

AN EXPERIMENTAL STUDY OF CONSUMER'S ATTITUDES
TOWARD THE WEB: CROSS-CULTURAL ANALYSIS OF
CULTURAL VALUES AND ONLINE CONSUMER BEHAVIOR

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ABSTRACT

The Internet has created a new market for both customers and organizations, and has become a serious alternative to traditional markets. The growth of Internet shopping provides an impetus for further investigation of the manner in which attitudes toward the web are built between online businesses and consumers. With this in mind, the current focus of this research seeks to address interrelated questions: 1.) How e-business influences consumers and their lives 2.) What are the challengeable issues in making an optimal web business and increasing Internet shopping? To identify these questions, this study is performing an investigation of cultural differences and consumer's web behaviors.

The cultural issues associated with the online environment revolve around the compatibility between cultural determined approaches to the online world and what online environments require or favor. Also, the use of technology in the online environment helps people get closer to consumers and build ongoing relationships with them. An increasing number of consumers are turning to the Internet in order to make their purchases. Therefore, awareness and sensitivity to cultural differences and consumer's web behaviors are major indicators for success in the online marketplace. This would apply to both traditional markets and the new electronic-based internet marketing.

The purpose of the research reported here is to examine attitudes toward the web in terms of cultural differences and consumer's web behavior. In particular, based on data collected from Koreans and Americans through an experimental study between Nike.com and Niketown.com websites, the study incorporates two essential variables: (1) Hofstede's five cultural dimensions, including power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, and long vs. short-term orientation, and (2) goal-oriented vs. experiential use of the web, that are likely to influence attitudes toward the web: (1) affective information, (2) cognitive information, (3) browsing for information intention, and (4) purchasing intention. Results indicate that cultural dimensions and two different consumer's web behavior influence attitudes toward the web when engaging in online shopping. For instance, when consumers have high experiential use of web or high long-term orientation dimension, attitudes are more positive towards certain websites.

Accordingly, the results and discussions of this study provide theoretical and practical implications for researchers, e-commerce educators and web designers in the apparel industry, as well as the online marketplace in general.

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CHAPTER 1

INTRODUCTION

The development of the Internet has strongly impacted the worldwide marketing environment. The Internet has also generated enough interest in traditional brick-and-mortar stores, and those companies are, in turn, beginning to develop e-commerce web sites as well. A variety of Internet-based technologies are offered to customers regularly, but only the customers can determine which of those technologies will be accepted (Hsu, 2006). With the development of the Internet and the increase of online shopping, e-business has become a trendy way for consumers and/or companies to trade over the Internet. Therefore, the success of e-business depends on knowing one's customers. The U.S. Commerce Department announced that Internet retail sales in the United States rose by a seasonally adjusted 5.7 percent in the third quarter of 2005 (2005, November 24). Forrester research predicts that online retailing will reach \$12.8 trillion by 2006 (Hsu, 2006). By 2010, online sales are expected to contribute \$316 billion in retail sales (Sullivan, 2004). This trend is indeed becoming global in nature. In Europe, home to many of the world's high fashion cities, online commerce has been eagerly embraced and consumers use the Web to buy fashion goods online (Paderni, 2005). Of the 40 million customers who make up the online fashion shopper contingent, most are young, higher-income females who use the Web extensively (Paderni, 2005). Recently, the latest American Consumer Satisfaction Index (ACSI) puts online retailers on 80 points, just over ahead of national brick-and-mortar businesses (BizReport, 2007, February 20). Thus, as e-commerce sales continue to grow and consumers find more retail satisfaction online

than offline, it becomes more and more important for online businesses to realize what options are available to them to assure online success.

In apparel marketing for global brand companies, websites are meant to lead customers who are looking for convenience, savings of time or money, and an easy information search to facilitate online shopping. The significance of effective retail websites as a marketing tool for attracting and retaining customers is well recognized (Kim, Williams & Lee, 2003). That is, in order to attract new visitors and encourage repeat business, online retailers need to build websites that meet their customer's demands. They also need to assess the effectiveness of their website from the customer's perspective (Kim et al., 2003). However, there are still some problems in global brand web sites, some of which are caused by the cultural differences displayed on the web site—i.e. American web sites only focus on a web design with American characteristics. Companies that want to do business internationally through the Internet should consider the impact of culture on the understanding and use of web-based communication, content and tools (Marcus & Gould, 2000). Moreover, awareness and sensitivity to cultural difference is a major premise for success in the world market (Tian & Emery, 2002). Consequently, the main challenge for online retailers that target consumers of different cultures is to understand the consumer's web behavior.

While recognized as important criteria for online business, there is not a lot of prior research focusing on the preference of customers from different cultures. Therefore, it is important for marketers, scholars and global online retailers to understand how consumers in different countries perceive parallel websites and what individual characteristics affect said perception. This study conceptualizes attitudes toward websites

in terms of cultural dimensions and customer's web behaviors of two different website designs and explores how cultural differences and consumer's web behavior affect one's attitude toward online shopping.

In order to approach a conceptualization of cultural dimensions with concern to the web, the researcher worked with Hofstede's cultural dimensions and considered how cultures might affect user interface design (Marcus & Gould, 2000). While examining of cultural dimensions, online businesses should consider customer attitudes for online shopping. Although customer attitudes are prevalent in the market area, it is not yet well understood what kind of web design is more attractive to online customers in today's web site design research. Hence, electronic marketing in the business world should deal more carefully with different types of customer's web behaviors when it comes to web design. In this study, two different customer's web behavior types are dealt with: goal-oriented vs. experiential use of web (Holbrook & Hirschman, 1982; Janiszewski, 1998; Novak & Hoffman, 2003; Sanchez-Franco & Roldan, 2005; Wolfinbarger & Gilly, 2001). In accordance with these two types, goal-oriented customers typically decide to shop online more than others and they often operate from a planned set of guidelines (Janiszewski, 1998). Using the web for its information value and purchase utility—such as directly searching for information to complete a task or to reduce purchase uncertainty—are goal-oriented behavior whereas experiential behavior is relatively unstructured recreational use (Sanchez-Franco & Roldan, 2005). However, many researchers have investigated how to reclassify experiential customers as online shoppers because they can shop more enjoyably, fulfill some impulsive buying intention and ultimately have a positive intention to return to the site (Childers, Carr, Peck & Carson, 2001; Holbrook &

Hirschiman, 1982; Novak & Hoffman, 2003; Sanchez-Franco & Roldan, 2005; Wolfinbarger & Gilly, 2001). Other research has also found that customers' intentions combined with their customer behavior type influence their online shopping decision-making (Ha & Stoel, 2004; Schlosser, 2003).

This proposed study attempts to expand on current literature by examining the effect of cultural differences and different consumer's web behavior on online shopping intention, thereby affecting attitude toward the web. It is hoped that this study will not only contribute to current literature, but also serve the practical purpose of influencing e-commerce website design in the apparel business world. Ultimately, the results of this study offer suggestions for increasing the effectiveness of cultural dimensions and consumer's web behavior on attitudes on the web.

CHAPTER 2

LITERATURE REVIEW

This chapter reviews relevant literature pertaining to the study. It covers previous research of the development of e-commerce and online business, the reason why web design is a critical feature for a successful online business, Hofstede's five cultural dimensions, goal-oriented vs. experiential use of the web, attitude toward the web, and stimuli (Nike.com vs. Niketown.com).

2.1 The development of E-commerce and online business

Recently, e-commerce has emerged as a fast growing field of the global marketing. Many companies continued to enter and expand their presence in e-commerce, and consumers have been increased to purchase online (Willis, 2004). E-commerce can be described by a number of features, which can be defined as "The sale and purchase of products and services over the Internet, which includes sharing business information, maintaining business relationships and executing business transactions by way of internet-based technology" and as "The conduct of business among enterprises and consumers where e-business means that enterprises exchange value electronically" (Hsu, 2006, p. 190).

The explosive growth of the e-commerce has revolutionized many aspects of daily life. As more and more people find themselves using e-mail for work and play, making friends on the Internet through chat rooms or messenger services, and Internet purchasing, it is not surprising that businesses based on the web should consider better understanding web users and e-shoppers (Korgaonkar & Wolin, 1999). Consumers and businesses have

the ability to shop from their homes or offices for a variety of products and services from all over the world. Consumers are able to view products on their computers, and visualize how the products may benefit their needs. Moreover, the use of an e-commerce channel such as the web results in a faster response to the needs of the marketplace. The benefit of online commerce over traditional commerce can be summarized by increased speed and efficiency, lower progressing costs, 24 hour service, quick adjustment to market situations and the ability to deal with customers directly instead of through intermediaries (Hsu, 2006).

From this perspective, the Internet combines the entire purchasing process—from product exposure to product purchase—into one easily accessible medium (Joines, Scherer & Scheufele, 2003). Thus, online shopping is one of the most rapidly growing forms of shopping, with sales growths rates that outpace buying through traditional retailing (Levy & Weitz, 2001).

Again, the tremendous growth of the Internet has made not only increased the number of consumers who turn to the Internet to make their purchases, but also has also encouraged a critical mass of consumers and firms to participate in a global online market (Hoffman, Novak & Chatterjee, 2000). The most important consumer benefit associated with marketing on the web is the access to greater amounts of dynamic information to support queries for consumer decisions. The other advantage for industrial consumers is that they can reduce the costs to buyers as more suppliers are able to compete in an electronic open marketplace. The benefits also arise from the use of the web as a distribution channel. Buyers and sellers can access and contact each other directly, potentially eliminating some of the marketing costs and constraints imposed by such

interaction in the terrestrial world (Hoffman et al., 2000). Also, business on the web transfers more of the selling function to the customer, through online ordering and the use of fill-out forms, thus helping to bring transactions to a quicker conclusion (Hoffman et al., 2000). The objective of successful continuous relationship-building between consumers and firms is to give consumers information about the firm and what it has to offer and to receive information from consumers about their needs with respect to such offerings.

However, in this era of globalization, it is important to consider whether regional markets are unique, thus requiring customized management tools and techniques, or whether the same management tools and techniques can be applied across differing marketplaces (Leo, Bennett & Härtel, 2005). Regarding this topic, Internet shopping may require computer skills and resources such as personal computer ownership or accessibility. In a global scale language, culture and government regulation may serve as barriers or impediments to Internet shopping (Shim, Eastlick, Lotz & Warrington, 2001). Thus, in a global market, one method of inquiry would be through the study of a cross-cultural consumer approach toward choices made on the web. Although little research examines cross-cultural differences, in an increasingly globalizing business market, it is imperative to learn marketing management regarding cultural differences in terms of consumer needs. The success of organizations in a culturally different market place may be largely affected by how well companies grasp their consumers' buying behaviors and how well they are able to incorporate such understanding into their marketing plan and strategies (Leo et al., 2005). The Internet-World-State (2003) reported, for instance, that the United States, United Kingdom, Australia, and South Korea are among the top 13

countries in the world with the highest percentage of Internet use and the United States ranks first with 165.75 million online users or 59% Internet use penetration and South Korea ranks sixth with 25.6 million Internet users or 54% of the population. Even though these countries are all industrialized countries, there are considerable differences regarding their respective cultures. As the importance of online businesses increases, cultural differences should be considered accordingly in online business. With the issue of cultural differences, Anastasi (1982) represented that cultural differences may impact customer behavior, and consumers from different cultural backgrounds may evaluate and perceive the same situations differently for online shopping.

Moreover, if retailers hope to attract and retain satisfied online shoppers, they need to know what evaluative criteria consumers use when selecting an e-tailer (Lim & Dubinsky, 2004). Consumer background characteristics are innately stable characteristics of a consumer's life based on the consumer's cultural background, values and demographic, psychological and social attitudes (Wu, 2003).

Many previous researchers have drawn theories to investigate consumer behavior such as behavioral learning, personality research, information processing and attitude models (Cheung, Zhu, Kwong, Chan, & Limayem, 2003). While the revealed components of consumer behavior have been applied in many studies, there are significant windfalls when borrowing concepts from previous consumer behavior models and applying them to online consumer behavior, due to the unique nature of the Internet-mediated shopping environment (Lim & Dubinsky, 2004). Among the classified consumer behavior theories, Vijayasathy (2001) integrated web specific factors (online shopping aid) into the theory of reasoned action (TRA) in order to better explain

consumer online shopping behavior. Song and Zahedi (2005) built on the model of the theory of planned behavior (TPB) and examined the effects of website design on the consumer's adoption of Internet shopping.

Also, researchers have found that web offers opportunities for competition in the present marketplace regarding web as the channel of business. The rapid growth of online retailing has created a vibrant market space and competition with all other shopping channels and it has challenged traditional retailers and is reshaping consumers' shopping habits (Chiang & Dholakia, 2003). Hoffman et al. (2000) also found that the delivery of value- benefits—convenience through direct electronic distribution of software, or enjoyment through a visually-appealing and unusual web site—is a more important competitive element for perspective marketing than other elements such as price. The inclination to use a particular shopping channel often depends on various factors such as consumer characteristics as well as situational variables (Chiang & Dholakia, 2003). In addition, firms are unsure of the number of people on the web and how many people use the web and this uncertainty makes investment decisions difficult (Hoffman et al., 2000). Hence, the commercial success of a web site depends in part on accurate information on market potential and consumer needs.

In this way, the development of e-commerce has been spurred not only by the developing online business, but also by expanding elements, such as the investigation of cultural differences, consumer characteristics and web design factors which can affect the web experience.

2.2 Why Is Web Design a Critical Feature For a Successful Online Business?

In e-commerce, websites play a critical role in attracting and maintaining potential

online customers (Song & Zahedi, 2005). They continue an important channel of communication between customers and sellers and sometimes constitute a company's sole interface with customers and the world at large. To establish one's place in an increasingly competitive online marketplace, the ability to build effective marketing web sites has become a prerequisite for survival in the world of Internet marketing (Tse & Chan, 2004). Martin, Sherrard and Wentzel (2005) studied the issue of personalization by investigating the influence of relevant personality traits in terms of the cognitive difficulty experienced by web surfers in processing web site stimuli. As a result, Martin et al.'s (2005) study revealed that subjects prefer web sites with a medium level of complexity, rather than high or low level of complexity. In addition, Martin et al. (2005) indicated that high sensation seekers prefer arousing qualities in the web, like more complex graphic animation, whereas low sensation seekers prefer a graphically simple site according to the online shopper. Equally, for an Internet vendor, the web site is perhaps the only way a firm communicates with its customer because a web site's appearance and structure can encourage or discourage a consumer's purchase intentions (Cyr, Bonanni, Bowes & Ilsever, 2005).

Many researchers have researched levels of online shopping satisfaction and were able to predict subsequent customer purchases and loyalty to Internet shopping sites (Anderson & Srivanan, 2003; Hsu, 2006; Szymanski & Hise, 2000). In particular, Yoon (2002) tested both trust and satisfaction related to web site design and security, and found trust related to security merits further investigation than various design features of web design. Regarding this respect, web customer satisfaction has two distinctive sources—satisfaction with the quality of web site information content and satisfaction with the web

site's system performance in delivering information (Mckinney, Yoon & Zahedi, 2002). Web information quality is defined as "The customers' perception of the quality of information presented on a website"; web system quality is defined as "Customers' perceptions of the web site's performance in information retrieval and delivery" (Mckinney et al., 2002). Moreover, web information quality is the perception of the customer regarding the characteristics of a web site's content including accuracy, comprehensiveness, reliability, relevance and usefulness; web system quality refers to the users' perception of the effectiveness of system attributes such as navigation, interface layout, download speed, digital seal and value-added mechanisms (Hsu, 2006).

Meanwhile, Szymanski and Hise (2000) recognized that aspects such as product information and web site design are crucially important determinants in accumulating customers. In addition, they referred that a good site design could impact website satisfaction levels and that the more pleasurable shopping experiences came from retail websites that were fast, uncluttered, and easy-to-navigate (Szymanski & Hise, 2000). Also, Cyr, Ilsever, Bonanni and Bowes (n.d.) explained the underlying premise is that site visitors who are comfortable with design and usability features are more likely to be satisfied and revisit the site.

In accordance with predictive factors for success in online business, other studies have systematically examined the web design elements preferences (Cyr et al., 2005; Hsu, 2006; Martin et al., 2005). Superior design elements on the Internet attract and engage customers (Hoffman & Novak, 1996; Tseng & Fogg, 1999). Hoffman et al. (2000) addressed that the image of a web site provides a virtual presence for a firm and its offering. Over and above these concerns, the main challenges for marketers are to attract

visitors to the site and generate significant repeat visits (William & Johnson, 1995).

Therefore, a website's image can build a relationship with customers, even before they purchase the product.

Some researchers have dealt with the area of culture and web design (Barber & Badre, 2001; Marcus & Gould, 2000). In particular, Marcus and Gould (2000) considered web design characteristics such as color and screen images in relation to cultural perspectives. They found significant differences in user preferences. Similarly, Chau, Cole, Massey, Montoya-Weiss, and O'Keefe (2002) asserted that cultural preferences and biases affect the degree of user friendliness with an interface; factors such as background color, graphics, and spatial orientation can change the experience. Jordan (2000) addressed the complex segmentation of preference within culture concerning the aesthetics of designing for experience. In other research, Cry, Bonanni, Bowes, and Ilsever (2005) found that some cultures are more sensitive than others to culturally-biased web design and are therefore more perceptive to trust, satisfaction, and e-loyalty. Barber and Badre (2001) also referred to the merging of culture and usability as "Culturability," when cultural elements are considered in web site design and are expected to directly affect the way a user interacts with a site. Therefore, understanding website preferences across cultures is imperative to the development of customer loyalty in an online environment (Cyr, Ilsever, Bonanni, & Bowes, n.d.), and the consideration of cultural difference is important as Internet commerce increasingly bridges national and international frontiers.

2.3 Culture Influence

Culture is a complex idea and there are too many definitions of culture in different

research fields. As one of the terms, culture has been defined as “Mental concepts influencing relationships with other people, the environment and the concept of time” (Kralisch & Berendt, 2004, p.1). Another definition of culture is concerned with differences such as “Educational background, beliefs, art, morals, customs, laws, economic and political framework, normally typified by country, etc.” (Pheng & Yuquan, 2002, p. 7) Culture represents a nation with a level of cultures, individuals, groups, organizations, or society as a whole may be relevant (Pheng & Yuquan, 2002). Indeed, culture is viewed as a collective phenomenon. People learn patterns of thinking, feeling, and potential acting from their life within their social environment by country. As such, culture is imperative for understanding consumer’s behavior because it is one of the most relevant aspects of a user’s personal context (Kralisch & Berendt, 2004).

Some research has shown that users from different countries differ in their perception of the purpose of the Internet, and accordingly exhibit differences in their user behavior and general attitudes toward the Internet (Chau et al., 2002). In particular, Marcus & Gould (2000) examined a number of Hofstede’s cultural dimensions and their possible impact on user-interface design. Pheng and Yuquan (2002) studied the context of construction projects using the Hofstede’s cross-cultural dimensions. Singh, Zhao, and Hu (2003) examined the cultural adoption on the web comparing American domestic and Chinese websites based on the Hofstede’s cultural dimensions. In many research fields of cross-culture on the web, many researches compared cultural differences using Hofstede’s cultural dimensions established by Hofstede (1980). Although cultural difference is a significant factor in web business, many international web businesses have been designed and developed with an insufficient knowledge of the user and his/her

cultural differences.

2.4 Hofstede five cultural dimensions

During 1978-83, the Dutch cultural anthropologist Greetz Hofstede discovered that mental programs denote the existence of five underlying value dimensions, along which 53 countries could be positioned into culture areas (Marcus & Gould, 2000). He determined patterns of similarities and differences among his data set, which was conducted with hundreds of IBM employees in 53 countries (Marcus & Gould, 2000). The index of Hofstede's cultural dimensions is shown in Appendix 1.

In particular, Marcus, Smith, and Salvendy (2001) identified Hofstede's five dimensions and each of five dimensions. Hofstede's five dimensions of culture are as follows: power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long vs. short-term time orientation. These dimensions are characterized in Table 2.1.

Table 2.1

The Description of Hofstede's Five Cultural Dimensions

Cultural Dimensions	Description
Power Distance (PD)	The extent that people accept large or small distances of power in social hierarchies
Individualism vs. Collectivism (IC)	The orientation to individual or group achievements
Masculinity vs. Femininity (MAS)	The extent of role division between the sexes on which people in a society place different emphasis—i.e. work goals and assertiveness as opposed to personal goals and nurturance
Uncertainty Avoidance (UA)	The extent to which members of an organizational society feel threatened by and try to avoid future uncertainty or ambiguous situations
Long vs. Short-term Time Orientation (LTO)	The orientation to Confucian thought, which emphasized patience

Note. From “Cross-cultural User-Interface Design” by Marcus, A., Smith, M. J., & Salvendy, G. E., Aug 5-10, 2001, Proceedings, 2, Human-Computer Interface Internet (HCII) conf., New Orleans, LA, USA, Lawrence Erlbaum Associates, Mahwah, NJ, USA, p.502-505.

2.4.1 Power Distance (PD)

Within cultural dimensions, power distance (PD) is the aspect that shows the nature of human relationships with regards to hierarchy (Marcus et al., 2001). While high-PD countries expose strong hierarchical systems, low-PD countries have flatter hierarchies and tend to view subordinates and supervisors more closely (Marcus et al., 2001).

Kralisch & Berebdt (2004) also indicated that members of high-PD cultures are characterized by vertical hierarchies in relation to mental models and also by a higher ability/desire to structure access to information. Thus, the group of high power distance prefers to declare their confirmed opinion, while the group of low power distance tends to express passively their opinion and prefer to support the others. Relating to the structure of websites, it is assumed that consumers from high-PD cultures tend to have positive attitude toward websites that have more in-depth information.

2.4.2 Individualism vs. Collectivism (IC)

While the power distance (PD) cultural dimension focuses on the nature of human relationships regarding hierarchy, individualism vs. collectivism (IC) focuses on an individual's relationship with society or other individuals. In an individualistic society such as the U.S., Canada, or Germany, members of society are expected to consider individual interests over interests of the group, and the value placed on individual decision making is high (Cyr et al., 2005). In other words, the members of an individual society place more value in individual freedom and decision-making for online purchasing than they do in the opinions of others (i.e. friends and family), or in the degree of purchase rates. In contrast, the members of a collective society have a stronger value for group decision-making and societal norms (Singh, Zhao, & Hu, 2003). In the

evolving Internet environment, collectivists may see the risks of buying online as more pervasive than do members of an individualist culture (Jarvenpaa, Tractinsky, Saarinen & Vital, 1999).

2.4.3 Masculinity vs. Femininity (MSA)

The masculinity and femininity dimension (MSA) refer to gender roles, not physical characteristics (Marcus & Gould, 2000). In terms of the masculinity vs. femininity dimension (MSA), “masculine” culture values assertiveness, ambition, success and performance. On the contrary, “feminine” cultures value beauty, nature and nurturance, and the ambiguity of gender roles. By Hofstede’s dimension, the U.S.A is a relatively more masculine society (rank 15) than South Korea (rank 41) (See Table 2.2). For example, the website design in masculine cultures might be more task-oriented and provide quicker results for more limited tasks rather than be oriented to outstanding achievements or calling attention to achievements (Marcus et al., 2001). In masculine societies, achievement, performance and growth are more emphasized and gender roles are more clearly differentiated than in feminine societies (Singh et al., 2003).

2.4.4 Uncertainty Avoidance (UA)

Culture vary in their avoidance of uncertainty, creating different rituals and having difference values regarding formality, punctuality, legal-religious-social requirements, and tolerance for ambiguity (Marcus & Gould, 2000). Uncertainty Avoidance (UA), that is, deals with a society’s tolerance for uncertainty and ambiguity. Countries like Greece, Japan and South Korea rank high on uncertainty avoidance and they are generally more averse to risk, need security and look for direction. High uncertainty avoidance societies are “tight societies” that value conservatism and traditional beliefs (Singh et al., 2003).

On the contrary, countries like Canada, Australia, the U.K., and the U.S. have been found to have greater tolerance for uncertainty (Singh et al.). In other words, the members in a society low on uncertainty avoidance are willing to accept uncertainty and ambiguity.

2.4.5 Long vs. Short Term Orientation (LTO)

Finally, Hofstede (2001) analyzed long vs. short term time orientation (LTO) to stand for the fostering of virtues oriented towards future rewards. Its opposite pole, short term time orientation, stands for the fostering of virtues related to the past and present (Kralisch & Berendt, 2004). Marcus and Gould (2000) point out cultures with low levels of long-term time orientation (LTO) will consider the immediacy of results and achievement of goals an important issue. On the other hand, cultures with high long-term time orientation exhibits stronger preferences for navigation and require more patience to determine whether items are of interest (Marcus and Gould, 2000). In addition, a long-term time orientation culture prefers a view of utility in regards to information of a specifically known item (Kralisch & Berendt, 2004). What is more, long-term time orientation seems to play an important role in Asian countries that have been influenced by Confucian philosophy over many thousands of years (Marcus & Gould, 2000). Therefore, a long-term orientation cultures are concerned with trusting a company or others in the future, while a short-term orientation culture are considering an immediate response while the facts are shown in the present.

Based on Hofstede's cultural dimensions, Korean culture and American culture are different in many aspects. The U.S.A has commonly been used as a frame of reference for western culture (Urban, 2006) and Korea represents the epitome of eastern culture (Hofstede, 1993). To briefly compare the dimension scores between U.S.A and South

Korea, Table 2.2 summarizes cultural differences based on Hofstede's five dimensions. As shown in Table 2.2, Korea and America have different cultural dimensions. Therefore, it is assumed that there will be a different relationship with consumer goal-oriented vs. experiential use of web behavior and attitude toward the web according to said cultural difference.

Table 2.2

The Score Comparison of Hofstede's Dimensions between U.S.A and South Korea

	Power distance		Individualism		Masculinity		Uncertainty Avoidance		Long-term time orientation	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
U.S.A	38	40	1	91	15	62	43	46	17	29
South Korea	27/28	60	43	18	41	39	16/17	85	5	75

Note. From "Culture's Consequences: Comparing values, behaviors, institutions, and organizations across nations" by Hofstede, 2001, International Educational and Professional Publisher, p. 500, Thousand Oaks, London, New Delhi.

In order to explore the cultural differences between Korean and America, the researcher adopted the Hofstede's cultural five dimensions because the researcher recognize that this cultural model is the one that has been most extensively applied and validated in a variety of cultural context and management research in general, and Hofstede's cultural dimensions are used the major determinants of the structure and management of firms and the behavior of their customers (Hofstede, 1991; Perlitz, 1994).

Recent research has revealed an apparent impact of cultural dimension on online shopping behavior. Pheng and Yuquan (2002) said that a cultural framework is especially useful for understanding people's conceptions of an organization, the mechanisms that are considered appropriate in controlling and coordinating the activities within it, and the roles and relations of its members. In this way, cultural differences affect consumer's web behavior and are a good measurement by which to study consumer's web behaviors or attitudes toward the web in the online marketing area.

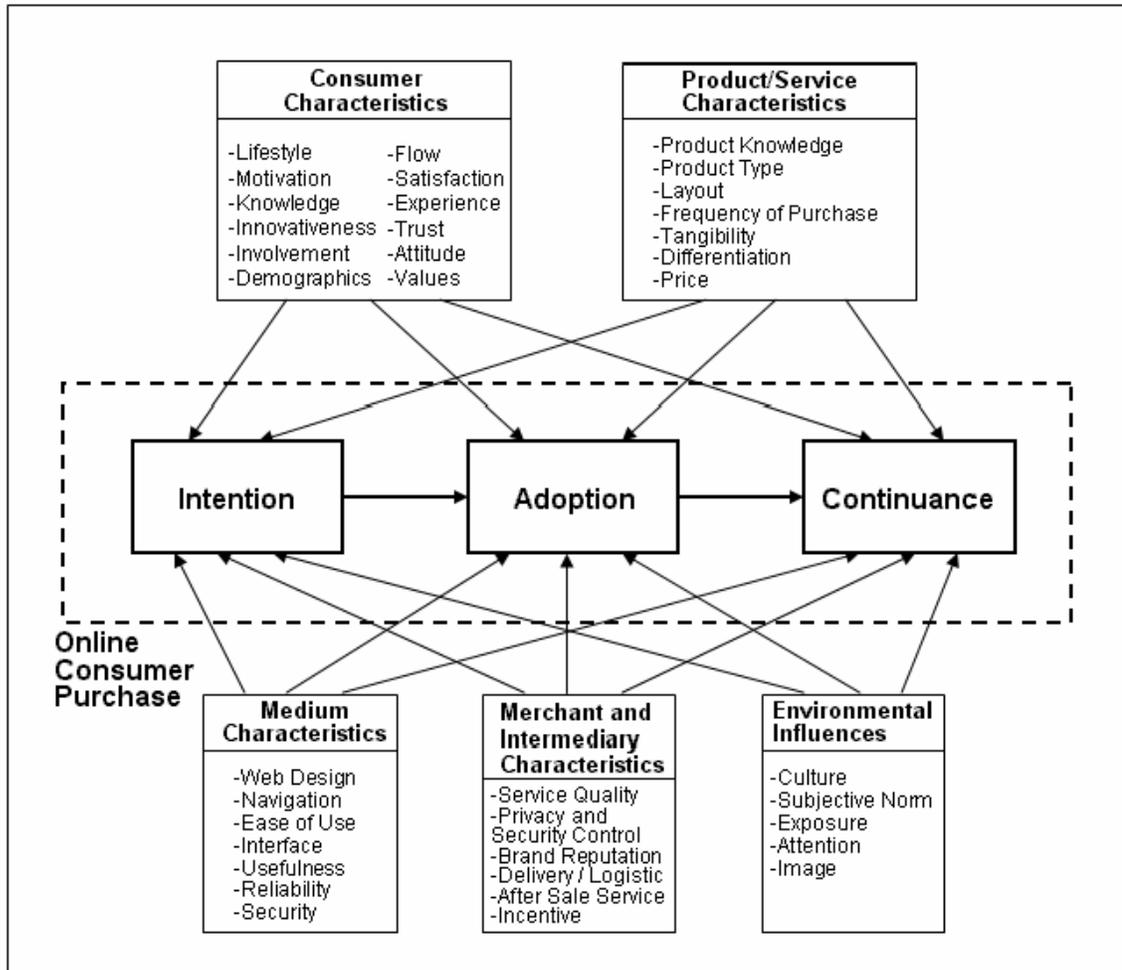
2.5 Consumer Behavior

2.5.1 Online Shopping Behavior

Online shopping behavior has been an important topic in online shopping research areas. The main reason is that most consumers are computer users and the online consumers perform all the functions of a traditional consumer on the computer with commercial web sites (Koufaris, 2002). Also, the physical store has been transformed into a virtual store through Information Technology (IT) (Koufaris, 2002). However, there are some important technology-based differences between offline and online channels that must be understood in order for companies to maximize their performance and technology-based consumer characteristics (Childers, Carr, Peck, & Carson, 2001).

Cheung, Zhu, Kwong, Chan, and Limayem (2003) emphasized investigation factors affecting online purchases, and suggested that there are still significant differences between offline and online consumer behavior that warrant a distinguished conceptualization. Also, Cheung et al. (2003) suggested that initial adoption by consumers will lead to overall success and that e-companies who succeed in their initiative adoption can create and maintain a long-term relationship with customers. To analyze online purchasing intentions, Chen and Chang (2003) focused on the five important factors explaining consumer online purchasing intentions; individual/consumer characteristics, environmental influences, product/service characteristics, medium characteristics and online merchant and intermediary characteristics. They framed the relationship between five factors and three key steps necessary to encourage repeated online shopping (See Figure 2.1).

Figure 2.1 Framework of Online Consumer Behavior¹



¹ From "Online Consumer Behavior: A Review and Agenda for Future Research" by Cheng, C.M.K., Zhu, L., Kwong, T., Chan, G.W.W., and Limayem, M., 2003, June 9-11, p.201, 16th Bled eCommerce conference eTransformation, Bled, Slovenia.

It was found that consumer behavior and medium characteristics are key points to be explored in prior research, but have not been investigated in accordance with environmental influences including culture and reference groups (Cheung et al., 2003). Also, Cheung et al. (2003) noted that it was contended that environmental factors like culture play an important role in affecting consumer purchasing decisions by Engel, Blackwell and Minard (2001). Besides, Cheung et al. (2003) empirically found that these consumer behaviors affect attitude and intention of purchasing and repurchasing on the web which is the main purpose of this study.

2.5.2 Goal-oriented vs. experiential use of web

Research for consumer characteristics has investigated various types of consumer behavior and many motivations exist for shopping goals (Childers et al., 2001). Babin, Darden and Griffin (1994) evaluated customer shopping experience along two important dimensions: utilitarian and hedonic value. This scale's dimensions are reflected in accounts of shopping's dark side and fun side (Babin et al., 1994). Babin et al. (1994) appended that hedonic and utilitarian shopping outcomes may provide insight into many consumption behaviors including impulsive purchasing, compulsive purchasing and browsing. Briefly, utilitarian consumer behavior has been described as "Task-related and rational" (Babin et al., 1994). On the other hand, hedonism is defined as "The doctrine that pleasure is the highest good; the pursuit of pleasure; a life-style devoted to pleasure-seeking" (Hopkinson & Pujari, 1999). Also, hedonic value is more subjective and personal than the utilitarian counterpart and results more from fun and playfulness than from task completion so that hedonic shopping value reflects shopping's potential entertainment and emotional worth (Babin et al., 1994).

In other areas, several consumer behavior studies focused on a “Shopping as work” theme (Fischer & Arnold, 1990; Sherry, McGrath & Levy 1993) and there are studies for “Shopping’s fun side” (Bloch & Bruce, 1984). These two types of consumer behaviors illustrate the diversity of consumer’s dimension along with their experience: utilitarian and hedonic value, entertainment and functional factors, or instrumental and utilitarian goal-directed factors. Regarding these two consumer behavior characteristics, Tse, Belk and Zhou (1989) suggested that these are sought by developed consumer societies. For example, high levels of hedonic shoppers might be more expected in American culture than in the culture of less developed countries. Similarly, Sanchez-Franco and Rey (2004) found two main Web user-types; H-browser (High-browser or experiential browser) and H-seeker (High goal-directed seeker or high situational involvement). These two types are explained in terms of the high browser, who is more likely to adopt the Web using enjoyable, lengthy browsing, versus those who adapt to their needs and goals and leave the Web after an active and efficient search (Sanchez-Franco & Rey, 2004).

Moreover, many researchers have studied online shopping consumer behavior between goal-directed users and experiential users in online environments (Holbrook & Hirschman, 1982; Janiszewski, 1998; Novak & Hoffman, 2003; Sanchez-Franco & Roldan, 2005; Wolfinbarger & Gilly, 2001). Clearly, understanding what motivates consumers into online shopping should be a matter of importance for online business strategy and marketing decisions, as well as website design. Marketers in the offline environment already recognize that consumers shop differently depending on whether their motivations for searching are primarily experiential (for fun) or goal-directed (for efficiency) (Wolfinbarger & Gilly, 2001).

Moreover, Hoffman and Novak (1996) summarized the distinction between goal-directed behavior and experiential behavior for the world wide web (See Table 2.3) and the differences reflect consumer behavior issues such as involvement, searching, decision making, consumer benefits and motivation (Novak & Hoffman, 2003). As another way, Wolfinbarger and Gilly (2001) formed the features according to goal-directed behavior and experiential behavior of online shopping (See Table 2.4). Table 2.4 described their characteristics and desire for online shopping respectively.

Table 2.3

Distinctions between Goal-directed and Experiential Behavior

Goal-directed Consumer	Experiential Consumer
Extrinsic motivation	Intrinsic motivation
Instrumental orientation	Ritualized orientation
Situational involvement	Enduring involvement
Utilitarian benefits/value	Hedonic benefits/value
Directed (prepurchase) search	Nondirected (ongoing) search
Goal-directed choice	browsing
Cognitive	Navigational choice
Work	Affective
	Fun
Planned purchases; repurchasing	Compulsive shopping; impulse buys

Note. From “The influence of Goal-directed and Experiential activities on online flow experience” by Novak, T.P. and Hoffman, D.L., 2003, *Journal of Consumer psychology*, 13 (1/2), p. 3–16.

Table 2.4

Focus Group Participants Descriptions of Online Shopping

Focus Group Participant Descriptors of:

Goal-Oriented Shopping

Accomplishment
 Going to specific site
 Looking for specific product
 Saving time
 I have a purpose in mind
 I make repeat purchases
 Finding the best price for a specific item

Experiential Shopping

Enjoyment
 Surfing/trying new sites
 Looking for new things
 Killing time
 I look for ideas
 I check my favorite sites regularly
 Bargain hunting for what's on sale

Focus Group Participant Desires when:

Goal-Oriented Shopping

I want to get in-and-out quickly
 (fewest clicks)
 Do-it-myself
 Don't waste my time
 I want immediate response to questions
 I want ease of use

Experiential Shopping

I want a welcoming site that draws me in
 I can interact with other consumers
 Shows me lots of choices
 I like to browse sites related to my hobby
 I want a unique experience

Note. From "Shopping Online for Freedom, Control, and Fun" by Wolfinbarger, M. and Gilly, M.C., 2001, California Management Review, 43 (2), p. 34-55.

Under the previous researches, the researcher adopts Sanchez-Franco and Roldan's (2005) two dimensions, goal-oriented and experiential behaviors, classified by motive may influence the attitude toward the web and behavior. In particular, the researcher use goal-oriented vs. experiential use of web as the modified terms in substitute for goal-oriented vs. experiential consumer behavior to measure clearly and correspondently in this study. The terms of goal-oriented vs. experiential use of web are used in the same context as goal-directed vs. experiential consumer behavior.

Experiential use of web is in a category where shoppers have an ongoing, hobby type interest, while experiential customers show ritualized orientations exploring the web in their daily quest for the latest interesting sites (Wolfenbarger & Gilly, 2001). Wolfenbarger and Gilly (2001) noted the consumers for experiential use of web frequently and regularly check sites of interest, looking for new items and updated information (Korgaonkar & Wolin, 1999). In other words, consumers who use the web experientially will search for new and updated opportunities, which then provoke them into further exploration of the websites. Accordingly, consumers for experiential use of web emphasize the importance of the primary process thinking in accordance with the pleasure principle (Holbrook & Hirschman, 1982). This is an intrinsic motivation which describes an individual's personal gain associated with the use of a particular technology so that it includes enjoyment, pleasure, and fun (Sanchez-Franco & Roldan, 2005). A more important factor to investigate is how the higher playfulness associated with experiential behavior results in a more positive mood, greater shopping satisfaction and a higher likelihood of impulse purchasing compared to goal-directed shopping (Wolfenbarger & Gilly, 2001). Thus, the consumer tendency towards experiential use of

the web is a factor worth further investigation in the online marketplace.

Goal-oriented use of web has been described by various marketing scholars as task-oriented, efficient, rational and deliberate; shoppers with goal-oriented use of web are transaction-oriented and desire to purchase what they want quickly and without distraction (Wolfinger & Gilly, 2001). They view online shopping as “work,” and evaluate the results of their efforts by terms commonly associated with work performance, such as “success” and “accomplishment” (Wolfinger & Gilly, 2001). Consumers for goal-oriented use of web are using the web for its informational value and purchase utility such as directly searching for information to complete a task or to reduce purchase uncertainty (Sanchez-Franco & Roldan, 2005). Therefore, consumer behavior for goal-oriented use of the web leads online consumption due to its characteristics of efficient and direct making decision in online shopping.

Regarding these consumers’ web behaviors, Wolfinger and Gilly (2001) found that the degree to which online shopping fulfills goal-oriented and experiential consumer needs will affect the amount of shopping dollars in the online environment. Also, it is reported from an online survey that 71% of shoppers (goal-oriented shoppers) had planned their most recent purchase, while 29% of shoppers (experiential shoppers) had been browsing when they made their purchase (Wolfinger & Gilly, 2001). Thus, consumers’ goal-oriented use of web behavior is more likely to purchase online than consumers’ experiential use of web behavior. Nevertheless, the other researchers suggest that consumption has begun to be seen as involving a steady flow of fantasies, feeling and fun encompassed by an “Experiential view” and they are associated with specific benefits: surprise, uniqueness, excitement, online deal searching and positive sociality

(Holbrook & Hirschman, 1982). Ultimately, consumers for both of goal-oriented vs. experiential use of web not only actively purchase while online, but also are impulsive and tend to purchase more. Therefore, it is essential to consider two types of consumer's web behavior are significantly related to the attitudes toward the web.

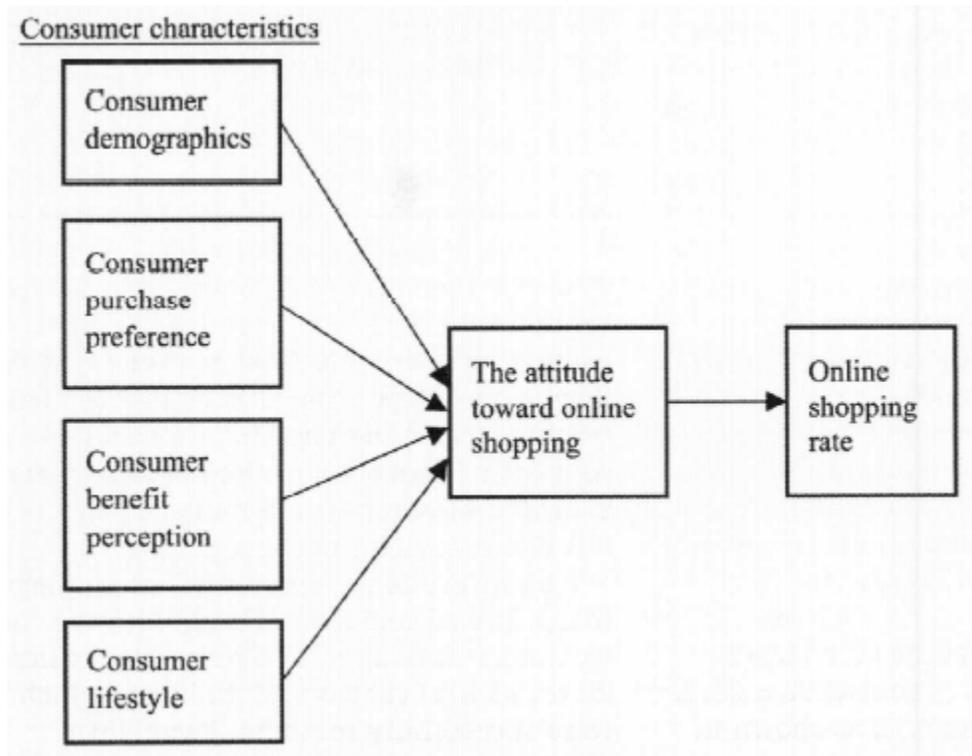
2.6 Attitudes Toward Websites

Attitudes serve as the bridge between a consumer's background characteristics and the consumption that satisfies his/her needs (Wu, 2003). There are literally hundreds of definitions of the word *attitude* (Wu, 1999). Among many definitions for attitude, Wu (1999, p.37) conceptualized attitudes as "A person's relatively consistent evaluations, feelings and tendencies toward an object or idea" so that attitudes put people into a frame of mind for liking or disliking things, for moving toward or away from them. Because attitudes are difficult to change, to understand consumer attitudes toward online shopping can help marketing managers predict the online shopping rate and evaluate the future growth of online commerce (Wu, 2003). As another definition, *attitude* is described as "A psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Lim and Dubinsky, 2004, p.506). Also, attitude toward online shopping has a strong influence on consumers' buying intentions, the immediate precursor to actual behavior (Lim and Dubinsky, 2004). As such, attitude towards web sites is an indicator of retail website effectiveness. Hence, measuring attitudes toward websites is an important step in studying the effectiveness of website design and web business.

Kim, William, & Lee (2003) identified the attitude toward online shopping as an individual characteristic that may play a role in developing perceptions of a specific

website. Shim, Eastlick, Lotz, & Warrington (2001) proposed an online repurchase intention model in order to explain the prediction of online purchase intention and found that consumers' positive attitudes toward online shopping significantly influenced the use of the Internet for information searching and intentions to shop online. In another study, Lee and Johnson (2002) examined differences in attitudes toward online shopping among different groups of customers, determined largely by their online browsing and purchasing experiences. Wu (2003) examined the relationship between consumer characteristics and attitude toward online shopping and formed the influence factors of attitude. Wu (2003) also identified the consumer characteristics using four areas: consumer demographics, consumer purchasing preference, and consumer benefit perception and consumer lifestyle (See Figure 2.2). Figure 2.2 shows that consumers' characteristics have a significant relationship with the attitude toward online shopping; the attitude toward online shopping has a significant relationship with the online shopping rate (Wu, 2003). In other words, consumer attitude is affected by the consumer individual characteristics and directly affects the shopping decision.

Figure 2.2 Consumer Characteristics, Attitude, and Online Shopping²



² From "The relationship between consumer characteristics and attitude toward online shopping" by Wu, S., 2003, *Marketing Intelligence & Planning*, 21 (1), p.37. Reproduced with permission of the copyright owner.

Through the previous studies of consumers' attitudes toward the web, the researcher came to realize that website design and corresponding attitudes are the most important factor for online businesses. Wu (1999) stated three critical categorized dimensions to evaluate attitudes which are (1) cognitive information, (2) affective/emotional information, and (3) information concerning past behaviors or behavioral intentions. In Wu's (1999) study, these three issues helped to resolve unwanted attitudes, and were more flexible and adaptable to various situations including the web since the web contains audio, video, graphics, and texts, it can change rapidly; a firm's website this week might be different from next week's, which allows users to interact with it in real time (Wu, 1999). With these reasons, the attitudinal dimensions by Wu (1999) are appropriate to examine attitude toward the web for this research. However, this research chooses two conceptualizations to measure attitudes toward the web which are cognitive information and affective information. Specifically, affective information means to perceive aesthetically web design elements with consumer's sensory and hedonic stimuli, like color, music, action, and interactivity, which are positively related to attitudes toward a website in this study. As the other measurement, cognitive information is related to trust with online web site for completing consumers' shopping transaction. Cognitive issues have been pointed out in other research, particularly that the most important variable appears to be a user's cognitive capacity, which has been examined mostly under the aspects of topic knowledge and web experience (Navorro-Prieto, 1999; Vakkari, 2000). Thus, affective and cognitive information can be adequate components to evaluate attitudes toward the web in this study.

Browsing or searching for information on the web is the process by which

consumers gather information about goods or services before a purchase is made (Ha & Stoel, 2004). This browsing information on the web is also a crucial element in online consumer decision-making, since the vast amount of information is available on the Internet. A decision is made when consumers have enough information about products or services. Ha and Stroel (2004) investigated whether browsing for information intention can be directly linked to a purchasing intention, where online purchasing intention is the act in which consumers actually pay for goods over the Internet. Even though there is some hesitance to buy a selection before actually seeing it, consumers are still purchasing online because of convenience, comparing variable price, etc. Therefore, the attitude toward the web—i.e. whether consumers browsing the websites for the purpose of purchase , or browsing just for information search —is significantly related to actual online shopping purchases, which is the ultimate goal of e-commerce businesses.

Based on the previous researches for attitudes toward the web, the researcher organized four key components of attitudes to achieve the purpose of this study. The four keys of attitude toward the web to study in this research include affective information, cognitive information, browsing for information intention, and purchasing intention.

Consequently, as mentioned above, the development of e-commerce has created consumers on the web. Due to the growth of online business, cultural differences and consumer's web behavior from culture to culture are paramount components to be researched. In the global business environment, they can be imperative factors to success in business. Moreover, the success of an organization in a culturally different marketplace may be largely determined by how well decision-makers grasp the consumer's buying behavior, and how well the decision-makers incorporate such understanding into their

marketing plans and strategies (Leo et al., 2005). Therefore, this research conducted to reveal and examined in order to understand the effects of cultural dimensions and consumer behavior on attitudes toward the web.

2.7 Hypotheses Development

Based on the literature review of cultural difference between Korea and America and consumer behavior for use of web, the researcher presents the following hypothesis 1:

H1: There will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) Individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation, and their consumer behaviors: (a) goal-oriented use of web, (b) experiential use of web.

It is also expected that consumer's goal-oriented and experiential use of web behavior influence attitudes toward the web regarding affective information, cognitive information, browsing for information intention and purchase intention. Hypothesis 2 in this study expects that:

H2: There will be a significant relationship between consumer behaviors: (1) goal-oriented use of web, (2) experiential use of web, and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention.

Finally, it is expected that cultural differences in Internet businesses are likely to extend into web attitudes. According to Hofstede (2001), the predisposition to purchase new and different products is related to cultural characteristics. Hence, on the basis of cultural difference it is hypothesized that:

H3: There will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation, and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention.

2.8 Stimuli (*Nike.com* vs. *Niketown.com*)

Recently, many researches have studied important components on the web in order to perceive positive attitudes from consumers. Website design has been discussed as a critical and major element to attracting and maintaining a consumer's interest (Cyr, Bonanni, Bowes, and Ilsever, 2005; Demangeot and Broderick, 2006; Kim, Williams, and Lee, 2003; Martin, Sherrard, and Wentzel, 2005; Song and Zahedi, 2005). Martin, Sherrard, and Wentzel (2005) proposed that website design can affect one differently based on individual characteristics and examined the impact of web design according to the sensation seeking and needing cognition on the web site. The following results were found: (1) high sensation seekers prefer complex visual designs, and low sensation seekers enjoy simple visual design, and (2) cognition-evaluated web sites with high verbal and low visual complexity are more favorable (Martin et al., 2005). Cyr, Bonanni, Bowes, and Ilsever (2005) also researched web site design preferences across cultures, and, in their study, web site design and culture were advanced as important to the web trust, web site satisfaction and e-loyalty in online business relationships. Kim, Williams, & Lee (2003) conducted a study examining the structure of dimensions of retail website quality between US and Korean internet users, and the relationship between attitude toward online shopping and retail website quality. With regard to the previous research,

web site design is not only significantly related to cultural dimensions and consumer use of web behavior, but also shows that it affects attitude toward the web.

In this study, the researcher posits that consumer's attitudes toward web site are favorably influenced by cultural dimensions and consumer's goal-oriented vs. experiential use of web behavior. In addition, this study reports on an experiment examining the relationship between consumers' goal-oriented vs. experiential use of web behaviors and attitude toward web site in the two different retail websites: Nike.com vs. Niketown.com. There are reasons why the researcher chooses the Nike web site. The first reason is that Nike is the one of the world-famous global apparel brand. The second is that Nike online web site offers the environment where people can do online shopping within either Nike.com or Niketown.com. The third is that Nike.com and Niketown.com show distinctive differences regarding web design. With these reasons, the researcher adopted Nike web site to examine attitude toward the web.

Incidentally, it was also reported that Nike Inc. was taking the lead in its industry with innovative Web marketing by fool.com on July 25, 2000. The Nike.com has all kinds of links connected to other Nike sites. There are many links such as Nike ID and, the Charles Barkley Network, Nike Cup Soccer, and Nike Digital Video. In particular, Nike ID is the "design your own shoe" part of the website. Customers can personalize their shoes by choosing styles and colors and adding words or numbers on the back of shoes. Even if Niketown.com is a part of its linked categories, it is originally focused on a purpose of e-commerce which allows the marketers to sell their products to consumers.

It is important that even though shopping is available in both Nike.com and Niketown.com, the two websites have different characteristics. Nike.com emphasizes the

aesthetic aspects of design and website performance by including more animation, video and sound than online shopping functions. The aesthetic nature of a site has very distinct look-and-feel that is artistic, visually appealing, and completely consistent in the use of color palette and graceful navigation, with the elegance associated with the Brand (Mohammed, Fisher, Jaworski, and Paddison, 2004). Obviously, it is largely captured by visual characteristics such as color, graphics, photographs, font choices, music, flash animation, and other visually oriented features focusing on the impact on performance and usability. On the other hand, Niketown.com focuses on the functionality which is oriented largely on the core offering whether it is a product, service, or information. The functionality oriented site contains much more information in presented on a single computer screen and navigation on this site is simple to provide consumers with effective navigation from page to page (Mohammed et al., 2004). Thereby, consumers can be able to move easily throughout the website. Although the Nike.com website cannot be distinguished as an aesthetic website design and Niketown.com can not be distinguished as a functional web site design, they were both operationalized by the context dimension of this study.

Consequently, the purpose of this study is to investigate attitudes between Nike.com vs. Niketown.com with cultural dimensions and consumer's use of web behavior in mind. It is expected that the results of this study will not only be useful in understanding consumer's web behaviors and making a successful website, but will also show how to influence experiential users of the web into making a purchase. Moreover, the results of this study will be useful to scholars who investigate attitudes toward websites, as well as web designers, since it helps to better define media features and

important components of web design that, in effect, lead to customers. Furthermore, it is also expected that this study will lead to future research projects that will more closely examine the different types of customer's web behavior and purchase intention. Finally, based on the literature review, the researcher suggested the proposed model (See Figure 2.3) and all of the hypotheses (See Table 2.5).

Figure 2.3 The Proposed Model of Research

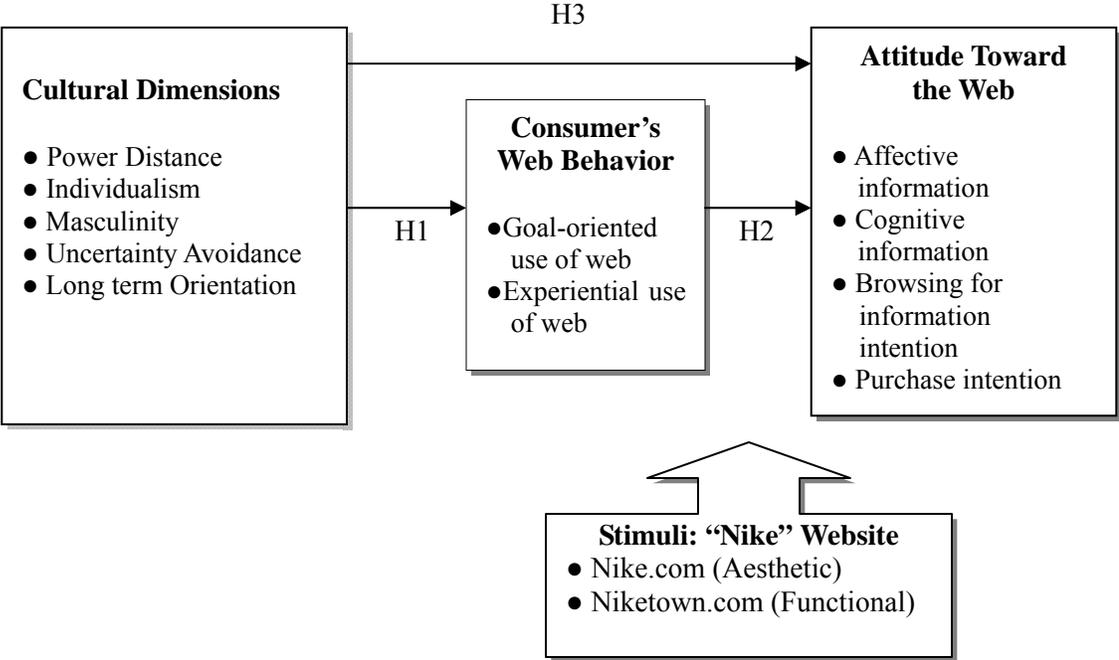


Table 2.5

Summary of Hypotheses; Cultural Dimensions and Consumer's Web Behavior, and Attitude toward the Web

Hypotheses

- H1 There will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) Individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation, and their consumer behaviors: (a) goal-oriented use of web, (b) experiential use of web.
- H2 There will be a significant relationship between consumer behaviors: (1) goal-oriented use of web, (2) experiential use of web, and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention.
- H3 There will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation, and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention.
-

CHAPTER 3

RESEARCH METHODS

This study adopts a survey approach in order to collect data for hypotheses testing. This chapter describes the research methods used for this study. The first section introduces questionnaire development. The second section explains questionnaire components with regarding to cultural dimensions, consumer's web behavior, and attitudes toward the web. The third section reports a pre-test, and the fourth section reports the data collection and procedure. The last section explains the methods for data analysis. To explore the influence of cultural dimensions and consumer's web behavior on attitudes toward websites, a survey was conducted on two cultural groups—Americans and Koreans—who browsed two websites: Nike.com and Niketown.com.

3.1 The Questionnaire Development

The questionnaire was used to gather the data needed to achieve the objectives of this study. A preliminary survey questionnaire was developed based on the review of relevant literature. The scales used for the study were adopted from the existing scales validated and used in past research. Modification was made to some items to meet the specific needs of this study. The questionnaire consists of three parts. The first part (section 1 and section 2) was given to participants before the main experiment. In section 1, the questions regarding cultural dimensions and consumer's web behavior were adopted from the studies of Hofstede (1980); Li, Zinn, Chick, Graefe & Absher (2004); Novak and Hoffman (2003) and Sanchez-Franco, Roldan and Rey (2004, 2005). All items in section 1 were rated using seven-point Likert scales. Section 2 included

demographic questions such as gender, age, nationality and general questions regarding Internet usage, comfortability of using Internet, hours using computer and the frequency of online buying. All structured questions for demography and general information for Internet experiences in section 2 were developed from GVU's 10th WWW User Surveys, www.gvu.gatech.edu/user_surveys/. The section 3 questionnaire was asked to be filled out by participants after they browsed either website, Nike.com or Niketown.com. Section 3 included questions regarding attitude toward the web in terms of affective information, cognitive information, browsing for information intention and purchasing intention. Therefore, the questionnaire can be delineated into four sections for this study: (1) demographic and general information (2) cultural dimensions, (3) consumer's use of web behavior; either goal-oriented use of web vs. experiential use of web, and (4) attitude toward the web site; affective information, cognitive information, browsing intention or the purchase intention. A copy of the questionnaire is included in Appendix 3.

3.2 The Questionnaire Components

3.2.1 Five cultural dimensions

Questions of cultural dimensions in section 1 were designed to identify how personal cultural dimensions differ between Americans and Koreans. Within the framework of Hofstede's cultural dimensions, Korean society is generally higher regarding power distance, uncertainty avoidance, and long-term orientation dimension than American society. American society is higher in the individualism and masculinity dimensions than Korean society. Even though cultural dimensions are largely organized by their cultural characteristics according to Hofstede's cultural dimensions, the researcher expects that participants' individual characteristics of this study can be

different from each other.

Hofstede's cultural values have been widely used among international management and marketing scholars (Li, Zinn, Chick, Graefe, & Absher, 2004). Li et al. (2004) studied and examined the validity and reliability of Hofstede's measure of cultural values from an ethnically diverse sample in a National Forest recreation context. In their result, it is suggested that seven items—two items from Hofstede's original power distance dimension, one item from the individualism dimension, two items from masculinity dimensions, and two items from the uncertainty avoidance dimensions—represented the best measure of cultural values. These seven items differ significantly among ethnic groups and reliability analysis revealed these seven items were retained yielding a Cronbach's alpha of 0.779 (Li et al., 2004). Nevertheless, the researcher for this study adopted the original 16 questions from Li et al.'s (2004). Because this research has a comparative purpose of measuring cultural differences between Americans and Koreans, the researcher expected that there would be different results from the original article with the subjects of this study. In order to make the questionnaires consistent, items in the Likert-style are formed with a seven point scale ranging from “*strongly disagree*” to “*strongly agree*.” The stem for seven items is “*please indicate your level of agreement with the following statements.*” The cultural dimensions as follow questions are:

Power Distance:

- (1) Inequalities among people are both expected and desired.
- (2) Less powerful people should be dependent on the more powerful.
- (3) Inequalities among people should be minimized.
- (4) There should be, and there is to be some extent, interdependencies between less

and more powerful people.

Individualism vs. Collectivism:

- (1) Everyone grows up to look after him/herself and his/her immediate family only.
- (2) People are identified independently of the group they belong to.
- (3) An extended family member should be protected by other member in exchange for loyalty.
- (4) People are identified by their position in the social networks to which they belong.

Masculinity vs. Femininity:

- (1) Money and material things are important.
- (2) Men are supposed to be assertive, ambitious and tough.
- (3) Dominant values in society are caring for others and preservation.
- (4) Both men and woman are allowed to be tender and to be concerned with relationships.

Uncertainty Avoidance:

- (1) Uncertainty is a normal feature of life and each day is accepted as it comes.
- (2) Emotions should not be shown.
- (3) High stress and subjective feelings of anxiety are frequent among people.
- (4) Fear of ambiguous situations and of unfamiliar risks is normal.

To measure Hofstede's fifth dimension, the researcher also adopted the questions from Values Survey Module (VSM), since initial IBM questions did not include the fifth dimension, long vs. short term orientation. VSM questions were a test designed for the comparison of two or more countries, regions or ethnic groups and are not a personality

test for comparing individuals within countries (Hofstede, 2001). Among the original VSM questions, four questions related to the long/short term orientation dimension were adopted for this study. The stem of four items was “*In your life, how important is each of the following to you?*” It ranges from “*of very little or no importance*” to “*of utmost importance.*” The questions were as follows:

Long vs. Short Term Orientation:

- (1) Personal steadiness and stability.
- (2) Repeat for tradition.
- (3) Thrift.
- (4) Persistence (perseverance)

3.2.2 Consumer’s web behavior

Questions in section 1 were also designed to measure overall consumer behavior to use of web between Americans and Koreans. Babin, Darden, and Griffin (1994) used a five point Likert scale to measure hedonic and utilitarian behavior for shopping, and each factor displays acceptable reliability levels at $\alpha = .94$ for hedonic and at $\alpha = .80$ for utilitarian value, respectively. Novak and Hoffman (2003) used a subset of the original items by Novak and Hoffman (2000) which were rated by the nine point rating scales. Meanwhile, Sanchez-Franco and Rey (2004) used a seven-point Likert scale unified and devised from Olney, Holbrook and Batra (1991), and Davis’s (1989) instruments to measure personal factors affecting users’ web session lengths including goal-oriented and experiential behavior. To measure web acceptance and usage model, Sanchez-Franco and Roldan (2005) declared the target users to be goal-oriented and experiential users were measured by using the seven-point scale contributed by Novak and Hoffman (2003).

In this research, the questionnaires used to measure consumers' goal-oriented vs. experiential use of web behavior are modified from Novak and Hoffman's (2003) and Sanchez-Franco and Roldan's (2005) measurements. In order to make the questionnaires consistent, total seven items were formed with a seven point Likert-style ranging from "strongly disagree" to "strongly agree." The stem for thirteen items was "please indicate your level of agreement with the following statements." The questions were as follows:

Goal-oriented use of web:

- (1) I use the web for my work.
- (2) I usually have a specific goal in mind when I browse.
- (3) I have a distinct or identifiable purpose for my browsing.

Experiential use of web:

- (1) I use the web for my entertainment.
- (2) I use the web for just fooling around and exploring for fun.
- (3) I have no preconceived purpose for my Internet experience.
- (4) I usually browse or explore without a specific goal in mind.

3.2.3 Attitude Toward the Web

With the continued growth of the web as a marketing channel, it has become increasingly important to know what factors influence attitude toward the web. In this study, attitude toward websites was measured using Wu (1999) and Chiang and Dholakia (2003)'s scales. Wu (1999) stated the importance of perceived interaction to investigate attitude toward website and examined three issues, which are: (1) cognitive information, (2) affective/emotional information, and/or (3) information concerning past behaviors or behavioral intentions. Among three issues of Wu (1999)'s conceptualization, the

researcher adopted two issues related to web design which are (1) cognitive information and (2) affective information to comply with the purpose of this study.

Chiang and Dholakia (2003) examined consumers' intentions to shop online during the information acquisition stage. In their research, they suggested that when consumers perceive offline shopping as inconvenient, their intention to shop online will be greater and they found online purchasing intention was higher when consumers perceived the product as search goods rather than experience goods. Hence, one item of browsing intention and one item of purchasing intention were adopted from Chiang and Dholakia's (2003) measurement. Original items were as follows: (1) The likelihood that I would search for this product online is high, and (2) I would be willing to buy this product online. But, some words were modified to meet specific needs for this study.

In order to measure purchasing intention, the researcher adopted two more items from Song and Zahedi (2005)'s research. In their research, purchasing intention was referred to as the probability and willingness to buy and consisted of the following items: (1) The likelihood that I would purchase the product is high, and (2) The probability of buying the product on this website would be highly probable. And the other two items were modified to meet a specific goal for browsing and purchasing intention in this research. They are (1) It is likely that I would browse this web site to find product information, and (2) I have a favorable attitude toward continuing to do business with this website.

All questions were measured using a seven point scale that ranged from "*strongly disagree*" to "*strongly agree*." The stem for the two items was "*please indicate your level of agreement with the following statements*." The items for the attitude toward the web

were as follows:

Affective information:

- (1) I think the site is attractive.
- (2) I think the site is interesting.
- (3) I think the site is likeable.
- (4) I think the site is appealing.

Cognitive information:

- (1) I think the site is trustworthy.
- (2) I think the site is believable.
- (3) I think the site is honest.

Browsing for information intention:

- (1) The likelihood that I would search for product information from this website is high.
- (2) It is likely that I would browse this web site to find product information.

Purchasing intention:

- (1) I would be willing to buy products from this website.
- (2) I have a favorable attitude toward continuing to do business with this website.
- (3) The likelihood that I would purchase the product is high.
- (4) The probability of buying the product on this website would be high.

3.3 Pre-test

A pre-test was conducted within 6 Korean and 6 American university students living in Columbia, Missouri. Each of the 12 subjects including Koreans and Americans were observed individually by the researcher. A pre-test was conducted to determine (1)

the clarity of the questionnaire and its wording, (2) any modifications that were needed for experimental design format and any other area which could hinder completion of the questionnaire, and (3) the necessary time to complete the questionnaire. After reading a survey letter of consent (See Appendix 4) and completing the questionnaire, the respondents were asked to indicate any difficulties or ambiguities in it, and they were also asked to write evaluations of the questionnaire. On the basis of pre-test results, several questions were refined. The revised survey questionnaires by pre-test are shown in Appendix 5.

3.4 Data Collection and Procedure

The researcher collected the data from Aug 31, 2006 to Sep 20, 2006, utilizing the survey questionnaire method. Participants were recruited from various age categories to allow greater application of the findings. Based on the paper survey of data collection, undergraduate and graduate students were administered with a sample of 208 students from the University of Missouri, Columbia. Participants consisted of 100 American and 108 Korean students. Urban (2006) suggested that a quota control on ethnic groups is necessary in order to ensure that a minimum sample size of 20-50 is achieved for each of these subgroups (Hofstede, 2001). In a study of consumers' behavioral intention to use different formats (e.g. retail store, catalog, Internet), Keen (1999) compared results between a student sample and mall shopper sample, and found that there is no difference between the two samples in predicting consumer decision-making on the Internet (Lim & Dubinsky, 2004). Moreover, college students deserve e-retailer attention because of their significant numbers on the Internet. They generally spend more than 20 hours per week on the Internet, and many of them have made purchases online. In other words, they are

the mainstream of the online consumer group and should be considered as a key target market in long-term success for many online businesses (Lim & Dubinsky, 2004).

Therefore, a student sample is considered appropriate for this research.

As the fall semester of 2006 began, 56 American students agreed to participate in the survey to earn extra credits and the 44 American students were given incentives to take part in this survey. For Korean students, the researcher sent an e-mail to all Korean students studying at the University of Missouri, Columbia. The email was sent by the president of the Korean Student Association to ask for voluntary participants. As a result, 108 Korean students were recruited for this survey.

Individually contacted respondents—both American and Korean students—came to the computer lab in College of Human Environmental Sciences. The participants were asked to sit at a computer, and they were randomly given one paper survey and were asked to fill out the paper survey concerning their cultural and consumer shopping characteristics (section 1 and 2 questions) before browsing the web site. After finishing the first paper survey, they were asked to go to the assigned web site, Nike.com vs. Niketown.com, with a written set of directions. The directions were also explained to participants orally to provide a clearer understanding of the web sites and to minimize any confusion for the aim of this study. After browsing the web site for 15 minutes, students were asked to complete another survey (section 3 questions), regarding their attitude concerning the web site. The entire survey process took about 30 minutes including paper survey and browsing the website. After the collection of the survey, participants were debriefed, thanked and dismissed.

3.4.1 Stimulus

Two existing retail web sites, Nike.com and Niketown.com, were used to investigate the influence of web site design on consumers' attitude toward the web in this study. In particular, the researcher chose the only "footwear" for respondents in this survey for two reasons. First, since the footwear is used for consumers including participants in this study as the purpose for both utilitarian and leisurely pursuits, it can be captured both goal-oriented and experiential behaviors (Demangeot & Broderick, 2006). Secondly, students are certainly an attractive market for e-tailers in product categories such as music and footwear (Mummalaneni, 2005). Therefore, the researcher considered footwear to be a relevantly appropriated case for this study in www.Nike.com (for 105 participants) and www.Niketown.com (for 103 participants). The Nike.com website focused more on aesthetic aspects of web design, while the Niketown.com website is an e-commerce website which leads business for shopping to customers.

Although consumers can purchase the products offered on both websites, it was expected that attitudes toward the web site such as affective information, cognitive information, browsing intention and purchase intention would vary based on the cultural dimensions and consumer's web behavior individually.

3.4.2 Experimental design

To test these hypotheses an experiment was conducted in a laboratory setting in which each person accessed e-commerce websites, either Nike.com or Niketown.com, via a computer. Participants in both groups were asked to respond to measures of cultural dimensions, consumer's web behavior and attitudes toward the web at the end of the experiment.

Before the experiment, all of the participants were asked to finish section 1 and 2

of a questionnaire. The researcher observed the participants until they completed the experiment. The researcher suggested they may want to use the opportunity to search for particular footwear they were thinking of buying, or browse information for footwear before they accessed the web site. After browsing the website, subjects were asked to fill out section 3 of a paper survey about their attitude concerning the web site they browsed.

3.5 Data Analysis

SPSS 14.0 was used for all data analysis. Descriptive analysis was used to find out the respondents' demographic and general characteristics. Factor analysis was conducted to reduce the number of measures to a level that is easier to manage. Through the factor analysis, some low factor loadings regarding the measurements of cultural dimensions and consumer's web behavior were excluded. According to Weiers (1984), a large number of measurements or variables for subjects have been founded to sometimes lead to reliability problems such as multicollinearity. Therefore, in this study, in order to avoid inflation of statistical errors, obtained factors were used to analyze the relationship between cultural dimensions, consumer's web behavior, and attitudes toward the web. To see whether Hofstede's five cultural dimensions were appropriate to generalize for measurement of cultural difference in online shopping behavior and to compare the difference between cultures, multivariate analysis of covariance (MANCOVA) was used. In addition, multivariate analysis of variance (MANOVA) was also used to test whether there are significant differences on attitudes toward the web between web site designs (Nike.com vs. Niketown.com). Finally, multiple regression analysis was used to test the relationships among variables and to test hypotheses. After hypotheses testing, the researcher added the result of multiple regression analysis with split file (Nike.com vs.

Niketown.com). The p value used to determine significance for all of the analysis was used at alpha levels of .01, .05, and .001. For all hypotheses, independent variables and dependent variables are shown in Table 3.1.

Table 3.1

Independent Variables and Dependent Variables		
	Independent Variables	Dependent Variables
H1a	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(a) Goal-oriented use of web
H1b	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(b) Experiential use of web
H2a	(1) Goal-oriented use of web (2) Experiential use of web	(a) Affective information
H2b	(1) Goal-oriented use of web (2) Experiential use of web	(b) Cognitive information
H2c	(1) Goal-oriented use of web (2) Experiential use of web	(c) Browsing for information intention
H2d	(1) Goal-oriented use of web (2) Experiential use of web	(d) Purchasing intention
H3a	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(a) Affective information
H3b	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(b) Cognitive information
H3c	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(c) Browsing for information intention
H3d	(1) Power Distance (2) Individualism (3) Masculinity (4) Uncertainty Avoidance (5) Long-term orientation	(d) Purchasing intention

CHAPTER 4

RESULTS

This chapter includes the statistical analyses of data that was obtained from 208 subjects through surveys. It is comprised of (1) description of respondents (2) factor analyses, (3) multivariate analysis of covariance and multivariate analysis of variance, (4) multiple regression for hypotheses testing, and (5) multiple regression with split file.

4.1 Description of respondents

Table 4.1 shows the distribution of demography and general characteristics for Internet experience among respondents. Of the 208 respondents, 52.4% were 21 to 25 year old (n=109). Next largest group was the 31 to 35 year old (16.3%, n=34) followed by the 18 to 20 year old (12.5%, n=26), 26 to 30 year old (12%, n=25), 36 to 40 year old (4.8%, n=10), and above 40 year old (1.9%, n=4), respectively. The age of respondents in the 21 to 25 bracket was predominated as over 50%. It can be explained as most of our American respondents were undergraduate students who were aged 21 to 25.

The sample is skewed in terms of gender. About 67.3% of the respondents was female (n=140) and 32.2% was male (n=67). This might contribute to the fact that most students in the Department Textile and Apparel Management are female students.

In terms of ethnicity, 51.9% of the respondents were Asian/Pacific Island (n=108); Caucasian/White comprised 42.3% (n=88) of the respondents; 2.4% (n=5) were Hispanic, and 1.4% (n=3) were African American. The high level of Asian/Pacific Island may contribute to the fact that the numbers of those who answered with this among participants in this study are all Korean students. Also, according to Hofstede (2001),

even if participants are American, Caucasian, African American, Hispanic American or Asian American, they may have different cultural dimensions. Therefore, 5 Hispanic and 3 African American of samples were excluded from further research. Therefore, this research mainly compared cultural dimensions and consumer use of web on attitude toward the web between Koreans (n = 108) and Caucasian/White Americans (n = 88).

In order to identify consumers' general experiences of Internet use, respondents were asked six questions regarding their experience of using Internet and computers. The questions were derived through the following variables: (1) Internet usage (2) comfortability that respondents feel using computer (3) hours using computer for work (4) hours using computer for fun (5) frequency of purchasing from the Internet in the past 6 months and (6) amount of spent on their last online purchase. Regarding Internet usage, 70.7% of respondents (n=147) reported their internet usage as over 7 years; 23.6% (n=49) answered between 5 to 7 years; 3.8% (n=8) answered between 3 to 5 years; 1.0% (n=2) was between either 1 to 3 years or reported as "other."

In terms of comfortability, 56.3% (n=117) answered very comfortable; 26.4% (n=55) felt somewhat comfortable; 11.1% (n=23) were very uncomfortable; 4.8% (n=10) answered to somewhat uncomfortable; only 1.4% (n=3) answered to neither uncomfortable nor comfortable. Most respondents felt comfortable using a computer.

Regarding time of using computer, 32.2% of respondents (n=67) reported that they use their computer for work/week between 1 to 5 hours. 25% (n=52) of respondents indicated they use computer for 6 to 10 hours; 17.3% (n=36) reported between 11 to 20 hours; 14.9% (n=31) said between 21 to 40 hours; 4.8% (n=10) answered they use the computer over 40 hours; 4.3% (n=9) indicated less than 1 hour.

In terms of time of using computer for fun/every week, 49.5% (n=103) of total answered they use computer during 1 to 5 hours. 24.5% (n=51) answered between 6 to 10 hours; 13% (n=27) answered between 11 to 20 hours; 8.2% (n=17) of respondents used the computer for less than 1 hour; 4.3% (n=9) answered between 21 to 40 hours; only 0.5% (n=1) answered over 40 hours.

Regarding the purchase frequency from the Internet in the past 6 months, 44.7% (n=93) of the respondents reported having purchased at least once in 2 months. 25.5% (n=53) of respondents indicated they had purchased about once a month; 17.3% (n=36) reported they had not purchased from the Internet in the past 6 months; 9.1% (n=19) answered about twice a month; 2.4% (n=5) answered they purchased about every week; 1% (n=2) answered they purchase several times a week from the Internet.

In terms of the amount spent on the last purchase online, 38.5% of respondents (n=80) reported the last spending amount form online with less than \$50; 34.1% (n=71) reported the amount between \$50 and \$100; 11.5% (n=24) reported the amount between \$100 and \$150; 10. 6% (n=22) reported the amount more than \$200; 4.8% (n=10) reported the amount between \$150 and \$200. The descriptive statistics for the demography and general information variables are shown in Table 4.1.

Table 4.1

Demographic Characteristics and General Characteristics of Respondents

Demographic variables	Frequency	Valid Percent
Gender		
Male	67	32.4
Female	140	67.6
Age		
18-20	26	12.5
21-25	109	52.4
26-30	25	12.0
31-35	34	16.3
36-40	10	4.8
Above 40	4	1.9
Ethnicity		
Rather not say	4	1.9
Caucasian/white	88	42.3
African American	3	1.4
Hispanic/Latino	5	2.4
Asian/Pacific Island	108	51.9
Internet Usage		
1-3 years	2	1.0
3-5 years	8	3.8
5-7 years	49	23.6
Above 7 years	147	70.7
Comfortability of using computer		
Very uncomfortable	23	11.1
Somewhat uncomfortable	10	4.8
Neither uncomfortable nor comfortable	3	1.4
Somewhat comfortable	55	26.4
Very comfortable	117	56.3
Hours using computer for work		
Less than 1	9	4.4
1 to 5 hours	67	32.7
6 to 10 hours	52	25.4
11 to 20 hours	36	17.6
21 to 40 hours	31	15.1
Over 40 hours/week	10	4.9
Hours using computer for fun		
Less than 1	17	8.2

1 to 5 hours	103	49.5
6 to 10 hours	51	24.5
11 to 20 hours	27	13.0
21 to 40 hours	9	4.3
Over 40 hours/week	1	.5

Frequency of purchasing from internet in the past 6 months

Never	36	17.3
About once in 2 months	93	44.7
About once a month	53	25.5
About twice a month	19	9.1
About every week	5	2.4
Several times a week	2	1.0

Amount of spending the last purchase online

Less than \$50	80	38.6
\$50-\$100	71	34.3
\$100-\$150	24	11.6
\$150-\$200	10	4.8
More than \$200	22	10.6

4.2 Factor Analysis

Factor analysis was used (1) to reduce the number of variables and (2) to detect structure in the relationships between variables to classify variables. In the factor analysis, rotation is needed because the original factor structure is mathematically correct, yet difficult to interpret. That is, it was ordinarily used to maximize the variance of factor loadings by making high loadings higher and low ones lower for each other (Tabachnick & Fidell, 1996). Thus, rotated factor loadings were conducted in order to determine which measures load on each factor. With all variables, varimax, the most commonly used rotation method, was performed. Factor loadings vary between -1.0 and +1.0 and indicate the strength of the relationship between a particular variable and a particular factor (George & Mallery, 2005). If each factor load highly (e.g. > .5) on one of the factors, it means that it has excellent face validity and appears to be measuring some underlying construct. Items that had factor loadings lower than 0.30 were deemed to be poor indicators of the construct and were removed from the analysis and hypothesis testing (Leo, Bennett, & Härtel, 2005).

By examining the factor analysis of Hofstede's cultural dimensions, two items were load on power distance and two items were loaded on individualism vs. collectivism. For masculinity vs. femininity, only one item was loaded. Three items were loaded on uncertainty avoidance and four items were loaded on long vs. short term orientation. Factor of power distance was interpreted that inequalities should exist with high loadings; factors of individualism vs. collectivism were interpreted as individualism is important with high loadings; the factors of masculinity vs. femininity were interpreted as masculinity should be important with high loadings; the factor of uncertainty avoidance

was interpreted that uncertainty can not be accepted with high loadings; factor of long vs. short term orientation was interpreted that long term orientation is important in respondents' life with high loadings on it.

Reliability estimates for the five factors were obtained by calculating Cronbach's alpha coefficient. The Cronbach's alpha coefficients, which were obtained, ranged from .35 to .69. Table 4.2 shows the result of the factor analysis and reliability test for each variable. Regardless the high factor loadings of all five factors, some Cronbach's alpha coefficients were found below acceptance level. Nevertheless, these items were still used to examine cultural dimensions for the purpose of this study based on the fact that these items are original questions of Hofstede's cultural dimensions and have been validated in many researches.

Table 4.2

The Result of Factor Analysis and Reliability for Hofstede's Five Cultural Dimensions

Cultural value and dimension item	Factor Loadings	Cronbach's Alpha Coefficient
Power Distance Dimension		.69
1. Inequalities among people are both expected and desired.	.864	
2. Inequalities among people should be minimized. ^r	.847	
Individualism vs. Collectivism Dimension		.35
1. An extended family member should be protected by other member in exchange for loyalty.	.678	
2. Everyone grows up to look after him/herself and his/her immediate family only.	.664	
Masculine vs. Feminine Dimension		
1. Men are supposed to be assertive, ambiguous, and tough.	.645	
Uncertainty Avoidance Dimension		.55
1. Fear of ambiguous situations and of unfamiliar risks is normal. ^r	.733	
2. High stress and subjective feeling of anxiety are frequently among people. ^r	.723	
3. Uncertainty is a normal feature of life and each day is accepted as it comes. ^r	.699	
Long vs. Short term orientation Dimension		.68
1. Personal steadiness and stability	.834	
2. Persistence (perseverance)	.736	
3. Tradition	.665	
4. Thrift	.627	

Note . Reversed scaled item

Extraction method, Principal component analysis; rotation method: varimax with Kaiser Normalization.

7-points Likert-scales were used with 1=strongly Disagree and 7=Strongly Agree

Regarding the factor analysis of customer behavior, two factors were obtained. Table 4.3 provides the results of factor analysis and the reliability test for each variable. All of the extracted items have high factor loadings that were over 0.5. Four items loaded on goal-oriented use of web and two items loaded on experiential use of web. Factors of goal-oriented use of web were interpreted that consumers have a certain purpose on Internet shopping with high loadings. Factors of experiential use of web were interpreted that consumers use usually Internet for fun with high loadings.

Reliability estimates for two factors were obtained by calculating Cronbach's alpha coefficient. The Cronbach's alpha coefficients for goal-oriented use of web and experiential use of web were .67 and .48, respectively.

Table4.3

 The Result of Factor Analysis and Reliability for Consumer Behavior to use the web

Customer behavior value and item	Factor Loadings	Cronbach's Alpha Coefficient
Goal-oriented use of web		.67
1. I usually have specific goal in mind when I browse.	.736	
2. I usually browse of explore without a specific goal in mind. ^r	.713	
3. I have a distinct or identifiable purpose of my browsing.	.661	
4. I have no preconceived purpose for my internet experience. ^f	.658	
Experiential use of web		.48
1. I use the web for my entertainment.	.841	
2. I use the web for just fooling around and exploring for fun.	.558	

Note . Reversed measured item

Extraction method, Principal component analysis; rotation method: varimax with Kaiser Normalization.

7-points Likert-scales were used with 1=strongly Disagree and 7=Strongly Agree

Finally, four factors were extracted from all 13 variables about attitudes toward the web. Table 4.4 shows the results of factor analysis and reliability test for attitude toward the web values. Four items were loaded on affective information; three items were loaded on cognitive information; two items were loaded on browsing for information intention; four items were loaded on purchasing intention. The factor of affective information was interpreted that consumers feel affective toward the website with high factor loadings. The factor of cognitive information was interpreted that consumers have more trust for the website with high factor loadings. Factor of browsing for information intention was interpreted that consumers enjoy browsing information through the Internet with high factor loadings. Factor of purchasing intention was interpreted that consumers prefer to buy product on the web with high factor loadings. All factors have high factor loadings that were over 0.5 indicating those four items are important factors in this study to examine the attitude toward the web.

Also, reliability estimates for five factors were obtained by calculating Cronbach's alpha coefficient. The Cronbach's alpha coefficients, which were obtained and ranged from .79 to .92, indicated that the four factors were reliable measures to represent attitudes toward the web.

Table 4.4

The Result of Factor Analysis and Reliability for Attitude Toward the Web

Attitude toward the web value and item	Factor Loadings	Cronbach's Alpha Coefficient
Affective information		.92
1. I think this site is attractive.	.878	
2. I think this site is likable.	.799	
3. I think this site is appealing.	.782	
4. I think this site is interesting.	.780	
Cognitive information		.88
1. I think this site is honest.	.886	
2. I think this site is believable.	.849	
3. I think this site is trustworthy.	.812	
Browsing for information intention		.79
1. The likelihood that I would search products information from this website is high.	.744	
2. It is likely that I would browse this web site to find products information.	.624	
Purchasing intention		.91
1. The probability of buying the product on this website would be highly probable.	.874	
2. The likelihood that I would purchase the product is high.	.835	
3. I have a favorable attitude toward continuing to do business with this website.	.685	
4. I would be willing to buy products from this website.	.668	

Note. Extraction method, Principal component analysis; rotation method: varimax with Kaiser Normalization.

7-points Likert-scales were used with 1=strongly Disagree and 7=Strongly Agree

4.3 Multivariate Analysis of Covariance and Multivariate Analysis of Variance

Multivariate analysis of covariance (MANCOVA) and multivariate analysis of variance (MANOVA) were used to compare groups formed by categorical variables. A MANCOVA revealed a significant multivariate effect. The covariates served as control variables for the independent factors, serving to reduce the error term in the model (“GLM: MANOVA and MANCOVA”, n.d.). Univariate testing compared differences (1) between Koreans and Americans with respect to five cultural dimensions and attitudes toward the web (2) between Nike.com and Niketown.com and attitude toward the web.

4.3.1 Control Variables

Six control variables were measured about Internet usage experience and purchasing experience. Study has shown that individual differences with computer-related experience and technology may affect attitudes toward computer media (Goldstein & Ford, 1978). Rodgers and Thorson (2000), taking a cue from Jih and Reeves (1992), warned against the confounding potential of these experiences. Heeding this warning, this study attempted to control these variables by asking questions related to each participant’s Internet using and purchasing experience, and used these variables as covariates.

4.3.2 MANCOVA

First, the multivariate analysis of covariance (MANCOVA) was conducted using ethnicity (Koreans vs. Americans) as an independent variable, the five cultural dimensions as dependent variables, and six questions about experience of Internet or shopping online as covariates. In this analysis, Internet usage, work/fun hours and past or last purchasing as covariance were shown to have a significant effect on the statistical

model in some cultural dimensions ($p < .05$).

By examining multivariate analysis of covariance, an F test showed a significant difference between Koreans and Americans on three cultural dimensions which were individualism (Korean $M= 3.865$, American $M= 3.330$; $p = .000$), masculinity (Korean $M= 2.688$, American $M= 2.134$; $p = .000$), and long-term orientation (Korean $M= 5.005$, American $M= 5.473$; $p = .001$). The results of multivariate analysis of covariance are shown in Table 4.5.

Table 4.5

The Result of Multivariate Analysis of Covariance between Ethnicity and Cultural Dimensions

Dependent Variable	Independent Variable		F	P-value
	Korean	Mean American		
Cultural Dimensions				
Power distance (PD)	3.742	3.646	.197	.658
Individualism (IC)	3.865	3.300	16.789***	.000
Masculinity (MAS)	2.688	2.134	24.615***	.000
Uncertainty Avoidance (UA)	4.414	4.430	.028	.868
Long-term orientation (LTO)	5.005	5.473	11.215**	.001

Note: * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

Second, the multivariate analysis of covariance (MANCOVA) was conducted by using ethnicity (Koreans vs. Americans) and web site designs (Nike.com vs. Niketown.com) as an independent variable respectively, attitudes toward the web as dependent variables, and six questions about experience of Internet or shopping online as covariates. In this analysis, comfortability, fun hours, and last purchasing as covariance were shown to have a significant effect on the statistical model in some cultural dimensions ($p < .05$).

For the results of multivariate analysis of covariance, an F test showed a significant difference between Koreans and Americans in terms of affective information (Korean M= 4.902, American M= 5.569; $p = .000$), cognitive information (Korean M= 5.188, American M= 5.972; $p = .000$), and purchasing intention (Korean M= 4.004, American M= 4.756; $p = .001$). The results of multivariate analysis of variance are shown in Table 4.6.

Table 4.6

The Result of Multivariate Analysis of Covariance between Ethnicity and Attitudes toward the Web

Dependent Variable	Independent Variable		F	P-value
	Mean Korean	Mean American		
Attitudes toward the web				
Affective information	4.902	5.569	13.515***	.000
Cognitive information	5.188	5.972	30.700***	.000
Browsing for information intention	4.915	5.079	.649	.421
Purchasing intention	4.004	4.756	11.856***	.001

Note: * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

4.3.3 MANOVA

Regarding two web site designs as independent variable by examining multivariate analysis of variance (MANOVA), F test showed no significant differences between Nike.com and Niketown.com on consumers' attitude toward the web. The results of multivariate analysis of variance are shown in Table 4.7.

Table 4.7

The Result of Multivariate Analysis of Variance between Web Design and Attitudes toward the Web

Dependent Variable	Independent Variable		F	P-value
	Mean			
	Nike.com	Niketown.com		
Attitudes toward the web				
Affective information	5.331	5.078	2.084	.150
Cognitive information	5.502	5.563	.171	.679
Browsing for information intention	5.005	5.000	.001	.979
Purchasing intention	4.384	4.299	.155	.694

Note. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

Hofstede (2001) suggested that Americans have higher individualism and masculinity than Koreans, while Koreans have higher long-term orientation. However, this research found that Koreans have higher individualism and masculinity than Americans; while Americans have higher long-term orientation than Koreans. Even though three out of five Hofstede's cultural dimensions were found statistically significant different between Koreans and American, the results were contradictory from Hofstede (2001)'s.

Much of the study of ethnic entrepreneurs was based on issues of culture with a growing body of literature supporting the argument that national culture influences a variety of economic/management behavior (Urban, 2006). In addition, even if Hofstede's cultural dimensions are generalized to study in many fields, they have been the subject of considerable debate and criticism. Researchers have adopted a more emic perspective, arguing that culture in all its complexity cannot be captured quantitatively and reduced to five variables, while others pointed out that culture is changeable in some countries (Urban, 2006). Nonetheless, Hofstede's dimensions are well-documented and useful in identifying the criteria level of the five empirical dimensions of national culture. Also, Hofstede's dimensions are widely used since measures are based on data from 53 developed and developing countries (Urban, 2006).

Accordingly, using Hofstede's cultural dimensions between Koreans and Americans in order to determine its influence on attitudes toward the web seems to be a robust approach. Even so, it remains important to remember that Hofstede's cultural dimensions yield statistically significant differences between Koreans and Americans. There seem to be some reasons regarding the results of this research such as small sample

numbers and limited subjects for Korean which means that most of the entire Korean sample used in this study is not really living in Korea, but students studying in U.S.A. This subject is discussed again in Discussion section of Chapter 5.

In this study the researcher propose that there will be a relationship influencing attitudes toward the web in terms of five cultural dimensions and goal-oriented vs. experiential use of web behavior. Therefore, hypotheses were tested based on this research model formulated as configurations of Hofstede's cultural dimensions and goal-oriented vs. experiential use of web behavior, which are optimal elements for encouraging online business and increasing positive attitudes toward the web.

4.4 Multiple Regression Analysis for Hypotheses Testing

Each of the hypotheses was tested to determine whether the hypothesis was supported or not. This study used the multiple regression analysis to test hypotheses and see the strength of the relationships among variables. The relationships among five cultural dimensions, goal-oriented vs. experiential use of web behavior, and four attitudes toward the web were tested under all three hypotheses. Multiple regression analysis tells of the interrelationships among variables.

4.4.1 Hypothesis 1 testing

Hypothesis 1 posited that there will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) Individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation, and their consumer behaviors: (a) goal-oriented use of web, (b) experiential use of web. The results of multiple regression analysis are shown in Table 4.8. There was only one statistically significant relationship between long-term orientation and goal-oriented use of web ($\beta = .157$, $p = .032$)

suggesting the high long term orientation possess the predictive high goal-oriented use of web. There were no significant relationships between the other cultural dimensions which are power distance, individualism, masculinity, and uncertainty avoidance and goal-oriented use of web. Therefore, hypothesis 1a (5) was supported. The hypotheses 1a (1), 1a (2), 1a (3), and 1a (4) were not supported. The result revealed only one statistically significant relationship ($p < .05$); that is, there is a significant positive relationship between consumers' long-term orientation and consumer's goal-oriented use of web behavior.

The results of multiple regression analysis showed there were statistically significant relationships between consumer's experiential use of web behavior and three cultural dimensions of power distance ($\beta = .164$, $p = .023$), individualism ($\beta = -.124$, $p = .085$), and long-term orientation ($\beta = .131$, $p = .073$). It indicates that the people who have high power distance have the high predictive experiential use of web; the people who have high individualism have the low experiential use of web; the people who have high long-term orientation have the high predictive experiential use of web. There were no significant relationships between two cultural dimensions which were masculinity and uncertainty avoidance. Table 4.8 exhibits the relationship between cultural dimensions and experiential consumer behavior. In conclusion, hypothesis 1b (1), 1b (2), and hypothesis 1b (5) were supported. The hypotheses 1b (3) and 1b (4) were not supported. The accepted hypotheses are following; there are significant positive relationship between consumers' power distance and long-term orientation, and their experiential use of web behavior, and there is a significant negative relationship between consumers' individualism and their experiential use of web behavior.

With regard to cultural dimensions, power distance, individualism, and long-term orientation have significantly influenced consumers' web behavior. However, there were shown counterproposal in terms of long-term orientation for consumer's goal-oriented use of web behavior even if proven statistically significant. It was assumed that people who have high long-term orientation possess the high experiential use of web rather than goal-oriented use of web. But, the result of this research showed the opposite direction. Regarding the individualism dimension, it seems to be right with the relationship between people who have high individualism show low experiential use of web. Moreover, even if there were not statistically significant relationships, there were shown negative relationship between masculinity and goal-oriented use of web, and negative relationship between uncertainty avoidance and experiential use of web.

Table 4.8

The Result of Multiple Regression Analysis of Cultural Dimensions on Consumer's Web Behavior

Independent variable	Dependent variable			
	Goal-oriented use of web		Experiential use of web	
	β	P-value	β	P-value
Cultural Dimensions				
Power distance	-.078	.282	.164**	.023
Individualism	-.085	.241	-.124*	.085
Masculinity	-.091	.213	.033	.654
Uncertainty avoidance	.113	.129	-.118	.110
Long-term orientation	.157**	.032	.131*	.073

Note. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

4.4.2 Hypothesis 2 testing

Hypothesis 2 was proposed that there will be a significant relationship between consumer behaviors: (1) goal-oriented use of web, (2) experiential use of web, and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention. Table 4.9 shows the finding of relationship between consumers' web behavior and attitudes toward the web. Overall, it was shown that consumers' web behavior depicts a positive relationship with attitudes toward the web.

This research found that goal-oriented use of the web had a significant positive influence on cognitive information ($\beta = .182$, $p = .009$). This means that the higher goal-oriented use of web is, the more positive cognitive attitude toward the web is found. Other predicted relationships between goal-oriented use of web and affective information, browsing for information intention, and purchasing intention, respectively, were not statistically significant relationships. Also, there were found statistical significant positive relationships between experiential use of web and attitude toward web affective information ($\beta = .163$, $p = .025$), cognitive information ($\beta = .340$, $p = .000$), and purchasing intention ($\beta = .217$, $p = .003$). It indicates that the more experiential a consumer is, the more positive attitudes for affective information, cognitive information, and purchasing intention are shown in the web site.

Hence, regarding goal-oriented use of web, only hypothesis 2b (1) was supported. Hypotheses 2a (1), 2c (1), and 2d (1) were not supported. For the results of experiential use of web, hypothesis 2a (2), 2b (2), and 2d (2) were supported. Hypothesis 2c (2) was not supported. Again, in relation to each items in hypothesis 2, no statistically significant

relationship was found associated with goal-oriented use of web and affective information, browsing for information intention, or purchasing intention, and between experiential use of web and browsing for information intention.

Consequently, following hypotheses are supported; there is a significant positive relationship between consumer's goal-oriented use of web and cognitive attitude toward the web; there is a significant positive relationship between consumer's experiential use of web and affective attitude toward the web; there is a significant positive relationship between consumer's experiential use of web and cognitive attitude toward the web, and there is a significant positive relationship between consumer's experiential use of web and purchasing intention toward the web. Overall, consumer's experiential use of web behavior shows more positive attitudes toward the web than consumer's goal-oriented use of web behavior.

Table 4.9

The Result of Multiple Regression Analysis of Consumer's Web Behavior on Attitude toward the Web

Independent variable	Dependent variable							
	Affective information		Cognitive information		Browsing Intention		Purchasing Intention	
	β	P-value	β	P-value	β	P-value	β	P-value
Consumer Behavior								
Goal-oriented use of web	.100	.168	.182**	.009	.032	.659	.035	.625
Experiential use of web	.163**	.025	.340***	.000	.071	.336	.217**	.003

Note. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

4.4.3 Hypothesis 3 testing

Hypothesis 3 proposed that there will be a significant relationship between consumers' cultural dimensions: (1) power distance, (2) individualism, (3) masculinity, (4) uncertainty avoidance, (5) long-term orientation and consumers' attitudes toward the web: (a) affective information, (b) cognitive information, (c) browsing for information intention, (d) purchasing intention.

Power distance was found to have statistically significant influences on the website affective information ($\beta = .150$, $p = .037$), browsing for information intention ($\beta = .136$, $p = .060$), and purchasing intention ($\beta = .139$, $p = .059$). In terms of the relationship between masculinity and consumers' attitudes toward the web, it was found there existed a statistically significant relationship between masculinity and affective information ($\beta = -.182$, $p = .013$); masculinity and cognitive information ($\beta = -.171$, $p = .018$). Long-term orientation was found statistically significant with cognitive information ($\beta = .229$, $p = .002$) and browsing for information intention ($\beta = .134$, $p = .068$). It is implied that people who have high power distance show positive affective and cognitive attitude toward the web, and purchasing intention on the web; people who have high masculinity show negative attitude toward the web according to the affective information and cognitive information; people who have long-term orientation possess the positive attitude toward the web for cognitive information and browsing for information intention. Therefore, hypothesis 3a (1), 3a (3), 3b (3), 3b (5), 3c (1), 3c (5), and 3d (1) were supported. Hypothesis 3a (2), 3a (4), 3a (5), 3b (1), 3b (2), 3b (4), 3c (2), 3c (3), 3c (4), 3d (2), 3d (3), 3d (4), and 3d (5) were not supported. The results of relationships between cultural dimensions and attitudes toward the web are shown in Table 4.10.

Table 4.10

The Result of Multiple Regression Analysis of Cultural Dimensions on Attitude toward the Web

Independent variable	Dependent variable							
	Affective information		Cognitive information		Browsing Intention		Purchasing Intention	
	β	P-value	β	P-value	β	P-value	β	P-value
Cultural dimensions								
Power distance	.150**	.037	.069	.331	.136*	.060	.139*	.059
Individualism	-.041	.572	-.022	.753	.045	.531	-.030	.685
Masculinity	-.182**	.013	-.171**	.018	-.120	.103	-.089	.232
Uncertainty avoidance	-.028	.701	-.051	.481	.049	.509	.004	.958
Long-term orientation	.120	.162	.229**	.002	.134*	.068	.099	.180

Note. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$

The supported hypotheses are as follows: there are significant positive relationships between a consumer's power distance and affective information, browsing for information intention, and purchasing intention on attitudes toward the web; there are significant negative relationships between consumer's masculinity and affective information and cognitive information on attitudes toward the web, and there are significant positive relationships between consumer's long-term orientation and cognitive information and browsing for information intention on attitudes toward the web. Finally, the results of hypotheses tests in this study are shown in Table 4.11.

Table 4.11

The Summary of Results for Hypotheses

	Independent Variables	Dependent Variables	Hypotheses Testing
H1a	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(a) Goal-oriented use of web	(1) Not supported (2) Not supported (3) Not supported (4) Not supported (5) Supported
H1b	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(b) Experiential use of web	(1) Supported (2) Supported (3) Not supported (4) Not supported (5) Supported
H2a	(1) Goal-oriented use of web (2) Experiential use of web	(a) Affective information	(1) Not supported (2) Supported
H2b	(1) Goal-oriented use of web (2) Experiential use of web	(b) Cognitive information	(1) Supported (2) Supported
H2c	(1) Goal-oriented use of web (2) Experiential use of web	(c) Browsing for information intention	(1) Not supported (2) Not supported
H2d	(1) Goal-oriented use of web (2) Experiential use of web	(d) Purchasing intention	(1) Not supported (2) Supported
H3a	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(a) Affective information	(1) Supported (2) Not supported (3) Supported (4) Not supported (5) Not supported
H3b	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(b) Cognitive information	(1) Not supported (2) Not supported (3) Supported (4) Not supported (5) Supported
H3c	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(c) Browsing for information intention	(1) Supported (2) Not supported (3) Not supported (4) Not supported (5) Supported
H3d	(1) Power distance (2) Individualism (3) Masculinity (4) Uncertainty avoidance (5) Long-term orientation	(d) Purchasing intention	(1) Supported (2) Not supported (3) Not supported (4) Not supported (5) Not supported

4.5 Multiple Regression Analysis with Split file

Through the testing of hypotheses, it was proven that there are significant relationships among cultural dimensions, consumer behavior on the web, and attitudes toward the web. However, to see which web design is more positively or negatively related with attitude toward the web, the researcher conducted a multiple regression analysis with a split file (web design: Nike.com vs. Niketown.com). The results of the multiple regression analysis are shown in Table 4.12.

From the previous findings of hypothesis 2, both consumer's goal-oriented web behavior and consumer's experiential web behavior have statistically significant relationships with attitude toward the web. Meanwhile, the results of hypothesis 2 show that consumer's experiential web behavior has a more positive relationship with attitude toward the web according to the effective information, cognitive information, and purchasing intention than consumer's goal-oriented use of web behavior. With a split file between Nike.com and Niketown.com, the multiple regression analysis shows some results.

First, the multiple regression analysis was conducting using a split file to see the relationship between goal-oriented vs. experiential web behavior and attitude toward the web. For the results, consumers with high goal-oriented use of the web have a significant positive relationship with cognitive information ($\beta = .170, p = .092$) in the Nike.com. Also, consumers with high experiential use of the web have a significant positive influence on cognitive information ($\beta = .216, p = .033$) in Niketown.com. Hence, both consumers' goal-oriented and experiential web behavior shows a positive relationship with cognitive information in Nike.com.

Regarding Niketown.com, consumers with high goal-oriented use of the web

have a significantly positive relationship with cognitive information ($\beta = .204, p = .034$). It indicates that the higher consumers for goal-oriented use of web are, the more positive the attitude towards the web and Niketown.com. Consumer's experiential use of the web shows a significant positive relationship with attitudes toward the web in terms of affective information ($\beta = .217, p = .039$), cognitive information ($\beta = .447, p = .000$), and purchasing intention ($\beta = .271, p = .009$) in Niketown.com. It means that consumers with high experiential use of the web are positively influenced by affective and cognitive information, and they have more purchasing intention in Niketown.com. Overall, it is suggested that consumer's experiential use of web behavior in Niketown.com have a positive attitude towards Niketown.com.

Table 4.12

The Result of Multiple regression Analysis with Split file for Consumer's Web Behavior on Attitude toward the Web

Independent variables		Dependent variables							
		Affective information		Cognitive information		Browsing intention		Purchasing Intention	
		β	P-value	β	P-value	β	P-value	β	P-value
Consumer's Web Behavior	Goal-oriented use of web	.095	.356	.170*	.092	.019	.851	-.020	.846
	Experiential use of web	.087	.399	.216**	.033	-.030	.771	.146	.158
Nike.com	Goal-oriented use of web	.093	.371	.204**	.034	.049	.642	.076	.461
	Experiential use of web	.217**	.039	.447***	.000	.166	.115	.271**	.009

Note. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.001$
Split file: Nike.com vs. Niketown.com

Secondly, the multiple regression analysis was examined to see the relationships between cultural dimensions and attitudes toward the web split file (web designs: Nike.com vs. Niketown.com). In this analysis, those who have power distance exhibit a significant relationship with affective information ($\beta = .208, p = .041$) in Nike.com. Also, those who have long-term orientation possess a significant relationship with browsing for information intention ($\beta = .197, p = .054$) in Nike.com. It implies that consumers who have high power distance show significantly positive relationship with browsing for information intention in Nike.com; and consumers who have high long-term orientation show a statistically significant positive influence on browsing for information intention in Nike.com.

Regarding Niketown.com, people with high masculinity have significant negative relationships with affective information ($\beta = -.255, p = .020$) and cognitive information ($\beta = -.193, p = .061$). It implies that consumers who consider higher masculine characteristics have lower attitudes regarding affective and cognitive information in Niketown.com. On the other hand, people with high long-term orientation have a significant positive relationship with cognitive information ($\beta = .357, p = .001$) in Niketown.com. It indicates that consumers who consider trust with a company have a higher positive attitude regarding long-term orientation in Niketown.com. In this result, there were no relationships between cultural dimensions and purchasing intention within either Nike.com or Niketown.com. The results of multiple regression analysis are shown in Table 4.13.

Table 4.13

The Result of Multiple regression Analysis with Split file for Cultural Dimensions on Attitude toward the Web

Independent variables		Dependent variables							
		Affective information		Cognitive information		Browsing for information intention		Purchasing Intention	
		β	P-value	β	P-value	β	P-value	β	P-value
Cultural Dimensions									
Nike.com	Power distance	.208**	.041	.050	.634	.160	.119	.127	.220
	Individualism	.021	.838	-.065	.533	.098	.340	.047	.655
	Masculinity	-.138	.177	-.135	.203	-.094	.360	-.084	.419
	Uncertainty Avoidance	-.138	.171	-.021	.837	-.009	.927	-.089	.388
	Long-term orientation	.135	.181	.100	.338	.197*	.054	.163	.117
Niketown.com	Power distance	.048	.653	.099	.330	.081	.457	.115	.296
	Individualism	-.084	.428	.006	.950	-.009	.935	-.080	.457
	Masculinity	-.255**	.020	-.193*	.061	-.161	.143	-.096	.381
	Uncertainty Avoidance	.108	.337	-.120	.261	.145	.205	.102	.373
	Long-term orientation	.038	.731	.357**	.001	.050	.654	.030	.791
Note. * p < 0.1 ** p < 0.05 *** p < 0.001 Split file: Nike.com vs. Niketown.com									

Consequently, the results of this analysis suggest that consumer's experiential web behavior shows a more positive attitude in terms of affective and cognitive information and purchasing intention in Niketown.com, rather than consumer's goal-oriented use of web and Nike.com. Consumers with high power distance and long-term orientation show a positive attitude regarding affective and cognitive information, and browsing for information intention within either Nike.com or Niketown.com. In contrast, consumers with high masculinity show a negative attitude regarding affective and cognitive information in Nike.com.

CHAPTER 5

SUMMARY, DISCUSSION AND IMPLICATION

This chapter includes summary, discussion and implication. The implications of the study findings are explained both academically and practically.

5.1 Summary and Discussion

The growth of online marketing agitates the study of cultural differences and consumer behavior on the web. However, little has been researched about attitudes toward the web that are defined by cultural differences and consumer behaviors together. Thus, by utilizing the Hofstede's cultural dimensions and consumer's web behaviors, along with examining attitudes toward the web, this study assessed the variables affecting attitudes toward the web and identified important relationships between variables.

The experimental study was completed with the sample (108 Korean vs. 88 American) and a paper based survey with respondent's browsing a website (Nike.com vs. Niketown.com). A survey questionnaires included not only the respondent's age, ethnicity, gender, and their past internet experiences such as (a) internet usage, (b) comfort of using computer, (c) hours using computer for work, (d) hours using computer for fun, (e) frequency of purchasing from internet in the past 6 months, and (f) amount of spending the last purchase online, but also questions examining for Hofstede's cultural dimensions: (1) power distance, (2) individualism vs. collectivism, (3) masculinity vs. femininity, (4) uncertainty avoidance, and (5) long vs. short term orientation, consumer's web behavior: (1) goal-oriented vs. (2) experiential use of web, and attitudes toward the web: (1) affective information, (2) cognitive information, (3) browsing for information intention,

and (4) purchasing intention.

Before testing the hypotheses, this study examined (1) factor analysis, (2) reliability of measurement, and (3) multivariate analysis of covariance and multivariate analysis of variance. For testing the hypotheses, multiple regression analysis was conducted. Also, multiple regression analysis with a split file (Nike.com vs. Niketown.com) was examined after testing the hypotheses to compare website designs.

Regarding the factor analysis, 12 questions were collected with high loading (over .50) to examine cultural dimensions; 6 questions were gathered with consumer's web behavior; and finally 13 questions were used for attitudes toward the web. All questionnaires were with high loaded items.

Regarding the reliability of measures, the Cronbach's alpha coefficients for all of the measurements indicated that the questionnaire was a reliable instrument for measuring variables. For attitude toward the web, all of the measurements were reliable. However, the score of Cronbach's alpha coefficient was less than accepted level of over .70 for cultural dimensions and consumer's web behaviors. This could have occurred through a misunderstanding on the respondent's part. The respondents would be either too easy or too difficult for survey questionnaires so that the score would be clustered together at either the high or the low end of the scale, with small differences among respondents (Jacobs, 1991). Thus, the results of reliability test remain as a limitation in this study.

From the test with multivariate analysis of covariance, it was shown that there were statistically significant differences between ethnicity and cultural dimensions. The mean difference between Korean and American occurred with individualism, masculinity, and

long-term orientation, indicating that Koreans have more individualism and masculinity than Americans, while American have more long-term orientation than Korean. Even though these results did not support Hofstede's work for five cultural dimensions, it is revealed that Koreans and Americans have different cultural dimensions. The reason why these findings did not follow Hofstede's cultural dimensions is discussed later in this chapter.

According to the test of multivariate analysis of covariance between ethnicity and attitude toward the web, there were significant differences. The mean differences were shown that Americans are higher affective, cognitive toward the web and have a higher purchasing intention on the web than Koreans.

Regarding the test of multivariate analysis of variance between web designs and attitude toward the web, it appears that there were no significant differences between Nike.com and Niketown.com.

Hypotheses testing

In order to test the hypotheses, a multiple regression analysis was used. This study exposed some previously considered results and some adverse results within hypotheses. Table 4.11 summarizes the outcomes from testing for relationships among variables. Some statistical significant relationships are reported.

First, according to the relationship between cultural dimensions and consumer's web behavior, respondents with the high long-term oriented culture show stronger goal-oriented use of web, which indicates that those who have more patience and foster virtues oriented towards future rewards (Hofstede, 2001) consider the results and achievement of goals (Kralisch & Berendt, 2004) on the web. In contrast, respondents with high power

distance culture show more positive experiential use of web, which means that those who are characterized by taller hierarchies in their mental models and by higher ability (Kralisch & Berendt, 2004) tend to follow the more experienced and others' considerations; respondents with high individualism culture show lower experiential use of web indicating that those who more consider their interests and freedom of decision do not strongly rely on other's previous experience and their opinions. However, regarding long-term orientation, respondents with high long-term orientation in this study revealed slightly below score with experiential users on the web ($p = .073$) than the goal-oriented users on the web ($p = .032$).

Previously, Marcus and Gould (2000) found that the cultural dimension with a low level of long-term orientation consider the immediate results and achievements of a goal, but the findings of this study show that long-term orientation culture has an effects on both goal-oriented users ($\beta = .157$) and experiential users on the web ($\beta = .131$). Also, while consumers in a high power distance culture basically tend to concentrate on their own opinion, this study found that respondents with high power distance cultures are willing to be experiential users on the web ($\beta = .164$). Thus, it remains that the cultural research should adjust to the changing culture and people in a changed culture.

Secondly, the results of the relationship between consumer's web behavior and attitude toward the web provides that consumer behaviors while using the web seem to influence their attitudes toward the web. The respondents with high goal-oriented use of the web show more positive cognitive attitudes related to trust on the web. Respondents with experiential use of web show a higher positive affective information, cognitive information, and purchasing intention, depicting they have great emotion and trust on the

web, and high intention for online shopping. With these results, it is explained that both of respondents for goal-oriented and experiential use of web tend to require important cognitive information related to trust on the website. What is more important, respondents for experiential use of web show more positive attitudes toward the web in many more aspects than respondents for goal-oriented use of web in this study.

Thirdly, the significant relationships were found between cultural dimensions and attitude toward the web. In this study, respondents with a high power distance culture show a positive attitude for affective information, browsing for information intention, and purchasing intention on the web, indicating that respondents who accept distance of power on the social level consider the website's aesthetic aspects, such as attractiveness, design appeal, or interestingness, searching information such as products and service, and buying products through online in their life. In addition, respondents with high masculinity culture show negative attitudes for affective and cognitive information on the web. It explains that those who consider more outstanding achievement and performance (Marcus and Gould, 2000) would not like to consult greater attractiveness and trust on the website. Besides, respondents with high long-term oriented culture show a positive attitude for cognitive information and browsing for information intention on the web, describing that those who have stronger patience to determine whether items are interested (Marcus and Gould, 2000) would like to build trust with the company and search and/or browse information before online shopping.

Although it is proven that cultural dimensions and consumer behaviors are important elements on attitudes toward the web, some discussion remains regarding the result of multivariate analysis of covariance between ethnicity and Hofstede's cultural

dimensions, as mentioned above.

Since Hofstede's dimensions have been adopted across various contexts and societies, they are generalizable (Li, Zinn, Chick, Graefe, & Absher, 2004). Even though associations of cultural dimensions were expected to be significantly different between Koreans and Americans, the results indicated that it would be inaccurate to describe this study's sample as having attitudes toward websites aligned with cultural values. According to power distance dimension, even if the mean score showed the differences where Koreans ranked higher than Americans and it supported Hofstede's cultural dimension, the results revealed that it was not statistically significant. Also, the high score on cultural values obtained by a group of Koreans was in individualism, the inevitable consequence of a collectivism nation. Urban (2006) addressed the situation like the above result, which is that even though Hofstede's cultural dimensions are generalized to study many fields, his work has been considered and debated with researchers adopting a more perspective, arguing that culture, in all its complexity, cannot be captured quantitatively and reduced to five variables. From a psychological standpoint, different groups adopt personal traits that vary across members of the same culture group; there can be, for instance, large differences even within the United States on cultural dimension (Allik & Realo, 2004). In addition, culture has been changed and is changeable in some countries (Urban, 2006). Moreover, Allik and Realo (2004) stated that Hofstede (1991) claimed that industrialized, wealthy and urbanized societies tend to become increasingly individualistic, whereas traditional, poorer, and rural societies tend to remain collectivistic. In Korea's case, culture has been changed in many aspects of marketing because of the growing importance of the economy, politics and culture as well.

Thus, with Koreans who have been pursuing new culture, a certain country or cultural group may not fully accompany the traditional culture in Korea. Overall, the results reflect a general lack of convergence in research regarding the effects of ethnicity on Hofstede's cultural dimensions.

The research also obtained results from a multiple analysis of covariance between web design and attitudes toward the web. The website designs that were expected to show the different attitudes between Nike.com and Niketown.com did not show any statistically significant differences on attitudes toward the web. These results show that consumers do not have different attitudes in Nike.com and Niketown.com. This subject may be connected with the level of the websites' complexity. Martin, Sherrard, and Wentzel (2005) addressed that consumers prefer hybrid web design, rather than functional or aesthetic web designs. With this reason, the respondents might not see the differences between Nike.com and Niketown.com.

Nevertheless, there is a challengeable idea regarding website design in this research. Previous research on the dimensionality of attitudes toward commercial web sites began in the mid-1990s, but those researchers considered dimensionally across a variety of commercial site types (Elliott & Speck, 2005). This study focused on existing retail websites, Nike.com and Niketown.com, and it considered whether cultural dimensions and two types of predictable consumer's web behavior affect retail web sites. In fact, though online shopping is recent, it is growing rapidly and will account for a substantial proportion of retail sales in future. With the exception of a few firms such as E-bay, online retailers are yet to succeed in finding ways of attracting and retaining customers (Mummalaneni, 2005). Therefore, in this research, it is proposed that analyzing cultural

differences with regards to web design is an integral element of retail strategy that would help e-tailers find success.

In summation, the results of this study indicate the usefulness in understanding cultural dimensions and the affect of different attitudes toward web design according to emotional responses and customer's web behaviors.

5.2 Theoretical implication

It is important for researchers to identify the cultural dimensions and study the various aspects of cultural differences (context, time orientation, etc.) so that they can better understand the role each plays in the continuous relationship of understanding between cultures and its effect on consumer's web behavior and attitude toward the web. This study attempted to measure only Hofstede's cultural dimensions and determine effects on attitudes toward the retail websites. In attempting to see the cultural differences, this research had two groups browsing in two different website designs, which were described as the functional design of a website and the aesthetic design of a web site, respectively. The research attempted to measure how Korean and American respondents have different cultural characteristics on the web, changing the experience of using the Internet. Also, to see the different attitudes toward retail websites, the research attempted two differently designed websites under the same brand, Nike. In spite of these efforts, the individual characteristics were not statistically significant enough to support Hofstede's cultural dimensions, and there was no significant difference in attitudes regarding either Nike.com or Niketown.com.

Previous researchers have identified multiple variables that contribute to a varying mix of cultural dimensions, such as context, concept of time and concept of space (An,

2003; Christopher, 2004; Kralish & Berendt, 2004). While this research identified one author's cultural dimensions, there were certainly other aspects that appear to contribute to the study of consumer's web behavior and attitudes toward the web. For instance, consumers with high power distance show higher experiential use on the web rather than goal-oriented use on the web. In addition, consumer's experiential use of web behavior has more positive purchase intention on the web than consumer's goal-oriented use of web behavior. Also, consumers with high power distance dimensions have more positive attitudes toward the web such as affective information, browsing for information intention and purchasing intention. Although the dimension of power distance was not significant between Koreans and Americans, its dimension was relevant with consumer's web behavior and attitudes toward the web.

This interpretation of the findings suggests that there are optimal attitudes toward the web which are increasing in the direction of online business success. Having established this, future research can explore, with varying sources of cultural dimensions or the mix of cultural dimension with authorized theories and its effect, in order to approach an understanding attitude toward the web. This idea has practical implications, as well as theoretical implications.

5.3 Practical Implication

The findings of this study support the suggestion that effects between two different website designs exist. The respondents were stimulated in two retail websites which were Niketown.com (functional website) and Nike.com (aesthetic website). Even though they are the same brand with the same product, the websites are formed with different purposes. In fact, there were many respondents who knew about Niketown.com where

they can shop online instead of at Nike.com. Nike.com allows customers to feel as though they are really in the store, featuring products with technological ability such as flash, animation and music, while Niketown.com focuses more on the number of products and features of products so that customers can be under impetus in the website. Despite the researcher's attempts to compare two different websites, the results of comparing the differences were not statistically significant. However, research working with different websites would make a difference in effects on attitudes toward the web and would be a worthy investment to increase the positive attitudes of online business. Only further research can determine the validity of these implications.

CHAPTER 6

LIMITATIONS AND FUTURE RESEARCH

The findings reported here are subject to several limitations. The first limitation of this study arises from the cultural context of Korea. Korea is a society in flux, where the present Koreans' attitudes about their own culture are changing. This study provides only a snapshot for this cultural dynamic at this specific time and place. Thus, this study does not allow many inferences to be made because of the cultural dynamic in Korea.

The second limitation arises from the possibility of generalizing the results of this study about the whole of Korea. This study focused on Korean consumers who were studying in the U.S.A. Hence, the study does not provide the possibilities of applying important results to consumers who are really in Korea.

The third limitation is the absence of fixed website designs. To elicit more accurate information and differences, this study could propose fixed website designs. For the duration of this experiential study, the websites that were used did not change. If it were possible for apparel companies to change website content and/or design before the start of a new season, future studies could use the change for valuable and precise results. A growing understanding between website design and users may therefore lead to heightened involvement, which, in turn, could produce hedonic value, stimulation, information searching and subjective expertise and shopping behavior (Demangeot & Broderick, 2006).

The fourth limitation was the sampling method, because the sample was selected within the researcher's limited interpersonal relations. Although the sample had various

characteristics in demographic variables, it is not quite certain that the study findings cannot be generalized to all Korean and American consumers.

The fifth limitation exists in the result of the reliability test. Even if high factor loadings were shown among items for cultural dimensions and consumer behaviors, the values of Cronbach's Alpha Coefficient are less than .70. Thus, it shows a lack of the instruments needed for measuring cultural dimensions and consumer's web behaviors; those items are not certainly reliable.

Consequently, the several suggestions should be considered for future research. First, analysis of a time series might provide a more comprehensive understanding of Korean and Americans' goal-oriented vs. experiential use of web on attitudes toward the web. Because of the currently increasing market in Korea, cultural characteristics can be different from the past. Thus, according to the cultural dimensions between the past and present, additional analysis is needed to trace and compare changes in Korea or America.

Along with the time variable, the sample can be formed not only with many numbers of respondents, but also with residents in Korea, not living or studying in the U.S.A. This would yield more possibilities and accurate results to compare cultural differences.

Regarding website design, future study can investigate attitudes toward the web using the re-assessment of the investment of Nike web sites. Thus, the different concepts of websites can be distinguished as functional websites versus aesthetic websites.

Analysis with other variables rather than consumer behavior is needed to fully capture cross-cultural attitudes toward the web and website preferences. Some relevant factors, such as consumer characteristics (product/service characteristics or merchant

characteristics) which are important factors in explaining attitudes toward the web (Chen & Chang, 2003) were not considered in this study. Even though consumer characteristics were found to be important factors, there might be other external variables that are strongly related to attitudes toward the web to better predict and explain cross-cultural differences in attitudes toward the web.

APPENDIX 1

The Indexes of Hofstede's Cultural Dimension

The indexes of Hofstede's cultural dimension

Indexes from: Hofstede, Greet, 1991, Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its Importance for Survival, McGraw Hill, New York, 1991, ISBN: 0-07-029307-4.

PDI: Power distance index

IDV: Individualism index

MAS: Masculinity index

UAI: Uncertainty avoidance index

LTO: Long-term orientation index

	PDI		IDV		MAS		UAI		LTO	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Arab Countries	7	80	26/27	38	23	53	27	68		
Argentina	35/36	49	22/23	46	20/21	56	10/15	86		
Australia	41	36	2	90	16	61	37	51	15	31
Austria	53	11	18	55	2	79	24/25	70		
Bangladesh										
Belgium	20	65	8	75	22	54	5/6	94		
Brazil	14	69	26/27	38	27	49	21/22	76	6	65
Canada	39	39	4/5	80	24	52	41/42	48	20	23
Chile	24/25	63	38	23	46	28	10/15	86		
China									1	118
Columbia	17	67	49	13	11/12	64	20	80		
Costa Rica	42/44	35	46	15	48/49	21	10/15	86		
Denmark	51	18	9	74	50	16	51	23		
East Africa	21/23	64	33/35	27	39	41	36	52		
Equador	8/9	78	52	8	13/14	63	28	67		
Finland	46	33	17	63	47	26	31/32	59		
France	15/16	68	10/11	71	35/36	43	10/15	86		
Germany FR	42/44	35	15	67	9/10	66	29	65	14	31
Great Britain	42/44	35	3	89	9/10	66	47/48	35	18	25
Greece	27/28	60	30	35	18/19	57	1	112		
Guatemala	2/3	95	53	6	43	37	3	101		
Hong Kong	15/16	68	37	25	18/19	57	49/50	29	2	96
India	10/11	77	21	48	20/21	56	45	40	7	61
Indonesia	8/9	78	47/48	14	30/31	46	41/42	48		

Iran	29/30	58	24	41	35/36	43	31/32	59		
Ireland (Rep of)	49	28	12	70	7/8	68	47/48	35		
Israel	52	13	19	54	29	47	19	81		
Italy	34	50	7	76	4/5	70	23	75		
Jamaica	37	45	25	39	7/8	68	52	13		
Japan	33	54	22/23	46	1	95	7	92	4	80
Malaysia	1	104	36	30	6	69	18	82		
Mexico	5/6	81	32	30	6	69	18	82		
Netherlands	40	38	4/5	80	51	14	35	53	10	44
New Zealand	50	22	6	79	17	58	39/40	49	16	30
Nigeria									22	16
Norway	47/48	31	13	69	52	8	38	50		
Pakistan	32	55	47/48	14	25/26	50	24/25	70	23	0
Panama	2/3	95	51	11	34	44	10/15	86		
Peru	21/23	64	45	16	37/38	42	9	87		
Philippines	4	94	31	32	11/12	64	44	44	21	19
Poland									13	32
Portugal	24/25	63	33/35	27	45	31	2	104		
Salvador	18/19	66	42	19	40	40	5/6	94		
Singapore	13	74	39/41	20	28	48	53	8	9	48
South Africa	35/36	49	16	65	13/14	63	39/40	49		
South Korea	27/28	60	43	18	41	39	16/17	85	5	75
Spain	31	57	20	51	37/38	42	10/15	86		
Sweden	47/48	31	10/11	71	53	5	49/50	29	12	33
Switzerland	45	34	14	68	4/5	70	33	58		
Taiwan	29/30	58	44	17	32/33	45	26	69	3	87
Thailand	21/23	64	39/41	20	44	34	30	64	8	56
Turkey	18/19	66	28	37	32/3	45	16/17	85		
Uruguay	26	61	29	36	42	38	4	100		
USA	38	40	1	91	15	62	43	46	17	29
Venezuela	5/6	81	50	12	3	73	21/22	76		
West Africa	10/11	77	39/41	20	30/31	46	34	54		
Yugoslavia	12	76	33/35	27	48/49	21	8	88		
Zimbabwe									19	25

APPENDIX 2
Questionnaire Components

Questionnaire Components

Construct/ Indicators	
<i>Power distance</i>	<ul style="list-style-type: none"> (1) Inequalities among people are both expected and desired. (2) Less powerful people should be dependent on the more powerful. (3) Inequalities among people should be minimized. (4) There should be, and there is to be some extent, interdependencies between less and more powerful people.
<i>Individualism</i>	<ul style="list-style-type: none"> (1) Everyone grows up to look after him/herself and his/her immediate family only. (2) People are identified independently of the group they belong to. (3) An extended family member should be protected by another member in exchange for loyalty. (4) People are identified by their position in the social networks to which they belong.
<i>Masculinity</i>	<ul style="list-style-type: none"> (1) Money and material things are important. (2) Men are supposed to be assertive, ambitious and tough. (3) Dominant values in society are caring for others and preservation. (4) Both men and woman are allowed to be tender and to be concerned with relationships.
<i>Uncertainty Avoidance</i>	<ul style="list-style-type: none"> (1) Uncertainty is a normal feature of life and each day is accepted as it comes. (2) Emotions should not be shown. (3) High stress and subjective feelings of anxiety are frequent among people. (4) Fear of ambiguous situations and of unfamiliar risks is normal.
<i>Long/short term orientation</i>	<ul style="list-style-type: none"> (1) Personal Steadiness and stability. (2) Repeat for tradition. (3) Thrift. (4) Persistence (perseverance)
<p><i>Note: *Measured with a 7-points Likert-type scale from strongly Disagree to Strongly Agree</i></p>	
<i>Goal-oriented use of web</i>	<ul style="list-style-type: none"> (1) I use the web for my work. (2) I usually have a specific goal in mind when I browse. (3) I have a distinct or identifiable purpose for my browsing.

Experiential use of web

- (1) I use the web for my entertainment.
- (2) I use the web for just fooling around and exploring for fun.
- (3) I have no preconceived purpose for my Internet experience.
- (4) I usually browse or explore without a specific goal in mind.

Affective information

- (1) I think the site is attractive.
- (2) I think the site is interesting.
- (3) I think the site is likeable.
- (4) I think the site is appealing.

Cognitive information

- (1) I think the site is trustworthy.
- (2) I think the site is believable.
- (3) I think the site is honest.

Browsing for information intention

- (1) The likelihood that I would search for product information from this website is high.
- (2) It is likely that I would browse this web site to find product information.

Purchasing intention

- (1) I would be willing to buy products from this website.
- (2) I have a favorable attitude toward continuing to do business with this website.
- (3) The likelihood that I would purchase the product is high.
- (4) The probability of buying the product on this website would be high.

*Note: *Measured with a 7-points Likert-type scale from strongly Disagree to Strongly Agree*

APPENDIX 3

Survey Letter of Consent

Survey Letter of Consent

I am a graduate student in Textile and Apparel Management Department of University of Missouri, Columbia. I am conducting a research study to explore the influence of consumer behavior and web design on the attitude toward the web site. This research will be conducted with students of University of Missouri, Columbia.

Your participant will involve the completion of the survey to look at your online shopping experience. It will take approximately 30 minutes to complete including time to fill out the paper survey and to browse the website. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty, (it will not affect your grade, treatment/care, select whichever applies). The results of the research study will assist in the compilation of an accurate and detailed description of consumer attitude of online shopping. All information you provide will be anonymous and will be used for research purposes only.

Although there may be no direct benefit to you, the possible benefit of your participation is the expansion of our knowledge by examining the effects of consumer attitude influencing online shopping.

If you have any questions concerning this research study, please call me at (573) 673-2929 or e-mail me to myfx8@mizzou.edu.

Sincerely,

Miri Yoon

APPENDIX 4

Survey Questionnaires

Section A

I: Please indicate your level of agreement with the following statement.

	Strongly Disagree			Strongly Agree			
1. Inequalities among people are both expected and desired	1	2	3	4	5	6	7
2. High stress and subjective feeling of anxiety are frequent among people	1	2	3	4	5	6	7
3. Dominant values in society are the caring for others and preservation	1	2	3	4	5	6	7
4. Less powerful people should be dependent on the more powerful	1	2	3	4	5	6	7
5. An extended family member should be protected by other member in exchange for loyalty	1	2	3	4	5	6	7
6. Inequalities among people should be minimized	1	2	3	4	5	6	7
7. Emotion should not be shown	1	2	3	4	5	6	7
8. Uncertainty is a normal feature of life and each day is accepted as it comes	1	2	3	4	5	6	7
9. Everyone grows up to look after him/herself and his/her immediate family only	1	2	3	4	5	6	7
10. Money and material things are important	1	2	3	4	5	6	7
11. There should be, and there is to some extent, interdependencies between less and more powerful people	1	2	3	4	5	6	7
12. Both men and women are allowed to be tender and to be concerned with relationships	1	2	3	4	5	6	7
13. People are identified by their position in the social networks to which they belong	1	2	3	4	5	6	7
14. Fear of ambiguous situations and of unfamiliar risks is normal	1	2	3	4	5	6	7
15. Men are supposed to be assertive, ambitious, and tough	1	2	3	4	5	6	7
16. People are identified independently of the groups they belong to	1	2	3	4	5	6	7
17. I use the web for my work	1	2	3	4	5	6	7
18. I use the web for my entertainment	1	2	3	4	5	6	7
19. I have a distinct or identifiable purpose of my browsing	1	2	3	4	5	6	7

- | | | |
|------------------------|---------------------------|-------------------------|
| 1) Never | 2) about once in 2 months | 3) About once a month |
| 4) About twice a month | 5) About every week | 6) Several times a week |

9. What was the average amount you spent to make the last purchase online?

- | | | |
|-------------------|--------------------|----------------|
| 1) Less than \$50 | 2) \$50 - \$100 | 3) \$100-\$150 |
| 4) \$150-\$200 | 5) More than \$200 | |

Section B1

The purpose of this study is to investigate your attitude towards Nike website and Nike footwear. Please follow the following instruction carefully when access the Nike website (www.nike.com).

1. Please spend about 10 minutes to browse the website. When browsing the website, please pretend that you intend to purchase footwear or to gather information of footwear from the Nike website.
2. Place the mouse on “**Directory**” in the upper left corner of the page, and select /browse two categories from the following: Basketball, Running, and Nike Woman.
 - To shop or gather information of **Basketball**, please click “**Start Shopping**”.
 - To shop or gather information of **Running**, please click “**Shop**”.
 - To shop or gather information of **Nike Woman**, please click “**Shop**”.
3. After browsing the website of two categories for 10 minutes, please select a product and click “**Add to Cart**” for pretend buy. Then fill out the survey in the following section.

Section B2

The purpose of this study is to investigate your attitude towards Nike website and Nike footwear. Please follow the following instruction carefully when access the Nike website (www.niketown.com).

1. Please spend about 10 minutes to browse the website. When browsing the website, please pretend that you intend to purchase footwear or to gather information of footwear from the Nike website.
2. **Browse two categories, Basketball and Running, from “Men’s” or “Women’s” Footwear.**
 - To shop or gather information of **Men’s Footwear**, please click **“All Footwear”** and **browse Basketball and Running categories.**
 - To shop or gather information of **Women’s Footwear**, please click **“All Footwear”** and **browse Basketball and Running categories.**
3. After browsing the website of two categories for 10 minutes, please select products and click **“Add to Cart”** for pretend buy. Then fill out the survey in the following section.

IV. Please indicate your level of agreement regarding Nike website with the following statement.

	Strongly Disagree			Strongly Agree			
1. I think the site is trustworthy	1	2	3	4	5	6	7
2. I would recommend this site to my friends	1	2	3	4	5	6	7
3. I think the site is attractive	1	2	3	4	5	6	7
4. The likelihood that I would search products information from this website is high	1	2	3	4	5	6	7
5. I think the site is interesting	1	2	3	4	5	6	7
6. I recommend this web site to anyone who seeks my advice	1	2	3	4	5	6	7
7. I think the site is likeable	1	2	3	4	5	6	7
8. The likelihood that I would purchase the product is high	1	2	3	4	5	6	7
9. I think the site is believable	1	2	3	4	5	6	7
10. I think the site is appealing	1	2	3	4	5	6	7
11. I have a favorable attitude toward continuing to do business with this website	1	2	3	4	5	6	7
12. I think the site is honest	1	2	3	4	5	6	7
13. I would be willing to buy products from this website	1	2	3	4	5	6	7
14. I would intent to purchase things from this website in the future	1	2	3	4	5	6	7
15. It is likely that I would browse this web site to find products information	1	2	3	4	5	6	7
16. The probability of buying the product on this website would be highly probable	1	2	3	4	5	6	7

Thank you very much for your participation!

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