4 Summary

This chapter provided an overview of the advertising response model. Based upon the dual process of persuasion, cognitive and affective responses that influence the conative stage (i.e., attitude and intention to purchase) were discussed together with considering specific elements including attention, recall, informativeness, and emotion. With the recognition of the importance of situational factors to information search process, travel decision flexibility is proposed and reviewed in two different perspectives (individual and situational perspectives). Then, the potential effect of decision flexibility on traveler's response to advertising was discussed. Chapter Three will discuss the proposed hypotheses whereby the relationships of the general advertising response model will be proposed and then, the moderating effect of decision flexibility will be examined.

CHAPTER 3

MODEL DEVELOPMENT

Based upon the literature this chapter first proposes hypotheses which are used to define the general advertising model. Then, based on the argument that travel decision flexibility affects travelers' responses to advertising, hypotheses are proposed to describe the role of flexibility within this model.

3.1 Defining General Advertising Response Model

The literature clearly indicates that individuals respond to advertising stimuli through two different paths – cognition ('thinking' dimension of a person's response) and affect ('feeling' dimension) whereby cognitive responses include attention, recall, and informativeness, and affect response contains emotion. A substantial amount of research confirms the positive relationships between cognitive and affective responses and attitude change (Hansen, 1972; Olney, et al., 1991; Petty & Cacioppo, 1986). This study investigates two specified attitudes, one toward advertising and the other toward advertised travel products. Attitude toward product has been postulated as a mediator in the relationship between advertising attitude and intention to purchase advertised products (MacKenzie, et al., 1986; Lutz, et al., 1983; Mitchell & Olson, 1981; Park & Young, 1986; Shimp, 1981; Stone, Besser, & Lewis, 2000). Additionally, several studies have found a positive relationship between attitudes and purchase intention (Shim & Drake, 1990; Tsang, Ho, & Liang, 2004). In tourism, travelers are required to make a variety of decisions (i.e., purchase a series of travel-related products) including destination(s), activities, accommodation(s), restaurants, attractions, length of trip,

activities, and so on (Fesenmaier & Jeng, 2000; Jeng & Fesenmaier, 2002). Therefore, it is argued that a favorable attitude toward advertising is positively related to a stronger intention to purchase advertised travel products.

The following hypotheses define the core travel advertising model:

Hypothesis 1: Cognitive and affective responses to travel advertising positively influence attitude toward advertising.

Hypothesis 1a: Attention to the advertising message positively influences advertising attitude.

Hypothesis 1b: Advertising recall positively influences advertising attitude.

Hypothesis 1c: Advertising informativeness positively influences advertising attitude.

Hypothesis 1d: Traveler's emotional response to advertising message positively influences advertising attitude.

Hypothesis 2: Attitude toward the advertisement positively influences attitude toward the travel products being promoted.

Hypothesis 3: Attitude toward travel products positively influences intention to purchase the travel products being promoted.

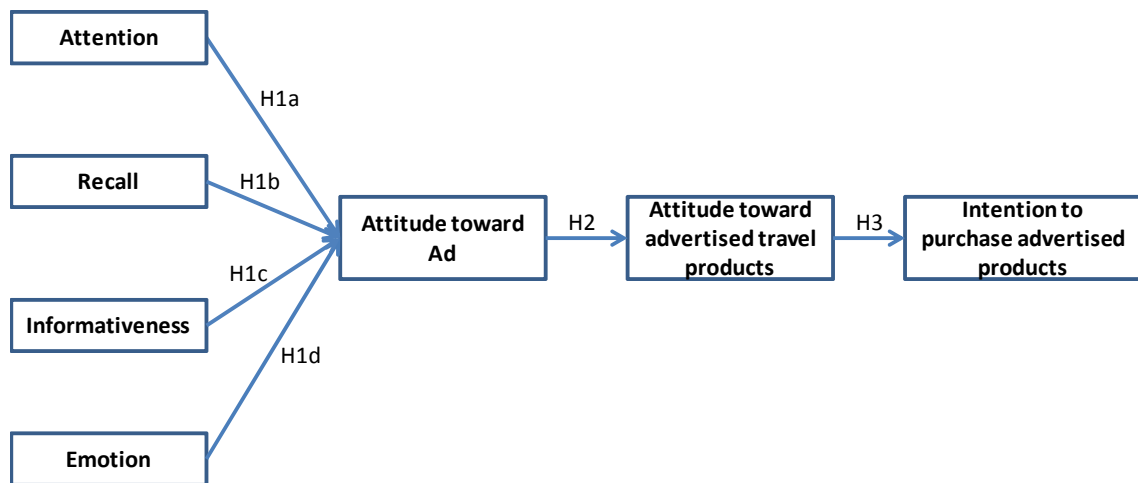


Figure 3. Hypotheses regarding the General Advertising Response Model

3.2 The Moderating Effect of Travel Decision Flexibility

Chen and McCain (2011) described five types of situational factors that may influence travel decision making process, including physical surroundings, social surroundings, temporal perspective, task definition, and antecedent state. Of them, task definition refers the set of goal a traveler develops to resolve needs deriving from a specific situation (Marshall, 1993). Foxall and Glodsmith (1994) said that the task definition is “the orientation, intent, role, or frame of a person through which certain aspects of the environment may become relevant..” (p. 184). Belk (1975) argued that the task definition is an important factor that stimulates the need for consumers to purchase products or services.

Based upon an understanding of the role of task definition, this study argues that the different types of travel decisions reflect different tasks in the trip planning, allowing travelers to concern different level of decision flexibility for each product or service to purchase. Accordingly, it is argued that travel decision flexibility is one of travel-related situational factors associated with other travel situational variables such as travel involvement, knowledge, and number of choice alternatives. Thus, travelers who have different levels of flexibility may indicate different ways on information process. Furthermore, Abelson and Levi (1985) suggest that a continuum of choice environment exists on the range from well-defined to ill-defined choice situations. Well-defined choice situations include both risky and risk-free decisions, whereas ill-defined choice situations generally concern risky decisions due to the uncertainty of the outcomes. Most tourism decisions may be regarded as ill-defined choice situations where travelers are hard to make certain outcomes because of the intangible and experiential nature of tourism

products. In order to reduce the perceived uncertainty of purchase outcomes, travelers tend to search for more information and thus, become adaptable in the planning process. Woodside and Lysonski (1989) provide the importance of considering situational factors and imply the moderating role of the situational variables in travel decision making process.

Merkhofer (1977) analyzed the influence of decision flexibility on the value of information to decision makers and found that the information value is not constant but varies depending on the decision maker's flexibility. The results support the idea that decision flexibility is important to evaluate the information gathering scheme. Marschak and Nelson (1962) suggest that flexibility can be referred to as a mechanism which allows decision makers to take advantage of future information. They concluded consistent argument that the more people are flexible in the sequential decision-making process, the greater the value of information gathering. In the tourism context, several studies indicate that travel information search behavior varies depending on the trip decision stage where travelers would like to make decisions, from pre-trip and en-route to post-trip. Fesenmaier and Jeng (2000) identified that travelers possess different perceived importance at different stages of decisions, and different levels of behavioral flexibility to change (Jeng & Fesenmaier, 2000; Hyde & Laesser, 2009). Thus, a traveler in different stages of decision making confronts different tasks, which, in turn, require different types of information (Gretzel, et al., 2006). A study by Choi et al. (2011) supports the argument of this study indicating that travelers in different stages of the travel planning process that represents the level of flexibility to change earlier decisions use different information sources and show different levels of depth to evaluate the information. Based on these

findings, it is argued that the relationships that define the general advertising model are likely to change depending upon decision flexibility (see Figure 4 below).

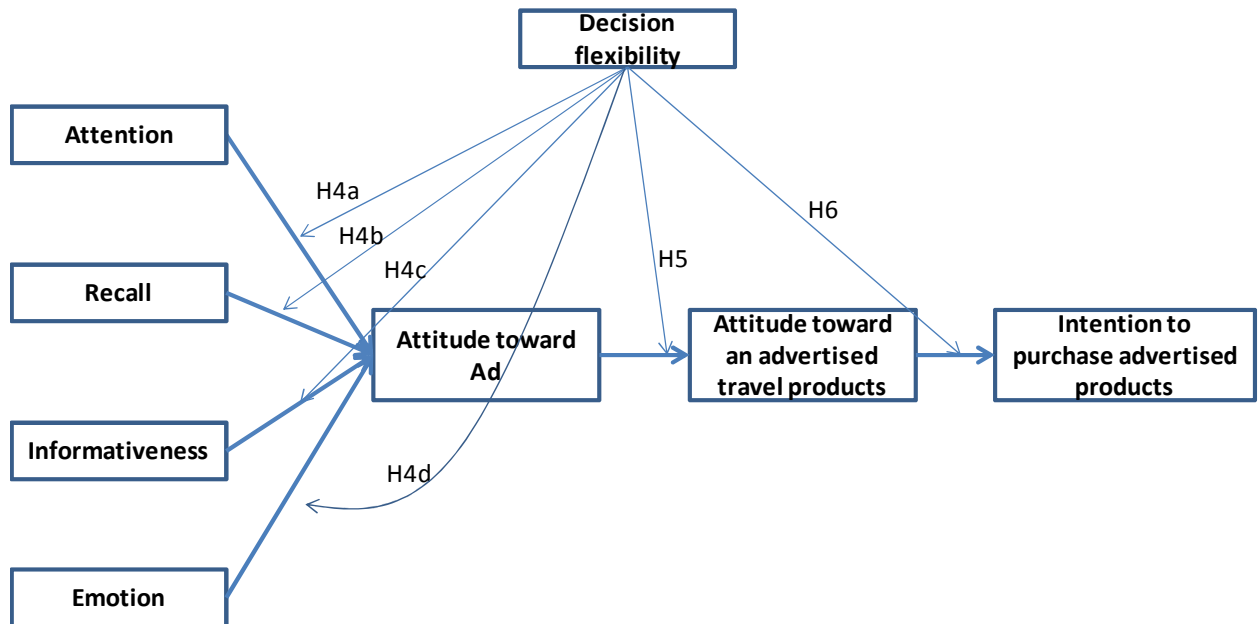


Figure 4. Proposed Moderating Effects of Travel Decision Flexibility on Advertising Response Model

More specifically, it is posited that in situations where a traveler tends to show high adaptive (or flexible) behavior, he/she may be more likely to consider a number of alternatives, and therefore extensively search for travel information, and to spend more time on evaluating the information. Elaboration Likelihood Model (ELM) depicts that two factors, the receiver’s motivation (e.g., involvement) and ability (e.g., prior knowledge), affect the degree of elaboration that determines the persuasion routes between *central and peripheral* processing (Petty & Briñol, 2012). This study argues that travelers who are high flexible on their trip decisions reflect the similar nature of those who involve relatively high elaboration because high flexible travelers tend to be highly

involved in information searching process to reduce the uncertainty of their choices and in turn, tend to have higher knowledge than less flexible travelers (see Petty & Cacioppo, 1986; Petty et al., 1994; Petty & Wegener, 1999). Based on this assumption, the persuasive effects for high flexible travelers will largely depend on the receiver's consideration of issue-related arguments whereby cognitive factors play important roles in changing or enhancing attitude toward message sources (i.e., advertisement).

In addition to the "elaboration continuum" aspect, based upon the notion that high flexibility reflects high uncertainty for future preference, highly flexible travelers are more likely to make an effort to identify their expected utility through focusing on advertising message and, in turn, lead to attitude change toward advertising. That is, the high level of flexibility who free from time pressure in decision making would comprehensively search information and take greater advantage of the cognitive learning, and thus intensify attitude (or evaluation) toward advertising (Payne, 1976; Payne et al., 1993; Hunton & McEwen, 1997; Vogt & Fesenmaier, 1998). This argument is supported by Petty and Wegener's (1999) study finding that uncertainty affects the strength of attitude (Sorrentino, Bobocel, Gina, Olson, & Hewitt, 1988). Thus, based upon these literatures, it is hypothesized that:

Hypothesis 4: The level of decision flexibility positively moderates the relationship between advertising responses including cognitive and affective responses and attitude toward advertising.

Hypothesis 4a: The level of decision flexibility positively moderates the relationship between advertising attention and attitude toward advertising.

Hypothesis 4b: The level of perceived flexibility positively moderates the relationship between advertising recall and attitude toward advertising.

Hypothesis 4c: The level of perceived flexibility positively moderates the relationship between advertising informativeness and attitude toward advertising.

The ELM suggests that under the condition of relatively low elaboration, the outcomes of persuasion effects will be influenced by the receiver's use of simple decision rules or heuristic principles (Petty & Cacioppo, 1986; O'keefe, 2002). In this vein, Mehta (1994) assessed advertising response model by integrating two alternative routes: central and peripheral processing. The results of the study indicated that the executional aspects of advertising (i.e., heuristic cues) rather than message related variables are important in influencing persuasion during peripheral processing. Petty, et al., (1983) concluded that under the condition of low product involvement, heuristic cue (e.g., the "famous endorser") induces higher level of attitude toward the advertising message than the level of arguments (i.e., cognitive responses).

Accordingly, this study argues that low flexible travelers who potentially determine most of trip decisions before going to trips may be less involved in additional information searching process and thus, will follow the peripheral persuasion route that focuses on heuristic cues. Thus, based upon these literatures, it is hypothesized that:

Hypothesis 4d: The level of perceived flexibility negatively moderates the relationship between advertising emotion and attitude toward advertising.

Petty and Briñol (2012) note that when a person is exposed to a message including a number of cogent arguments, the high elaboration process might concern various favorable implications of each of the argument, whereas the low elaboration processor might think of only one favorable implication. That is, the high elaboration processors are likely to have more favorable attitude toward the message that affects attitude toward the product (MacKenzie, et al., 1986) than the low elaboration processors. This is because high elaboration processors who generate more variable implications of the strong arguments presented on the message will be favorable to the advertising and use these thoughts as a guide to correct attitude toward the products promoted.

Based upon the cognitive response theory arguing that cognitive response affects attitude formation and/or change after exposure to message (Greenwald, 1968), people develop a favorable attitude toward advertising when they are able to highly elaborate and integrate information (i.e., advertising message). That is, travelers who are highly flexible to change their decisions may search for more information about travel products in a more comprehensive way than ones who are less flexible because the level of variety seeking that reflects the level of information integrity is different. Thereby, the highly flexible travelers may establish a more inclusive evaluation scheme than less flexible people. Based on the argument, the following hypothesis is proposed:

Hypothesis 5: Decision flexibility positively moderates the relationship between attitude toward advertising and attitude toward travel products.

Travel is recognized as a composite of many activities that are ‘bundled’ so as to comprise a “travel experience.” As such, research indicates that travel is a high

involvement product and information intensive (Gratzer, Werthner, & Winiwarter, 2004; Mill & Morrison, 2009) whereby travelers pay more attention to information describing alternatives. Thus, it can be argued that highly flexible travelers who take large alternatives are more likely to purchase multiple travel products rather than less flexible travelers because they might have a high information search involvement and try hard to reduce the risk to accomplish the ideal level of travel satisfaction by purchasing multi-products. Therefore, it can be hypothesized that:

Hypothesis 6: Decision flexibility positively moderates the relationship between attitude toward advertised travel products and intention to purchase travel products.

3.3 Summary

This chapter proposed a number of hypotheses that form the general travel advertising response model; it also includes hypotheses that focus on the moderating effect of travel decision flexibility on the relationships within the tourism advertising response model. Specifically, it hypothesizes that the perceived evaluation to advertising (i.e., advertising attitude) is positively influenced by cognitive (i.e., attention, recall, and informativeness) and affective (i.e., emotion) factors. Further, it is hypothesized that attitude toward advertising indirectly effects intention to purchase advertised products, which is mediated by attitude toward the travel products included in the advertising. Finally, it is hypothesized that travel decision flexibility has a significant moderating effect on how travelers respond to destination advertising. Chapter Four will discuss the research methodology: to estimate the hypotheses proposed it covers how this study

develops research design, data collection, the development of the measurement and statistical analysis.

CHAPTER 4

METHODOLOGY

The purposes of this study are: (1) to develop travel advertising response model, (2) to define and describe decision flexibility within the context of travel planning, and (3) to examine the moderating effect of flexibility on travelers' responses to tourism advertising. This section discusses the research methodology used in this study in order to address these purposes and includes: (1) research design, (2) data collection, (3) procedure, (4) measurements, and (5) data analysis.

4.1 Research Design

This study examines American travelers' responses to tourism advertising in their trip planning process using the proposed destination advertising evaluation model; in particular, this research focuses on how American travelers who live in the Midwest United States respond to advertising about Chicago, Illinois as a tourism destination. Chicago as a case study was selected for several reasons including: (1) Chicago is one of the most popular and well-known destinations so that people can easily respond their travel behavior. For example, Chicago Travel Statistics (2010) reported that there are approximately 37 million visitors per year between 1998 and 2010, and (2) Chicago includes a variety of natural and cultural attractions which offers diverse opportunities instead of being dominated by a small number of big attractions, and thus facilitates diversified spatial behaviors.

An online survey method was used to collect data from American travelers, excluding people who live in the Chicago area. Several advantages of this approach

include the ability to obtain response information from a large number of American travelers within a target population by using carefully designed questions (Fraenkel & Wallen, 1996) as well as in the ability to obtain highly precise and reliable results by enforcing uniform definitions upon the participants and standardized questions, and by reaching remote locations (Burns, 2000). Further, the online survey method can help to minimize sampling error (i.e., sampling precision and size) because of the low cost, fast response, and wide accessibility of the Internet enabled researchers to send surveys to a large sample (Fricker & Schonlau, 2002; Hwang & Fesenmaier, 2004; Park & Fesenmaier, 2012). However, non-response bias is problematic as response rates have declined substantially over the last decade and are often extremely low when using the Internet (Dolnicar, Laesser, & Matus, 2009; Sheehan, 2001). Non-response bias occurs when “a significant number of people in the survey sample do not respond to the questionnaire and have different characteristics from those who do respond, when those characteristics are important to the study” (Dillman, 2007, p.10). Furthermore, previous studies indicate that travelers who live in the same state sponsoring the advertising campaign are much more likely to respond to the survey which, in turn, leads to response bias (Burke & Gitelson, 1990; Park & Fesenmaier, 2012; Woodside & Ronkainen, 1984). Last, measurement error (i.e., the extent to which the variation of a construct is explained by errors) may be embedded in an online survey whereby a poorly designed survey decreases potential respondents’ motivation to participate in the survey (Couper, 2000). In order to reduce the measurement error, the assessment of content validity is conducted whereby the researcher invites several experts in travel advertising and survey method to execute the procedure.

Once all of the survey questions were developed, the measurement items and the survey instruments were pretested using academic panels. Specifically, eleven doctoral students from three different departments of the Eastern American University reviewed the preliminary instrument to check the clarity and clearness. The process to recruit the panel from several departments enables the researcher to investigate possible survey errors between respondents who are familiar to the tourism advertising context and those who are not familiar. Second academic panels consisting of three professors who are expertise in advertising and travel behavior are invited to estimate by critically evaluating the items from the standpoint of domain representativeness, item specificity, and clarity of construction (Jaworski & Kohli, 1993).

4.2 Data Collection

The population of this study is comprised of American travelers who have requested information about tourism destinations throughout the United States. More specifically, the population is composed of American travelers who contacted the advertising company and/or official destination websites to obtain travel information and who reside in the Midwest United States (i.e., Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin), excluding Chicago Metropolitan area. This research uses two different data collection efforts to develop and test the proposed model: (1) a pilot study and (2) the main study. The importance of the pilot study has been discussed as a crucial element which leads to the success of the main study. In particular, this study uses a pilot study in order to: (1) assess the feasibility of a full-scale survey, (2) test the adequacy of research instruments about advertising response model and decision

flexibility, (3) identify logistical problems in the proposed methodology, (4) test and understand the structures of theoretical constructs, and (5) assess the validation of the constructs using the proposed data analysis. Accordingly, this research used a large-scale pilot study of American travelers in order to identify the characteristics of American travelers living in the Midwest United States, the properties of the proposed constructs, and to test the relationships as described in the proposed tourism advertising model. The main study was used to validate the structure of the proposed constructs and to assess their role within the travel advertising response model

4.3 Procedure

Given approval from the Institutional Review Board (IRB), the online survey was distributed to the sample of American travelers described above: the pilot data set was collected between November 11th and 25th, 2011 and the actual data set was obtained from June 6th to 14th, 2012. The survey included a cover letter at the first page, explaining the purpose of this current research project and included a consent form so as to obtain the agreement to participate in the survey. In order to maximize the response rate, a three-step process was used: (1) an initial invitation was sent out along with the URL of the survey; (2) several days later, a reminder was delivered to those who had not completed the survey; and, (3) the final request for participation was sent out to those who had not completed the survey one week later. Additionally, an incentive to participate in the survey was provided by a way of a draw. An “Amazon.com” gift card valued at \$100 was provided to one winner as an incentive to participate in the study. Once data for the pilot study and the actual data sets are collected, nonresponse and common method bias are

estimated to test if the survey errors are embedded in the data and have a potential to affect the statistical findings in both the pilot and main studies.

Testing Nonresponse Bias

Non-response bias was tested based upon wave difference approach which compares response patterns between different survey blasts (Crompton & Cole, 2001; Lankford, Buxton, Hetzler, & Little, 1995; Woodside & Ronkainen, 1984).

Testing Common Method Bias

This study includes the potential to evoke common method bias as the same measurement medium was used to collect data for all constructs. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) suggests that common method bias tends to be more noticeable and prevailing in the studies when the data for the exogenous and endogenous variables are obtained from same respondents in the same measurement context utilizing the same item and similar characteristics of instruments. The common method can be defined as the variance derived from the measurement method rather than the construct of interest (Podsakoff, et al., 2003). Common method biases refer to one of the main measurement errors that threaten the validity of the statistical results about the relationships between measures (Bagozzi & Yi, 1991; Spector, 1987). That is, it may include confounding effects whereby the observed correlation between constructs is produced by the common features of the measurement in the survey instead of the interrelated constructs.

To test the extent to which the common method variances are embedded in the statistical results, this study adopted three different approaches: correlation, Harman's single factor test, and a latent variable approach (or called 'the marker variable method') recommended by Podsakoff et al. (2003). The results of correlation analysis between latent constructs are checked to see whether the extremely high correlation appears between factors. If the correlation value is over .90, it would refer to the potential common method bias. Next, for Harman's single factor test, Exploratory Factor Analysis (EFA) in SPSS was used without performing any rotation. More specifically, all of the items that represent constructs in the theoretical model are put in the EFA and forces the principal component analysis to extract one number of factors without any rotation technique. In the result, if the variance explained of a factor is below 50%, it could indicate that it does not have considerable common method bias (Harman, 1976; Podsakoff & Organ, 1986). Lastly, the latent variable approach adds a first-order unmeasured factor that specifies with all of the indicators explaining constructs in the proposed model. The changes of model fit indices for the model and factor loadings are compared with the one excluding the method factor (Kline, 2011). This test is conducted by AMOS 9.0 software.

4.4 Measurement

The scales for each construct were obtained through a review of existing literature in marketing, advertising, and tourism and a detailed description of the items forming each construct is discussed below including advertising exposure, attention, recall, informativeness, emotion, attitude toward advertising, attitude toward advertised travel

products in Chicago, intention to purchase travel products, travel decision flexibility, decision alternatives, travel involvement, prior knowledge, travel party, and awareness of advertising information about trip features (see Table 4).

Advertising exposure

A single item (number of advertisements that travelers saw, read, or heard) was used to measure the extent to which people were exposed to advertising about Chicago as a travel destination and is consistent with studies by Burke and Srull (1988), Moorthy et al., (1997), and Tellis (1988).

Attention

The measurement of attention to advertising were based upon five items developed by Leong, Huang, and Stanners, (1998) and Nagar (2009); these are: (1) I paid attention to the Chicago ads, (2) the Chicago travel ads were eye catching, (3) the ads were attractive, (4) I read/watched the ads, and (5) the ads were effective in producing engaging messages. This measurement of attention has been used in a range of contexts to assess advertising response and has is a single dimension.

Recall

Based on the definition of recall (i.e., the extent to which consumers have learned or remembered), this study used the measurement proposed by Wu et al.,(2008) where they proposed using three items: (1) I can remember most of the advertising content, (2) the advertising message enhances my impression toward the destination, and (3) I can

describe advertising content. The study by Wu et al. (2008) showed the appropriate level of reliability whereby Cronbach's coefficient α is 0.78.

Informativeness

In order to assess the degree to which advertisements convey information to the targeted consumers, Ducoffe (1996) operationalized informativeness as an antecedent to advertising value, and Nagar (2009) utilized the items to compare the perceived value of TV and internet advertising channels. The results of these studies indicate a high level of internal reliability (Cronbach $\alpha = .82$ and $.65$, respectively). Seven items were adopted and implemented in this study: "The Chicago travel ads ..." (1) were good sources of product information, (2) provided relevant product information, (3) provided timely information, (4) were a source of up-to-date product information, (5) made product information immediately available, (6) were convenient sources of product information, and (7) supplied complete product information.

Emotion

Emotional feelings experienced during exposure to advertisement have been measured using a bipolar scale developed by Abelson, Kinder, Peters, and Fiske (1982) and Machleit and Wilson (1988) that reports high reliability scores ($\alpha = .92$ for positive emotion and $.91$ for negative emotion). A list of adjectives was provided to subjects to complete the sentence "The Chicago travel ads make me feel _____". The adjectives are: insulted, good, angry, happy, cheerful, irritated, warmhearted, pleased, repulsed, amused, stimulated, calm, shocked, and soothed. Survey participants responded on a five-

point scale with endpoints of “Strongly Disagree” to “Strongly Agree.”

Attitude toward advertising

The literature has often used a set of bipolar adjective pairs to evaluate one’s attitude toward an advertisement (MacKenzie & Lutz, 1989). Consistent with this work, attitude toward the travel advertising was measured using nine-item with five point semantic scale including: (1) not persuasive – persuasive, (2) unappealing – appealing, (3) bad – good, (4) unattractive – attractive, (5) not clear – clear, (6) unconvincing – convincing, (7) simple – complex, (8) overall disliking – overall liking, and (9) unfavorable – favorable. Coefficient alpha for the scale ranges from .92 to .97 (MacKenzie & Lutz, 1989).

Attitude toward advertised travel products in Chicago

Following Lee, Gretzel, & Law (2010), this study measured destination attitude by asking “After seeing, reading, or hearing the travel ads and/or websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois?”, with five-likert scale from ‘Not at all attractive’ to ‘Extremely attractive.’

Intention to purchase travel products

The intention to purchase travel products was measured by asking the likelihood of buying four different items promoted in Chicago advertising (e.g., the featured

attractions, restaurants, accommodations, and shopping stores) using a six-point scale (from “Extremely unlikely” to “Extremely likely”) (Wong & Law, 2005).

Travel decision flexibility

Flexibility refers to the degree to which a traveler is willing to change their travel decisions determined at an early stage (Hwang, 2004). Following Jeng (2000), flexibility in travel planning was measured by asking “How flexible to change would you be, once you had decided the following aspects of this trip?” with regard to five major travel decisions, including choice of the additional destinations besides Chicago, attractions, accommodations, restaurants, and shopping (using a 5-point scale from “Not at all flexible” to “Extremely flexible”).

Decision alternatives

The number of alternatives is regarded as one of the core indicators denoting decision flexibility (Payne et al., 2003). Following Payne et al. (2003), this study asked respondents to indicate: “How many additional destinations besides Chicago, Illinois, would you consider visiting?”, “How many attractions, restaurants, accommodations, and shopping stores would you consider?”

Travel involvement

Cognitive involvement measurement developed by Putrevu and Lord (1994) and Kim (2008) was used in this study. This current study modified their items to be consistent with the tourism research context using a five point semantic differential scale;

for example, (1) travel decision is unimportant/very important, (2) travel decision requires little thought/a lot of thought, (3) there is little/a lot to lose if you choose the wrong travel decision, (4) travel decision is not/is mainly logical or objective, and (5) travel decision is/is not based mainly on functional facts.

Prior knowledge

Following Kerstetter and Cho (2001), travelers' prior knowledge about five travel features (i.e., Chicago destination, additional destinations, accommodations, restaurants, shopping, and activities) regarding the Chicago tourism destination was measured by a single item for each feature (i.e., "Please rate your level of knowledge about the following aspects of Chicago.") using a 5-point scale (from "Not at all knowledgeable" to "Extremely knowledgeable").

Travel party

Following So and Lehto (2006), a single question was used to describe the nature of the travel party "Who went on this most recent trip?" with four categories: 'with spouse/partner?'; 'with children?'; 'with friends?'; and 'alone?'

Awareness of advertising information about trip features

Travel advertising generally provides information about the destination as well as other travel-related products (e.g., attractions, restaurants, accommodations, and shopping in this study). This study asked people to indicate the extent to which the travel advertising they have seen (read or viewed) included information about each trip feature,

including Chicago as a travel destination (in general), specific places or attractions in Chicago, specific restaurants in Chicago, specific overnight accommodations in Chicago, and specific shopping stores in Chicago (from “None of ads” to “All of ads”).

Constructs used to Test the Validity of Travel Decision Flexibility

Based upon previous studies, this study argues that decision flexibility may relate with four key travel-related situational factors including travel involvement, prior knowledge, travel group, and a number of alternatives (Decrop & Snelders, 2004; Hyde & Laesser, 2009). The following section discusses the relationships between flexibility and four travel-related situational factors (see Figure 5).

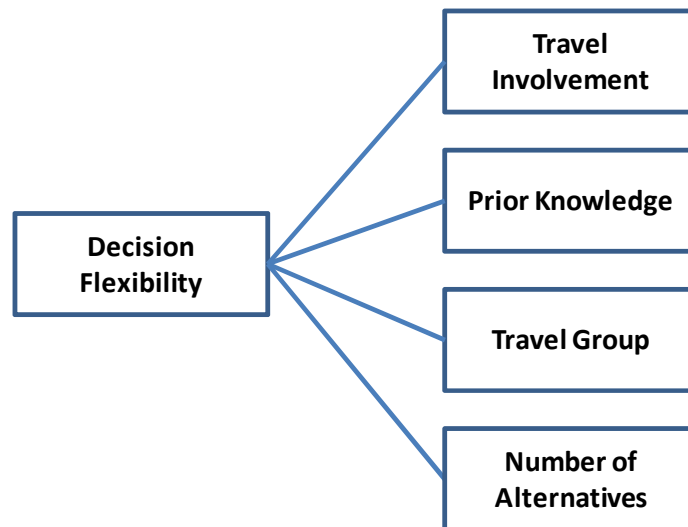


Figure 5. Factors Affecting Decision Flexibility

Flexibility and Travel Involvement

Travel involvement refers to cognitive elaboration including internal state of motivation and interest, and is highly associated with travel decision flexibility. That is,

the higher degree to which people perceive the relevance (or importance) of the decision, the more time people spend on making a decision, which involves a longer travel planning horizon. Fesenmaier and Johnson (1989) used the individual's trip-planning involvement to understand travel's decision-making behaviors. They found that low-involvement travelers tend to have a shorter planning horizon, while the medium-high involvement travel group showed a longer trip-planning horizon. It is important to note that the longer the planning horizon, the more destination alternatives can be considered and the more extensive can be their evaluation. That is, the more a person is involved in a product, the more the product is salient, relevant, or important to the person, and the more motivation that person will have to think about and exert the cognitive effort message (Petty & Cacioppo, 1979). Thus, it is argued that highly involved travelers are likely to spend more time on learning and are willing to change their decisions while planning their trips as long as the alternative provides better value to achieve the ideal level of travel satisfaction than a former decision.

Flexibility and Prior Knowledge

Knowledge influences the range of alternatives considered. Further, prior knowledge (or past experience) about a specific travel product plays an important role with regard to how the product is categorized during the decision-making process because a traveler can be aware of how well it could perform (i.e., the expected utility) when selected as a travel consumption (Woodside & Lysonski, 1989). Hence, travelers who have high knowledge about travel products are more selective in their decisions (Oppermann, 1992; Decrop, 2006; Hwang, Gretzel, & Fesenmaier, 2002). Thus, it can be

argued that expert travelers are less flexible to change decisions because the opportunity cost of deferring their decisions is smaller than for novice (or less experienced) travelers (Hwang & Fesenmaier, 2011).

Flexibility and Travel group

Travel compositions are highly related to the purchasing pattern choosing the level of risk products (McKercher, 1998; Zeithaml, 1981). Roehl and Fesenmaier (1992) identified three types of perceived risk (physical-equipment risk, vacation risk, and destination risk) and showed that most travelers who possess these three types of risk tend to travel with children. Barker, Page, and Meyer (2003) also identified the different perceived safety on travel activity in accordance with travel type (e.g., group and individual travels) (Money & Crofts, 2003). These previous studies conclude that travel groups including children or older people are more likely to complete their itinerary before departure and are not willing to change them because they have a higher level of uncertainty avoidance compared to those excluding children and younger people. Further, even if an individual is making a travel decision, he or she may feel accountable to other members in the travel group, such as children and older people. Such feelings of accountability can affect the way in which a decision is made, which leads a decision maker to make most of the travel decisions in the pre-trip stage (Hwang, 2004).

Flexibility and Number of Alternatives

Research indicates that choice strategy is affected by the number of alternatives (Shields, 1980) whereby information acquisition becomes more attribute-based as the

number of alternatives increases (Payne & Braunstein, 1978). As Payne et al. (2003), and Wright and Barbour (1975) argue, a decision maker intuitively recognizes that a large number of potential choices raise his or her chance for an optimal choice (Walsh, 1995). Reibstein, Youngblood, and Fromkin (1975) provide empirical evidence that perceived flexibility is increased as the number of options in the choice set increases because consumers can experience additional utility from multiple items in the choice set (Kahn, Moore, & Glazer, 1987; Broniarczyk, Hoyer, & McAlister, 1998). Lastly, Kahn and Lehmann (1991) found out a positive relationship between preference for an assortment of items and a number of additional acceptable items.

Based on this research, exploratory factor analysis (EFA) was used to assess to assess the fundamental structure of the decision flexibility construct. Then, four travel-related situational factors (travel involvement, prior knowledge, travel group composition, and number of alternatives) are used to evaluate its external validity. Specifically, correlation analysis and t-tests are used to examine the relationships/associations between flexibility and involvement, travel knowledge, and the number of alternatives.

Table 4. Operationalization of the Constructs

Constructs(Number of Items)	Scale items	Authors
Advertising exposure (1)	Number of advertising you saw, read or heard	Burke & Srull, 1988; Tellis, 1988; Moorthy, et al., 1997
Cognitive Response		
Attention (5)	I paid attention to the Chicago ads. The Chicago travel ads were eye catching. The ads were attractive. I read/watched the ads. The ads were effective in producing engaging messages.	Leong et al., 1998; Nagar, 2009
Recall (3)	I can remember most of the advertising content. The advertising message enhances my impression toward the Chicago ads.	Wu et al., 2008
Informativeness (7)	I can describe advertising content of the Chicago ads. The Chicago travel ads ... were good sources of product information. provided relevant product information. provided timely information. were source of up-to-date product information. made product information immediately available. were convenient sources of product information. supplied complete product information.	Ducoffe, 1996; Nagar, 2009
Affective Response		
Emotion (14)	The Chicago travel ads make me feel ... Insulted, good, angry, happy, cheerful, irritated, warmhearted, pleased, repulsed, amused, stimulated, calm, shocked and soothed.	Machleit & Wilson, 1988
Conative Response		
Attitude toward advertising (9)	How would you evaluate the advertising you saw, read, or heard from from TV, radio, magazine, newspaper, and/or Internet about Chicago, Illinois?	Bezjian-Avery, Calder, & Iacobucci, 1998; MacKenzie & Lutz, 1989; Van & Song, 2010

Table 4. (Continued)

Constructs(Number of Items)	Scale items	Authors
Attitude toward travel products in Chicago (5)	<p>Not persuasive – persuasive, Unappealing – appealing, Bad – good, Unattractive – attractive, Not clear – clear, Unconvincing – convincing, Simple – complex, Overall disliking – overall liking Unfavorable – favorable</p> <p>After seeing, reading, or hearing the travel ads and/or websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois?</p> <p>How attractive is/are ...?</p> <p>-Chicago as a tourism destination, the places or attractions, the restaurants, the accommodations, and the shopping stores</p>	Lee et al., (2010)
Intention to purchase travel products (4)	<p>When visiting Chicago in this imaginary trip, how likely are you to do the activities of the following statements?</p> <p>-the featured Chicago places or attractions, the featured restaurants, accommodations, and shopping stores</p>	Wong & Law (2005)
Moderating Factor Flexibility (5)	<p>How flexible to change would you be once you had decided the following aspects of this trip?</p> <p>-Additional destinations besides Chicago to visit, accommodations, restaurants, shopping, and activities</p>	Jeng (2000)
Variables for Validity Check Prior knowledge (5)	<p>Please rate your level of knowledge about the following aspects of Chicago, Illinois Destination, accommodations, restaurants, shopping, and activities</p>	Kerstetter & Cho, (2004); Park & Kim, (2009)

Table 4. (Continued)

Constructs(Number of Items)	Scale items	Authors
Composition of travel party (4)	Who would go with you on this imaginary pleasure trip to Chicago, Illinois?	So & Lehto, (2006)
	Travel with spouse/partner?	
	Travel with children?	
	Travel with friends?	
Cognitive Involvement (5)	Travel alone?	Kim (2008); Putrevu & Lord (1994)
	What is your attitude toward planning this imaginary trip to Chicago, Illinois?	
Variety-Seeking (5)	Very important/unimportant decision	Kahn & Lehmann, (1990); Simonson, (1990)
	Decision requires a lot of/little thought	
	A lot/little to lose if you choose the wrong destination	
	Decision is not/is mainly logical or objective	
	Decision is/is not based mainly on functional facts	
Awareness of adverting information about trip features (5)	How many additional destinations besides Chicago, Illinois would you consider visiting?	
	How many attractions/restaurants, accommodations, and shopping stores would you consider?	
	How many times have you seen, read or heard travel advertising information (including travel images etc) about the following trip features of Chicago, Illinois?	
	-Chicago destination in general, The Chicago places or attractions to visit, restaurants in Chicago, overnight accommodations in Chicago, and shopping stores in Chicago	

4.5 Data Analysis

A series of analyses were conducted to examine the basic relationships comprising the travel advertising response model including: (1) frequency analysis was conducted to develop profiles of the respondents, (2) PLS was used to test the general advertising response model, (3) validity tests for travel decision flexibility were conducted using correlation analysis and Student t-tests, and (4) PLS and polynomial regression were used to test for the linear and quadratic moderating effects of flexibility within the advertising response model. The detailed description of each phase is discussed below.

Profiles of Respondents

The first phase of the data analysis uses frequency analysis to identify profiles of respondents including information about demographic, travel behaviors, and advertising exposure. The descriptive results provide basic information identifying the respondents and their travel behaviors by indicating the frequency and proportion of the variables

Testing the General Advertising Response Model

This study uses Partial Least Square (PLS) to calibrate the proposed advertising response model because it offers several advantages over other multivariate methods such as LISREL and OLS regression. For example, it places minimal restrictions (i.e., soft modeling approach) on measurement scales, sample size, and residual distributions (Chin, Marcolin, & Newsted, 2003; Vinzi, Trinchera, & Amato, 2010). Further, PLS approach is more appropriate for models that include complex relationships and a large

number of manifest variables (more than 20) (Chin, 1998; Fornell, Lorange, & Roos, 1990; Kleijnen, de Ruyter, & Wetzels, 2007). More specifically, the fundamental idea of PLS follows three straightforward steps. Firstly, the weight relations of indicators that reflect unobservable variables are estimated. Next, case values of each indicator are calculated by considering the averaged weights of its respective indicators. The weights used to estimate this aggregation are obtained by a similar manner to principal component analysis for especially reflective formation (Cassel, Hackl, & Westlund, 1999). Then, lastly, these calculated values are used in a set of regression analysis to estimate the structural parameters of relationships between exogenous and endogenous variables (Fornell & Bookstein, 1982).

As such, the key advantage of PLS over regression or covariance based methods (e.g., LISREL, AMOS, or EQS) is that it employs a principal component analysis to maximize the variance explained without assuming random error variance (Chin, et al., 2003). It results in a large percentage of the variance explained in the observed variables. More specifically, the object of SEM is to reproduce the theoretical covariance matrix using Maximum Likelihood function so as to focus on goodness of fit rather than explained variance. However, PLS focuses on maximizing the variance of dependent variables explained by the independent ones whereby it attempts to identify factors optimizing the total variance of endogenous variables considered in the proposed model. In addition, PLS enables ones to simultaneously analyze hypothesized relationships at the theoretical level as well as measuring relationships to each construct. The ability to include multiple measures for each construct provides more accurate estimates of the paths among constructs, which are typically downward biased by measurement error

when applying multiple regression analysis (Chin, 1998; Haenlein & Kaplan, 2004). Unlike covariance-based SEM, PLS algorithm maximizes the variance of all the dependent variables instead of explaining the covariance, and avoids inadmissible solutions and factor indeterminacy (Fornell & Bookstein, 1982), which makes PLS lower demands on measurement scales, sample size and residual distributions, and normal distribution (Urbach & Ahlemann, 2010; Wold, 1985). Thus, based upon modeling assumption and the study purpose, it is argued that PLS is an appropriate statistical method for this study (Haenlein & Kaplan, 2004; Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). In fact, PLS comprises a combination of measurement (or outer model) that describes the relations between latent constructs and their indicators, and structural models (or inner model) that indicate the relationships between latent variables to be accurately estimated (Urbach & Ahlemann, 2010). The detailed explanation for each model is described below.

Testing the Measurement Model for General Advertising Response Model

The first step in PLS is to estimate that dimensionality of the respective constructs using Exploratory Factor Analysis (EFA); in this study there were three cognitive constructs (i.e., attention, recall, and informativeness) and one affective construct (i.e., emotion), attitude toward advertising and travel products, and intention to purchase advertised products. The cut-off point of 0.65 is the appropriate cutoff, as suggested by Gefen and Straub (2005). Since EFA enables researchers to explore the underlying factor structure of a set of observed variables without imposing a preconceived structure on the outcome (Child, 1990), it is employed as the first step to estimate the validity by

examining factor loadings. Cronbach's alpha coefficient for each construct is successively computed to evaluate the internal consistency reliability with the cutoff point at 0.6 (Nunnally & Bernstein, 1994).

After the exploratory test, Confirmatory Factor Analysis (CFA), correlation, and Average Variance Extracted (AVE) were used to assess the validity of the seven latent constructs included in the proposed tourism advertising response model. It is argued that CFA rather than EFA is better suited to measure the ability of each indicator composing the latent variables. In terms of indicator reliability, the indicator's loadings obtained by CFA are assessed. Specifically, the factor loadings should be statistically significant and greater than .70 factor scores (Chin, 1998). Accordingly, bootstrap resampling method is applied to calculate significance value of the indicator loadings (Efron & Tibshirani, 1993).

To address convergent validity recognizing the degree to which items that reflect a latent construct converge compared to items that aim to measure different constructs, AVE is estimated based on two assessment criteria. First, the estimated value is recommended at least more than .50 for each construct, indicating that the latent variable accounts for more than half of the variance in its indicators. The value of AVE should be larger than the correlation with any other constructs, which provides the evidence of discriminant validity (Chin, 1998; Fornell & Larcker, 1981). Next, cross-loadings in the CFA are checked to address discriminant validity. The factor loadings are compared with other component scores of each item measuring different constructs. If each loading for its designed construct is higher than the ones for other constructs, and the factor loadings for each relevant construct indicate highest value, it implies to appropriately recognize

discriminant validity. Composite reliability estimating internal consistency, developed by Werts, Linn, and Joreskog (1974), is subsequently calculated and is recommended above .70 as an acceptable level (Fornell & Larcker, 1981; Hair, Anderson, Tatham, & Black, 1998). Table 5 provides a summary of the lists of criteria to assess the PLS reflective measurement model.

In order to check the validity about attitude toward advertising, the correlation analysis was conducted between advertising awareness questions including all five travel facets (i.e., destination, accommodation, places/attractions, restaurants, and shopping stores), and overall attitude toward advertising measurements. If the correlation value is significant and positive, it would suggest that the comprehensive attitude toward advertising reflects the perceived evaluations of advertising contents regarding multi-travel products rather than focuses on a specific travel attribute.

Table 5. Assessment of PLS Measurement Models

Validity Type	Criterion	Description	Authors
Unidimensionality	Exploratory factor analysis	Measurement items should be correspondent with a proposed construct so that each item loadings should be high enough on only one factor that supposed to measure. The unidimensional factor is determined with Eigenvalue exceeding 1.0 and loading coefficient above .60.	Gefen & Straub (2005); Anderson & Gerbing (1988)
Indicator reliability	Indicator loadings	Measures how much of the observed indicators can be explained by the corresponding latent variables. The factor scores should be significant at the p-value .05 and higher than coefficient .70. The significance value can be calculated by bootstrapping.	Chin (1998)
Convergent validity	Average variance extracted (AVE)	Measuring the amount of variance that a latent variable construct captures from its indicators relative to the amount of measurement error. The suggested cutoff value is $AVE > .50$	Fornell & Larcker (1981)
Discriminant validity	Cross-loadings	Attempts to check the factor scores between the component scores of each latent variable and all other items. If the factor loading of each indicator is higher for its desired construct than for any other construct and shows the highest with its own items, it could conclude that the construct is sufficiently different with one another.	Chin (1998)
Discriminant validity	Fornell-Larcker criterion	Measures whether a latent variable shares more variance with its proposed indicators than any other latent variables. The squared root of AVE value should be larger than correlation with other latent variables.	Fornell & Larcker (1981)
Internal consistency reliability	Cronbach's alpha (CA)	Attempts to measure the degree to which the observed variable load simultaneously when a latent variable increases. The recommend threshold of CA value is over .70. The value lower than .60 indicates weak consistency reliability.	Cronbach (1951); Nunnally & Bernstein (1994)
Internal consistency reliability	Composite reliability (CR)	Measuring the sum of factor loadings of a latent variable relative to the sum of the factor loadings plus error variance. Unlike Cronbach's alpha, it does not allow items to be equally weighted. The recommended cut point is larger than .80.	Werts et al. (1974); Nunally & Bernstein (1994)

Source from Urbach & Ahlemann, (2010)

Testing the Core Components of the Travel Advertising Response Model

After the measurement models have been validated, the structural model was estimated using PLS software with bootstrapping simulation to drive t-statistics of coefficient parameters (Chin et al., 2003). The first elemental criterion to assess the PLS structural model is to compare squared correlation coefficient (R^2) of each endogenous latent construct. R^2 indicates the variances explained by the proposed relationships of total variance. Chin (1998) suggests that the value of R^2 at approximately .60 is substantial, at around .30 is average and below .19 is weak. The next step of the structural model assessment includes path coefficient estimations between latent constructs.

Table 6. Assessment of PLS Structural Models

Validity type	Criterion	Description	Authors
Model validity	Coefficient of determination (R^2)	Measuring the variance explained of a latent variable by proposed exogenous variables. The values of R^2 over .60 refers to be substantial, around .30 moderate and around .15 weak.	Chin (1998); Ringle (2004)
Model validity	Path coefficients	Three aspects (i.e., magnitude, significance value and algebraic sign) should be estimated for path coefficients.	Huber et al. (2007)

Source from Urbach & Ahlemann, (2010)

Once running the path analysis, the researcher checked three aspects, including algebraic sign, magnitude, and significance. More specifically, it is checked whether the signs of path show the theoretically proposed relationships. Second, a path coefficient magnitude indicating the strength of the relationships between latent variables is assessed. Huber, Herrmann, Frederik, Vogel, and Vollhardt (2007) suggest that path

coefficients should exceed .10 to explain a certain impact within the model. Furthermore, the coefficient should be statistically significant at the .05 level. Table 6 provides the summary of the structural model assessment.

Testing the Moderating Effects of Decision Flexibility in the Travel Advertising Response Model

Linear Moderating Effect of Decision Flexibility on the Travel Advertising Response Model

Once the core advertising response model and decision flexibility constructs are identified, PLS was used to estimate the linear moderating effect of flexibility within the core advertising response model. Based on the assumption that the indicators of each construct are approximately equivalent and no bias is particular to one indicator, this study considers the standardized indicator of the predictors and moderator constructs to estimate values as suggested by Jaccard, Turrisi, and Wan (1990) and Aiken and West (1991). This approach enable PLS to use the latent variable scores as well as preventing computational errors (Smith & Sasaki, 1979). In addition, it facilitates interpretation of the regression coefficient of predictor variables (Chin et al., 2003).

Based on these decision, this research used the cross multiplying method to compute interaction variables of flexibility with other constructs of advertising responses (Chin et al 2003; Kenny & Judd, 1984). PLS then examines the latent variables with the linear combination of its indicators so as to maximize the variance explained for the endogenous variables. In order to assess effect size of flexibility, this study focuses on the extent to which the total variance explained of endogenous variables is considerably

changed beyond the model including just main effects using F-statistic (see Carte & Russell, 2003):

$$F(df_{\text{interaction}} - df_{\text{main}}, N - df_{\text{interaction}} - 1) = \frac{[\Delta R^2 / (df_{\text{interaction}} - df_{\text{main}})]}{F[(1 - R^2_{\text{interaction}}) / (N - df_{\text{interaction}} - 1)]}$$

To further validate the moderating effect, Cohen's f^2 that compares the R^2 value of the interaction effect over one of main effects was used based upon the following form (Chin et al., 2003):

$$\text{Cohen's } f^2 = \frac{R^2(\text{interaction model}) - R^2(\text{main effects model})}{[1 - R^2(\text{main effects model})]}$$

Values for f^2 between .02 and .15, between .15 and .35, and exceeding .35 indicate that a moderating decision flexibility variable has a small, medium, or large effect on explaining endogenous latent variable.

The Quadratic Moderating Effect of Decision Flexibility on the Travel Advertising Response Model

This study also examines the curvilinear relationship of decision flexibility with a number of advertising response variables (i.e., cognitive, affective and attitude constructs) using polynomial regression modeling. Polynomial regression is a useful approach to

assessing complex nonlinear relationships between component measures (e.g., certain higher-order terms) and an outcome variable (Edwards & Parry, 1993). This approach enables researchers to avoid many problems associated with difference scores between component measures (e.g., desired vs. actual job complexity, desired vs. actual quantitative work load; mainly concerned in organization research) and in turn, allow to more accurately estimate the curvilinear terms (or complex hypotheses) (e.g., Edwards & Parry, 1993; Edwards & Rothbard, 1999; Edwards, 2002). Due to these advantages of the analysis, a number of researchers have used the polynomial regression with the central aim to test higher-order effects of interests (see Brown, Venkatesh & Goyal, 2011; Edwards, 2007; Edwards & Harrison, 1993; Gefen & Pavlou, 2011; Roberts & Grover, 2012; Venkatesh & Goyal, 2010).

Despite the advantages of polynomial regression modeling, there is a limitation in the analysis. For example, the results derived from polynomial regression (especially about higher-order effect) are difficult to interpret when coefficients deviate from patterns. Thus, this study also conducts Response Surface Methodology Analysis which offers “the bases necessary for describing and testing the essential features of surfaces corresponding to quadratic regression equations” (Edwards, 2003; p.1582) and uncover new empirical insights being not obvious in polynomial regression (Edwards, 1994) . That is, the response surface shows a 3-D visual graph consisting of three axes that indicate three factors in the proposed polynomial regression model. Recently, Gefen and Pavlou (2011) stated that response surface methodology is not a limited analysis to estimate different scores. Rather, it is a useful approach to examining polynomial models that develop in three dimensional spaces and to effectively understanding the

relationships between factors. This argument supports the suitability of this research to apply response surface methodology. That is, testing the different scores, $(X_{\text{attention}} - Y_{\text{flexibility}})^2$, is not the main purpose in this study but estimating the quadratic moderating effect of flexibility with other advertising related variables is the main goal in using by the response surface analysis.

In order to interpret the results of response surface analysis, Edwards (2007) emphasized three key features: (1) the stationary point (the point where the slope of the response surface is zero in all directions including maximum, minimum and saddle points), (2) principal axes of the surface (the functions that run perpendicular to one another and intersect at the stationary point) and (3) slopes (lines of the interest on the X_1 - X_2 plot). The detailed explanations to calculate these three features are discussed in the result section.

CHAPTER 5

RESULTS: Estimating the Travel Advertising Response Model

This chapter discusses the results of analyses using pilot and main data sets. First, frequency analysis of the pilot study data presents descriptive information about the respondents and basic constructs used to define the respective tourism advertising model. Then, principal component analysis based on Coefficient alpha is conducted to assess the dimensionality of the proposed constructs. Following these analyses, this chapter reports the results of analyses using Confirmatory Factor Analysis of the theoretical constructs using PLS. Based on the results of analyses using the pilot study data, similar statistical analysis using the ‘main data ’ were conducted in order to assess the validity of the findings of the pilot study. The results of these analyses are summarized in this chapter.

5.1 Pilot Study

The purposes of this pilot study are: (1) to identify and eliminate the possible survey errors in the instruments, and (2) to test if the constructs in the proposed model (i.e., cognitive and affective responses, attitude toward advertising and advertised products, intention to purchase products and travel decision flexibility) are valid.

5.1.1 Response Rate

The online survey was distributed to 53,985 American travelers who have contacted an advertising company and/or official destination websites to request travel information, and reside in Midwest United States (i.e., Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin). Of them, 1,482 people responded to the

survey (about 3% response rates). However, 888 (60% of total) number of respondents who have seen or heard Chicago tourism advertising and completed all of questions are used for further data analysis. Thus, the following data analysis took into account the selected respondents.

5.1.2 Non-Response Bias

Non-response bias was estimated by comparing respondents who answered the survey in different time periods with regard to demographic (i.e., gender, age, annual household income, and number of people in household), travel characteristics (i.e., number of pleasure trips to Midwest and/or Chicago), and advertising exposure (Armstrong & Overton, 1976). Survey subjects were categorized into three groups: early, middle and late respondents. Early respondents (n = 344, 38.7%) are defined as people who participated in the survey after first blast. Middle respondents (n = 288, 32.4%) are those who responded to the survey after second invitation, and the late respondents (n = 256, 28.8%) are persons who answered the online survey after third invitation. The results of a series of Chi-square analysis and post hoc ANOVA tests indicate that there are no significant differences between groups ($p > .05$), suggesting that the risk of non-response bias is limited (see Table 7).

Table 7. Non-Response Bias Test – Pilot Study

	Early (N = 344)	Middle (N = 288)	Late (N = 256)	Chi- square
	%			
Demographic Characteristic				
Gender				.51
Female	68.0	68.4	65.7	
Male	32.0	31.6	34.3	
Age				10.61
18-21 years	.3	.3	.4	
22-29 years	3.2	2.1	4.4	
30-39 years	10.0	8.4	8.8	
40-49 years	23.2	20.9	20.3	
50-59 years	34.3	34.1	33.1	
60-69 years	19.9	28.2	26.3	
70 and above years	9.1	5.9	6.8	
Annual household income				16.66
Less than \$19,999	4.1	2.8	1.6	
\$20,000 to \$ 39,999	12.0	10.8	11.2	
\$40,000 to \$59,999	21.7	16.7	20.3	
\$60,000 to \$79,999	22.9	21.2	19.1	
\$80,000 to \$99,999	16.4	19.4	16.7	
\$100,000 to \$129,999	11.4	17.7	20.3	
\$130,000 to \$159,999	4.4	5.9	5.2	
\$160,000 and over	7.0	5.6	5.6	
Number of people in household (Age 18 and over)				12.98
1 person	17.9	12.2	14.3	
2 persons	61.9	66.7	57.4	
3 persons	12.3	13.5	19.1	
4 – 6 persons	7.9	7.3	9.2	
11 or more		.3		
Number of people in household (Under Age 18)				7.84
None	68.9	67.4	64.1	
1 person	15.8	13.2	14.7	
2 persons	11.4	13.5	13.9	
3 persons	2.9	4.9	4.4	
4 – 6 persons	.9	1.0	2.8	
Travel Characteristics				
Number of Pleasure Trips to Midwest				11.08
None	4.9	3.9	4.4	
1 trip	16.8	13.3	18.4	
2 trips	22.3	20.4	22.4	
3 trips	19.8	21.9	24.8	
4 trips	12.5	14.0	10.0	
5 - 10 trips	18.9	22.6	18.0	
11 or more trips	4.9	3.9	2.0	

Table 7. (continued)

	Early (N = 344) %	Middle (N = 288) %	Late (N = 256) %	Chi- square
Number of Pleasure Trips to Chicago in the past 3 years				11.00
None	17.4	22.9	16.8	
1 trip	27.9	18.8	24.6	
2 trips	15.7	19.1	18.4	
3 trips	11.3	11.1	10.5	
4 trips	8.1	8.7	9.4	
5 - 10 trips	12.5	13.2	12.5	
11 or more trips	7.0	6.3	7.8	
	Mean			F-value
Ad exposure ¹	2.31	2.34	2.32	.081

Note: 1 means five point scales including 1 = Not at all, 2 = Very few ads, 3 = Few ads, 4 = Some ads, and 5 = A lot of ads.

5.1.3 Profiles of Respondents

Table 8 presents a summary of demographic and travel behaviors of the survey respondents. Approximately 68 percent of respondents in the pilot study are female and over 90.0 percent are 30 years old or above. Annual household income seems to follow normal distribution whereby people who report annual income between \$40,000 and \$99,999 represent 58.5 percent of the sample; 62.2 percent of respondents report that they have 2 persons (age 18 and over) in their household, and 67.0 percent of them indicate they do not have any children under age 18 in their family. In terms of travel characteristics, 43.6 percent of respondent have taken trips in the Midwest about 2-3times; 81.0 percent of the travelers answered they have visited Chicago at least one time in the past 12 months.

Table 8. Profiles of Respondents – Pilot Study

Variables	Frequency	%
Demographic Characteristic		
Gender (N = 880)		
Female	594	67.5
Male	286	32.5
Age (N = 850)		
18-21 years	3	.3
22-29 years	28	3.2
30-39 years	80	9.1
40-49 years	190	21.6
50-59 years	298	33.9
60-69 years	215	24.5
70 and above years	65	7.4
Annual household income (N = 880)		
Less than \$19,999	26	3.0
\$20,000 to \$ 39,999	100	11.4
\$40,000 to \$59,999	173	19.7
\$60,000 to \$79,999	187	21.3
\$80,000 to \$99,999	154	17.5
\$100,000 to \$129,999	141	16.0
\$130,000 to \$159,999	45	5.1
\$160,000 and over	54	6.1
Number of people in household (Age 18 and over) (N = 851)		
1 person	132	15.0
2 persons	547	62.2
3 persons	129	14.7
4 – 6 persons	71	8.1
11 or more	1	.1
Number of people in household (Under Age 18) (N = 880)		
None	590	67.0
1 person	129	14.7
2 persons	113	12.8
3 persons	35	4.0
4 – 6 persons	13	1.5

Table 8. (Continued)

Variables	Frequency	%
Travel characteristics		
Number of trips in Midwest United States (N = 857)	38	4.4
1 trip	138	16.1
2 trips	186	21.7
3 trips	188	21.9
4 trips	105	12.3
5 - 10 trips	170	19.8
11 or more trips	32	3.7
Number of trips visited in Chicago (N = 888)		
None	169	19.0
1 visit	213	24.0
2 visits	156	17.6
3 visits	98	11.0
4 visits	77	8.7
5 - 10 visits	113	12.7
11 or more visits	62	7.0

Table 9 presents the descriptive results of the constructs that comprise the tourism advertising response model. The mean values range from 1.73 to 4.19 based on five point scales; the highest value is 3.66 for attention, 3.39 for recall, 3.76 for informativeness, 3.62 for emotion, 4.11 for attitude toward advertising, and 4.19 for attitude toward travel products. The intention items that used six point scales show an average of 4.36. Overall, the results of descriptive statistics suggested that the data are widely distributed with roughly normal distribution pattern.

Table 9. Descriptive Analysis about Advertising related Variables – Pilot Study

Variables	Mean	SD	Mix.	Max.
Attention				
I paid attention to the Chicago ads.	3.40	.88	1	5
The Chicago travel ads were eye catching.	3.66	.62	1	5
The ads were attractive.	3.71	.62	1	5
I read/watched the ads.	3.63	.72	1	5
The ads were effective in producing engaging messages.	3.52	.68	1	5

Table 9. (Continued)

Variables	Mean	SD	Mix.	Max.
Recall				
I can remember most of the advertising content.	2.91	.83	1	5
The advertising message enhances my impression toward the Chicago ads.	3.39	.78	1	5
I can describe advertising content of the Chicago ads.	2.75	.94	1	5
Informativeness				
The Chicago travel ads ...				
were good sources of product information.	3.76	.70	1	5
provided relevant product information.	3.73	.72	1	5
provided timely information.	3.63	.73	1	5
were source of up-to-date product information.	3.62	.75	1	5
made product information immediately available.	3.65	.79	1	5
were convenient sources of product information.	3.76	.76	1	5
supplied complete product information.	3.26	.88	1	5
Emotion				
How do you feel about the travel ads and/or websites you saw, read, or heard from TV, radio, magazine ...				
Happy	3.57	.67	1	5
Good	3.62	.65	1	5
Amused	3.26	.69	1	5
Cheerful	3.43	.68	1	5
Pleased	3.53	.70	1	5
Irritated	2.03	.91	1	5
Warmhearted	3.21	.69	1	5
Smoothed	2.95	.74	1	5
Repulsed	1.81	.92	1	5
Angry	1.75	.90	1	5
Stimulated	3.22	.84	1	5
Calm	3.06	.67	1	5
Shocked	1.80	.90	1	5
Insulted	1.73	.91	1	5
Attitude toward advertising				
How would you evaluate the advertising you saw, read, or heard from TV, radio, magazine, newspaper, and/or Internet about Chicago, Illinois?				
Not persuasive – Persuasive	3.87	.81	1	5
Bad – Good	4.04	.82	1	5
Not clear – Clear	4.01	.81	1	5
Unappealing – Appealing	4.11	.84	1	5
Unattractive – Attractive	4.09	.85	1	5
Unconvincing – Convincing	3.80	.88	1	5

Table 9. (Continued)

Variables	Mean	SD	Mix.	Max.
Simple – Complex	2.94	.91	1	5
Overall disliking – Overall liking	3.97	.86	1	5
Unfavorable – Favorable	4.09	.86	1	5
Attitude toward advertised travel products				
After seeing, reading, or hearing the travel ads and/or websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois?				
Chicago as a tourism destination	4.19	.68	1	5
Places or attractions	4.19	.63	1	5
Restaurants	3.91	.77	1	5
Accommodations	3.84	.76	1	5
Shopping stores	3.78	.86	1	5
Intention to purchase travel products				
How likely are you to visit the featured ...?				
Chicago places or attractions	4.86	.86	1	6
Restaurants	4.30	1.07	1	6
Accommodations	4.12	1.15	1	6
Shopping stores	4.16	1.25	1	6

5.1.4 Testing the Reliability and Validity of the Travel Advertising Response Model

5.1.4.1 Exploratory Analyses

The Constructs of the Advertising Response Model

A series of exploratory data analyses are conducted to estimate the reliability and validity of theoretical constructs that comprise the travel advertising response model.

Table 10 presents the result of principal component analysis for the attention construct. It shows that attention is a reasonably well defined unidimensional construct with factor loadings over .70; the five items have acceptable eigenvalues (3.16), variance explained (63.13) and the coefficient of reliability (.84).

Table 10. Principal Component Factor Analysis for Attention – Pilot Study

Attention	Factor loadings
The ads/websites were attractive.	.83
The Chicago travel ads/websites were eye catching.	.82
The ads/websites were effective in producing engaging messages.	.82
I read/watched the ads/websites.	.78
paid attention to the Chicago ads/websites.	.73
Eigenvalues	3.16
Variance explained	63.18%
Coefficient alpha	.84

Principal component analysis was also used to assess a unidimensional structure of recall; this effort resulted in an eigenvalue over 1.0 (2.07) for the main factor which accounts for 69.04percent of the overall explained variance; reliability tests using Coefficient alpha confirmed internal consistency with a value of .77 (see Table 11).

Table 11. Principal Component Factor Analysis for Recall – Pilot Study

Recall	Factor loadings
I can describe advertising content of the Chicago ads/websites.	.87
I can remember most of the advertising/website content.	.87
The advertising/website message enhances my impression toward Chicago.	.75
Eigenvalues	2.07
Variance explained	69.04%
Coefficients alpha	.77

Using a varimax rotation, PCA has extracted a component with an eigenvalue greater than 1.0 (4.94) which explain 70percent of the variability in observations and a high value of coefficient reliability, .93 (see Table 12).

Table 12. Principal Component Factor Analysis for Informativeness – Pilot Study

Informativeness	Factor loadings
Travel ads made travel information immediately available.	.86
Travel ads were sources of up-to-date travel information.	.86
Travel ads provided relevant travel information.	.86
Travel ads were convenient sources of travel information.	.86
Travel ads provided timely information.	.84
Travel ads were good sources of travel information.	.84
Travel ads supplied complete travel information.	.77
Eigenvalues	4.94
Variance explained	70.60%
Coefficients alpha	.93

The result of principal component analysis for the emotion construct suggests two separate factors as can be seen in Table 13. The fourteen items are classified into two constructs with eigenvalues larger than 1.0 (4.65 and 4.55, respectively). These two factors account for 66.73percent of the total explained variance; 33.21percent for the first factor naming positive emotion and 33.52 percent for a second factor labeling negative emotion. Some of factor loadings of positive emotion are lower than .70 which indicates the warning of items insufficiently explaining the positive emotion construct, such as Smoothed (.61), Stimulated (.57), and Calm (.56). In spite of the several items including low factor scores, the reliability test using Cronbach alpha confirms the internal consistency with the high enough value of .88. The modification of positive emotion construct is discussed in the confirmatory factor analysis part. In case of negative emotion, all factor loadings are above .84 with a high value of Cronbach reliability (.95), which suggests a cohesive structure of the negative emotion construct.

Table 13. Principal Component Factor Analysis for Emotion – Pilot Study

Emotion	Factor loadings	
	Positive emotion	Negative emotion
Cheerful	.83	
Happy	.80	
Warmhearted	.78	
Good	.76	
Pleased	.76	
Amused	.73	
Smoothed	.61	
Stimulated	.57	
Calm	.56	
Angry		.94
Repulsed		.93
Insulted		.93
Shocked		.92
Irritated		.85
Eigenvalues	4.65	4.55
Variance explained	33.21%	32.52%
Coefficients alpha	.88	.95

The results of exploratory factor analysis indicate the unidimensional structure of attitude toward advertising; the factor scores of all items are over .80 except for an item, Simple:Complex (factor loading =.15). Despite the low factor loading item, three estimations of PCA indicate satisfactory values including eigenvalues (5.94), variance explained (65.97) and the coefficient of reliability (.92). As the emotion construct, the revision of the advertising attitude construct is discussed in the confirmatory analysis section (see Table 14).

Table 14. Principal Component Factor Analysis for Attitude toward Advertising – Pilot Study

Attitude toward Advertising	Factor loadings
Unappealing:Appealing	.92
Unattractive:Attractive	.91
Unfavorable:Favorable	.87
Overall disliking:Overall liking	.86
Unconvincing:Convincing	.86
Bad:Good	.85
Not clear:Clear	.81
Not persuasive:Persuasive	.80
Simple:Complex	.15
Eigenvalues	5.94
Variance explained	65.97%
Coefficients alpha	.92

Table 15 presents the result of the exploratory factor analysis with varimax rotation. It shows that attitude toward travel products is a well-defined unidimensional construct with factor loadings over .76. Three indexes of the factor analysis indicate reasonably acceptable values, eigenvalues (3.32), overall variance explained (66.4percent), and Cronbach alpha (87percent).

Table 15. Principal Component Factor Analysis for Attitude toward Travel Products – Pilot Study

Attitude toward Travel Products	Factor loadings
Attractiveness - Accommodations	.84
Attractiveness - Restaurants	.83
Attractiveness - Chicago as a tourism destination	.83
Attractiveness - Places or attractions	.80
Attractiveness - Shopping stores	.77
Eigenvalues	3.32
Variance explained	66.38%
Coefficients alpha	.87

A principal component factor analysis with varimax rotation was conducted to assess the underlying structure of intention to purchase advertised products concerning four travel decisions (i.e., accommodations, restaurants, shopping stores, and Chicago places or attractions). The result reveals that purchasing intention is a unidimensional construct with factor loadings over .67 which results in an engenvalue over 1.0 (2.51), explains 63percent of the total variance for the intention construct and confirms the internal consistency (Cronbach alpha = .80) (see Table 16).

Table 16. Principal Component Factor Analysis for Intention to Purchase Travel Products – Pilot Study

Intention to purchase travel products	Factor loadings
Accommodations	.85
Restaurants	.85
Shopping stores	.78
Chicago places or attractions	.68
Eigenvalues	2.51
Variance explained	62.66%
Coefficient alpha	.80

Decision Flexibility

A series of statistical analyses conducts to assess the underlying structure of travel decision flexibility and to examine the relationships of flexibility with four travel-related factors (i.e., knowledge, alternatives, travel involvement, and travel group). Table 18 presents the descriptive results about five types of flexibility. As this research proposed, the level of perceived flexibility on each travel product seems to vary depending on different travel attributes. Specifically, travelers tend to be the most flexible for restaurant

decisions (Mean = 4.25 and SD = .84), followed by shopping stores (Mean = 4.10 and SD = 1.04), the places/attractions to visit (Mean = 3.89 and SD = .84), additional destinations (Mean = 3.55 and SD = 1.01), and overnight accommodation choices (Mean = 2.87 and SD = 1.21). This result reveals the same findings of Fesenmaier and Jeng (2000)'s study. They argue that destination and accommodation constitutes core travel decisions where people are most likely to plan the core decisions in advance and less likely to change their decisions. In contrary, secondary decisions such as activities and attractions are somehow planned in advance but may be changed in *en route* stage. Shopping and restaurants as *en route* decisions are not mostly planned in advance and commonly considered to open to change.

Table 17. Descriptive Statistics for Travel Decision Flexibility – Pilot Study

Flexibility	Mean	SD	Min.	Max.
Additional destinations besides Chicago, Illinois to visit	3.55	1.01	1	5
The places or attractions to visit	3.89	.84	1	5
Restaurants	4.25	.84	1	5
Overnight accommodations	2.87	1.21	1	5
Shopping stores	4.10	1.04	1	5

Note: SD means Standard Deviation; Min. means Minimum; Max. means Maximum

Next, principal component analysis was conducted to assess the structure of travel flexibility including five travel decisions (see Table 18). The results indicate that decision flexibility consists of two constructs: 'En-route Flexibility' (32.51% of explained variance & Reliability coefficients = .60) including shopping stores and restaurants, and 'Pre-trip Flexibility' (31.63% of explained variance & Reliability coefficients = .59) containing overnight accommodation, additional destinations besides Chicago, and the

places or attractions to visit with eigenvalues of 2.19 and 1.02, respectively. Note that while reliability coefficients of the pilot study are relatively low (e.g., .60 for En-route flexibility and .59 for Pre-trip flexibility), it is largely identified that Cronbach alpha is sensitive to number of items in the construct examined. Thus, further reliability test is conducted using confirmatory estimations based on the latent construct.

Table 18. Principal Components Factor Analysis for Flexibility– Pilot Study

Types of Flexibility	Factor loadings	
Shopping stores	.82	
Restaurants	.81	
Overnight accommodations		.78
Additional destinations besides Chicago, Illinois to visit		.75
The places or attractions to visit		.62
Eigenvalues	2.19	1.02
Variance explained	32.51%	31.63%
Coefficient alpha	.60	.59

Tables 19 and 20 show the results of the descriptive analysis regarding travel knowledge and the number of alternatives. Travelers report that they have relatively higher knowledge about places or attractions to visit in Chicago trip ($M = 3.20$ and $SD = .89$) than other travel decisions: for example, additional destinations besides Chicago ($M = 3.00$ and $SD = .96$), shopping facilities ($M = 2.89$ and $SD = 1.06$), overnight accommodations ($M = 2.77$ and $SD = 1.02$), and restaurants ($M = 2.64$ and $SD = 1.03$).

Table 19. Descriptive Statistics for Prior Knowledge – Pilot Study

Knowledge	Mean	SD	Min	Max
Additional destinations besides Chicago, Illinois to visit	3.00	.96	1	5
The places or attractions to visit	3.20	.89	1	5
Restaurants	2.64	1.03	1	5
Overnight accommodations	2.77	1.02	1	5
Shopping stores	2.89	1.06	1	5

Note: SD means Standard Deviation; Min. means Minimum; Max. means Maximum

With regard to number of alternatives considered, the median values for all five items range from 3.0 to 4.0, and from .82 to 1.37 in standard deviation (see Table 20).

Table 20. Descriptive Statistics for Decision Alternatives – Pilot Study

Alternatives	Median	SD	Min	Max
Additional destinations besides Chicago, Illinois to visit	3.00	1.14	1	6
The places or attractions to visit	4.00	.82	1	6
Restaurants	4.00	.95	1	6
Overnight accommodations	4.00	1.14	1	6
Shopping stores	4.00	1.37	1	6

Note: SD means Standard Deviation; Min. means Minimum; Max. means Maximum

Table 21 presents the results of the descriptive analysis about cognitive travel involvement. It shows that the respondents of this pilot study are highly involved in their travel decision with the mean value of 4.35 (Travel decision is very important), 4.00 (Travel decision requires a lot of thought), 3.83 (Travel decision is mainly logical or objective & Travel decision is based mainly on functional facts), and 3.54 (A lot of lose if I choose the wrong travel decision).

Table 21. Descriptive Statistics for Travel Involvement – Pilot Study

Involvement	Mean	SD	Min	Max
Travel decision is very important.	4.35	.76	1	5
Travel decision requires a lot of thought.	4.00	.96	1	5
A lot of lose if I choose the wrong travel decision.	3.54	1.04	1	5
Travel decision is mainly logical or objective.	3.83	.87	1	5
Travel decision is based mainly on functional facts.	3.83	.91	1	5

Note: SD means Standard Deviation; Min. means Minimum; Max. means Maximum

Principal component analysis with varimax estimation was also used to assess the unidimensional structure of travel involvement (see Table 22). The statistical result reveals the single dimension of involvement with factor loadings over .70. The main factors result in reasonable eigenvalues (2.68), variance explained (53.69), and Cronbach's coefficient reliability (.78).

Table 22. Principal Components Factor Analysis for Knowledge and Involvement – Pilot Study

Involvement	Factor loadings
Travel decision is mainly logical or objective.	.78
Travel decision requires a lot of thought.	.74
Travel decision is based mainly on functional facts.	.73
Travel decision is very important.	.71
A lot of lose if I choose the wrong travel decision.	.70
Eigenvalues	2.68
Variance explained	53.69
Coefficient alpha	.78

Table 23 presents the result of the frequency analysis about travel compositions. The results indicate that 9.7 percent of respondents would travel alone to Chicago (N = 86), 40.5 percent with children (N = 360), 78.7 percent with spouse/partners (N = 699), and 39.6 percent with friends (N = 352).

Table 23. Descriptive Statistics for Travel Group – Pilot Study

Travel Group	N	%
Alone	86	9.7
With children	360	40.5
With spouse/partners	699	78.7
With friends	352	39.6

The Relationships between Decision Flexibility and Travel Involvement, Knowledge, Alternatives, and Travel Groups

Based on the notion of travel decision flexibility and other situational variables, a set of statistical analyses (e.g., correlation and T-test) estimates the relationships between decision flexibility and four travel factors. Alternative and knowledge variables are categorized according to the corresponding facets of decision flexibility (i.e., one consisting of restaurants and shopping facilities and another composing additional destinations, places/attractions and accommodations). As shown in Table 24, the results of Pearson correlation show that En-route flexibility positively correlates with number of alternatives ($r = .23, p < .01$) and negatively relates with involvement ($r = -.09, p < .01$). However, the relationship between flexibility and prior knowledge was not statistically significant.

Table 24. Correlation between En Route Flexibility, Alternative, Knowledge and Involvement – Pilot Study

	ERF	Alternative ¹	Knowledge ¹	Involvement
ERF	1			
Alternative ¹	.23**	1		
Knowledge ¹	.00	.24**	1	
Involvement	-.09**	.04	.04	1

Note: ERF refers to En-route Flexibility; Knowledge¹ refers to the mean values of knowledge about restaurants and shopping stores; Alternative¹ means that the summation value of restaurants and shopping stores; ** p < .01

In terms of travel group, people who would travel to Chicago with friends or alone are more flexible (M = 4.24, p < .05) than other groups (M = 4.12 and 4.13) to make en-route decisions (e.g., restaurants and shopping stores) (see Table 25).

Table 25. Comparison of En-route Flexibility with Travel Groups – Pilot Study

	Travel Group with friends		t-value
	No	Yes	
En-route Flexibility	4.12	4.24	-2.25*
	Travel Group Alone		
	No	Yes	
En-route Flexibility	4.13	4.24	-2.16*

Note: *p < .05

The same statistical analyses used in En-route flexibility are conducted to estimate the relationships between Pre-trip flexibility and other situational variables.

Table 26 presents the significant results of the relationships between Pre-trip flexibility and number of alternatives (r = .19, p < .01), and involvement (r = -.08, p < .05). However, as the case of En-route flexibility, prior knowledge was not significantly related with Pre-trip flexibility (r = .03, p > .05).

Table 26. Correlation between Pre-trip Flexibility, Alternative, Knowledge and Involvement – Pilot Study

	PTF	Alternative ²	Knowledge ²	Involvement
PTF	1			
Alternative ²	.19**	1		
Knowledge ²	.03	.14**	1	
Involvement	-.08*	.01	.06	1

Note: PTF refers to Pre-Trip Flexibility; Alternative² means that the summation value of additional destination, the places or attractions, and accommodation is considered; Knowledge² refers to the mean values of knowledge about additional destination, the places or attractions, and accommodation; Travel group variable does not show any significant result with Pre-trip flexibility within

5 percent of cut-off p-value. However, the same pattern that travelers who go to a Chicago trip alone are more flexible is identified within 10 percent of the significant level (see Table 27).

Table 27. Comparison of Pre-trip Flexibility with Travel Groups – Pilot Study

	Travel Group Alone		t-value
	No	Yes	
Pre-trip Flexibility	3.39	4.49	-1.91 [†]

Note: [†]p < .10

5.1.4.2 Confirmatory Analyses

As a sequential step to assess theoretical constructs of travel advertising response model, Confirmatory Factor Analysis (CFA) was conducted using SmartPLS software with 888 total number of response data. Following the estimations of the measurement model discussed in the methodology section, indicator reliability was first assessed through examining the confirmatory factor loadings. As can be seen at Appendix D, all of the indicator variances are statistically significant at the .05 p-value, but it is shown

that several items have low factor scores (below .70) in positive emotion and attitude toward advertising: for example, ‘Smoothed’ (.514), ‘Stimulated’ (.545:), ‘Calm’ (.488), and ‘Simple : Complex’ (.133). The result of CFA reveals the similar pattern with one obtained from EFA about low factor loading items. A revised measurement model is performed after removing these four variables. Table 28 presents that all of item loadings are significant and over cut-off point (.70). Furthermore, the CFA result indicates that the factor loadings reflecting the constructs to measure are much higher than ones with other principal constructs, which confirms the discriminant validity suggested by Chin (1998). Note that while Intent1 (i.e., Chicago places or attractions) in the intention construct showed factor loading below .70 (.69), the author did not delete the variable in this current study. This is because the variable plays a conceptually important role to comprise an inclusive purchasing intention for travel products based on the argument that travel is a multi-decision process including destinations as well as accommodations, restaurants, activities, attractions and so on (Fesenmaier & Jeng, 2000).

Table 28. PLS Confirmatory Factor Analysis for the Constructs of the Advertising Response – Pilot Study

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Attention1	0.82	0.45	0.45	0.49	-0.28	0.47	0.35	0.30
Attention2	0.83	0.43	0.43	0.47	-0.27	0.48	0.35	0.26
Attention3	0.76	0.49	0.41	0.37	-0.20	0.39	0.30	0.26
Attention4	0.82	0.56	0.48	0.50	-0.26	0.52	0.36	0.31
Attention5	0.73	0.64	0.47	0.39	-0.22	0.45	0.36	0.33
Recall1	0.48	0.83	0.39	0.36	-0.06	0.34	0.22	0.30
Recall2	0.59	0.81	0.44	0.45	-0.22	0.45	0.33	0.33
Recall3	0.51	0.84	0.40	0.36	-0.04	0.37	0.24	0.31
Inform1	0.53	0.46	0.85	0.41	-0.25	0.51	0.41	0.34
Inform2	0.49	0.45	0.86	0.37	-0.21	0.45	0.37	0.31
Inform3	0.51	0.43	0.84	0.38	-0.22	0.46	0.39	0.33
Inform4	0.47	0.40	0.85	0.37	-0.18	0.44	0.40	0.33

Table 28. (Continued)

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Inform5	0.45	0.41	0.86	0.36	-0.20	0.45	0.39	0.32
Inform6	0.47	0.37	0.86	0.35	-0.26	0.48	0.40	0.31
Inform7	0.39	0.43	0.77	0.38	-0.11	0.39	0.38	0.35
PostEmo1	0.51	0.41	0.40	0.87	-0.34	0.54	0.41	0.35
PostEmo2	0.37	0.35	0.28	0.71	-0.02	0.34	0.25	0.25
PostEmo3	0.48	0.38	0.36	0.87	-0.20	0.44	0.39	0.33
PostEmo4	0.47	0.39	0.39	0.82	-0.26	0.47	0.35	0.29
PostEmo5	0.37	0.40	0.31	0.72	-0.06	0.36	0.27	0.25
PostEmo9	0.51	0.43	0.40	0.89	-0.29	0.53	0.43	0.35
NegEmo1	-0.30	-0.17	-0.26	-0.28	0.87	-0.36	-0.33	-0.18
NegEmo2	-0.29	-0.12	-0.23	-0.24	0.93	-0.33	-0.29	-0.16
NegEmo3	-0.30	-0.14	-0.25	-0.26	0.95	-0.34	-0.31	-0.17
NegEmo4	-0.25	-0.09	-0.18	-0.18	0.92	-0.29	-0.25	-0.13
NegEmo5	-0.29	-0.12	-0.21	-0.24	0.93	-0.32	-0.27	-0.14
AdAtt1	0.54	0.46	0.50	0.52	-0.28	0.81	0.51	0.40
AdAtt2	0.49	0.40	0.47	0.49	-0.36	0.85	0.48	0.37
AdAtt3	0.44	0.34	0.44	0.41	-0.31	0.81	0.46	0.34
AdAtt4	0.54	0.42	0.47	0.50	-0.34	0.92	0.51	0.38
AdAtt5	0.52	0.41	0.45	0.48	-0.32	0.91	0.49	0.36
AdAtt6	0.51	0.45	0.50	0.50	-0.24	0.86	0.49	0.39
AdAtt8	0.49	0.40	0.45	0.48	-0.28	0.86	0.47	0.36
AdAtt9	0.51	0.39	0.47	0.47	-0.33	0.87	0.51	0.38
ProAtt1	0.42	0.27	0.41	0.38	-0.35	0.53	0.83	0.45
ProAtt2	0.38	0.24	0.40	0.37	-0.33	0.53	0.81	0.40
ProAtt3	0.32	0.27	0.35	0.33	-0.20	0.42	0.83	0.50
ProAtt4	0.37	0.32	0.43	0.38	-0.22	0.46	0.84	0.50
ProAtt5	0.28	0.22	0.31	0.32	-0.19	0.37	0.77	0.49
Intent1	0.35	0.29	0.36	0.31	-0.24	0.42	0.42	0.69
Intent2	0.26	0.29	0.28	0.30	-0.08	0.32	0.47	0.84
Intent3	0.31	0.37	0.34	0.29	-0.09	0.34	0.43	0.83
Intent4	0.25	0.26	0.26	0.29	-0.15	0.31	0.49	0.79

Note: Inform means ‘Informativeness’; PosEmotion means ‘Positive Emotion’; NegEmotion means ‘Negative Emotion’; AdAtt means ‘Attitude toward Advertising’; ProAtt means ‘Attitude toward advertised product’; Intention means ‘Intention to purchase advertised products’

Additional confirmatory factor analysis estimated the latent scale of flexibility according to two types of decision flexibility: En-route flexibility and Pre-trip flexibility.

Table 29 presents that all factor loadings indicating the corresponding constructs of flexibility are much larger than another construct and the scores are statistically significant based on t-values.

Table 29. PLS Confirmatory Factor Analysis for Travel Decision Flexibility – Pilot Study

Types of Flexibility	Factor loadings	
	En-route flexibility	Pre-trip flexibility
Shopping stores	.94	.28
Restaurants	.72	.39
Overnight accommodations	.15	.67
Additional destinations besides Chicago, Illinois to visit	.25	.68
The places or attractions to visit	.37	.86

The square root of Average Variance Extracted (AVE) was calculated to test the convergent validity for ten latent variables and then, the values are compared with other constructs to assess discriminant validity. The results of the analysis show that the AVEs (the mean-squared loading for each construct) of each construct are larger than the cross-correlations of other constructs, which suggests the each reflective construct is distinct from other constructs in the measurement model: it confirms discriminant validity (Fornell & Bookstein, 1982). The squared AVE is also over .73, implying that the latent variables explain its indicators more than error variance, and it suggests convergent validity (see Table 30).

Table 30. Latent Variable Correlation with En-route Flexibility and Advertising Response Variables – Pilot Study

	1	2	3	4	5	6	7	8	9	10
1. Attention	.79									
2. Recall	.64	.83								
3. Informativeness	.57	.50	.84							
4. PostEmo	.56	.48	.45	.82						
5. NegEmo	-.31	-.14	-.25	-.29	.92					
6. AdAtt	.59	.47	.54	.57	-.36	.86				
7. ProAtt	.44	.32	.46	.44	-.32	.57	.81			
8. Intention	.37	.38	.39	.37	-.17	.43	.57	.79		
9. En-route Flexibility	.06	-.01	.00	.06	-.12	.02	.12	.11	.84	
10. Pre-trip Flexibility	.03	.05	.04	.10	-.06	.07	.09	.12	.36	.74

Note: PostEmo means Positive Emotion; NegEmo means Negative Emotion; AdAtt means Attitude toward advertising; ProAtt means Attitude toward travel products; The diagonal elements (in bold) represent the square root of AVE

Reliability was calculated using the PLS internal consistency scores (Werts, et al., 1974). As can be seen in Table 31, all of reliabilities are over .77 which indicates high enough levels to satisfy tolerable reliability.

Table 31. Composite Reliability – Pilot Study

	Composite Reliability
Attention	.90
Recall	.87
Informativeness	.94
Positive Emotion	.92
Negative Emotion	.97
Attitude toward advertising	.96
Attitude toward travel products	.91
Intention to purchase products	.87
En-route flexibility	.82
Pre-trip flexibility	.78

5.1.5 Validity Check for Attitude toward Advertising

Correlation analysis was conducted to estimate the extent to which attitude toward advertising reflects the information about multi-travel products including Chicago destination itself, attractions, restaurants, accommodations, and shopping stores. Table 32 presents that all five travel facets significantly and positively correlates with attitude toward advertising, which suggests the comprehensive advertising attitude including the perceived evaluation of multi-product information.

Table 32. Correlation between Attitude toward Advertising and the Awareness of Advertising Contents – Pilot Study

	Destination	Places/attractions	Restaurants	Accommodation	Shopping
Attitude toward Ad	.14**	.19**	.20**	.20**	.24**

Note: **p < .01

5.1.6 Assessment of Common Method Bias

This phase of the data analysis attempted to assess a potential of common method bias in the study results. Based on the assumption that the existence of common method bias results in extremely high correlation, the latent correlation matrix was considered. As shown in Table 33, the results of the correlation analysis did not show any factors that have exceptionally high correlation values (>.90). Next, principal component analysis was conducted for Harman's single factor test. This effort results in an eigenvalue (15.54) and 37 percent of variance explained for total constructs, which suggest limited common method errors in the results (lower than 50percent of total variance). As explained in the methodology section, correlation and the single factor test are preliminary tests as these procedures do not statistically control for common method variance (Podsakoff et al.,

2003). Accordingly, a third approach, marker-variable technique, was used to identify the extent of common method bias based on the revised measurement model (Lindell & Whitbey, 2001). In order to avoid an identification issue, the marker factor was constrained to have a factor loading compared to the paths of all items. The model fit indices including a method (i.e., marker) factor are shown at Table 33 ($\chi^2/df = 2781.332/782 = 3.60$, CFI = .933, TLI = .926, RMR = .047, and RMSEA = .054). The results indicate that the inclusion of a marker factor does not significantly improve the general model fit compared to the revised measurement model without the method factor: even, the index regarding the error estimation for a model including a marker factor seems to be slightly increased (.038 \rightarrow .047 for RMR; .05 \rightarrow .054 for RMSEA). Therefore, the results of three different estimations to test common method bias lessened the concerns where the statistical results could derive from measurement characteristics rather than the constructs examined. Thus, the revised measurement model was confirmed and compared with the main study in next chapter.

Table 33. Comparison of Model Fit Indices to Test the Common Method Bias – Pilot Study

	χ^2	Df	χ^2/df	CFI	TLI	RMR	RMSEA
Revised Measurement model	2820.565	783	3.60	.932	.925	.038	.050
Measurement model with the common method factor	2781.332	782	3.60	.933	.926	.047	.054

Note: CFI means Comparative Fit Index, TLI means Tucker-Lewis Index, RMR means Root Mean Square Residual, and RMSEA means Standardized Root Mean Square Residual

Summary

This section estimated a set of exploratory and confirmatory analyses to understand the underlying constructs of travel advertising response model. The results indicated the unidimensionality of all seven latent constructs with acceptable levels of various validity and reliability estimations. Accordingly, these findings suggest that the measurements of advertising response model are valid along with the argument of this study.

In terms of travel flexibility, the results of analysis using the pilot data revealed two types of decision flexibility (i.e., En-route and Pre-trip flexibility) with marginal level of Cronbach alpha and acceptable levels of composite reliability as well as construct validity (i.e., discriminant and convergent validities). Considering four situational variables (involvement, prior knowledge, alternatives, and travel groups), flexibility showed significant relationships with alternatives as well as travel groups and involvement. However, there is insignificant relationship with low correlation values between flexibility and prior knowledge which denotes the inconsistent argument of this study.

Thus, these findings of the pilot study suggest the author argues that it is appropriate to use similar instruments measuring ten constructs of the travel advertising response model when collecting the main data. Additionally, one more item (i.e., ‘additional destination other than Chicago’) is added in the measurement of purchasing intention being excluded from the pilot study. This is because additional destination is not only one of important travel decisions for travelers to plan their trips, but also it plays a

distinctive role as an independent travel decision based upon the results about different levels of flexibility across travel facets.

The finding of the insignificant relationship between prior knowledge and flexibility suggest the modification of the measurements for prior knowledge. Accordingly, the actual data uses different measurements to evaluate prior knowledge: that is, 'knowledge uncertainty' (Littler & Melanthiou 2006; Pekka, Thersea, Timo, & Anssi, 2011; Urbany, Dickson, & Wilkie, 1989). Knowledge uncertainty refers to the extent to which consumer's knowledge about products is enough to judge the products and execute reasonable product comparisons in the decision-making process. While the prior knowledge considered in the pilot study focuses on the level of general (on-going) information, knowledge uncertainty asks respondents to assess product knowledge to evaluate the quality of the products. Therefore, the main data considers the alternative measurements to measure prior knowledge and to estimate the relationship with flexibility. The questions are adapted from Urbany, et al. (1989) and presented in Appendix E.

Lastly, as shown in Table 24 and 26, travel involvement indicates low correlations with not only flexibility but also other situational factors (e.g., alternatives and prior knowledge). While it shows a slightly significant result with flexibility, there is very weak association with insignificant estimation between involvement and other travel related factors. Thus, the author decides to eliminate the travel involvement from the survey to collect the main data.

5.2 Empirical Results of the Main Data Set

5.2.1 Response Rate

Total 34,447 number of American travelers who have contacted an advertising company or official destination websites to obtain travel information and live in Midwest United States are asked to conduct the online survey. Total 699 people answered the survey (about 2% response rate) and of them, 360 (51.5%) number of respondents have seen, heard, or read Chicago travel information and completed all of questions in the survey. Thus, this study focuses on the selected respondents for following data analysis.

5.2.2 Non-response bias

This study first assesses non-response bias by comparing respondents who answered the survey in different time periods. Three types of variables including demographic, travel characteristics and advertising exposure were estimated between three groups: early (N = 149), middle (N = 108), and late respondents (N = 103) based on the same method to categorize groups used in the pilot study. As shown Table 34, the results of Chi-square analysis and post hoc ANOVA reveal no significant difference across groups ($p > .05$), which indicates limited non-response error in the data set.

Table 34. Non-Response Bias Test – Main Study

	Early (N = 149)	Middle (N = 108)	Late (N = 103)	Chi- square
	%			
Demographic Characteristic				
Gender				2.35
Female	64.6	65.1	73.3	
Male	35.4	34.9	26.7	
Age				8.83
18-21 years	0.0	1.0	.0	
22-29 years	2.8	2.9	1.0	
30-39 years	7.6	4.8	3.9	
40-49 years	20.8	18.3	20.6	
50-59 years	28.5	37.5	38.2	
60-69 years	27.1	26.9	26.5	
70 and above years	13.2	8.7	9.8	
Annual household income				12.98
Less than \$19,999	3.5	4.7	9.9	
\$20,000 to \$ 39,999	11.8	12.3	11.9	
\$40,000 to \$59,999	30.6	22.6	20.8	
\$60,000 to \$79,999	16.0	18.9	24.8	
\$80,000 to \$99,999	16.0	13.2	11.9	
\$100,000 to \$129,999	13.2	17.0	10.9	
\$130,000 to \$159,999	4.2	4.7	5.9	
\$160,000 and over	4.9	6.6	4.0	
Number of people in household (Age 18 and over)				2.40
1 person	20.1	17.0	21.8	
2 persons	57.6	53.8	52.5	
3 persons	16.0	19.8	18.8	
4 – 6 persons	6.3	9.4	6.9	
11 or more				
Number of people in household (Under Age 18)				4.21
None	66.0	71.7	71.3	
1 person	19.4	12.3	12.9	
2 persons	9.7	10.4	8.9	
3 persons	4.2	3.8	5.0	
4 – 6 persons	.7	1.9	2.0	
Travel Characteristics				
Number of Pleasure Trips to Midwest				14.49
None	7.3	5.6	3.7	
1 trip	18.7	12.0	14.8	

Table 34. (Continued)

	Early (N = 149)	Middle (N = 108)	Late (N = 103)	Chi- square
	%			
2 trips	19.3	22.2	29.6	
3 trips	28.7	21.3	18.5	
4 trips	11.3	13.9	13.9	
5 - 10 trips	12.0	18.5	16.7	
11 or more trips	2.7	6.5	2.8	
Number of Pleasure Trips to Chicago in the past 3 years				16.94
None	25.3	18.5	17.4	
1 trip	16.5	21.0	24.8	
2 trips	16.5	10.9	14.7	
3 trips	13.3	9.2	10.1	
4 trips	6.3	10.1	2.8	
5 - 10 trips	13.9	13.4	17.4	
11 or more trips	8.2	16.8	12.8	
		Mean		F-value
Ad exposure ¹	2.44	2.38	2.42	.14

Note: 1 means five point scales including 1 = Not at all, 2 = Very few ads, 3 = Few ads, 4 = Some ads, and 5 = A lot of ads.

5.2.3 Profiles of Respondents

The profiles of respondents in the main data set are quite similar with the ones of the pilot data. Specifically, There are more female (67.3%) in the survey respondents, and over 90percent of travelers are 30 years or above. Annual household income shows such a normal distribution pattern: 72.4percent of people reported their income ranges between \$40,000 and \$129,999. Approximately 70percent of travelers indicated that they have 1person (age 18 and over) in their household and 55.1percent of them have a children under age 18 in their household. With regard to travel characteristics, about 95percent of respondents had at least a pleasure trip to the Midwest in the last 12 months and about 80percent of the travelers had a trip that includes Chicago, Illinois in the past 12 months (see Table 35).

Table 35. Profiles of Respondents – Main Study

Variables	Frequency	%
Demographic Characteristic		
Gender (N = 352)		
Female	237	67.3
Male	115	32.7
Age (N = 350)		
18-21 years	2	.6
22-29 years	9	2.6
30-39 years	21	6.0
40-49 years	83	23.7
50-59 years	112	32.0
60-69 years	95	27.1
70 and above years	28	8.0
Annual household income (N = 351)		
Less than \$19,999	20	5.7
\$20,000 to \$ 39,999	42	11.9
\$40,000 to \$59,999	90	25.6
\$60,000 to \$79,999	68	19.0
\$80,000 to \$99,999	49	13.9
\$100,000 to \$129,999	48	13.9
\$130,000 to \$159,999	17	4.8
\$160,000 and over	18	5.1
Number of people in household (Age 18 and over) (N = 351)		
1 person	243	69.0
2 persons	55	15.6
3 persons	34	9.7
4 – 6 persons	15	4.3
11 or more	5	1.4
Number of people in household (Under Age 18) (N = 351)		
None	69	19.6
1 person	194	55.1
2 persons	63	17.9
3 persons	26	7.4
4 – 6 persons		
Travel characteristics		
Number of trips in Midwest United States (N = 342)		

Table 35. (Continued)

Variables	Frequency	%
None	21	6.1
1 trip	55	16.1
2 trips	78	22.8
3 trips	78	22.8
4 trips	43	12.6
5 - 10 trips	55	16.1
11 or more trips	12	3.5
Number of trips visited in Chicago (N = 360)		
None	75	20.8
1 visit	74	20.6
2 visits	52	14.4
3 visits	42	11.7
4 visits	24	6.7
5 - 10 visits	50	13.9
11 or more visits	43	11.9

Table 36 presents the results of descriptive analysis about constructs comprising the tourism advertising response model. The mean values of the items range from 1.86 (Emotion; ‘Insulted’) to 4.16 (Attitude toward advertising; ‘Unattractive – Attractive’). The aggregated mean values of advertising response constructs show 3.67 (Attention), 3.19 (Recall), 3.64 (Informativeness), 2.88 (Emotion), 3.67 (Attitude toward Advertising), and 3.91 (Attitude toward travel products), in order. The intention construct used six point scales shows an average of 4.40. As the patterns of the theoretical constructs in the pilot study, the descriptive statistics using the main data roughly indicated the normal distribution.

Table 36. Descriptive Analysis about Advertising related Variables – Main Study

Variables	Mean	SD	Mix.	Max.
Attention				
I paid attention to the Chicago ads.	3.50	.84	1	5
The Chicago travel ads were eye catching.	3.74	.69	1	5
The ads were attractive.	3.78	.68	1	5
I read/watched the ads.	3.70	.74	1	5
The ads were effective in producing engaging messages.	3.64	.70	1	5
Recall				
I can remember most of the advertising content.	3.12	.87	1	5
The advertising message enhances my impression toward the Chicago ads.	3.48	.77	1	5
I can describe advertising content of the Chicago ads.	2.96	.91	1	5
Informativeness				
The Chicago travel ads ...				
were good sources of product information.	3.77	.70	1	5
provided relevant product information.	3.72	.71	1	5
provided timely information.	3.67	.73	1	5
were source of up-to-date product information.	3.63	.78	1	5
made product information immediately available.	3.62	.80	1	5
were convenient sources of product information.	3.73	.75	1	5
supplied complete product information.	3.33	.86	1	5
Emotion				
How do you feel about the travel ads and/or websites you saw, read, or heard from TV, radio, magazine ...				
Happy	3.61	.70	1	5
Good	3.72	.67	1	5
Amused	3.35	.71	1	5
Cheerful	3.51	.72	1	5
Pleased	3.61	.72	1	5
Irritated	2.10	.99	1	5
Warmhearted	3.33	.75	1	5
Smoothed	3.05	.79	1	5
Repulsed	1.93	1.01	1	5
Angry	1.87	.98	1	5
Stimulated	3.27	.79	1	5
Calm	3.18	.69	1	5
Shocked	1.93	.98	1	5
Insulted	1.86	1.00	1	5

Table 36. (Continued)

Variables	Mean	SD	Mix.	Max.
Attitude toward advertising				
How would you evaluate the advertising you saw, read, or heard from TV, radio, magazine, newspaper, and/or Internet about Chicago, Illinois?				
Not persuasive – Persuasive	3.90	.91	1	5
Bad – Good	4.11	.85	1	5
Not clear – Clear	4.09	.85	1	5
Unappealing – Appealing	4.15	.84	1	5
Unattractive – Attractive	4.16	.85	1	5
Unconvincing – Convincing	3.87	.93	1	5
Simple – Complex	3.02	1.00	1	5
Overall disliking – Overall liking	4.03	.90	1	5
Unfavorable – Favorable	4.14	.89	1	5
Attitude toward advertised travel products				
After seeing, reading, or hearing the travel ads and/or websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois?				
Additional destinations besides Chicago	3.81	.72	1	5
Places or attractions	4.08	.70	1	5
Restaurants	3.94	.82	1	5
Accommodations	3.89	.79	1	5
Shopping stores	3.82	.87	1	5
Intention to purchase travel products				
How likely are you to visit the featured ...?				
Additional destinations besides Chicago	4.33	1.05	1	6
Chicago places or attractions	4.81	.94	1	6
Restaurants	4.43	1.09	1	6
Accommodations	4.20	1.23	1	6
Shopping stores	4.25	1.31	1	6

Decision Flexibility

Table 37 presents the results of descriptive analysis about travel decision flexibility. Travelers report that the decision to choose restaurants is the most flexible (Mean = 4.18 and SD = 1.00), followed by shopping stores (Mean = 4.00 and SD = 1.14), the places or attractions to visit (Mean = 3.91 and SD = .90), additional destinations

(Mean = 3.68 and SD = 1.00), and overnight accommodations (Mean = 3.11 and SD = 1.20). This finding indicates the consistent pattern with one of the pilot study, which validates the notion of decision flexibility across five multi-travel facets.

Table 37. Descriptive Statistics for Travel Decision Flexibility – Main Study

Flexibility	Mean	SD	Min.	Max.
Additional destinations besides Chicago, Illinois to visit	3.68	1.00	1	5
The places or attractions to visit	3.91	.90	1	5
Restaurants	4.18	1.00	1	5
Overnight accommodations	3.11	1.20	1	5
Shopping stores	4.00	1.14	1	5

Note: SD means Standard Deviation; Min. means Minimum; Max. means Maximum

5.2.4 Reliability and Validity of Travel Advertising Response Model and Decision

Flexibility

5.2.4.1 PCA about Intention to Purchase Travel Products

Based on the insights from the pilot study, this main data set includes a new item (additional destination besides Chicago) in the construct of the purchasing intention.

Principal component analysis was used to assess the unidimensional structure of the intention including five components. This effort results in eigenvalue (3.14) for the main factor which explains 63percent of total variance explained and confirms the internal consistency with a value of .85 (see Table 38).

Table 38. Principal Component Factor Analysis for Intention to Purchase Travel Products – Main Study

Intention to purchase travel products	Factor loadings
Restaurants	.88
Shopping stores	.83
Accommodations	.83
Chicago places or attractions	.73
Additional destinations besides Chicago	.67
Eigenvalues	3.14
Variance explained	62.88%
Cronbach alpha	.85

Thus, based on the principal component analysis, it is suggested that five travel facets can be integrated as an inclusive intentions to purchase travel products. Further analysis considers the comprehensive purchasing intention including five types of products.

5.2.4.2 Confirmatory approaches

With the rationale of the ‘main data’ set that compromise the confirmatory estimation , CFA estimates the measurement model of travel advertising response including attention, recall, informativeness, positive emotion, negative emotion, attitude toward advertising and travel products, and intention to purchase travel products. In order to assess the reliability and validity of each construct, this study conducted same approaches used in the pilot study, which focuses on CFA factor loadings with significance value, AVE, composite reliability, and correlations between each construct with total 360 number of samples. The results of the original measurement model estimation show the same pattern with the ones of CFA in the pilot study (see Appendix F). Specifically, three items in positive emotion and a factor of advertising attitude have

low factor scores based on cut-off value of .70: for example, ‘Smoothed’ (542), ‘Stimulated’ (.545), ‘Calm’ (.667) and ‘Simple : Complex’ (.193).

A revised measurement is conducted after removing these four items. Then, the result reveals that all of item loadings are over .70 within the corresponding constructs, and are statistically significant based on t-values (see Table 41). Thus, it is suggested that the result of CFA confirms discriminant validity of the travel advertising measurement model (Chin, 1998). Note that while there are three factors indicating around .69 (Attention 5 = ‘I paid attention to the Chicago ads/websites’; ProAtti1 = ‘Additional destinations to visit besides Chicago’, and Intent 1 = ‘Additional destinations besides Chicago’), this study did not remove these three factors because (1) these factors are theoretically important items to describe each conceptual construct and (2) there are marginal gaps to be limitedly concerned comparing to the cut-off level (Attention 5 = .008, ProAtti1 = .008, and Intent 1 = .04).

Table 39. PLS Confirmatory Factor Analysis for the Constructs of the Advertising Response – Main Study

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Attention1	0.85	0.47	0.44	0.47	-0.30	0.54	0.41	0.31
Attention2	0.87	0.48	0.47	0.48	-0.33	0.55	0.44	0.33
Attention3	0.83	0.46	0.37	0.39	-0.25	0.48	0.34	0.26
Attention4	0.85	0.59	0.53	0.49	-0.20	0.57	0.44	0.37
Attention5	0.69	0.66	0.48	0.49	-0.15	0.45	0.43	0.43
Recall1	0.50	0.85	0.38	0.39	-0.03	0.34	0.33	0.32
Recall2	0.60	0.85	0.52	0.53	-0.14	0.45	0.38	0.35
Recall3	0.52	0.84	0.40	0.39	0.05	0.29	0.26	0.30
Inform1	0.56	0.48	0.84	0.50	-0.19	0.52	0.40	0.36
Inform2	0.52	0.47	0.88	0.49	-0.19	0.47	0.46	0.42
Inform3	0.46	0.42	0.85	0.42	-0.12	0.42	0.40	0.34
Inform4	0.45	0.41	0.89	0.46	-0.09	0.44	0.39	0.33
Inform5	0.42	0.40	0.86	0.42	-0.11	0.38	0.36	0.33
Inform6	0.48	0.45	0.86	0.46	-0.12	0.45	0.39	0.38

Table 39. (Continued)

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Inform7	0.42	0.48	0.75	0.42	0.03	0.36	0.36	0.42
PostEmo1	0.52	0.45	0.46	0.87	-0.30	0.53	0.47	0.39
PostEmo2	0.42	0.43	0.39	0.76	-0.01	0.38	0.42	0.32
PostEmo3	0.48	0.49	0.51	0.89	-0.18	0.51	0.46	0.42
PostEmo4	0.51	0.46	0.49	0.88	-0.27	0.57	0.48	0.43
PostEmo5	0.36	0.40	0.36	0.75	-0.02	0.41	0.42	0.35
PostEmo9	0.55	0.46	0.48	0.90	-0.25	0.55	0.49	0.41
NegEmo1	-0.27	-0.10	-0.18	-0.24	0.89	-0.35	-0.24	-0.10
NegEmo2	-0.29	-0.04	-0.12	-0.19	0.95	-0.33	-0.24	-0.08
NegEmo3	-0.31	-0.08	-0.13	-0.21	0.97	-0.34	-0.24	-0.09
NegEmo4	-0.26	-0.02	-0.12	-0.19	0.94	-0.30	-0.21	-0.06
NegEmo5	-0.28	-0.06	-0.11	-0.20	0.96	-0.33	-0.23	-0.08
AdAtt1	0.59	0.44	0.47	0.55	-0.28	0.85	0.54	0.35
AdAtt2	0.58	0.39	0.47	0.54	-0.29	0.91	0.53	0.38
AdAtt3	0.51	0.34	0.47	0.46	-0.27	0.81	0.48	0.36
AdAtt4	0.55	0.37	0.41	0.48	-0.35	0.90	0.53	0.36
AdAtt5	0.56	0.32	0.43	0.50	-0.34	0.88	0.50	0.35
AdAtt6	0.54	0.42	0.49	0.54	-0.24	0.86	0.48	0.38
AdAtt8	0.54	0.39	0.42	0.51	-0.33	0.86	0.49	0.36
AdAtt9	0.55	0.38	0.41	0.50	-0.35	0.87	0.49	0.37
ProAtt1	0.37	0.33	0.40	0.46	-0.13	0.46	0.69	0.41
ProAtt2	0.45	0.31	0.39	0.50	-0.32	0.54	0.77	0.44
ProAtt3	0.39	0.29	0.34	0.36	-0.20	0.44	0.86	0.57
ProAtt4	0.42	0.36	0.42	0.42	-0.19	0.48	0.86	0.58
ProAtt5	0.40	0.32	0.33	0.45	-0.14	0.45	0.84	0.57
Intent1	0.26	0.32	0.29	0.33	-0.04	0.26	0.42	0.66
Intent2	0.38	0.31	0.33	0.40	-0.23	0.38	0.47	0.71
Intent3	0.32	0.30	0.36	0.36	-0.06	0.34	0.59	0.88
Intent4	0.33	0.33	0.34	0.31	0.00	0.29	0.44	0.81
Intent5	0.34	0.29	0.36	0.41	-0.02	0.36	0.56	0.84

Additional CFA was conducted to test the latent scale of flexibility with regard to two types of decision flexibility: En-route flexibility and Pre-trip flexibility. Table 40 presents reasonable factor scores all over .70 and statistically significant using bootstrapping method. It confirms the validity of the findings about decision flexibility between pilot and main studies.

Table 40. PLS Confirmatory Factor Analysis for Travel Decision Flexibility – Main Study

Travel Facets	Factor loadings	
	En-route flexibility	Pre-trip flexibility
Shopping stores	.92	.46
Restaurants	.86	.52
Additional destinations besides Chicago	.42	.82
The places or attractions to visit	.58	.87
Overnight accommodations	.27	.73

The results of latent correlation analysis indicate that there is no considerable multicollinearity between the constructs comparing the reflective advertising response model (see Table 41). The square root of AVEs was larger than the correlation value between other constructs, and all the latent variables account for its indicators more than error variance with the squared AVE values over .80. Thus, this study confirms convergent and discriminant validities in the measurement estimation of the travel advertising response model.

Table 41. Latent Variable Correlation – Main Study

	1	2	3	4	5	6	7	8	9	
1. Attention	.82									
2. Recall	.65	.84								
3. Informativeness	.56	.52	.85							
4. Positive emotion	.56	.53	.53	.84						
5. Negative emotion	-.30	-.06	-.14	-.22	.94					
6. Advertising attitude	.63	.44	.51	.59	-.35	.87				
7. Product attitude	.50	.39	.46	.54	-.24	.58	.81			
8. Intention	.41	.39	.43	.46	-.09	.42	.64	.83		
9. En-route flexibility	.15	.04	.05	.16	-.22	.16	.29	.25	.89	
10. Pre-trip flexibility	.16	.11	.12	.27	.21	.16	.27	.20	.53	.81

Note: The diagonal elements (in bold) represent the square root of AVE.

The composite reliability test also results in high acceptable values to indicate internal consistence of the measurement constructs, including attention (.91), recall (.88), informativeness (.95), positive emotion (.94), negative emotion (.98), attitude toward advertising (.96), attitude toward travel products (.90), intention to purchase products (.90), En-route flexibility (.89), and Pre-trip flexibility (.85) (see Table 42).

Table 42. Composite Reliability – Main Study

	Composite Reliability
Attention	.91
Recall	.88
Informativeness	.95
Positive Emotion	.94
Negative Emotion	.98
Attitude toward advertising	.96
Attitude toward travel products	.90
Intention to purchase products	.90
En-route flexibility	.89
Pre-trip flexibility	.85

The Relationships between Decision Flexibility and Knowledge Uncertainty,

Alternatives, and Travel Groups

This section estimates the relationships of decision flexibility with other travel related factors. The descriptive analyses of knowledge uncertainty and alternatives report that travelers relatively have higher knowledge uncertainty for restaurants (M = 2.99 and SD = 1.21) than any other travel decisions, followed by shopping facilities (M = 3.09 and SD = 1.24), additional destinations besides Chicago (M = 3.13 and SD = 1.18), overnight accommodations (M = 3.24 and SD = 1.17), and places or attractions to visit in Chicago trip (M = 3.40 and SD = 1.13) (see Table 43).

Table 43. Descriptive Analysis about Knowledge Uncertainty – Main Study

Knowledge Uncertainty	Mean	SD	Min	Max
Additional destinations	3.13	1.18	1	5
Places or attractions to visit	3.40	1.13	1	5
Restaurants	2.99	1.21	1	5
Accommodations to stay	3.24	1.17	1	5
Shopping stores	3.09	1.24	1	5

The median values of product alternative range from 3.0 to 4.0 with standard deviation between 1.13 and 1.52 (see Table 44).

Table 44. Descriptive Analysis about Alternatives – Main Study

Alternatives	Median	SD	Min	Max
Additional destinations	3.0	1.13	1	5
Places or attractions to visit	4.0	1.16	1	5
Restaurants	4.0	1.16	1	5
Accommodations to stay	4.0	1.34	1	5
Shopping stores	4.0	1.52	1	5

With regard to travel composition, respondents of this study report that 10 percent of travelers would go to a Chicago trip alone (N = 36), 35.4percent with children (N = 127), 71.9percent with spouse/partners (N = 258), and 37.6percent with friends (N = 135) (see Table 45).

Table 45. Descriptive Statistics for Travel Group – Main Study

Travel Group	N	%
Alone	36	10.0
With children	127	35.4
With spouse/partners	258	71.9
With friends	135	37.6

Correlation analyses were conducted to estimate the relationships of flexibility with knowledge uncertainty and number of alternatives. The results are presented in Table 46.

Specifically, En-route flexibility positively correlates with knowledge uncertainty ($r = .14$, $p < .01$) and number of alternatives ($r = .22$, $p < .01$) of restaurants and shopping stores. Pre-trip flexibility also positively relates with knowledge uncertainty ($r = .12$, $p < .05$) and number of alternatives ($r = .16$, $p < .01$) for attractions, additional destinations, and accommodations.

Table 46. Correlation between Flexibility and Knowledge Uncertainty – Main Study

	1	2	3	4	5	6
1. En-route flexibility	.1					
2. Pre-trip flexibility	.51**	.1				
3. Knowledge uncertainty ¹	.14**	.15**	1			
4. Knowledge uncertainty ²	.08	.12*	.78**	1		
5. Alternatives ¹	.22**	.14**	.40**	.22	1	
6. Alternatives ²	.12**	.16**	.10	.16**	.54**	1

Note: * $p < .05$; ** $p < .01$; Knowledge uncertainty¹ refers to the average on knowledge uncertainty about restaurant and shopping stores; Knowledge uncertainty² refers to the average on knowledge uncertainty about additional destination, the places or attractions, and accommodation; Alternatives¹ means that the summation value of restaurant and shopping stores is considered; Alternative² means that the summation value of additional destination, the places or attractions, and accommodation is considered;

In terms of travel group, people who would go to travel to Chicago with spouse or partner are more flexible ($M = 4.15$, $p < .05$) than other groups ($M = 3.91$) for en-route trip decisions (see Table 47).

Table 47. Comparison of En-route Flexibility with Spouse/Partner – Main Study

	Travel Group with spouse/partner		t-value
	No	Yes	
En-route Flexibility	3.91	4.15	-2.14*

Note: * $p < .05$

5.2.5 Validity Check for Attitude toward Advertising

A correlation analysis was conducted to assess the extent to which attitude toward advertising reflects information about travel products (i.e., additional destinations besides Chicago, attractions, restaurants, accommodations, and shopping facilities). Table 48 presents the correlation values between advertising attitude and five travel facets are positively significant, which validates that the advertising attitude includes the perceived evaluation of all five travel features.

Table 48. Correlation between Attitude toward Advertising and the Awareness of Advertising Contents – Main Study

	Additional destinations	Places/attractions	Restaurants	Accommodation	Shopping
Attitude toward Ad	.17**	.30**	.22**	.21**	.26**

Note: **p < .01

5.2.6 Assessment of Common Method Bias

This study considers three methods to estimate common method bias: correlation matrix, Harman's single factor test and latent-based common method test. As shown in Table 49, there is no variable that indicates correlation value over .90. Harman's single factor test using EFA results in the variance explained of 35.98percent which is lower than cut-off level by 50percent. Lastly, latent-based approach shows no substantial differences in terms of model fit indexes between the measurement models including and excluding a marker-variable: for example, $\chi^2/df = 2.42$ & 2.42 , CFI = $.915$ & $.915$, TLI = $.907$ & $.907$, RMR = $.055$ & $.059$, and RMSEA = $.067$ & $.070$ (see Table 49). Even, the inclusion of a marker factor results in slightly less model fit where the values of RMR and RMSEA for the model including the marker factor are larger than the one without the

factor. Thus, the results of the estimations assessing common method bias suggest limited common method errors in the findings. Thus, this study maintains the revised measurement model for further data analysis.

Table 49. Comparison of Model Fit Indices to Test the Common Method Bias – Main Study

	χ^2	Df	χ^2/df	CFI	TLI	RMR	RMSEA
Revised Measurement model	1998.18	825	2.42	.915	.907	.055	.067
Measurement model with the common method factor	1993.67	824	2.42	.915	.907	.059	.070

5.2.7. Estimating Travel Advertising Response Model

A general advertising response model was estimated using SmartPLS with bootstrap resampling method (300 sample generation) to obtain p-value. All paths are statistically significant except for the relationship between recall and attitude toward advertising. More specifically, attention ($b = .36, p < .001$), informativeness ($b = .15, p < .01$), and positive emotion ($b = .29, p < .01$) positively affect advertising attitude, whereas negative emotion negatively influences attitude toward advertising ($b = -.16, p < .001$) with 52percent of variance explained of an endogenous variable. In turn, advertising attitude positively affects attitude toward travel products ($b = .58, p < .001$) and product attitude positively influences intention to purchase travel products ($b = .64, p < .001$) with explaining 34percent and 41percent of each endogenous variable (see Figure 6). Therefore, in terms of hypotheses testing, the results of PLS analysis support the hypotheses from H1a to H3 except for H1b as summarized in Table 50.

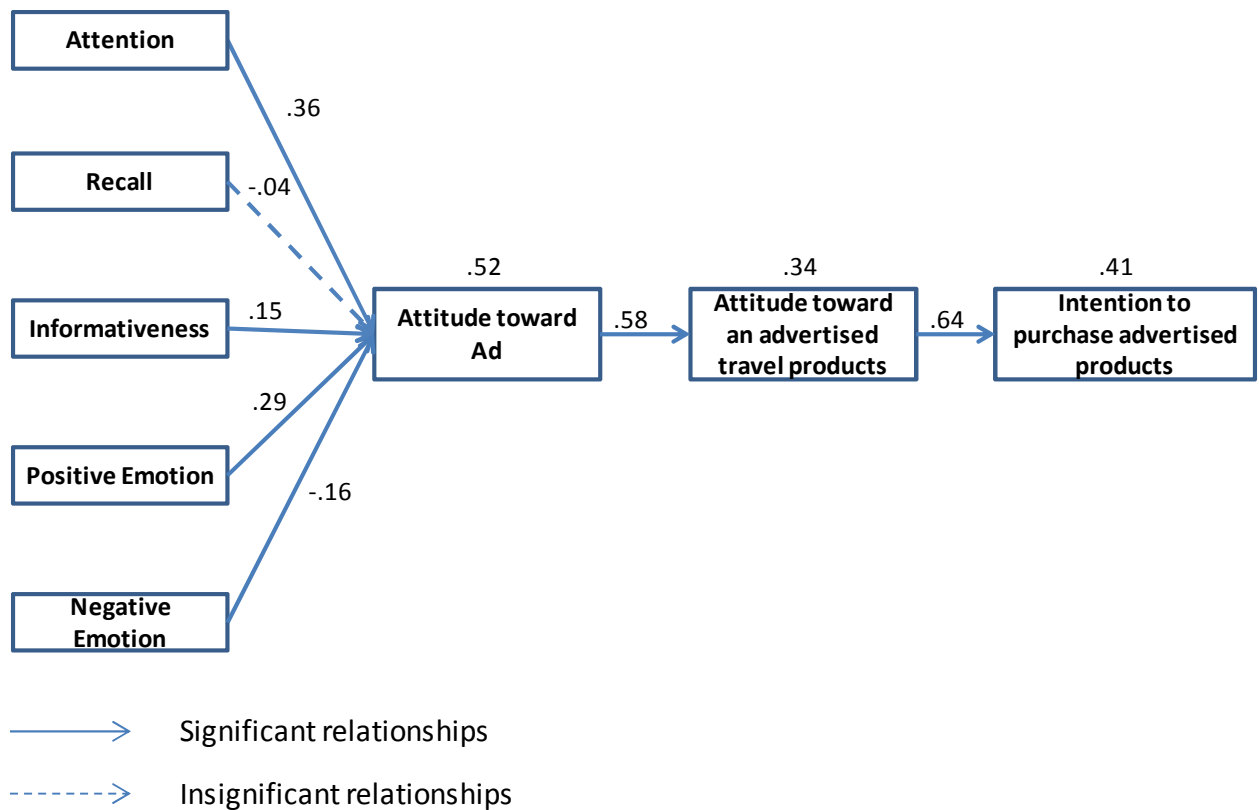


Figure 6. Travel Advertising Response Model Results

Table 50. Results of the Hypothesis Estimations

	Hypotheses	Results
H1a	Attention to the advertising message → Attitude toward travel advertising	Supported
H1b	Advertising recall → Attitude toward travel advertising	Not supported
H1c	Advertising informativeness → Attitude toward travel advertising	Supported
H1d	Traveler’s emotional response to advertising → Attitude toward travel advertising	Supported
H2	Attitude toward travel advertising → attitude toward advertised travel products	Supported
H3	Attitude toward advertised travel products → intention to purchase advertised products	Supported

Summary

A series of data analyses using actual data set indicated similar results with ones from the pilot study. Specifically, the unidimensional structure of seven constructs comprising travel advertising response model are confirmed with acceptable levels of validity and reliability tests. The structural estimations of the advertising response model also showed all significant path coefficients, except for recall.

CFA supports the idea about two dimensions of flexibility with reasonable values of construct validity and composite reliability. In the comparisons of flexibility with other situational variables, knowledge uncertainty and number of alternatives positively correlate with corresponding flexibility (between En-route and Pre-trip flexibility). As the suggestion from the pilot study, it is identified that knowledge uncertainty is more suitable measurement than just asking their general knowledge about the products. Lastly, in terms of travel group comparisons, travel compositions with spouse/partners are more flexible in pre-trip decisions than other groups.

Therefore, based on the similar findings from the pilot and the main studies, this research reasonably indicates the validation about the constructs of travel advertising response model as well as two types of travel decision flexibility with other situational variables (i.e., alternatives, product knowledge, and travel group). Lastly, the results about the estimations of the advertising response model using PLS supports most of proposed hypotheses.

CHAPTER 6

RESULTS: Evaluating the Moderating Effect of Flexibility on the Travel

Advertising Response Model

This chapter discusses the results of analyses that estimate the moderating effect of decision flexibility on advertising response model. PLS analysis was conducted to assess the linear moderating effect of flexibility, and polynomial regression with response surface method was used to examine the quadratic moderating effect of decision flexibility on the advertising response model. The results of these analyses are summarized in this chapter.

6.1. The Empirical Results of Main Data Set

6.1.1 The Linear Moderating Effect of Decision Flexibility on Travel Advertising Response Model

Before assessing the linear moderating effect of flexibility, latent variable correlation is examined to check the multicollinearity issue between constructs. Table 31 presents limited concerns of the multicollinearity with correlation values below .90. Then, PLS analysis was conducted to estimate the linear interaction effect of En-route flexibility using SmartPLS with bootstrapping sample generation (see Table 51). As expected, attention ($b = .36, p < .001$), informativeness ($b = .15, p < .01$), and positive emotion ($b = .28, p < .001$) positively influence attitude toward advertising, and negative emotion negatively affects advertising attitude ($b = -.16, p < .001$). Attitude toward advertising positively correlates with attitude toward travel products ($b = .54, p < .001$) and then, the product attitude significantly influences intention to purchase travel

products ($b = .61, p < .001$). However, the interaction effect between en-route flexibility and advertising response factors was not statistically significant. Note that while a direct effect of decision flexibility on attitude toward travel products was identified ($b = .19, p < .001$) and improved R^2 by .04 ($\Delta R^2 = .04$), it is not concerned as a major finding based on the Cohen's f^2 (.06 = low effect size).

Table 51. Moderating Effect of En-route Flexibility on Travel Advertising Response Model

Path	Coefficient	R^2	ΔR^2	t-value
Attention → Ad Attitude	.36	.52		6.25***
Recall → Ad Attitude	-.04			0.57
Informativeness → Ad Attitude	.15			2.73**
Positive Emotion → Ad Attitude	.28			5.62***
Negative Emotion → Ad Attitude	-.16			3.99***
En-Route Flexibility (ERF) → Ad Attitude	.02			0.43
ERF × Attention → Ad Attitude	-.02			0.22
ERF × Recall → Ad Attitude	-.03			0.40
ERF × Informativeness → Ad Attitude	.05			0.72
ERF × Positive Emotion → Ad Attitude	-.03			0.46
ERF × Negative Emotion → Ad Attitude	-.01			0.07
Ad Attitude → Product Attitude	.54	.38	.04	14.14***
ERF → Product Attitude	.19			3.28***
ERF × Ad Attitude → Product Attitude	-.05			0.83
Product Attitude → Intention	.61	.42	.01	14.50***
ERF → Intention	.05			0.95
ERF × Product Attitude → Intention	-.08			1.24

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; ERF means En-Route Flexibility;

Next, this phase of data analysis focuses on the effect of Pre-trip flexibility on travel advertising response model. The latent variable correlation indicates the limited multicollinearity issue between the constructs of advertising response model (see Table 31). Table 52 presents the results about the linear moderating effect of Pre-trip flexibility.

As the pattern of En-route flexibility, it is identified that Pre-trip flexibility does not play the linear moderating role in the advertising response model. In addition, Pre-trip flexibility shows direct effects on attitude toward travel products ($b = .18, p < .001$); however, it leads to minimum increase of R^2 for product attitude by .04.

Table 52. Moderating Effect of Pre-trip Flexibility on Travel Advertising Response Model

Path	Coefficient	R^2	ΔR^2	t-value
Attention → Ad Attitude	.33	.55	.03	5.65***
Recall → Ad Attitude	.01			0.15
Informativeness → Ad Attitude	.13			2.66**
Positive Emotion → Ad Attitude	.27			5.80***
Negative Emotion → Ad Attitude	-.15			3.43
Pre-Trip Flexibility (PTF) → Ad Attitude	.03			0.58
PTF × Attention → Ad Attitude	-.15			1.46
PTF × Recall → Ad Attitude	.14			1.55
PTF × Informativeness → Ad Attitude	.10			1.25
PTF × Positive Emotion → Ad Attitude	-.10			1.19
PTF × Negative Emotion → Ad Attitude	-.05			0.75
Ad Attitude → Product Attitude	.55	.38	.04	13.11***
PTF → Product Attitude	.18			3.32***
PTF × Ad Attitude → Product Attitude	-.07			0.61
Product Attitude → Intention	.63	.41		13.43***
PTF → Intention	.02			0.43
PTF × Product Attitude → Intention	-.02			0.33

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; PTF means Pre-Trip Flexibility

6.1.2 The Quadratic Moderating Effect of Decision Flexibility on Travel Advertising Response Model

A polynomial regression model (see equation 1) was used to examine the quadratic effect of decision flexibility on the travel advertising response model consisting of cognitive, affective, and conative responses. From the parsimonious aspect of the model development, this study proposed 14 regression models that take into account each advertising response and decision flexibility. However, a specific result that indicates significant findings is described below: the effect of Pre-trip flexibility with advertising attitude on attitude toward travel products. The rest of regression results are attached in the Appendix G.

The effect of advertising attitude and Pre-trip Flexibility on attitude toward products advertised (Equation 1)

$$Z_{\text{Product Attitude}} = X_{\text{Advertising Attitude}} + Y_{\text{Pre-trip flexibility}} + X_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}} + X_{\text{Advertising Attitude}}^2 + Y_{\text{Pre-trip flexibility}}^2 + X_{\text{Advertising Attitude}}^3 + Y_{\text{Pre-trip flexibility}}^3 + X_{\text{Advertising Attitude}}^2 * Y_{\text{Pre-trip flexibility}} + X_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}}^2$$

Before conducting the hierarchical polynomial analysis, regression diagnostics were tested to identify potential outliers as higher-order factors are sensitive to outliers in the polynomial regression model (Gefen & Pavlou, 2011) as well as the outliers largely influence the variance explained of a dependent variable (e.g., advertising and product attitude, and purchasing intention) (Edward, 2002). Four diagnostic estimations are taken into account such as leverage (a measure of how strongly the data for case i

verify the fitted dependent variable), studentized residuals (ones converted to a scale approximately representing the standard deviation of an individual residual from the center of the residual distribution), Cook's distance (an influence measure based on the difference between the regression parameter estimated β and what they become if the i th data point is deleted), and regression residual plots, suggested by Edwards, (2002), Shanock, Baran, Gentry, Pattison, and Heggestad, (2010), and Venkatesh and Goyal (2010). More specifically, the response data was regarded as an outlier when it shows leverage value over .111 ($4 \times p/n$), the absolute value of studentized residuals over 2.0, and Cook's distance over .011 ($4/n$). VIF and tolerance values are initially concerned to check potential multicollinearity between factors in the regression model based on the cut-off level as 10 of VIF (Chatterjee, Hadi, & Price, 2000). The diagnostic results of the regression model including En-route flexibility indicate a multicollinearity issue between the quadratic and cubic effects of flexibility. Thus, this research excludes the cubic effect of En-route flexibility in the regression analyses. Since the main aim of the polynomial regression is to estimate the quadratic moderating effect of flexibility rather than direct effect, this study argues that eliminating the cubic term of flexibility in the regression models is not major issue in this analysis. Additionally, the data for independent and dependent variables are catered by subtracting the mean from the measured value. Aiken and West (1991) suggest that scale centering reduces the level of multicollinearity between component measures and their associated higher-order terms (Edwards, 2007).

After checking these regression diagnostics, a hierarchical polynomial regression is conducted following five steps: first, the main independent variables (Block 1), second the linear interaction effects of decision flexibility with advertising responses (Block 2),

third the quadratic effects of decision flexibility and advertising responses (Block 3), fourth the cubic effects of decision flexibility and advertising responses (Block 4), and fifth the quadratic moderating effect of decision flexibility with advertising responses (Block 5) so as to examine the changes of the variance explained across sequential models, including linear, interaction, quadratic, and cubic effects.

Before estimating the hierarchical regression (Equation 1), this research conducted correlation analysis to assess collinearity between Pre-trip flexibility, advertising and product attitudes including not only main effect but also higher-order terms. As shown in Table 53, correlation values indicate acceptable levels with a little concern between advertising attitude and the cubic term of the advertising attitude, .82. However, Simkiss, Ebrahim, and Waterston (2009) mentioned that when correlation value between two explanatory variables is over .80, one needs to be aware of possible collinearity and is suggested to check other diagnostic methods. If the correlation is over .95, the collinearity problem is very serious. Furthermore, Tabachnick and Fidell (2007) stated that “The statistical problems created by singularity and multicollinearity occur at much higher correlations (.90 and higher)” (pp. 90) (Fox, 1991). Accordingly, the results of other regression diagnostics are indicated in Table 54 including VIF and conditioning index of the regression model. For example, all VIF are below 10 and conditioning index is between 1.0 and 7.1. Belsely et al. (1980) suggest that conditioning index greater than 30 implies the collinearity. Additionally, there is no factor that shows exceptionally high standard errors. Thus, based on these diagnostic results, there is limited concern of collinearity between explanatory factors in the regression model (Equation 1).

Table 53. Pearson Correlation between Ad Attitude, Flexibility, and Product Attitude - Main Study

	AdAtti	PTF	AdAtti*PTF	AdAtti ²	PTF ²	AdAtti ³	PTF ³	AdAtti ² *PTF	AdAtti*PTF ²	ProAtti
AdAtti	1									
PTF	.16**	1								
AdAtti*PTF	-.05	-.01	1							
AdAtti ²	-.27**	-.07	.18**	1						
PTF ²	-.01	-.46**	.14**	.14**	1					
AdAtti ³	.82**	.15**	-.12*	-.60**	-.04	1				
PTF ³	.08	.77**	-.04	-.12*	-.79**	.10	1			
AdAtti ² *PTF	.22**	.76**	-.24**	-.19**	-.47**	.29**	.69**	1		
AdAtti*PTF ²	.33**	.43**	-.25**	-.18**	-.38**	.31**	.51**	.57**	1	
ProAtti	.58**	.25**	-.03	-.20**	-.10	.48**	.18**	.25**	.55**	1

Note: AdAtti means Advertising Attitude, PTF means Pre-trip Flexibility, ProAtti means Product Attitude; * $p < .05$; ** $p < .01$; *** $p < .001$

A polynomial regression for attitude toward travel products with advertising attitude and Pre-trip flexibility was conducted after deleting three outliers. As shown in Table 54, the cubic effects of Pre-trip flexibility ($\beta = -.31$ $p < .001$ in Block 5) were statistically significant. More interestingly, the significant result about the quadratic moderating effect of flexibility was identified in Block 5 ($\beta_{\text{Ad. Attitude X Pre-trip Flexibility}}^2 = .53$) with the substantial improvement of variance explained for attitude toward travel products ($\Delta R^2 = .15$). To further investigate the moderating effect, Cohen's f^2 was calculated to estimate the effect size of the higher-order factor by comparing the differences of R^2 between the linear (Model 1) and higher-order effects (Model 5) (Cohen, 1988). Then, it indicates the middle effect size of Pre-trip flexibility for product attitude with f^2 value of .31

Table 54. Hierarchical Polynomial Regression for Product Attitude with Advertising Attitude and Pre-trip Flexibility - Main Study

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.55*** (1.0)	.55*** (1.0)	.54*** (1.1)	.62*** (4.2)	.46*** (4.5)
Pre-trip Flexibility	.16*** (1.0)	.16*** (1.0)	.15** (1.3)	.17* (3.1)	.28*** (4.1)
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X Pre-trip Flexibility		.00 (1.0)	.01 (1.1)	.01 (1.1)	.09* (1.2)
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			-.04 (1.1)	-.08 (2.1)	-.06 (2.1)

Table 54. (continued)

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
(Pre-trip Flexibility) ²			-.02 (1.3)	-.04 (3.5)	-.10 (3.5)
<i>Block 4: Cubic Effects</i>					
(Ad. Attitude) ³				-.10 (6.1)	-.05 (6.5)
(Pre-trip Flexibility) ³				-.04 (6.7)	-.31* (7.4)
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X Pre- trip Flexibility					-.17* (3.4)
Ad. Attitude X Pre- trip Flexibility ²					.53*** (1.8)
Adjusted R ²	.36	.36	.36	.35	.51
F (df)	100.48 (2)***	66.80 (3)***	40.14 (5)***	28.74 (7)***	42.37 (9)***

Note: values in the brackets indicate VIF; conditioning index is between 1.0 and 7.1; * p < .05; ** p < .01; ***p < .001

To further validate the coefficient value and R² derived from the quadratic flexibility effect, this study conducted cross-validation analysis where the data was randomly divided into two data sets sharing 50% of the total sample (one - estimation data, N= 188 & another - test data sets, N = 172). Then, the same procedures used for testing the full data set were conducted to identify outliers and to assess collinearity between factors. While there is no outlier recognized in the estimation data, it turned out that 2 observations in the test data set should be removed as outliers. In terms of estimation data set, Table 55 presents the result of correlation analysis between advertising attitude, Pre-trip flexibility, and product attitude. Based on the consistent cut-off point of the full data

set, it indicates no considerable collinearity issue between factors as well as is similar with the one when concerning the full data set (see Table 53). Furthermore, VIF and conditioning indexes are calculated as shown in Table 56, and all of values are placed below the cut-off level (VIF < 10 and conditioning index < 30).

Table 55. Pearson Correlation between Ad Attitude, Flexibility, and Product Attitude – Estimation Data Set

	AdAtti	PTF	AdAtti*PTF	AdAtti ²	PTF ²	AdAtti ³	PTF ³	AdAtti ² *PTF	AdAtti*PTF ²	ProAtti
AdAtti	1									
PTF	.18*	1								
AdAtti*PTF	-.13	-.15*	1							
AdAtti ²	-.48**	-.09	.18*	1						
PTF ²	-.06	-.49**	.22**	.08	1					
AdAtti ³	.63**	.09	-.15*	-.87**	-.01	1				
PTF ³	.11	.78**	-.19*	-.10	-.81**	.05	1			
AdAtti ² *PTF	.28**	.73**	-.45**	-.31**	-.50**	.32**	.68**	1		
AdAtti*PTF ²	.31**	.42**	-.30**	-.19*	-.48**	.15*	.58**	.61**	1	
ProAtti	.60**	.22**	-.07	-.28**	-.12	.33**	.17*	.25**	.52**	1

Note: AdAtti means Advertising Attitude, PTF means Pre-trip Flexibility, ProAtti means Product Attitude; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 56. Hierarchical Polynomial Regression for Product Attitude with Advertising Attitude and Pre-trip Flexibility – Estimation Data Set

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.58*** (1.0)	.58*** (1.0)	.59*** (1.3)	.64*** (1.8)	.47*** (2.0)
Pre-trip Flexibility	.12* (1.0)	.12* (1.1)	.10 (1.4)	.11 (3.4)	.31** (4.5)
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X Pre-trip Flexibility		.02 (1.0)	.03 (1.1)	.03 (1.1)	.06 (1.4)
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			.01 (1.3)	-.14 (4.4)	-.06 (4.4)
(Pre-trip Flexibility) ²			-.05 (1.4)	-.03 (3.7)	-.08 (3.8)
<i>Block 4: Cubic Effects</i>					
(Ad. Attitude) ³				-.20 (5.5)	-.03 (5.9)
(Pre-trip Flexibility) ³				-.01 (7.4)	-.34* (8.3)
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X Pre-trip Flexibility					-.23* (4.1)
Ad. Attitude X Pre-trip Flexibility ²					.55*** (2.1)
Adjusted R ²	.36	.36	.36	.36	.50
F (df)	54.47 (2)***	36.19 (3)***	21.63 (5)***	15.78 (7)***	21.94 (9)***

Note: values in the brackets indicate VIF; conditioning index is between 1.0 and 7.7; * p < .05; ** p < .01; ***p < .001

According to the results of polynomial regression, the cubic effect of Pre-trip flexibility is statistically significant ($\beta = -.34$ $p < .001$ in Block 5) and the coefficients of the quadratic moderating effect of flexibility indicates .55. The variance explained of attitude toward travel products in Block 5 is about 50% ($\Delta R^2 = 14\%$), which shows similar values with the results of the original model (Full data set) (see Table 56).

Table 57 shows the results of the correlation analysis using test data set and indicates a correlation value over .90 between advertising attitude and advertising attitude³. It can be explained that as the sample size is smaller, the impact of collinearity is increased. That is, the number of sample in the test data set (170: slightly less than half of total samples) may arise the possibility of potential collinearity. Nevertheless, in order to make sure the potential effect of collinearity, this study deleted advertising attitude³ in the regression model and compared the regression findings between models including and excluding advertising attitude³ as well as between the results of full data set and test data set. As this study mentioned above, removing the cubic term of ad attitude in the regression models is not major issue as the purpose of the polynomial regression is to estimate the quadratic moderating effect of flexibility. The results of the revised correlation analysis after removing advertising attitude³ are presented in Table 58 and it seems restricted collinearity issue to be concerned ($r < .82$). Then, the hierarchical polynomial regression was conducted without advertising attitude³. As expected, VIF indexes are lower than 10 and conditional index are below 30. The coefficient of the quadratic moderating effect of flexibility is .53 and R^2 explaining the dependent variable in Block 5 indicates about 51% ($\Delta R^2 = 16\%$). As described above, the results of regression model including the coefficients, F-values and the change of R^2 are consistent

with the model that includes advertising attitude³ (see Appendix H) as well as one of full model (see Table 54). Therefore, these findings imply that collinearity does not significantly influence the estimated cubic effect in the regression model.

Table 57. Pearson Correlation between Ad Attitude, Flexibility, and Product Attitude – Test Data

	AdAtti	PTF	AdAtti*PTF	AdAtti ²	PTF ²	AdAtti ³	PTF ³	AdAtti ² *PTF	AdAtti*PTF ²	ProAtti
AdAtti	1									
PTF	.12	1								
AdAtti*PTF	-.01	.21**	1							
AdAtti ²	-.01	-.01	.11	1						
PTF ²	.08	-.51**	-.05	.11	1					
AdAtti ³	.91**	.11	.00	-.22**	.09	1				
PTF ³	.01	.78**	.22**	-.06	-.83**	.01	1			
AdAtti ² *PTF	.15*	.82**	.26**	.01	-.46**	.14	.69**	1		
AdAtti*PTF ²	.25**	.32**	-.31**	.06	-.25**	.21**	.34**	.20**	1	
ProAtti	.55**	.30**	-.08	-.02	-.12	.49**	.22**	.24**	.58**	1

Note: AdAtti means Advertising Attitude, PTF means Pre-trip Flexibility, ProAtti means Product Attitude, * p < .05; ** p < .01; ***p < .001

Table 58. Pearson Correlation between Ad Attitude, Flexibility, and Product Attitude excluding Cubic Effect of Advertising Attitude – Test Data

	AdAtti	PTF	AdAtti*PTF	AdAtti ²	PTF ²	PTF ³	AdAtti ² *PTF	AdAtti*PTF ²	ProAtti
AdAtti	1								
PTF	.13	1							
AdAtti*PTF	.04	.20**	1						
AdAtti ²	-.02	-.01	.14	1					
PTF ²	.08	-.41**	-.01	.11	1				
PTF ³	.03	.75**	.21**	-.05	-.77**	1			
AdAtti ² *PTF	.19*	.81**	.21**	.02	-.39**	.68**	1		
AdAtti*PTF ²	.33**	.44**	-.14	.02	-.20**	.40**	.45**	1	
ProAtti	.56**	.29**	.02	-.04	-.06	.18*	.28**	.61**	1

Note: AdAtti means Advertising Attitude, PTF means Pre-trip Flexibility, ProAtti means Product Attitude, * p < .05; ** p < .01; ***p < .001

Table 59. Hierarchical Polynomial Regression for Product Attitude with Advertising Attitude and Pre-trip Flexibility – Test Data Set

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.53*** (1.0)	.53*** (1.0)	.53*** (1.0)	.53*** (1.0)	.39*** (1.2)
Pre-trip Flexibility	.22** (1.0)	.23*** (1.1)	.23** (1.3)	.24* (2.8)	.21 (4.3)
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X Pre-trip Flexibility		-.05 (1.0)	-.05 (1.1)	-.05 (1.1)	.12* (1.3)
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			-.02 (1.0)	-.02 (1.0)	-.06 (1.0)
(Pre-trip Flexibility) ²			-.01 (1.3)	-.02 (3.2)	-.14 (3.3)
<i>Block 4: Cubic Effects</i>					
(Pre-trip Flexibility) ³				-.02 (6.1)	-.26* (6.5)
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X Pre-trip Flexibility					-.10 (3.3)
Ad. Attitude X Pre-trip Flexibility ²					.53*** (1.6)
Adjusted R ²	.35	.35	.34	.34	.51
F (df)	46.54 (2)***	31.19 (3)***	18.54 (5)***	15.36 (6)***	22.97 (8)***

Note: values in bracket indicate VIF; * p < .05; ** p < .01; ***p < .001; conditioning index is between 1.0 and 6.0

Additionally, some researchers argue that certain statistical method (e.g., multiple regression and ANOVA) that test a number of hypotheses has the potential of inflating

alpha level of the study, implying that setting alpha (0.05) is not sufficient to protect against a Type I error. Accordingly, this study conducted Bonferroni Adjustment to control for the inflation problem of alpha value. Based on Bonferroni t-statistics suggested by Korn and Graubard (1990), the revised alpha level is simply calculated by Desired alpha for the study divided by number of parameters, $0.05/8 = 0.00625$. As suggested in the literature, this approach can protect against alpha level inflation from multiple tests of significance. Based on this approach, the results of the original model was re-checked again: the quadratic moderating effect of Flexibility is still statistically significant.

This study also tested the null hypothesis for the specific coefficient (i.e., the quadratic moderating effect of flexibility $\beta = 0$) based on Bonferroni procedure, $\max(|\hat{\beta}/S|) \geq t^{\alpha/2p}$ where S is the standard error and $t^{\alpha/2p}$ is the upper $\alpha/2p$ ($p =$ number of parameters) point of a t distribution with df. Accordingly, the result rejects the null hypothesis. Therefore, based on these findings, I can say that the quadratic moderating effect of flexibility is justified and statistically leads a significant improvement in the variation in purchasing attitude.

To further investigate the moderating effects of decision flexibility on advertising response model, response surface analysis was conducted using XLSTAT software. Since three variables can be shown in 3-D graph indicating each axis, separate polynomial regression model was estimated. This research shows a certain graph describing the effect of advertising attitude and Pre-trip flexibility on attitude toward travel products (see Figure 7). More specifically, the response surfaces were developed based on the unstandardized coefficients of the polynomial regression model indicated by standardized

forms in Tables 54. Then, scale-point centering method was conducted because it makes researchers easy to interpret the results (Edwards, 2007):

The moderating effect of Pre-trip flexibility with advertising attitude on product attitude (see Figure 7)

$$Z_{\text{Product Attitude}} = .048 + .375 * X_{\text{Advertising Attitude}} + .206 * Y_{\text{Pre-trip flexibility}} + .082 * X_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}} + .067 * X_{\text{Advertising Attitude}}^2 + .05 * Y_{\text{Pre-trip flexibility}}^2 + .033 * X_{\text{Advertising Attitude}}^3 + .059 * Y_{\text{Pre-trip flexibility}}^3 + .143 * X_{\text{Advertising Attitude}}^2 * Y_{\text{Pre-trip flexibility}} + .332 * X_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}}^2$$

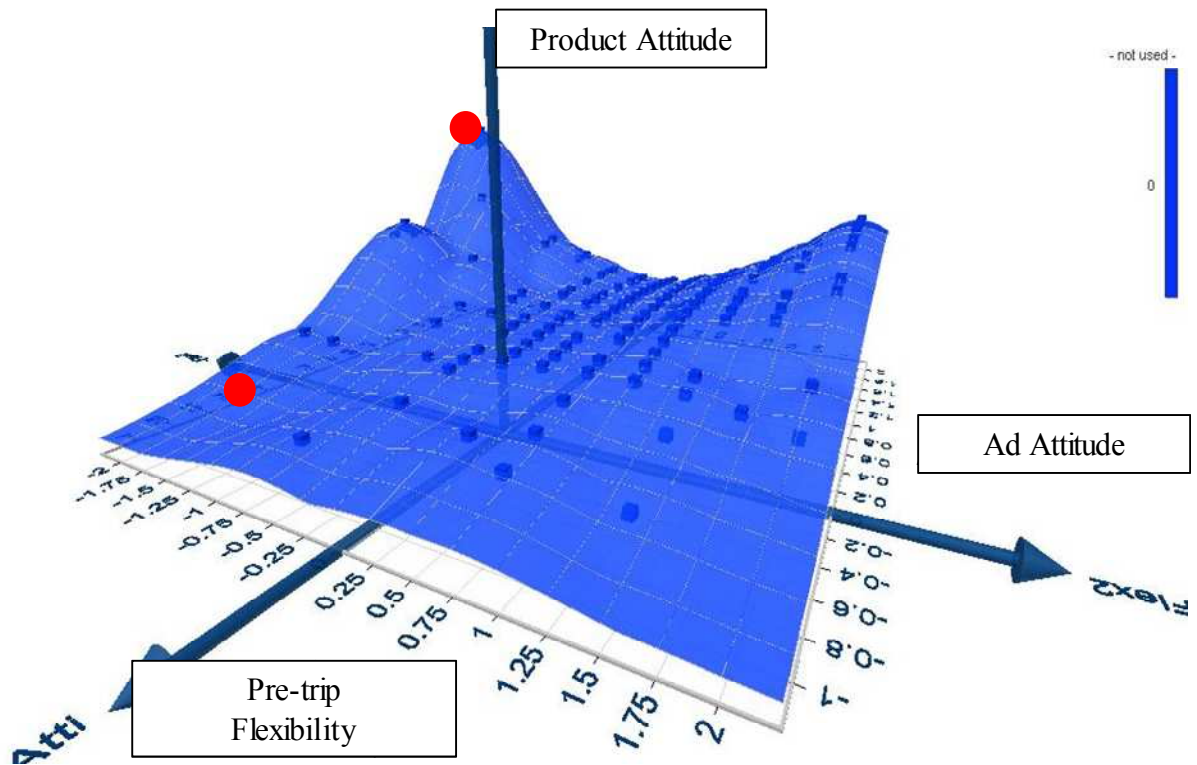


Figure 7. 3-D View of the Moderating Effect of Pre-trip Flexibility with Advertising Attitude on Attitude toward Travel Products

Overall, response surface analysis indicates an apparent moderating effect of Pre-trip flexibility on the relationship between attitude toward advertising and travel product (see Figure 7). First, the calculation to identify Stationary Points was attempted in order to conduct more specific analysis of the response surface method. However, since the estimated Stationary Points were over the range of the data, this study showed two points indicating the minimum and maximum spots within the local range of the data. Accordingly, the other estimations of response surface analysis (i.e., principal axes and slopes) based on the Stationary Points were not tested in this study. Thus, this research uses the surface result to check the validation of the findings from polynomial regression models and interpreting the relationships on the 3-D view. The scatter plot including three variables of the original data is also added in Appendix J.

The surface graph suggests that Pre-trip flexibility has a U-shape relationship with product attitude after '0' value of advertising attitude. That is, the curvilinear pattern is clearer when travelers positively estimate travel advertising (over '0' in the axis indicating 'Neither Agree nor Disagree' in the survey). Also, within travelers who positively assess travel advertisements, high and low flexible travelers in Pre-trip decisions perceive higher values of product attitude than ones who have the middle level of Pre-trip flexibility.

Summary

This chapter reports the results of a series of analyses that estimated the linear and quadratic moderating effects of decision flexibility within the tourism advertising response model. The results using the main data set indicate a quadratic moderating effect of Pre-trip flexibility on the relationship between attitudes toward advertising and travel

products; the moderating impact of Pre-trip flexibility was demonstrated by the substantial increase of R^2 and the acceptable Cohen's f^2 value. While a significant finding is identified, this study does not support any hypothesis about the moderating effect of flexibility as summarized in Table 60.

Table 60. Results of the Hypothesis Estimations Regarding Moderating Effect of Decision Flexibility

	Hypotheses	Results
H4a	Decision flexibility moderates the relationship between adverting attention and attitude toward advertising.	Not supported
H4b	Decision flexibility moderates the relationship between adverting recall and attitude toward advertising.	Not supported
H4c	Decision flexibility moderates the relationship between adverting informativeness and de toward advertising.	Not supported
H4d	Decision flexibility moderates the relationship between adverting emotion and de toward advertising.	Not supported
H5	Decision flexibility moderates the relationship between attitude toward advertising and attitude toward travel products.	Not supported
H6	Decision flexibility moderates the relationship between attitude toward advertised travel products and intention to purchase travel products.	Not supported

CHAPTER 7

CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

When confronting economic crisis, efficiency and effectiveness in advertising are critical issues facing destination marketing organizations. A number of studies about destination advertising evaluation have focused on the process by which one chooses a travel destination promoted on the advertisement. However, it is clear that these models over simplify the travel decision making process in that they (i.e., travelers) are required to make a variety of sub-decisions. Additionally, it argued that these models fail to incorporate key situation variables reflecting the extent to which they perceive themselves to be flexible or adaptable to changes in the situation. Accordingly, this chapter presents the results of two studies (i.e., pilot and main studies) that estimate the destination advertising response model based upon the facet-based approach and incorporates decision flexibility. The following sections provide detailed discussion of the findings and then the contributions of the dissertation with limitations and future research are discussed.

7.1 Conclusions

This study was based upon a basic destination advertising model whereby it was assumed that travelers' cognitive and affective perceptions of destination advertising form the overall attitudes toward the advertising, which in turn, influences attitudes toward travel products and consequently, intentions to purchase these products. In particular, this research considered several sub-decisions to estimate intentions to purchase travel products other than a single destination. A set of factor analyses (e.g.,

exploratory and confirmatory factor analyses) confirmed the unidimensional structure of purchasing intentions based upon four types of travel products (e.g., places/attractions, accommodations, restaurants, and shopping facilities) in the pilot study and five types of the products in the main study (e.g., places/attractions, accommodations, restaurants, and shopping facilities and visiting an additional destination).

The proposed four stage destination advertising response model was then evaluated whereby the first stage included three cognitive (i.e., attention, recall, and informativeness) and two affective responses (i.e., positive and negative emotions). Of these three cognitive factors, attention and informativeness were statistically significant and have a substantial impact on attitude toward the tourism ads ($b_{\text{attention-Ad attitude}} = 0.36$; $b_{\text{informativeness-Ad attitude}} = 0.15$). Both types of affective responses, positive and negative emotions ($b_{\text{PositiveEmotion-Ad attitude}} = 0.29$; $b_{\text{NegativeEmotion-Ad attitude}} = -0.16$), also were found to be significant, and confirm that emotions play important roles in affecting attitude toward advertising. Importantly, the relationships between the two constructs attitude toward destination advertising and product attitudes, and attitude toward travel products and intention to purchase advertised products are also significant ($b_{\text{Ad attitude-Pro.attitude}} = 0.58$; $b_{\text{Pro.attitude-Intention}} = 0.64$).

While advertising researchers generally argue that recall is one of the important cognitive variables that influence attitude toward advertising (Chattopadhyay & Alba, 1988; Haley & Baldinger, 1991), this study found a non-significant relationship between recall and attitude toward destination advertising. One way to explain this finding relates to the unique nature of tourism; that is, due to the characteristics of travel products (i.e., intangibility and perishability), research indicates that people generally perceive travel

products high risk and therefore they tend to search for as much information as possible in order to reduce ambiguity (Werthner & Klein, 1999). As suggested by Krugman (2000) and Wells (2000), the extent to which advertising provides useful information and/or evokes emotional motivation may be more critical as they are likely to increase the likelihood of purchasing promoted travel products. Additionally, two types of emotions play direct causes in creating advertising attitude; in particular, positive emotion is relatively more influential in forming attitude toward the destination advertising than negative emotion, according to statistical coefficients between the constructs. This might be interpreted as when travelers perceive a positive feeling after exposure to travel advertising, they are more likely to consider it as an effective advertisement. Thus, these findings support the notion that cognitive and affective responses can operate simultaneously.

The results of the analyses also demonstrated that there is a significant positive relationship between attitudes toward the destination advertising and travel products, and confirms the hypothesis that promoted products are more recognized by travelers who are favorable toward the advertisement than those who do not like it. In other words, favorable responses to an advertisement generate positive evaluations toward the products promoted and in turn, increase brand loyalty (Hwang, et al., 2011). Importantly, attitude toward travel products plays a significant mediating role that influences intention to purchase travel products. As proposed, the results of this study indicate that travelers who are favorable toward travel products promoted in the advertising campaign tend to purchase a number of different products, and vice-versa, those travelers who are

unfavorable toward the travel products tend to purchase a fewer number of travel products.

It was hypothesized that travel decision flexibility moderates the basic relationships within the core destination advertising response model. This study found that travelers perceive different levels of flexibility in their decisions depending on different facets of travel (Hyde & Laesser, 2009; Ricci, Cavada, Mirzadeh, & Venturini, 2006). For example, this study found that travelers are quite flexible when considering restaurants (M = 4.25 in the pilot study & 4.18 in the main study), followed by shopping facilities (M = 4.10 & 4.00), places or attractions (M = 3.89 & 3.91), additional destinations (M = 3.55 & 3.68), and accommodations (M = 2.89 & 3.11). As such, the results suggest two dimensions of flexibility which were described as “En-route flexibility” (which included shopping facilities and restaurants) and “Pre-trip flexibility” (which consisted of overnight accommodations, additional travel destinations, and places or attractions to visit). This finding concurs with the argument of Fesenmaier and Jeng (2000) that primary/secondary destinations, accommodations, attractions, and activities at the destination represent “core” and/or “secondary” decisions, while shopping facilities and restaurants constitute “en-route” decisions (Jeng, 2002). Moreover, the vacation decision-making study conducted by Hyde and Lawson (2003) found that travel consists of decisions for elements prior to the vacation’s commencing as well as a great number of unplanned elements.

Based on the recognition of two types of flexibility, a series of analyses were first conducted to test for their validity; in particular, the number of alternatives considered and involvement of the destination were compared with the two decision flexibility

constructs. The findings partially support the proposed construct, whereby highly flexible travelers appear to prefer to delay their decisions until the moment of final consumption at which they search for sufficient information in order to arrive at a final choice. This finding suggests that highly flexible travelers are likely to attempt to preserve future options (i.e., alternatives) by maintaining potential flexibility until future preferences are certain (March, 1978); also, the study four that highly involved travelers tend to be less flexible for their trip decisions. The composition of a travel party also differed depending on different types of flexibility whereby travelers in a group of friends and/or those who travel alone are more likely to be flexible for en-route decisions. O’Leary et al. (1974, p.211) found that a “set of activities can be associated with groups, and activities do become interchangeable depending on the configuration of the group and the purpose of taking part in activities” (p.211). Also, So and Lehto (2007) compared different benefits sought and travel activities between those traveling with friends, with family, and alone and found that those travel groups which included friends are more likely to be active and focused on social engagement and, as such, tend to be more flexible in terms of their en-route decisions. Hyde and Lawson (2003) found that independent travelers tend not to plan trips in advance; rather, they learn the travel elements after arrival. Finally, the results of this study found that when travelers are confident with regards to their knowledge about travel products, they are flexible to changing their decisions. That is, travelers who have a high degree of knowledge about travel products tend to be more adaptable because they already have sufficient information with which to compare and evaluate the various travel products.

A series of statistical analyses were then conducted to estimate the moderating effects of decision flexibility within the core advertising response model using PLS, polynomial regression and the response surface method. The results of these analyses indicate that decision flexibility plays a significant moderating role in a certain stage of the destination advertising response model. Specifically, the results suggest a strong U-shaped relationship of Pre-trip flexibility between attitude toward advertising and travel products ($\beta_{\text{advertising attitude} * \text{Pre-trip flexibility}^2} = 0.53$). In addition to the significant path coefficient, the substantial improvement of R^2 (the quadratic moderating effect of Pre-trip explains 15 percent more variance on product attitude as compared to the model without the quadratic effect) confirms the U-shape relationship between Pre-trip flexibility and advertising attitude, indicating that advertising attitude largely influences on product attitude with travelers who are high or low flexible for pre-trip decisions after exposure to the destination advertisement.

A series of consumer behavior studies (see Payne et al., 1982; 1992a; 1992b; 1993) about contingent decision making argued that individuals use a variety of choice strategies (Abelson & Levi, 1985). That is, the use of a particular decision strategy is contingent on many tasks and context variables such as number of alternatives, *contingent information processing* (Payne, Bettman, & Johnson, 1988). Payne et al., (1993) identified that consumers employ varied information processing strategy depending on problem and situational contexts (e.g., number of alternatives equivalent with level of decision flexibility in this study). More specifically, an individual who consider large number of alternatives (i.e., high flexible travelers in this study) will use a compensatory strategy that processes all information and trade-off the good and bad

aspects of each alternative. In contrary, the person who considers small number of alternatives (i.e., low flexible travelers in this study) might use noncompensatory decision strategy, which avoids trade-off among values and adopt information selectivity.

In addition to adaptive decision making aspect, based upon the assumption that high flexible travelers who maintain the large number of alternatives are not certain about their preferences for purchasing decisions, they may considerably search for information in order to reduce the perceived uncertainty (Mitra, Reiss, & Capella, 1999; Moorthy et al., 1997; Vogt & Fesenmaier, 1998). Thus, high flexible travelers may be favorable on the product (i.e., positive attitude toward travel products) when advertising provides inclusive and effective information allowing them to thoroughly evaluate the values between alternatives. This contrasts with travelers that are not flexible in that they generally tend to consider a limited number of choices, but evaluate each alternative a lot. It is largely identified that people often systematically prefer information that is consistent with their beliefs, attitudes, or decisions and, in contrast, overlook inconsistent information: *selective exposure to (consistent) information* (Fischer, Schulz-Hardt & Frey, 2008). For example, Ditto and Lopez (1992) found that people tend to over-estimate the diagnostic value of supportive information and under-estimate the diagnostic value of conflicting information, implying that increased commitment to a position leads to a stronger confirmation bias in information processing. In terms of attitude strength, Krosnick and Petty (1995) found that the selected exposure effect (i.e., behaviors seeking information that provides the consistency with travelers' beliefs and attitudes) is more evident for more strongly held attitudes (i.e., positive attitude toward destination advertising). Based on this theory, low flexible travelers who have limited alternatives

may be favorable on the product promoted when they obtain supportive advertising information (i.e., positive attitude toward advertising).

7.2 Implications

The results of this study provide the foundation for developing a model of destination advertising that includes multiple facets of travel decision-making. Thus, this study proposes a new travel advertising model which may be described as a Facets-based Advertising Response model (FAR model), implying the importance of considering a number of aspects of travel and providing the way to evaluate the destination advertising model. Moreover, the current research includes Pre-trip flexibility as a moderating factor whereby it is argued that travelers are willing to change decisions to varying degrees depending on different aspects of the traveling experience (or types of decisions). Along with the definition of flexibility, this study examined the effect of flexibility in the way travelers process travel advertisements. While Jeng and Fesenmaier (2002) and Hwang and Fesenmaier (2011) suggested that flexibility in travel decision-making is important in terms of planned and unplanned decisions, these studies focused on conceptual arguments or used a substitutive variable (i.e., the level of spontaneous trip decision-making) to measure flexibility. Further, these studies emphasized the decision-making process rather than how they processed information (or advertisements). Recently, Choi et al. (2011) compared informational sources for travel used according to different decision-making stages; however, they did not actually measure travelers' levels of flexibility for decision-making but assumed that the different stages of the travel planning represent the different levels of flexibility. Thus, this study represents the first study to theoretically and

empirically define the construct of flexibility. Specifically, decision flexibility somehow relates with other situational factors and, more importantly, plays a moderating role in the evaluation stage of the advertising response model (conative stage). In other words, while there is a number of tourism advertising studies that identify the factors determining the information formats between cognitive and affective appeals to make effective communication, this study suggests an important situational factor (i.e., flexibility) that affects the consumer assessment of the product promoted on the advertisement. Thereby, this research suggests the approach to understanding travel flexibility and the way to estimate the role of decision flexibility in the information processing context.

The results of this study also offer a number of practical implications. In particular, the findings of this study are important for designing more effective and personalized information as well as allocating the available monetary resources for advertising. For example, the results show that destination advertising triggers both cognitive responses (i.e., attention and informativeness) and affective responses (i.e., positive and negative emotions) that engender attitudes toward the advertising and products promoted. Additionally, the findings of this research indicates that tourism advertising needs to contain information about the tourism destination, but also travel-related products including lodging, restaurants, activities, secondary destinations, and shopping facilities, since travelers perceive these as defining the overall travel decision. Also, since one sub-decision might influence other sub-decisions, an important consideration for marketers is to create advertising information/messages that promote interconnected products in travel packages.

Recent studies show that travelers who use mobile technology (e.g., smartphones) to search for travel information are more likely to extend the timing/moment for final decisions, thereby, increasing the likelihood of unplanned behavior (Koufaris, 2002; Monsuwe, Dellarert, & De Ruyter, 2004). As such, it argued that destination marketing organizations need to consider the degree to which potential travelers are willing to change their trip (especially for pre-trip decisions) because their perceived evaluation of travel products that directly engender the purchasing intention varies according the level of flexibility. More specifically, when destination marketers promote travel products for accommodations, places/attractions, and additional destinations, they need to appeal to high and low flexible travelers through more attractive travel advertisements.

7.3 Limitation and Future Research

Several limitations to this study exist. Importantly, the current study used a single item, “How flexible to change would you be once you had decided the following aspects of this trip?” This limitation may potentially limit testing the construct’s validity and reliability. Thus, future research might apply a multi-dimensional approach to defining flexibility for decision-making, which allows researchers to conduct comprehensive validity and reliability tests (e.g., exploratory and confirmatory methods). Also, this study used an imaginary trip to Chicago as the basis to simulate the travel planning process and, as such, may create errors of internal validity (Bagozzi, Gurhan-Canli, & Priester, 2002). In order to reduce potential errors, one recommendation is to collect data from travelers who are actually traveling to a range of different types of destinations.

As numerous tourism scholars suggested, situational contexts between three travel decision-making stages (i.e., pre-trip, en-route, and post-trip) differ fundamentally and this distinction influences travel and informational searching behaviors. However, this study investigated flexibility and the process of responses to advertising in the pre-trip context. As such, future research should also investigate each stage in order to assess the definition, level, and effect of flexibility. In the similar vein, the findings of this study show that the moderating effect of flexibility for just pre-trip decisions was significant, implying that the En-route flexibility has little systematic impact on how travelers evaluate travel advertising prior to the trip. It is argued in retrospect that while this finding might be expected in that the study/survey, and therefore did not capture adequately information search environment during the trip. Thus, future research should consider travelers who are en-route as well as prior to actual travel.

Also, this study examined the relationships between flexibility for travel decisions and other travel-related variables such as travel involvement, prior knowledge, number of alternatives, and travel groups. However, there are other important tourism-related factors to consider; for example, the numbers of travel companies (Hwang & Fesenmaier, 2011), travel expectations (Hui, Wan, & Ho, 2007), travel purposes (Gretzel et al., 2006), and travel personalities (Park, Tussyadiah, Mazanec, & Fesenmaier, 2010) in terms of travel-related variables, seeking information (Kuhlthau, 1991), and the need for cognition with regard to psychological variables, which influence travel decision and informational search behaviors. Thus, one suggestion for future research is to account for other travel-related and individual variables in order to understand, in detail, the nature and characteristics of flexibility for travel decisions.

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APPENDIX A

IRB APPROVAL



TEMPLE UNIVERSITY

Office for Human Subjects Protections Institutional Review Board Medical Intervention Committees A1 & A2 Social and Behavioral Committee B

Student Faculty Conference Center 3340 N Broad Street - Suite 304 Philadelphia, Pennsylvania 19140 Phone: (215) 707-3390 Fax: (215) 707-8387 e-mail: irb@temple.edu

Certification of Approval for a Project Involving Human Subjects

Protocol Number: 13994
PI: FESENMAIER, DANIEL
Approved On: 05-Aug-2011
Review Date: 05-Aug-2011
Committee: B BEHAVIORAL AND SOCIAL SCIENCES
School/College: Tourism and Hospitality (2100)
Department: Tourism:Tourism/Hospitality Dept (21030)
Sponsor: TEMPLE UNIVERSITY SCHOOL OF TOURISM & HOSPITALITY
Project Title: Understanding Responses to Travel Advertising: The Role of Flexibility in Travel Information Search

In accordance with the policy of the Department of Health and Human Services on protection of human subjects in research, it is hereby certified that protocol number 13994, having received preliminary review and approval by the department of Tourism:Tourism/Hospitality Dept (21030) was subsequently reviewed by the Institutional Review Board in its present form and approved on 05-Aug-2011 with respect to the rights and welfare of the subjects involved; appropriateness and adequacy of the methods used to obtain informed consent; and risks to the individual and potential benefits of the project.

In conforming with the criteria set forth in the DHHS regulations for the protection of human research subjects, and in exercise of the power granted to the Committee, and subject to execution of the consent form(s), if required, and such other requirements as the Committee may have ordered, such orders, if any, being stated hereon or appended hereto.

It is understood that it is the investigator's responsibility to notify the Committee immediately of any untoward results of this study to permit review of the matter. In such case, the investigator should call the IRB at (215) 707-3390.

This is the Certificate of Approval. Supplemental documentation will follow under separate cover. Enrollment may not begin until all documents have been reviewed and processed by the IRB and received by the study team.

Board determined conditions of approval applied to this protocol:

Table with 2 columns: Name (Fulfilled Date), Description

Handwritten signature of Zebulon Kendrick

ZEBULON KENDRICK, Ph.D. CHAIRMAN, IRB

APPENDIX B

CONSENT FORM

 **SCHOOL OF TOURISM & HOSPITALITY MANAGEMENT**
TEMPLE UNIVERSITY

Consent Form

Purpose and Procedures: This study is being conducted by the National Laboratory for Tourism and eCommerce, Temple University with the goal to estimate the role of travel decision flexibility in traveler's responses to tourism advertising. This study will take no longer than 10 minutes to complete.

Your participation in this research is voluntary. You may refuse to participate, discontinue participation, or skip any questions you don't wish to answer at any time without penalty or loss of the benefits to which you are otherwise entitled. All information will be handled by the research team.

Confidentiality: Although the study team has placed safeguards to maintain the confidentiality of my personal information, there is always a potential risk of an unpermitted disclosure. To that degree, all documents and information pertaining to this research study will be kept confidential, unless required by applicable federal, state, and local laws and regulations to be disclosed. I understand the records and data generated by the study may be reviewed by Temple University and its agents, the study sponsor or the sponsor's agents (if applicable), and/or governmental agencies to assure proper conduct of the study and compliance with regulations. I understand that the results of this study may be published. If any data is published, I will not be identified by name.

Who to Contact with Questions: Questions about this research study should be directed to the primary investigator, Mr. Sangwon Park, whom can be reached at 215-204-5612 or nltec@temple.edu.

If you have any questions about your rights as a research subject, you may contact the Institutional Review Board Coordinator at (215) 707-3390. The IRB Coordinator may also be reached by email: IRB@temple.edu or regular mail:
Institutional Review Board Coordinator
Temple University Research Administration
Student Faculty Conference Center
3340 North Board Street – Suite 304
Philadelphia, PA 19140

I certify that I am 18 years of age or older, have read this form, and volunteer to participate in this research study.

I DO NOT certify that I am 18 years of age or older, have read this form, and volunteer to participate in this research study.

APPENDIX C

SURVEY



Q2 Thank you for taking a moment to participate in our survey. Your response is crucial to the success of the study in helping us understand travelers' responses to tourism advertising. All your answers will be kept strictly confidential. Please be assured that no sales call will ever results from your participation. When you complete the survey, you will be automatically entered into a drawing to win \$100 and the winner will be notified by email. Thank you in advance for your participation!

Q3 The first section asks you about pleasure trips that you (and members of your household) have taken in the last 12 months. In the past 12 months, have you taken trips that were at least 50 miles, ONE WAY away from home, or that included an overnight stay? Please \checkmark one.

- Yes
- No

Q4 In the past 12 months, how many pleasure trips (including short overnight trips and long overnight vacations) have you taken within the Midwest United States? The Midwest United States includes the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. Please \checkmark one.

- None
- 1 trip
- 2 trips
- 3 trips
- 4 trips
- 5 - 10 trips
- 11 or more trips

Q5 How many times have you visited Chicago, Illinois in the past 3 years? Please \checkmark one.

- None
- 1 visit
- 2 visits
- 3 visits
- 4 visits
- 5 - 10 visits
- 11 or more visits

Q6 How would you describe Chicago, Illinois as a tourism destination? Please indicate your attitude toward Chicago, Illinois using the following word-pair descriptions. Please \checkmark one for each word-pair.

	1	2	3	4	5
Dislike:Like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad:Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative:Positive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unpleasant:Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Please rate your level of knowledge about the following aspects of Chicago, Illinois. Please √ one for each aspect of Chicago.

	Not at all knowledgeable	Somewhat knowledgeable	Moderately knowledgeable	Very knowledgeable	Extremely knowledgeable
Chicago as a tourism destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional destinations besides Chicago, Illinois to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The places or attractions to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight accommodations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Please rate your level of attractiveness about the following aspects of Chicago, Illinois. Please √ one for each aspect of Chicago. How attractive is/are ... ?

	Not at all attractive	Not attractive	Neutral	Attractive	Extremely attractive
Chicago as a tourism destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the places or attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the accommodations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Please indicate the likelihood of you visiting Chicago, Illinois within each of the following time periods.

	Extremely unlikely	Quite unlikely	Slightly unlikely	Slightly likely	Quite likely	Extremely likely
How likely are you to take a pleasure trip to Chicago, Illinois in the next 12 months?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to take a pleasure trip to Chicago, Illinois in the next 3 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to take a pleasure trip to Chicago, Illinois in the next 5 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Imagine that you will take a pleasure trip which includes travel to Chicago, Illinois within the next 12 months (including at least an overnight stay). The following questions ask about this imaginary trip to Chicago, Illinois. Who would go with you on this imaginary pleasure trip which includes travel to Chicago, Illinois? Please \checkmark all that may apply.

- Alone
- With children
- With Spouse/Partners
- With Friends

Q11 How many people (including yourself) will be on this imaginary trip which includes travel to Chicago, Illinois? Please \checkmark one.

- One
- Two
- 3 - 5 people
- 6 or more people

Q12 How far away (one-way distance) would be Chicago, Illinois on this imaginary trip? Please \checkmark one.

- 1 - 50 miles
- 51 - 100 miles
- 101 - 200 miles
- 201 - 300 miles
- over 300 miles
- Don't know

Q13 How long would this trip be? Please \checkmark one.

- 1 day
- 2 days
- 3 days
- 4 days
- 5 - 10 days
- 11 or more days

Q14 How many days before leaving on this imaginary trip would you actually start planning your visit which includes travel to Chicago, Illinois? Please \checkmark one.

- Day of departure
- 1 day before departure
- 2 - 6 days before departure
- 1 - 2 weeks before departure
- 3 - 8 weeks before departure
- 2 - 3 months before departure
- 4 - 6 months before departure
- More than 6 months before departure

Q15 What is your attitude toward planning this imaginary trip which includes travel to Chicago, Illinois? Please \checkmark one for each statement.

	1	2	3	4	5
Travel decision is unimportant.:Travel decision is very important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel decision requires little thought.:Travel decision requires a lot of thought.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Little to lose if I choose the wrong travel decision.:A lot of lose if I choose the wrong travel decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel decision is not mainly logical or objective.:Travel decision is mainly logical or objective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel decision is not based mainly on functional facts.:Travel decision is based mainly on functional facts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Again, thinking about planning this imaginary trip which includes travel to Chicago, Illinois, ...

	None	One	Two	3 - 5	6 - 10	Over 10
How many additional destinations besides Chicago, Illinois would you consider visiting?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many attractions would you consider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many restaurants would you consider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many accommodations would you consider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many shopping stores would you consider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 We would like to know about how much and when you would plan in advance this imaginary trip which includes travel to Chicago, Illinois. Please indicate the extent to which you would plan the following trip features. Please \checkmark one for each feature.

	Not at all planned in advance	Some planned in advance	Mostly planned in advance	Entirely planned in advance
The destinations to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The places or attractions to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight accommodations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 Again, thinking about this imaginary trip which includes travel to Chicago, Illinois, how flexible to change would you be, once you had decided the following aspects of this trip? Please drag the bar to answer.

- _____ Additional destinations besides Chicago, Illinois to visit
- _____ The places or attractions to visit
- _____ Restaurants
- _____ Overnight accommodations
- _____ Shopping stores

Q19 The following section asks you about Chicago, Illinois travel advertisements that you may have seen, read, or heard over the past 12 months. In the last 12 months, have you seen (read or heard) travel ads about Chicago, Illinois? Please \checkmark one.

- Yes
- No

If No Is Selected, Then Skip To End of Block

Q20 How many travel ads have you seen, read, or heard about Chicago, Illinois? Please drag the bar to answer.

_____ {CHOICE 1}

Q21 Where have you seen, read or heard travel ads about Chicago, Illinois? Please \checkmark one for each media channel.

	Yes	No	Not sure
TV / radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Magazine / newspaper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Billboard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22 How many times have you seen, read or heard travel advertising information (including travel images etc.) about the following trip features of Chicago, Illinois? Please \checkmark one.

	None of ads	Some of ads	Most of ads	All of ads
Chicago destination in general	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Chicago places or attractions to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight accommodations in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23 In the last 12 months, have you used the Internet to obtain travel information about Chicago, Illinois? Please \checkmark one.

- Yes
- No

Q24 How much travel information have you obtained regarding Chicago, Illinois via the Internet? Please drag the bar to answer.

_____ {CHOICE 1}

Q25 How many times have you seen travel website information (including travel images etc) about the following trip features of Chicago, Illinois? Please √ one.

	None of websites	Some of websites	Most of websites	All of websites
Chicago destination in general	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Chicago places or attractions to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight accommodations in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 What do you think about the travel ads and/or websites you saw, read, or heard from TV, radio, magazine, newspaper, billboard and/or the Internet about Chicago, Illinois? Please indicate the degree to which you agree or disagree with each of the following statement.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The Chicago travel ads/websites were eye catching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ads/websites were attractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I read/watched the ads/websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ads/websites were effective in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

producing engaging messages.					
I can remember most of the advertising/website content.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The advertising/website message enhances my impression toward Chicago.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe advertising content of the Chicago ads/websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I paid attention to the Chicago ads/websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27 Again, we would like to know what you think about the travel ads and/or websites you saw, read, or heard from TV, radio, magazine, newspaper, billboard and/or the Internet about Chicago, Illinois. Please indicate the degree to which you agree or disagree with each of the following statement. The Chicago travel ads and/or websites ...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
were good sources of travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provided relevant travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provided timely information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
were sources of up-to-date travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

information. made travel information immediately available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
were convenient sources of travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
supplied complete travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q28 How do you feel about the travel ads and/or websites you saw, read, or heard from TV, radio, magazine, newspaper, billboard, and/or the Internet about Chicago, Illinois? Please indicate the degree to which you agree or disagree with each of the following statement. The Chicago travel ads and/or websites make me feel ...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cheerful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warmhearted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoothed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Repulsed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shocked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insulted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q29 How would you evaluate the advertising and/or websites you saw, read, or heard from from TV, radio, magazine, newspaper, billboard, and/or the Internet about Chicago, Illinois? Please √ one for each word-pair.

	1	2	3	4	5
Not persuasive:Persuasive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad:Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not clear:Clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unappealing:Appealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unattractive:Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unconvincing:Convincing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simple:Complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall disliking:Overall liking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q30 After seeing, reading, or hearing the travel ads and/or websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois? Please √ one for each trip feature. How attractive is/are ...?

	Not at all attractive	Not attractive	Neutral	Attractive	Extremely attractive
Chicago as a tourism destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the places or attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the accommodations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31 When visiting Chicago in this imaginary trip, how likely are you to do the activities of the following statements? Please \surd one for each statement.

	Extremely unlikely	Quite unlikely	Slightly unlikely	Slightly likely	Quite likely	Extremely likely
How likely are you to visit the featured Chicago places or attractions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to visit the featured restaurants in Chicago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to stay at the featured accommodations in Chicago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to visit the featured shopping stores in Chicago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q32 This last section of the survey asks some general questions about you and your household. I am . . . Please \surd one

- Female
- Male

Q33 In what year were you born? (Please enter 4 digits)

Q34 How many people live in your household at the present time? Please fill in the blank.

Age 18 and over (Including yourself)	<input type="radio"/> 1 person	<input type="radio"/> 2 persons	<input type="radio"/> 3 persons	<input type="radio"/> 4-6 persons	<input type="radio"/> 7-10 persons	<input type="radio"/> 11 or more persons
Under age 18	<input type="radio"/> None	<input type="radio"/> 1 person	<input type="radio"/> 2 persons	<input type="radio"/> 3 persons	<input type="radio"/> 4-6 persons	<input type="radio"/> 7 or more persons

Q35 Which of the following statements best describes your total annual household income (from all sources) before taxes? Please \checkmark one.

- Less than \$19,999
- \$20,000 to 39,999
- \$40,000 to \$59,999
- \$60,000 to \$79,999
- \$80,000 to \$99,999
- \$100,000 to \$129,999
- \$130,000 to \$159,999
- \$160,000 and over

Q36 Thank you for your participation in this survey. Mr. Sangwon Park National Laboratory for Tourism & eCommerce Temple University

Q37 In the last 12 months, have you used the Internet to obtain travel information about Chicago, Illinois? Please \checkmark one.

- Yes
- No

If No Is Selected, Then Skip To This last section of the survey asks ...

Q38 How much travel information have you obtained regarding Chicago, Illinois via the Internet? Please drag the bar to answer.

_____ {CHOICE 1}

Q39 How many times have you seen travel website information (including travel images etc.) about the following trip features of Chicago, Illinois? Please \surd one.

	None of websites	Some of websites	Most of websites	All of websites
Chicago destination in general	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Chicago places or attractions to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight accommodations in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores in Chicago	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q40 What do you think about the travel websites about Chicago, Illinois? Please indicate the degree to which you agree or disagree with each of the following statement.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The Chicago travel websites were eye catching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The travel websites were attractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I read/watched the travel websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The travel websites were effective in producing engaging messages.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can remember most of the travel website contents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The travel websites enhance my impression toward Chicago.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe the content of the Chicago travel websites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I paid attention to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

the Chicago travel websites.					
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Q41 Again, we would like to know what you think about the travel websites about Chicago, Illinois. Please indicate the degree to which you agree or disagree with each of the following statement. The Chicago travel websites...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
were good sources of travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provided relevant travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provided timely information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
were sources of up-to-date travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
made travel information immediately available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
were convenient sources of travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
supplied complete travel information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q42 How do you feel about the travel websites about Chicago, Illinois? Please indicate the degree to which you agree or disagree with each of the following statement. The Chicago travel websites make me feel ...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cheerful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warmhearted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoothed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Repulsed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stimulated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shocked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insulted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q43 How would you evaluate the travel websites about Chicago, Illinois? Please √ one for each word-pair.

	1	2	3	4	5
Not persuasive:Persuasive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad:Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not clear:Clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unappealing:Appealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unattractive:Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unconvincing:Convincing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simple:Complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall disliking:Overall liking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfavorable:Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q44 After seeing or reading travel websites about Chicago, Illinois, how would you rate the attractiveness of the following trip features about Chicago, Illinois? Please \surd one for each trip feature. How attractive is/are ...?

	Not at all attractive	Not attractive	Neutral	Attractive	Extremely attractive
Chicago as a tourism destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the places or attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the accommodations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q45 When visiting Chicago in this imaginary trip, how likely are you to do the activities of the following statements? Please \surd one for each statement.

	Extremely unlikely	Quite unlikely	Slightly unlikely	Slightly likely	Quite likely	Extremely likely
How likely are you to visit the featured Chicago places or attractions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to visit the featured restaurants in Chicago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to stay at the featured accommodations in Chicago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely are you to visit the featured shopping stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

in Chicago?						
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Q46 This last section of the survey asks some general questions about you and your household. I am . . . Please \checkmark one

- Female
- Male

Q47 In what year were you born? (Please enter 4 digits)

Q48 How many people live in your household at the present time? Please fill in the blank.

Age 18 and over (Including yourself)	<input type="radio"/> 1 person	<input type="radio"/> 2 persons	<input type="radio"/> 3 persons	<input type="radio"/> 4-6 persons	<input type="radio"/> 7-10 persons	<input type="radio"/> 11 or more persons
Under age 18	<input type="radio"/> None	<input type="radio"/> 1 person	<input type="radio"/> 2 persons	<input type="radio"/> 3 persons	<input type="radio"/> 4-6 persons	<input type="radio"/> 7 or more persons

Q49 Which of the following statements best describes your total annual household income (from all sources) before taxes? Please \checkmark one.

- Less than \$19,999
- \$20,000 to 39,999
- \$40,000 to \$59,999
- \$60,000 to \$79,999
- \$80,000 to \$99,999
- \$100,000 to \$129,999
- \$130,000 to \$159,999
- \$160,000 and over

APPENDIX D

PLS CONFIRMATORY FACTOR ANALYSIS FOR ORIGINAL MEASUREMENT MODEL_PILOT STUDY

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Attention1	0.818	0.453	0.446	0.475	-0.278	0.472	0.352	0.296
Attention2	0.830	0.429	0.433	0.456	-0.272	0.481	0.352	0.263
Attention3	0.763	0.491	0.405	0.374	-0.204	0.393	0.299	0.259
Attention4	0.824	0.562	0.480	0.496	-0.260	0.516	0.364	0.311
Attention5	0.733	0.643	0.473	0.384	-0.218	0.452	0.361	0.333
Recall1	0.594	0.809	0.444	0.451	-0.221	0.449	0.331	0.330
Recall2	0.513	0.844	0.400	0.370	-0.038	0.371	0.235	0.305
Recall3	0.483	0.831	0.388	0.367	-0.059	0.340	0.218	0.297
Inform1	0.525	0.455	0.846	0.400	-0.253	0.510	0.410	0.339
Inform2	0.491	0.446	0.857	0.363	-0.213	0.448	0.368	0.313
Inform3	0.511	0.432	0.841	0.373	-0.217	0.458	0.394	0.330
Inform4	0.471	0.400	0.853	0.365	-0.180	0.444	0.395	0.334
Inform5	0.453	0.406	0.856	0.357	-0.197	0.448	0.393	0.320
Inform6	0.466	0.374	0.857	0.349	-0.259	0.479	0.398	0.308
Inform7	0.385	0.434	0.767	0.381	-0.107	0.395	0.375	0.347
PostEmo1	0.513	0.411	0.403	0.842	-0.343	0.542	0.405	0.347
PostEmo2	0.373	0.350	0.282	0.706	-0.018	0.339	0.250	0.245
PostEmo3	0.475	0.384	0.362	0.857	-0.204	0.444	0.387	0.331
PostEmo4	0.471	0.386	0.388	0.805	-0.259	0.471	0.353	0.287
PostEmo5	0.368	0.398	0.314	0.742	-0.056	0.360	0.270	0.249
PostEmo6	0.175	0.220	0.145	0.514	0.158	0.192	0.107	0.131
PostEmo7	0.307	0.247	0.223	0.545	-0.027	0.280	0.242	0.198
PostEmo8	0.197	0.251	0.186	0.488	0.085	0.194	0.117	0.137
PostEmo9	0.511	0.427	0.403	0.863	-0.294	0.531	0.425	0.345
NegEmo1	-0.300	-0.168	-0.255	-0.235	0.866	-0.357	-0.328	-0.184
NegEmo2	-0.287	-0.115	-0.226	-0.189	0.931	-0.323	-0.290	-0.162
NegEmo3	-0.301	-0.140	-0.253	-0.214	0.946	-0.337	-0.307	-0.174
NegEmo4	-0.253	-0.086	-0.178	-0.138	0.918	-0.290	-0.246	-0.131
NegEmo5	-0.289	-0.121	-0.209	-0.198	0.934	-0.318	-0.274	-0.138
AdAtt1	0.540	0.462	0.501	0.510	-0.284	0.811	0.510	0.404
AdAtt2	0.490	0.395	0.465	0.480	-0.363	0.849	0.478	0.369
AdAtt3	0.440	0.339	0.437	0.408	-0.307	0.806	0.461	0.339
AdAtt4	0.537	0.418	0.466	0.490	-0.340	0.915	0.505	0.378
AdAtt5	0.515	0.410	0.447	0.473	-0.318	0.908	0.488	0.364
AdAtt6	0.511	0.444	0.498	0.496	-0.243	0.859	0.493	0.386
AdAtt7	-0.006	0.057	0.042	0.111	0.195	0.133	0.081	0.053

AdAtt8	0.488	0.396	0.448	0.467	-0.281	0.863	0.470	0.361
AdAtt9	0.507	0.391	0.471	0.455	-0.328	0.865	0.509	0.384
ProAtt1	0.421	0.269	0.405	0.365	-0.352	0.532	0.831	0.450
ProAtt2	0.384	0.236	0.400	0.360	-0.326	0.531	0.806	0.398
ProAtt3	0.317	0.267	0.345	0.323	-0.204	0.416	0.827	0.499
ProAtt4	0.370	0.323	0.427	0.370	-0.215	0.461	0.838	0.504
ProAtt5	0.277	0.217	0.310	0.315	-0.185	0.373	0.769	0.492
Intent1	0.351	0.289	0.360	0.306	-0.239	0.420	0.423	0.691
Intent2	0.263	0.285	0.283	0.295	-0.077	0.322	0.465	0.840
Intent3	0.312	0.366	0.341	0.289	-0.086	0.334	0.431	0.833
Intent4	0.248	0.261	0.256	0.280	-0.150	0.307	0.492	0.791

APPENDIX E

SURVEY ITEMS ABOUT KNOWLEDGE UNCERTAINTY

Now, we would like to know about how confident you are in your knowledge of Chicago. Please rate your level of confidence for each aspect of the trip.

	Not at all confident (1)	Somewhat confident (2)	Confident (3)	Moderately confident (4)	Extremely confident (5)
Additional destinations to visit besides Chicago (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The places or attractions to visit (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accommodations to stay (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping stores (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX F

PLS CONFIRMATORY FACTOR ANALYSIS FOR ORIGINAL MEASUREMENT MODEL

Items	Attention	Recall	Inform	PosEmotion	NegEmotion	AdAtt	ProAtt	Intention
Attention1	0.854	0.471	0.437	0.449	-0.298	0.537	0.408	0.305
Attention2	0.868	0.484	0.469	0.446	-0.325	0.552	0.439	0.333
Attention3	0.827	0.456	0.373	0.356	-0.254	0.483	0.344	0.258
Attention4	0.851	0.587	0.534	0.474	-0.198	0.574	0.438	0.370
Attention5	0.692	0.659	0.484	0.482	-0.149	0.446	0.425	0.434
Recall1	0.497	0.849	0.375	0.383	-0.034	0.340	0.327	0.324
Recall2	0.600	0.847	0.521	0.520	-0.136	0.453	0.384	0.354
Recall3	0.516	0.838	0.399	0.391	0.050	0.291	0.261	0.300
Inform1	0.557	0.475	0.836	0.487	-0.187	0.517	0.397	0.359
Inform2	0.516	0.469	0.878	0.485	-0.193	0.468	0.463	0.417
Inform3	0.464	0.417	0.852	0.414	-0.121	0.417	0.397	0.337
Inform4	0.454	0.413	0.885	0.460	-0.094	0.437	0.385	0.333
Inform5	0.418	0.402	0.862	0.422	-0.110	0.378	0.362	0.328
Inform6	0.477	0.448	0.864	0.456	-0.117	0.446	0.387	0.375
Inform7	0.423	0.482	0.752	0.429	0.027	0.360	0.358	0.419
PostEmo1	0.516	0.450	0.458	0.834	-0.296	0.527	0.474	0.391
PostEmo2	0.424	0.433	0.393	0.752	-0.014	0.383	0.415	0.317
PostEmo3	0.484	0.489	0.510	0.884	-0.175	0.512	0.459	0.417
PostEmo4	0.511	0.462	0.488	0.869	-0.268	0.567	0.479	0.427
PostEmo5	0.358	0.400	0.356	0.785	-0.015	0.412	0.419	0.354
PostEmo6	0.095	0.231	0.213	0.542	0.210	0.209	0.228	0.279
PostEmo7	0.250	0.231	0.311	0.545	-0.022	0.282	0.279	0.270
PostEmo8	0.251	0.320	0.321	0.667	0.095	0.298	0.325	0.304
PostEmo9	0.547	0.458	0.483	0.871	-0.254	0.552	0.488	0.406
NegEmo1	-0.271	-0.095	-0.178	-0.194	0.893	-0.346	-0.235	-0.098
NegEmo2	-0.291	-0.039	-0.124	-0.136	0.951	-0.319	-0.240	-0.079
NegEmo3	-0.312	-0.082	-0.127	-0.157	0.969	-0.335	-0.235	-0.090
NegEmo4	-0.263	-0.021	-0.120	-0.135	0.936	-0.292	-0.207	-0.062
NegEmo5	-0.280	-0.057	-0.110	-0.144	0.957	-0.324	-0.227	-0.083
AdAtt1	0.590	0.444	0.465	0.546	-0.276	0.851	0.535	0.349
AdAtt2	0.577	0.391	0.471	0.523	-0.294	0.905	0.527	0.380
AdAtt3	0.508	0.337	0.471	0.454	-0.267	0.813	0.477	0.361
AdAtt4	0.554	0.373	0.407	0.469	-0.348	0.896	0.532	0.363
AdAtt5	0.561	0.319	0.430	0.482	-0.342	0.882	0.496	0.353
AdAtt6	0.537	0.423	0.485	0.536	-0.235	0.859	0.484	0.375
AdAtt7	0.121	0.127	0.155	0.183	0.227	0.193	0.123	0.100

AdAtt8	0.538	0.384	0.421	0.485	-0.335	0.856	0.487	0.357
AdAtt9	0.546	0.383	0.413	0.476	-0.349	0.867	0.488	0.374
ProAtt1	0.368	0.329	0.396	0.473	-0.133	0.457	0.693	0.413
ProAtt2	0.454	0.311	0.389	0.485	-0.321	0.533	0.772	0.444
ProAtt3	0.388	0.285	0.343	0.363	-0.200	0.441	0.864	0.566
ProAtt4	0.419	0.356	0.423	0.420	-0.194	0.480	0.864	0.583
ProAtt5	0.403	0.316	0.333	0.441	-0.136	0.446	0.836	0.566
Intent1	0.259	0.318	0.291	0.331	-0.043	0.263	0.423	0.663
Intent2	0.376	0.307	0.334	0.385	-0.225	0.382	0.469	0.714
Intent3	0.320	0.300	0.364	0.375	-0.063	0.344	0.586	0.879
Intent4	0.327	0.328	0.344	0.324	-0.003	0.292	0.444	0.814
Intent5	0.342	0.294	0.359	0.418	-0.020	0.362	0.563	0.837

APPENDIX G

THE RESULTS OF HIERARCHICAL POLYNOMIAL REGRESSION

The effect of attention and En-route Flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{attention} + Y_{En-route\ flexibility} + X_{attention} * Y_{En-route\ flexibility} + X^2_{attention} + Y^2_{En-route\ flexibility} + X^3_{attention} + X^2_{attention} * Y_{En-route\ flexibility} + X_{attention} * Y^2_{En-route\ flexibility}.$$

Table 61. Hierarchical Polynomial Regression for Advertising Attitude with Attention and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
Block 1: Linear effects					
Attention	.65***	.65***	.66***	.78***	.78***
En-route Flexibility	.06	.05	.05	.04	.05
Block 2: Interaction Effects					
Attention X En-route Flexibility		-.02	-.02	-.01	.00
Block 3: Quadratic Effects					
(Attention) ²			-.09*	-.08	-.08
(En-route Flexibility) ²			.01	.00	.00
Block 4: Cubic Effects					
(Attention) ³				-.15*	-.15*
Block5: Quadratic Moderating Effects					
Attention ² X En-route Flexibility					-.03
Attention X En-route Flexibility ²					.00
Adjusted R ²	.43	.43	.44	.44	.44
F (df)	136.97 (2)***	91.19 (3)***	56.17 (5)***	48.01 (6)***	35.86 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of recall and En-route flexibility on attitude toward advertising

$$Z_{\text{AdAttitude}} = X_{\text{recall}} + Y_{\text{En-route flexibility}} + X_{\text{recall}} * Y_{\text{En-route flexibility}} + X_{\text{recall}}^2 + Y_{\text{En-route flexibility}}^2 + X_{\text{recall}}^3 + X_{\text{recall}}^2 * Y_{\text{En-route flexibility}} + X_{\text{recall}} * Y_{\text{En-route flexibility}}^2$$

Table 62. Hierarchical Polynomial Regression for Advertising Attitude with Recall and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Recall	.42***	.42***	.41***	.53***	.54***
En-route Flexibility	.16**	.16**	.11	.12	.19*
<i>Block 2: Interaction Effects</i>					
Recall X En-route Flexibility		.03	.01	-.02	-.09
<i>Block 3: Quadratic Effects</i>					
(Recall) ²			.09	.09	.06
(En-route Flexibility) ²			-.07	-.07	-.05
<i>Block 4: Cubic Effects</i>					
(Recall) ³				-.15	-.06
<i>Block5: Quadratic Moderating Effects</i>					
Recall ² X En-route Flexibility					-.13*
Recall X En-route Flexibility ²					-.14
Adjusted R ²	.20	.19	.20	.20	.21
F (df)	44.62 (2)***	29.80 (3)***	18.73 (5)***	16.25 (6)***	12.99 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of informativeness and En-Route Flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{informativeness} + Y_{En-route flexibility} + X_{informativeness} * Y_{En-route flexibility} + X_{informativeness}^2 + Y_{En-route flexibility}^2 + X_{informativeness}^3 + X_{informativeness}^2 * Y_{En-route flexibility} + X_{informativeness} * Y_{En-route flexibility}^2 + Y_{En-route flexibility}^3$$

Table 63. Hierarchical Polynomial Regression for Advertising Attitude with Informativeness and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Inform	.49***	.49***	.50***	.69***	.68***
En-route Flexibility	.14**	.14**	.12	.13	.11
<i>Block 2: Interaction Effects</i>					
Inform X En-route Flexibility		-.01	-.01	-.02	.01
<i>Block 3: Quadratic Effects</i>					
(Inform) ²			.08	-.01	-.01
(En-route Flexibility) ²			-.03	-.01	-.01
<i>Block 4: Cubic Effects</i>					
(Inform) ³				-.28***	-.29***
<i>Block5: Quadratic Moderating Effects</i>					
Inform ² X En-route Flexibility					.03
Inform X En-route Flexibility ²					.05
Adjusted R ²	.26	.26	.26	.29	.29
F (df)	65.27 (2)***	43.41 (3)***	26.72 (5)***	25.25 (6)***	18.95 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of attention and Pre-trip flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{attention} + Y_{Pre-trip\ flexibility} + X_{attention} * Y_{Pre-trip\ flexibility} + X_{attention}^2 + Y_{Pre-trip\ flexibility}^2 + X_{attention}^3 + Y_{Pre-trip\ flexibility}^3 + X_{attention}^2 * Y_{Pre-trip\ flexibility} + X_{attention} * Y_{Pre-trip\ flexibility}^2$$

Table 64. Hierarchical Polynomial Regression for Advertising Attitude with Attention and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Attention	.66***	.66***	.66***	.79***	.77***
Pre-trip Flexibility	.06	.06	.07	.11	.10
<i>Block 2: Interaction Effects</i>					
Attention X Pre-trip Flexibility		-.07	-.06	-.05	-.03
<i>Block 3: Quadratic Effects</i>					
(Attention) ²			-.09*	-.08*	-.09*
(Pre-trip Flexibility) ²			.02	-.01	-.02
<i>Block 4: Cubic Effects</i>					
(Attention) ³				-.15*	-.16*
(Pre-trip Flexibility) ³				-.06	-.09
<i>Block5: Quadratic Moderating Effects</i>					
Attention ² X Pre-trip Flexibility					.03
Attention X Pre-trip Flexibility ²					.04
Adjusted R ²	.44	.44	.45	.46	.45
F (df)	141.65 (2)***	96.11 (3)***	59.20 (5)***	43.51 (7)***	33.80 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of recall and Pre-trip Flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{recall} + Y_{Pre-trip\ flexibility} + X_{recall} * Y_{Pre-trip\ flexibility} + X_{recall}^2 + Y_{Pre-trip\ flexibility}^2 + X_{recall}^3 + Y_{Pre-trip\ flexibility}^3 + X_{recall}^2 * Y_{Pre-trip\ flexibility} + X_{recall} * Y_{Pre-trip\ flexibility}^2$$

Table 65. Hierarchical Polynomial Regression for Advertising Attitude with Recall and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Recall	.41***	.41***	.41***	.54***	.50***
Pre-trip Flexibility	.13**	.13**	.12*	.16	.21*
<i>Block 2: Interaction Effects</i>					
Recall X Pre-trip Flexibility		.04	.02	-.02	-.01
<i>Block 3: Quadratic Effects</i>					
(Recall) ²			.09	.11*	.07
(Pre-trip Flexibility) ²			-.03	-.06	-.05
<i>Block 4: Cubic Effects</i>					
(Recall) ³				-.17	-.05
(Pre-trip Flexibility) ³				-.04	-.01
<i>Block5: Quadratic Moderating Effects</i>					
Recall ² X Pre-trip Flexibility					-.14
Recall X Pre-trip Flexibility ²					-.04
Adjusted R ²	.19	.19	.19	.20	.21
F (df)	43.19 (2)***	29.05 (3)***	18.07 (5)***	13.67 (7)***	11.27 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of informativeness and Pre-Trip Flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{informativeness} + Y_{Pre-trip flexibility} + X_{informativeness} * Y_{Pre-trip flexibility} + X_{informativeness}^2 + Y_{Pre-trip flexibility}^2 + X_{informativeness}^3 + Y_{Pre-trip flexibility}^3 + X_{informativeness}^2 * Y_{Pre-trip flexibility} + X_{informativeness} * Y_{Pre-trip flexibility}^2$$

Table 66. Hierarchical Polynomial Regression for Advertising Attitude with Informativeness and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Informativeness	.49***	.49***	.50***	.72***	.70***
Pre-trip Flexibility	.11*	.11*	.12*	.15	.15
<i>Block 2: Interaction Effects</i>					
Informativeness X Pre-trip Flexibility		-.01	-.02	-.05	-.02
<i>Block 3: Quadratic Effects</i>					
(Informativeness) ²			.07	-.02	-.03
(Pre-trip Flexibility) ²			.02	.00	-.01
<i>Block 4: Cubic Effects</i>					
(Informativeness) ³				-.31***	-.33***
(Pre-trip Flexibility) ³				-.03	-.03
<i>Block5: Quadratic Moderating Effects</i>					
Informativeness ² X Pre-trip Flexibility					-.01
Informativeness X Pre-trip Flexibility ²					.07
Adjusted R ²	.26	.26	.26	.29	.29
F (df)	64.90 (2)***	43.16 (3)***	26.48 (5)***	22.16 (7)***	17.31 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of positive emotion and En-route flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{Positive\ Emotion} + Y_{En-route\ flexibility} + X_{Positive\ Emotion} * Y_{En-route\ flexibility} + X_{Positive\ Emotion}^2 + Y_{En-route\ flexibility}^2 + X_{Positive\ Emotion}^3 + X_{Positive\ Emotion}^2 * Y_{En-route\ flexibility} + X_{Positive\ Emotion} * Y_{En-route\ flexibility}^2$$

Table 67. Hierarchical Polynomial Regression for Advertising Attitude with Positive

Emotion and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Positive Emotion	.55***	.55***	.55***	.71***	.73***
En-route Flexibility	.09	.08	.01	.01	.03
<i>Block 2: Interaction Effects</i>					
Positive Emotion X En-route Flexibility		-.03	-.03	-.03	-.05
<i>Block 3: Quadratic Effects</i>					
(Positive Emotion) ²			.01	-.03	-.03
(En-route Flexibility) ²			-.11	-.09	-.10
<i>Block 4: Cubic Effects</i>					
(Positive Emotion) ³				-.21**	-.21**
<i>Block5: Quadratic Moderating Effects</i>					
Pos. Emotion ² X En- route Flexibility					-.05
Pos. Emotion X En- route Flexibility ²					-.04
Adjusted R ²	.32	.32	.32	.34	.34
F (df)	84.29 (2)***	56.28 (3)***	34.41 (5)***	31.41 (6)***	23.63 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of negative emotion and En-route flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{Negative\ Emotion} + Y_{En-route\ flexibility} + X_{Negative\ Emotion} * Y_{En-route\ flexibility} + X_{Negative\ Emotion}^2 + Y_{En-route\ flexibility}^2 + X_{Negative\ Emotion}^3 + X_{Negative\ Emotion}^2 * Y_{En-route\ flexibility} + X_{Negative\ Emotion} * Y_{En-route\ flexibility}^2 + X_{Negative\ Emotion}^2 * Y_{En-route\ flexibility}^2$$

Table 68. Hierarchical Polynomial Regression for Advertising Attitude Negative Emotion and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Negative Emotion	-.33***	-.33***	-.49***	-.60***	-.62***
En-route Flexibility	.12*	.14**	.06	.05	.06
<i>Block 2: Interaction Effects</i>					
Negative Emotion X En-route Flexibility		-.06	-.05	-.07	.00
<i>Block 3: Quadratic Effects</i>					
(Negative Emotion) ²			.33***	-.04	-.02
(En-route Flexibility) ²			-.12	-.12	-.15
<i>Block 4: Cubic Effects</i>					
(Negative Emotion) ³				.45**	.41**
<i>Block5: Quadratic Moderating Effects</i>					
Neg. Emotion ² X En- route Flexibility					-.03
Neg. Emotion X En- route Flexibility ²					.10
Adjusted R ²	.13	.13	.21	.23	.23
F (df)	28.42 (2)***	19.39 (3)***	19.93 (5)***	18.52 (6)***	14.02 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of positive emotion and Pre-trip flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{Positive\ Emotion} + Y_{Pre-trip\ flexibility} + X_{Positive\ Emotion} * Y_{Pre-trip\ flexibility} + X^2_{Positive\ Emotion} + Y^2_{Pre-trip\ flexibility} + X^3_{Positive\ Emotion} + Y^3_{Pre-trip\ flexibility} + X^2_{Positive\ Emotion} * Y_{Pre-trip\ flexibility} + X_{Positive\ Emotion} * Y^2_{Pre-trip\ flexibility}$$

Table 69. Hierarchical Polynomial Regression for Advertising Attitude with Positive

Emotion and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Positive Emotion	.56***	.56***	.56***	.74***	.75***
Pre-trip Flexibility	.05	.05	.07	.14	.12
<i>Block 2: Interaction Effects</i>					
Positive Emotion X Pre-trip Flexibility		-.03	-.03	-.03	-.07
<i>Block 3: Quadratic Effects</i>					
(Positive Emotion) ²			-.02	-.06	-.05
(Pre-trip Flexibility) ²			.05	.01	.02
<i>Block 4: Cubic Effects</i>					
(Positive Emotion) ³				-.25***	-.25***
(Pre-trip Flexibility) ³				-.11	-.12
<i>Block5: Quadratic Moderating Effects</i>					
Pos. Emotion ² X Pre- trip Flexibility					.05
Pos. Emotion X Pre- trip Flexibility ²					-.03
Adjusted R ²	.32	.32	.31	.34	.34
F (df)	84.16 (2)***	56.19 (3)***	33.79 (5)***	27.39 (7)***	21.32 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of negative emotion and Pre-trip flexibility on attitude toward advertising

$$Z_{AdAttitude} = X_{Negative\ Emotion} + Y_{Pre-trip\ flexibility} + X_{Negative\ Emotion} * Y_{Pre-trip\ flexibility} + X^2_{Negative\ Emotion} + Y^2_{Pre-trip\ flexibility} + X^3_{Negative\ Emotion} + Y^3_{Pre-trip\ flexibility} + X^2_{Negative\ Emotion} * Y_{Pre-trip\ flexibility} + X_{Negative\ Emotion} * Y^2_{Pre-trip\ flexibility}$$

Table 70. Hierarchical Polynomial Regression for Advertising Attitude with Negative Emotion and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Negative Emotion	.34***	-.34***	-.52***	-.63***	-.61***
Pre-trip Flexibility	.11*	.11*	.14*	.24**	.26**
<i>Block 2: Interaction Effects</i>					
Negative Emotion X Pre-trip Flexibility		.00	.03	.02	-.01
<i>Block 3: Quadratic Effects</i>					
(Negative Emotion) ²			.29***	-.09	-.12
(Pre-trip Flexibility) ²			.13*	.00	.00
<i>Block 4: Cubic Effects</i>					
(Negative Emotion) ³				.48**	.59***
(Pre-trip Flexibility) ³				-.20	-.26
<i>Block5: Quadratic Moderating Effects</i>					
Neg. Emotion ² X Pre- trip Flexibility					-.04
Neg. Emotion X Pre- trip Flexibility ²					-.16
Adjusted R ²	.13	.13	.21	.23	.23
F (df)	28.44 (2)***	18.91 (3)***	19.57 (5)***	16.18 (7)***	13.03 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of advertising attitude and En-route flexibility on attitude toward travel products

$$Z_{\text{Product Attitude}} = X_{\text{Advertising Attitude}} + Y_{\text{En-route flexibility}} + X_{\text{Advertising Attitude}} * Y_{\text{En-route flexibility}} + X^2_{\text{Advertising Attitude}} + Y^2_{\text{En-route flexibility}} + X^3_{\text{Advertising Attitude}} + X^2_{\text{Advertising Attitude}} * Y_{\text{En-route flexibility}} + X_{\text{Advertising Attitude}} * Y^2_{\text{En-route flexibility}}$$

Table 71. Hierarchical Polynomial Regression for Attitude toward Travel Products with Advertising Attitude and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.56***	.55***	.56***	.61***	.57***
En -Route Flexibility	.18***	.16***	.17**	.17**	.19**
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X En - Route Flexibility		-.07	-.08	-.08	-.04
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			.05	-.03	-.03
(En -Route Flexibility) ²			.02	.03	.03
<i>Block 4: Cubic Effects</i>					
(Ad. Attitude) ³				-.12	-.09
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X En - Route Flexibility					-.05
Ad. Attitude X En - Route Flexibility ²					.08
Adjusted R ²	.37	.37	.37	.37	.37
F (df)	106.21 (2)***	71.90 (3)***	43.25 (5)***	36.44 (6)***	27.40 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of advertising attitude and Pre-trip flexibility on attitude toward travel products

$$Z_{\text{Product Attitude}} = X_{\text{Advertising Attitude}} + Y_{\text{Pre-trip flexibility}} + X_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}} + X^2_{\text{Advertising Attitude}} + Y^2_{\text{Pre-trip flexibility}} + X^3_{\text{Advertising Attitude}} + Y^3_{\text{Pre-trip flexibility}} + X^2_{\text{Advertising Attitude}} * Y_{\text{Pre-trip flexibility}} + X_{\text{Advertising Attitude}} * Y^2_{\text{Pre-trip flexibility}}$$

Table 72. Hierarchical Polynomial Regression for Product Attitude with Advertising Attitude and Pre-trip Flexibility - Main Study

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.55***	.55***	.54***	.62***	.46***
Pre-trip Flexibility	.16***	.16***	.15**	.17*	.28***
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X Pre-trip Flexibility		.00	.01	.01	.09*
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			-.04	-.08	-.06
(Pre-trip Flexibility) ²			-.02	-.04	-.10
<i>Block 4: Cubic Effects</i>					
(Ad. Attitude) ³				-.10	-.05
(Pre-trip Flexibility) ³				-.04	-.31*
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X Pre-trip Flexibility					-.17*
Ad. Attitude X Pre-trip Flexibility ²					.53***
Adjusted R ²	.36	.36	.36	.35	.51
F (df)	100.48 (2)***	66.80 (3)***	40.14 (5)***	28.74 (7)***	42.37 (9)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of product attitude and En-route flexibility on intention to purchase travel products

$$Z_{\text{Intention}} = X_{\text{Product Attitude}} + Y_{\text{En-route flexibility}} + X_{\text{Product Attitude}} * Y_{\text{En-route flexibility}} + X^2_{\text{Product Attitude}} + Y^2_{\text{En-route flexibility}} + X^3_{\text{Product Attitude}} + X^2_{\text{Product Attitude}} * Y_{\text{En-route flexibility}} + X_{\text{Product Attitude}} * Y^2_{\text{En-route flexibility}}$$

Table 73. Hierarchical Polynomial Regression for Purchasing Intention with Product Attitude and En-route Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Pro. Attitude	.63***	.62***	.61***	.60***	.57***
En -Route Flexibility	.09*	.07	.11	.11	.13*
<i>Block 2: Interaction Effects</i>					
Pro. Attitude X En - Route Flexibility		-.09*	-.09	-.09	-.09
<i>Block 3: Quadratic Effects</i>					
(Pro. Attitude) ²			-.03	-.02	-.02
(En -Route Flexibility) ²			.06	.06	.06
<i>Block 4: Cubic Effects</i>					
(Pro. Attitude) ³				.02	.09
<i>Block5: Quadratic Moderating Effects</i>					
Pro. Attitude ² X En - Route Flexibility					-.08
Pro. Attitude X En - Route Flexibility ²					.04
Adjusted R ²	.43	.43	.43	.43	.43
F (df)	134.94 (2)***	92.35 (3)***	55.59 (5)***	46.21 (6)***	34.74 (8)***

Note: * p < .05; ** p < .01; ***p < .001

The effect of product attitude and Pre-trip flexibility on intention to purchase travel products

$$Z_{\text{Intention}} = X_{\text{Product Attitude}} + Y_{\text{Pre-trip flexibility}} + X_{\text{Product Attitude}} * Y_{\text{Pre-trip flexibility}} + X^2_{\text{Product Attitude}} + Y^2_{\text{Pre-trip flexibility}} + X^3_{\text{Product Attitude}} + X^2_{\text{Product Attitude}} * Y_{\text{Pre-trip flexibility}} + X_{\text{Product Attitude}} * Y^2_{\text{Pre-trip flexibility}}$$

Table 74. Hierarchical Polynomial Regression for Purchasing Intention with Product Attitude and Pre-trip Flexibility

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Pro. Attitude	.63***	.63***	.62***	.58***	.56***
Pre-trip Flexibility	.06	.05	.09	.17*	.18*
<i>Block 2: Interaction Effects</i>					
Pro. Attitude X Pre-trip Flexibility		-.04	-.03	-.01	-.02
<i>Block 3: Quadratic Effects</i>					
(Pro. Attitude) ²			-.05	-.02	-.03
(Pre-trip Flexibility) ²			.09	-.01	.00
<i>Block 4: Cubic Effects</i>					
(Pro. Attitude) ³				.07 -.16	.12 -.15
<i>Block5: Quadratic Moderating Effects</i>					
Pro. Attitude ² X Pre-trip Flexibility					-.06
Pro. Attitude X Pre-trip Flexibility ²					-.01
Adjusted R ²	.42	.42	.42	.42	.42
F (df)	128.30 (2)***	85.72 (3)***	52.61 (5)***	38.06 (6)***	29.50 (8)***

Note: * p < .05; ** p < .01; *** p < .001

APPENDIX H

POLYNOMIAL REGRESSION RESULTS USING TEST DATA SET

Table 75. Hierarchical Polynomial Regression for Product Attitude with Advertising Attitude and Pre-trip Flexibility including AdAtt³ – Test Data Set

	Block 1 Linear Effects	Block 2: Interaction Effects	Block 3: Quadratic Effects	Block 4: Cubic Effects	Block5: Quadratic Moderating Effects
<i>Block 1: Linear effects</i>					
Ad. Attitude	.53*** (1.0)	.53*** (1.0)	.53*** (1.0)	.65*** (7.8)	.56*** (7.9)
Pre-trip Flexibility	.22** (1.0)	.23*** (1.0)	.23** (1.3)	.24* (2.8)	.21 (4.3)
<i>Block 2: Interaction Effects</i>					
Ad. Attitude X Pre-trip Flexibility		-.05 (1.1)	-.05 (1.1)	-.04 (1.1)	.12* (1.3)
<i>Block 3: Quadratic Effects</i>					
(Ad. Attitude) ²			-.02 (1.0)	-.05 (1.4)	-.10 (1.4)
(Pre-trip Flexibility) ²			-.01 (1.3)	-.01 (3.2)	-.13 (3.3)
<i>Block 4: Cubic Effects</i>					
(Ad. Attitude) ³				-.13 (8.4)	-.19 (8.4)
(Pre-trip Flexibility) ³				-.02 (6.1)	-.26 (6.5)
<i>Block5: Quadratic Moderating Effects</i>					
Ad. Attitude ² X Pre-trip Flexibility					-.10 (3.3)
Ad. Attitude X Pre-trip Flexibility ²					.53*** (1.6)
Adjusted R ²	.35	.35	.34	.34	.51
F (df)	46.54 (2)***	31.19 (3)***	18.54 (5)***	13.20 (7)***	20.65 (9)***

Note: values in bracket indicate VIF; * p < .05; ** p < .01; ***p < .001; conditioning index is between 1.0 and 7.5

APPENDIX I

THE RESULTS ABOUT RESPONSE SURFACE ANALYSIS

The moderating effect of En-route flexibility with attention on advertising attitude

$$Z_{\text{AdAttitude}} = .037 + 1.017 * X_{\text{attention}} + .042 * Y_{\text{En-route flexibility}} + -.005 * X_{\text{attention}} * Y_{\text{En-route flexibility}} \\ + -.117 * X_{\text{attention}}^2 + .000 * Y_{\text{En-route flexibility}}^2 + -.154 * X_{\text{attention}}^3 + -.028 * X_{\text{attention}}^2 * Y_{\text{En-route flexibility}} \\ + .002 * X_{\text{attention}} * Y_{\text{En-route flexibility}}^2.$$

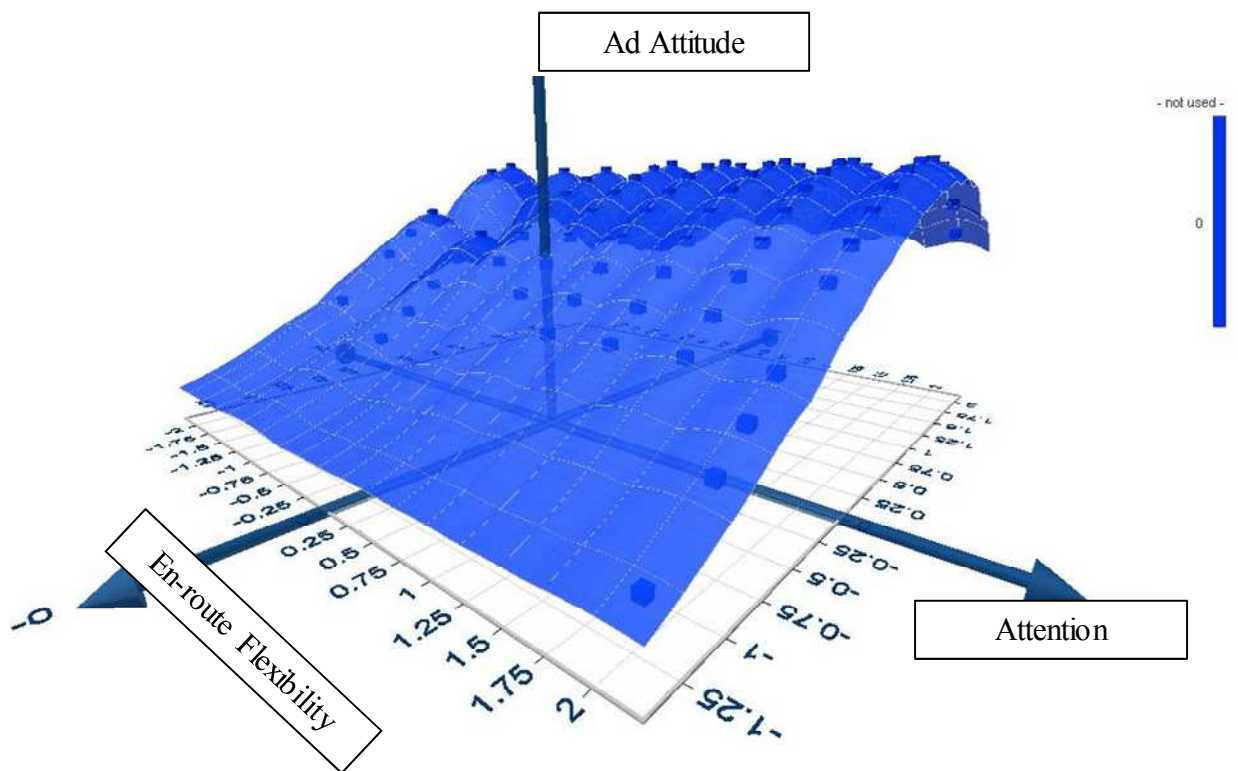


Figure 8. 3-D View of the Moderating Effect of En-route Flexibility with Attention on Attitude toward Advertising

The moderating effect of En-route flexibility with recall on advertising attitude

$$Z_{\text{AdAttitude}} = -.008 + .557 * X_{\text{recall}} + .144 * Y_{\text{En-route flexibility}} + -.08 * X_{\text{recall}} * Y_{\text{En-route flexibility}} \\ + .057 * X_{\text{recall}}^2 + -.02 * Y_{\text{En-route flexibility}}^2 + -.028 * X_{\text{recall}}^3 + -.079 * X_{\text{recall}}^2 * Y_{\text{En-route flexibility}} + \\ -.063 * X_{\text{recall}} * Y_{\text{En-route flexibility}}^2$$

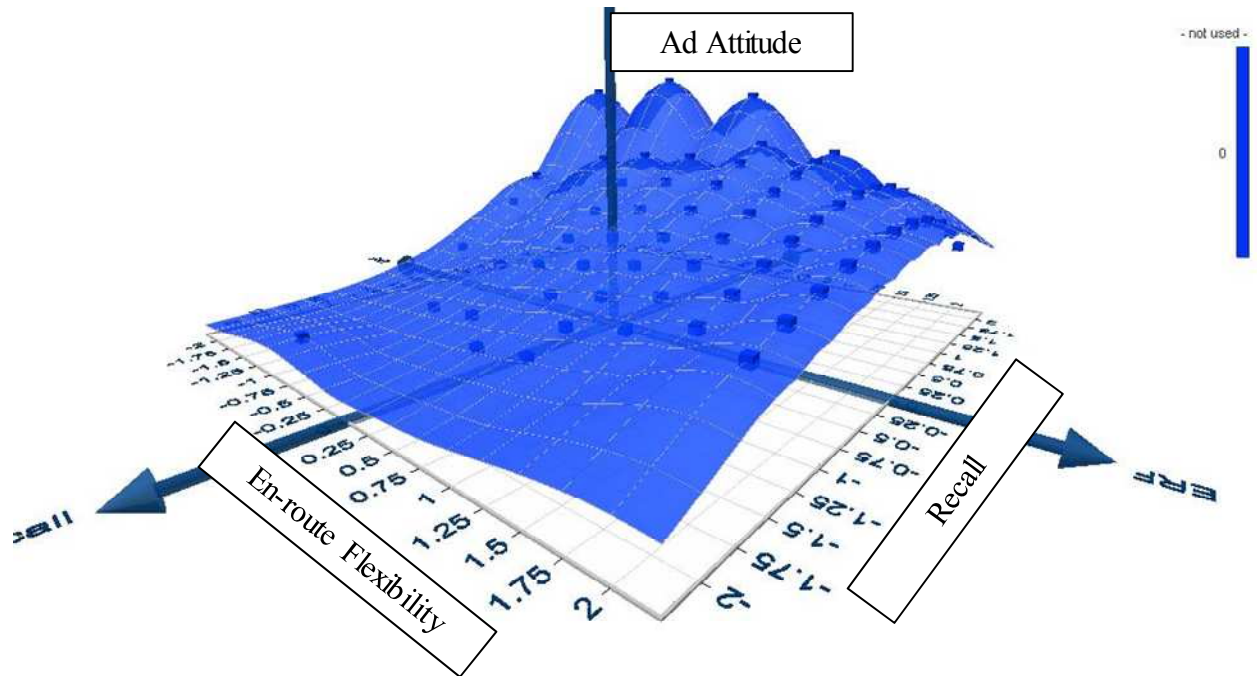


Figure 9. 3-D View of the Moderating Effect of En-route Flexibility with Recall on Attitude toward Advertising

The moderating effect of En-route flexibility with informativeness on advertising attitude

$$Z_{AdAttitude} = .005 + .811 * X_{informativeness} + .085 * Y_{En-route flexibility} + .015 * X_{informativeness} * Y_{En-route flexibility} + -.013 * X_{informativeness}^2 + -.003 * Y_{En-route flexibility}^2 + -.173 * X_{informativeness}^3 + .028 * X_{informativeness}^2 * Y_{En-route flexibility} + .025 * X_{informativeness} * Y_{En-route flexibility}^2$$

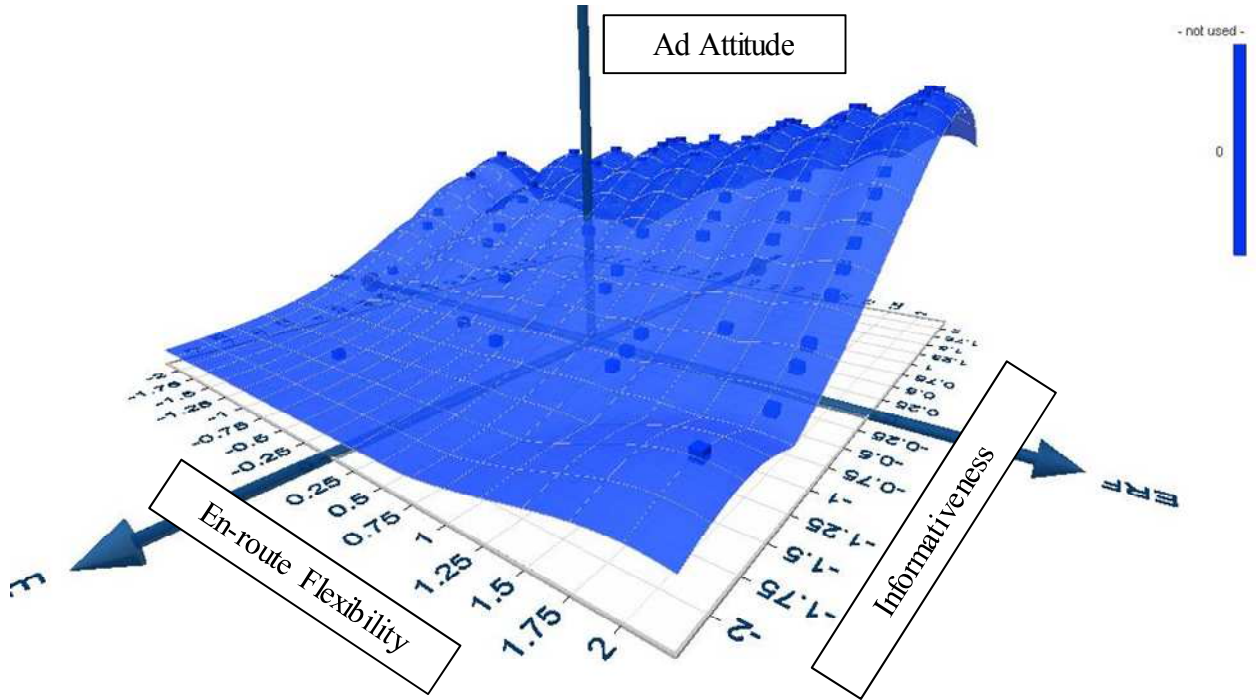


Figure 10. 3-D View of the Moderating Effect of En-route Flexibility with Informativeness on Attitude toward Advertising

The moderating effect of Pre-trip flexibility with attention on advertising attitude

$$Z_{AdAttitude} = .036 + 1.01 * X_{attention} + .088 * Y_{Pre-trip flexibility} + -.044 * X_{attention} * Y_{Pre-trip flexibility} + .136 * X_{attention}^2 + -.013 * Y_{Pre-trip flexibility}^2 + -.162 * X_{attention}^3 + -.02 * Y_{Pre-trip flexibility}^3 + .032 * X_{attention}^2 * Y_{Pre-trip flexibility} + .027 * X_{attention} * Y_{Pre-trip flexibility}^2$$

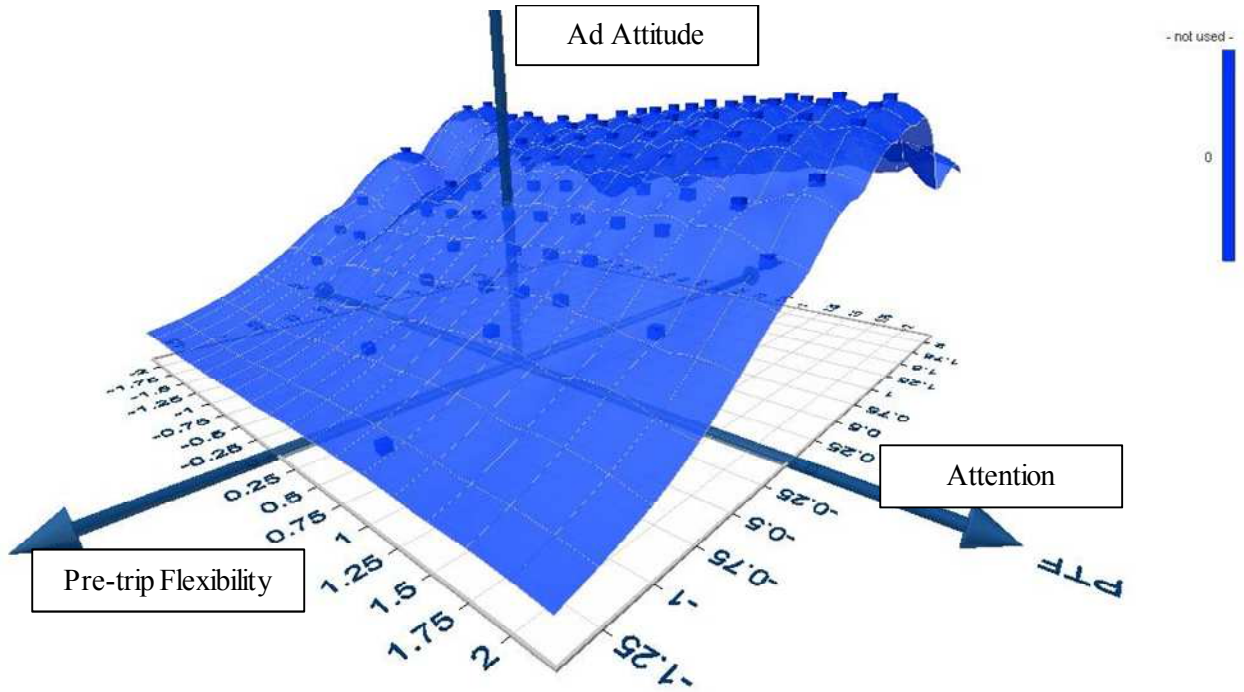


Figure 11. 3-D View of the Moderating Effect of Pre-trip Flexibility with Attention on Attitude toward Advertising

The moderating effect of Pre-trip flexibility with recall on advertising attitude

$$Z_{\text{AdAttitude}} = -.020 + .513 * X_{\text{recall}} + .188 * Y_{\text{Pre-trip flexibility}} + -.013 * X_{\text{recall}} * Y_{\text{Pre-trip flexibility}}$$

$$+ .071 * X_{\text{recall}}^2 + -.033 * Y_{\text{Pre-trip flexibility}}^2 + -.024 * X_{\text{recall}}^3 + -.002 * Y_{\text{Pre-trip flexibility}}^3 +$$

$$.082 * X_{\text{recall}}^2 * Y_{\text{Pre-trip flexibility}} + -.022 * X_{\text{recall}} * Y_{\text{Pre-trip flexibility}}^2.$$

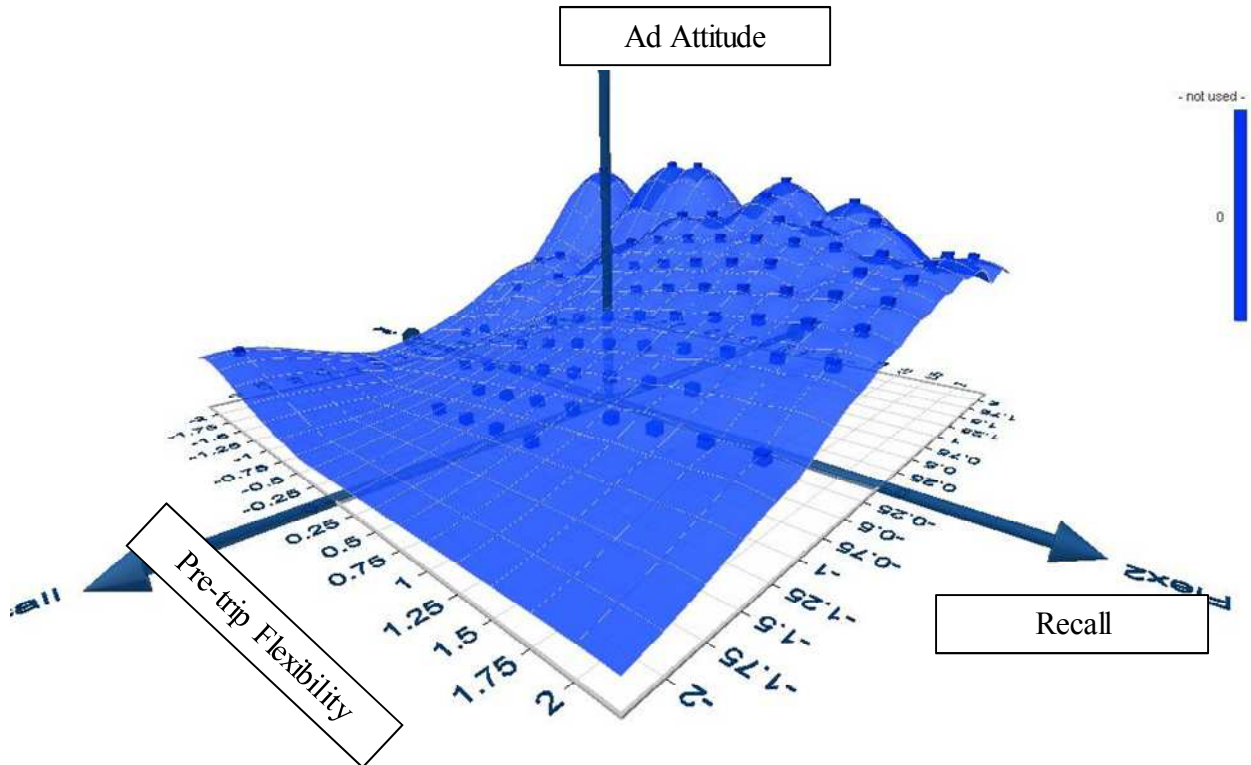


Figure 12. 3-D View of the Moderating Effect of Pre-trip Flexibility with Recall on Attitude toward Advertising

The moderating effect of Pre-trip flexibility with informativeness on advertising attitude

$$Z_{AdAttitude} = .001 + .836 * X_{informativeness} + .135 * Y_{Pre-trip flexibility} - .021 * X_{informativeness} * Y_{Pre-trip flexibility} - .034 * X_{informativeness}^2 - .005 * Y_{Pre-trip flexibility}^2 - .199 * X_{informativeness}^3 - .008 * Y_{Pre-trip flexibility}^3 - .009 * X_{informativeness}^2 * Y_{Pre-trip flexibility} + .042 * X_{informativeness} * Y_{Pre-trip flexibility}^2$$

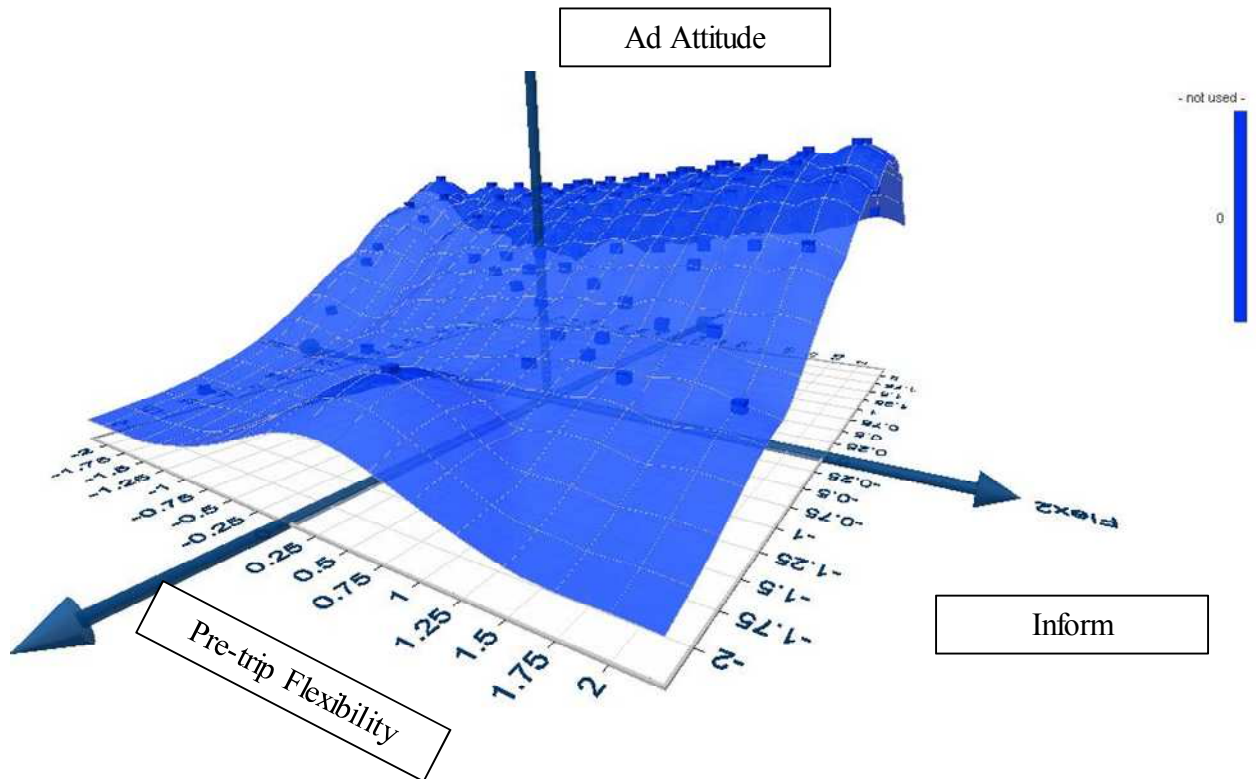


Figure 13. 3-D View of the Moderating Effect of Pre-trip Flexibility with Informativeness on Attitude toward Advertising

The moderating effect of En-route flexibility with positive emotion on advertising attitude

$$Z_{AdAttitude} = .066 + .960 * X_{Positive\ Emotion} + .026 * Y_{En-route\ flexibility} - .053 * X_{Positive\ Emotion} * Y_{En-route\ flexibility} - .038 * X_{Positive\ Emotion}^2 - .041 * Y_{En-route\ flexibility}^2 - .139 * X_{Positive\ Emotion}^3 - .048 * X_{Positive\ Emotion}^2 * Y_{En-route\ flexibility} - .017 * X_{Positive\ Emotion} * Y_{En-route\ flexibility}^2$$

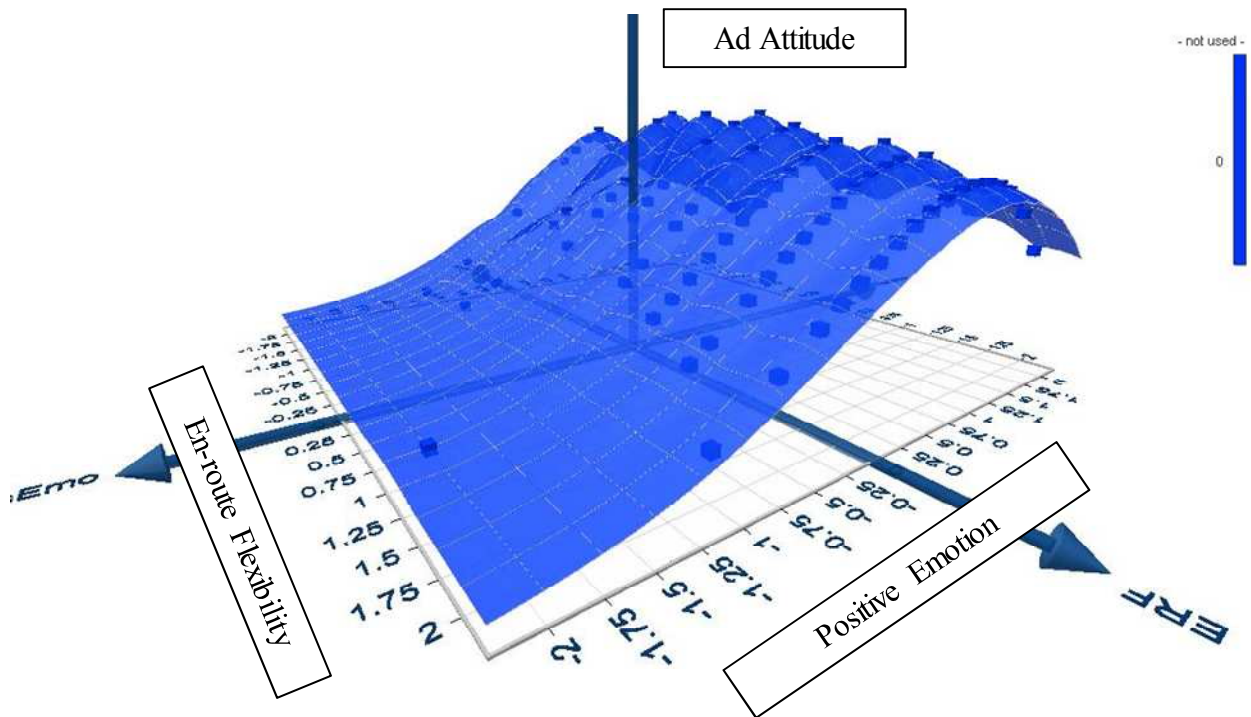


Figure 14. 3-D View of the Moderating Effect of En-route Flexibility with Positive Emotion on Attitude toward Advertising

The moderating effect of En-route flexibility with negative emotion on advertising attitude

$$Z_{\text{AdAttitude}} = .000 + -.491 * X_{\text{Negative Emotion}} + .051 * Y_{\text{En-route flexibility}} + .002 * X_{\text{Negative Emotion}} *$$

$$Y_{\text{En-route flexibility}} + -.014 * X_{\text{Negative Emotion}}^2 + -.064 * Y_{\text{En-route flexibility}}^2 + .084 * X_{\text{Negative Emotion}}^3 + -.010 * X_{\text{Negative Emotion}}^2 * Y_{\text{En-route flexibility}} + .028 * X_{\text{Negative Emotion}} * Y_{\text{En-route flexibility}}^2$$

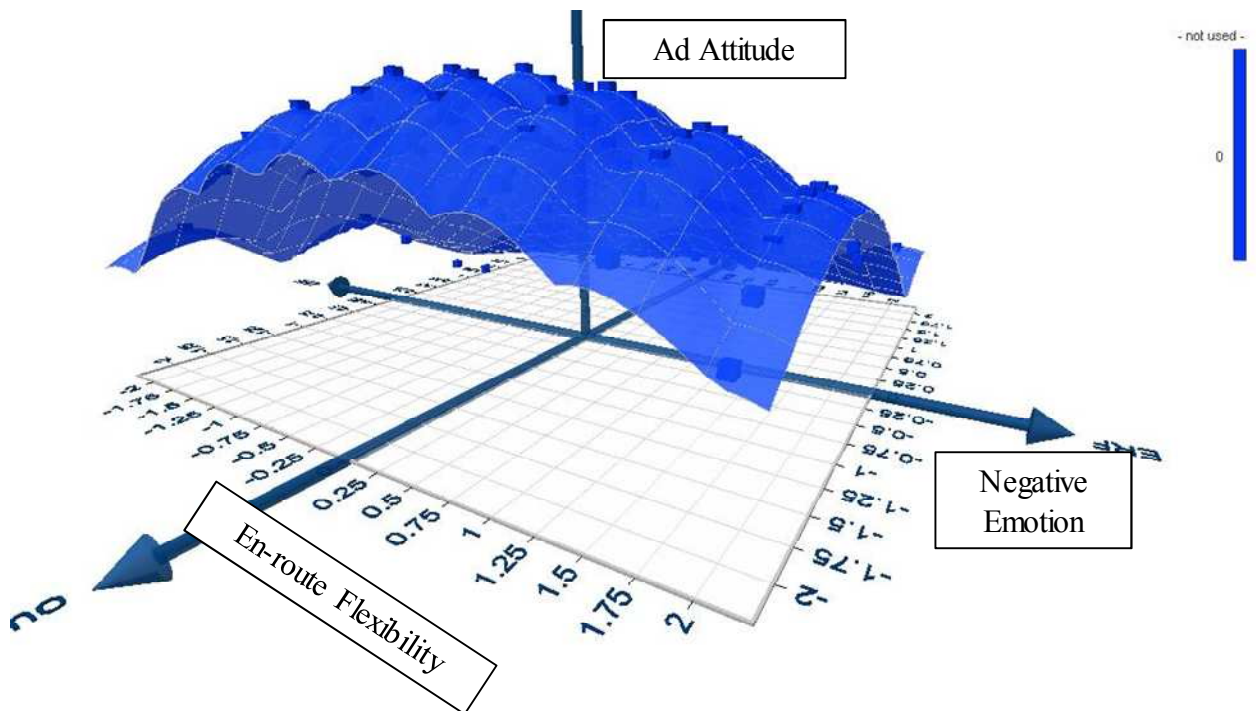


Figure 15. 3-D View of the Moderating Effect of En-route Flexibility with Negative Emotion on Attitude toward Advertising

The moderating effect of Pre-trip flexibility with positive emotion on advertising attitude

$$Z_{AdAttitude} = .025 + .988 * X_{Positive\ Emotion} + .110 * Y_{Pre-trip\ flexibility} + -.091 * X_{Positive\ Emotion} * Y_{Pre-trip\ flexibility} + -.060 * X_{Positive\ Emotion}^2 + .010 * Y_{Pre-trip\ flexibility}^2 + -.166 * X_{Positive\ Emotion}^3 + -.029 * Y_{Pre-trip\ flexibility}^3 + .052 * X_{Positive\ Emotion}^2 * Y_{Pre-trip\ flexibility} + -.021 * X_{Positive\ Emotion} * Y_{Pre-trip\ flexibility}^2$$

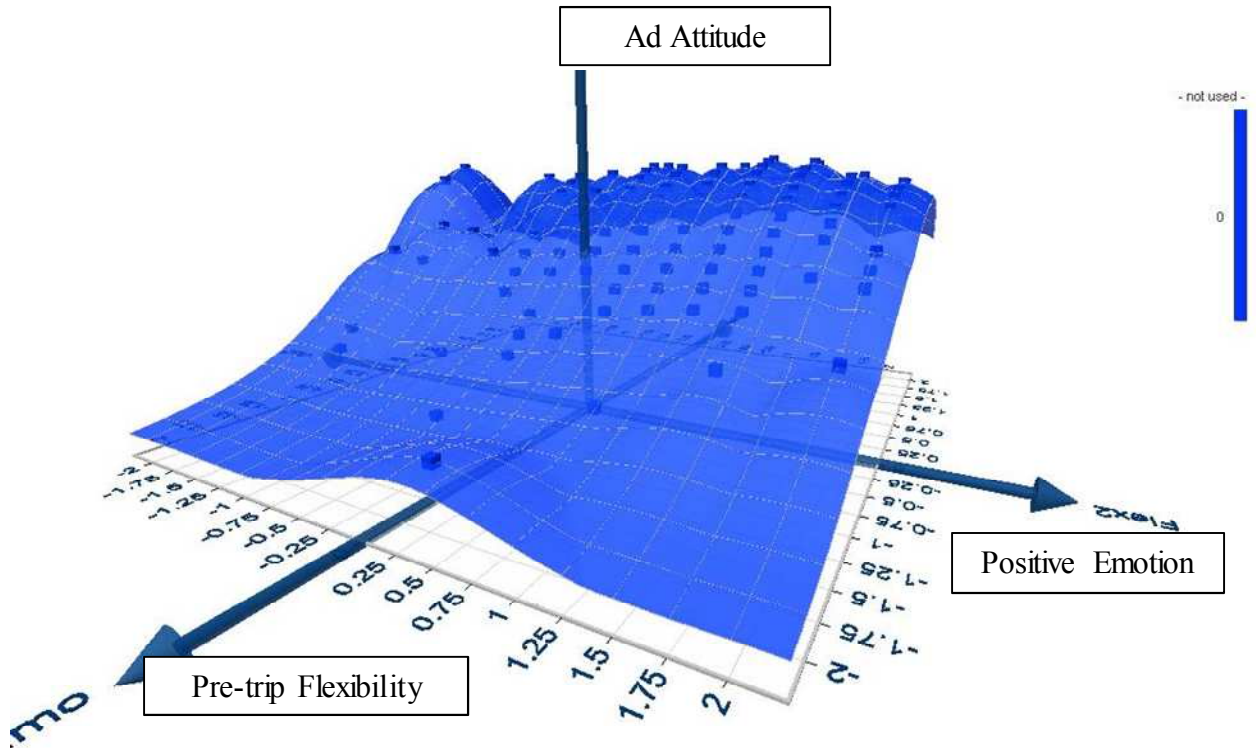


Figure 16. 3-D View of the Moderating Effect of Pre-trip Flexibility with Positive Emotion on Attitude toward Advertising

The moderating effect of Pre-trip flexibility with negative emotion on advertising attitude

$$Z_{AdAttitude} = -.026 + -.489 * X_{Negative\ Emotion} + .239 * Y_{Pre-trip\ flexibility} + -.011 * X_{Negative\ Emotion} *$$

$$Y_{Pre-trip\ flexibility} + -.072 * X_{Negative\ Emotion}^2 + .002 * Y_{Pre-trip\ flexibility}^2 + .120 * X_{Negative\ Emotion}^3 + -$$

$$.059 * Y_{Pre-trip\ flexibility}^3 + -.015 * X_{Negative\ Emotion}^2 * Y_{Pre-trip\ flexibility} + -.066 * X_{Negative\ Emotion} * Y_{Pre-trip\ flexibility}^2$$

trip flexibility

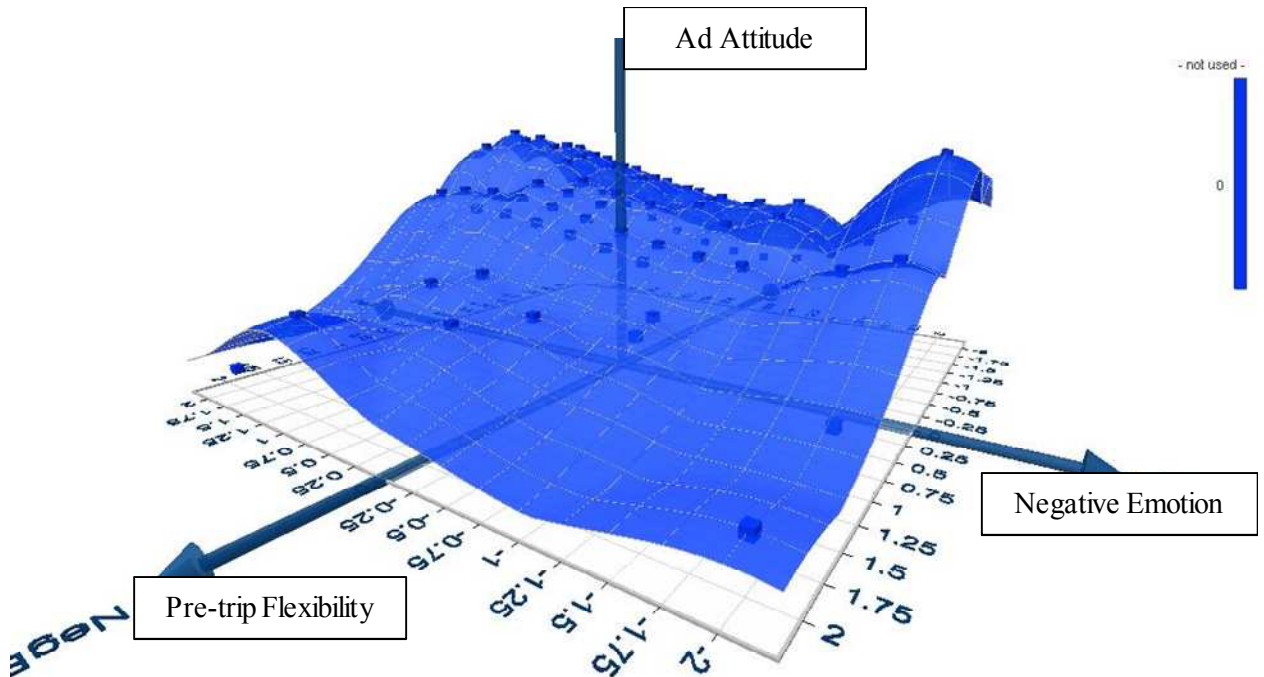


Figure 17. 3-D View of the Moderating Effect of Pre-trip Flexibility with Negative Emotion on Attitude toward Advertising

The moderating effect of En-route flexibility with advertising attitude on product attitude

$$Z_{\text{Product Attitude}} = .004 + .472 * X_{\text{Advertising Attitude}} + .126 * Y_{\text{En-route flexibility}} + -.033 * X_{\text{Advertising Attitude}} * Y_{\text{En-route flexibility}} + -.024 * X_{\text{Advertising Attitude}}^2 + .009 * Y_{\text{En-route flexibility}}^2 + -.029 * X_{\text{Advertising Attitude}}^3 + -.029 * X_{\text{Advertising Attitude}}^2 * Y_{\text{En-route flexibility}} + .025 * X_{\text{Advertising Attitude}} * Y_{\text{En-route flexibility}}^2$$

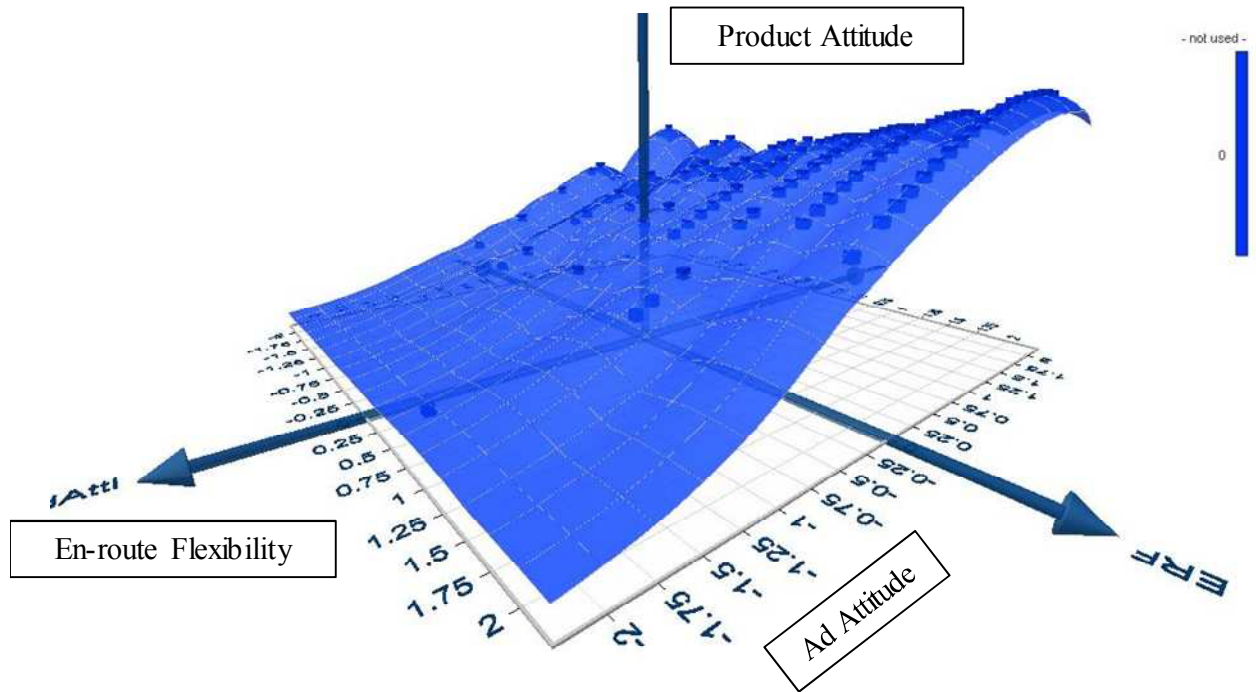


Figure 18. 3-D View of the Moderating Effect of En-route Flexibility with Advertising Attitude on Attitude toward Travel Products

The moderating effect of En-route flexibility with product attitude on intention to purchase products

$$Z_{\text{Intention}} = -.005 + .813 * X_{\text{Product Attitude}} + .118 * Y_{\text{En-route flexibility}} + -.100 * X_{\text{Product Attitude}} * Y_{\text{En-route flexibility}} + -.026 * X_{\text{Product Attitude}}^2 + .028 * Y_{\text{En-route flexibility}}^2 + .065 * X_{\text{Product Attitude}}^3 + -.058 * X_{\text{Product Attitude}}^2 * Y_{\text{En-route flexibility}} + .016 * X_{\text{Product Attitude}} * Y_{\text{En-route flexibility}}^2$$

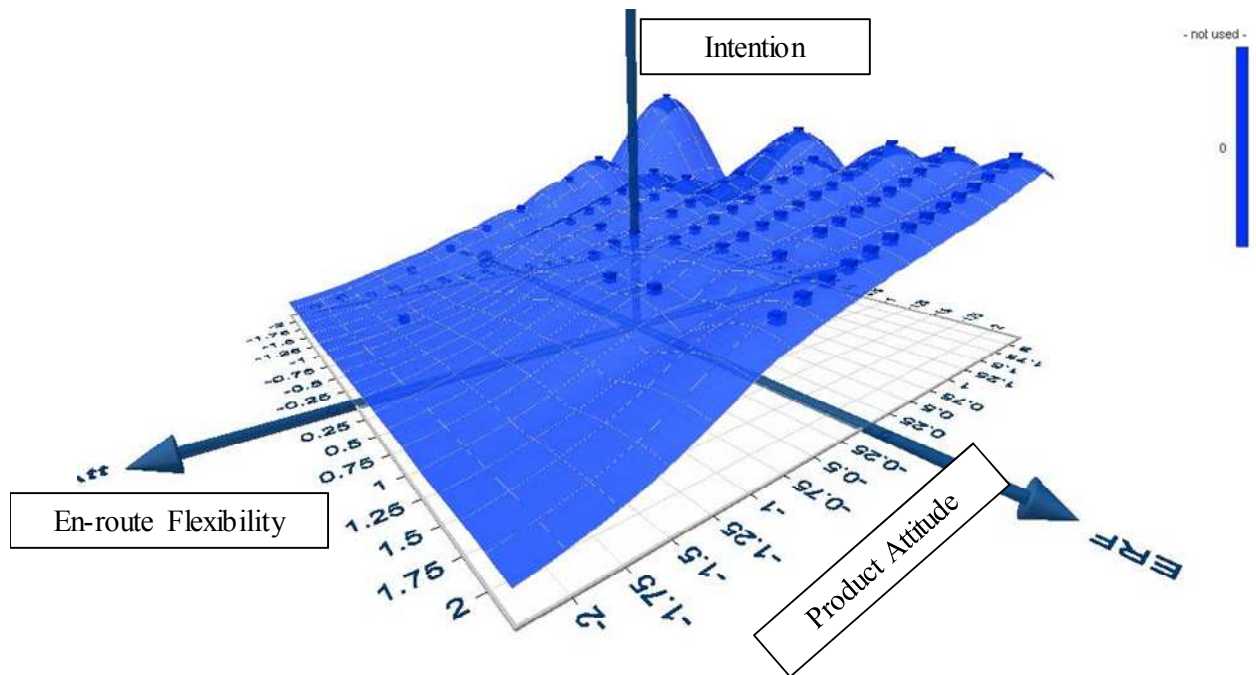


Figure 19. 3-D View of the Moderating Effect of En-route Flexibility with Product Attitude on Intention to Purchase Travel Products

The moderating effect of Pre-trip flexibility with product attitude on intention to purchase products

$$Z_{\text{Intention}} = .002 + .791 * X_{\text{Product Attitude}} + .191 * Y_{\text{Pre-trip flexibility}} + -.027 * X_{\text{Product Attitude}} * Y_{\text{Pre-trip flexibility}} + -.036 * X_{\text{Product Attitude}}^2 + .001 * Y_{\text{Pre-trip flexibility}}^2 + .089 * X_{\text{Product Attitude}}^3 + -.041 * Y_{\text{Pre-trip flexibility}}^3 + -.044 * X_{\text{Product Attitude}}^2 * Y_{\text{Pre-trip flexibility}} + -.005 * X_{\text{Product Attitude}} * Y_{\text{Pre-trip flexibility}}^2$$

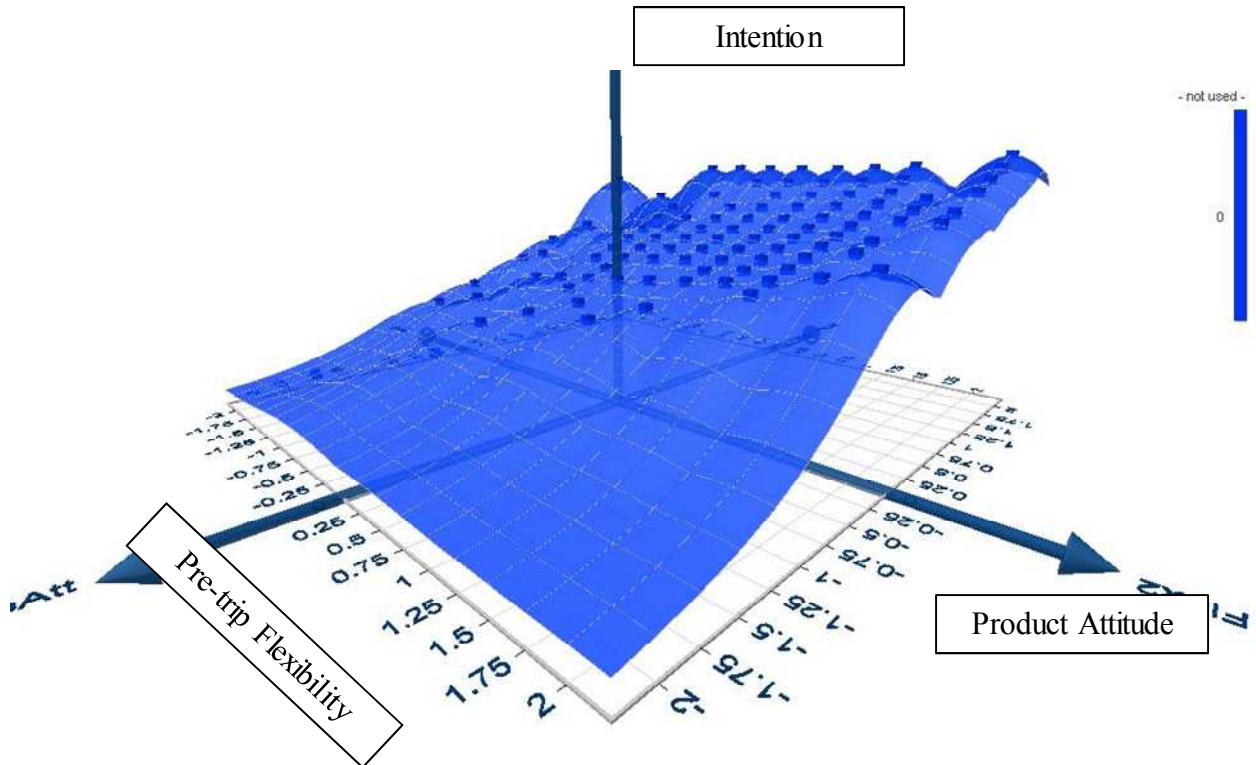


Figure 20. 3-D View of the Moderating Effect of Pre-trip Flexibility with Product Attitude on Intention to Purchase Travel Products

APPENDIX J

3D SCATTER PLOT

