

THE INFLUENCE OF LEISURE CONSTRAINTS ON
PREFERENCE FOR AND PARTICIPATION IN
EXHIBITIONS IN SOUTH KOREA

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DEDICATION

This dissertation is dedicated to the Lord, Jesus Christ, and the Holy Spirit.

Moreover, this dissertation is dedicated to my family, especially

My father, Sang-Ok Lee and my mother, An-Soon Lee.

ACKNOWLEDGMENTS

For GOD so loved the world that He gave His only begotten Son, that whoever believes in Him should not perish but have everlasting life (John 3:16). The fear of the LORD is the beginning of wisdom; a good understanding have all those who do His commandments. His praise endures forever (Psalms 111:10). All Scripture is given by inspiration of GOD, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness, that the man of GOD may be complete, thoroughly equipped for every good work (2 Timothy 3:16-17). When Simon Peter saw it, he fell down at Jesus' knees, saying, "Depart from me, for I am a sinful man, O LORD!" And Jesus said to Simon, "Do not be afraid. From now on you will catch men (Luck 5: 8 & 10). Fear not, for I am with you; be not dismayed, for I am your GOD. I will strengthen you, Yes, I will help you, I will uphold you with My righteous right hand (Isaiah 41:10). The LORD shall preserve you from all evil; He shall preserve your soul. The LORD shall preserve your going out and your coming in from this time forth, and even forevermore (Psalms 121:7-8). I will lift up my eyes to the hills. From whence comes my help? My help comes from the LORD, who made heaven and earth (Psalms 121:1-2). Jesus asked His disciples, saying to them, "Who do men say that I am?" So they answered, "John the Baptist; but some say, Elijah; and others, one of the prophets." He said to them, "but who do you say that I am?" Peter answered and said to Him, "You are the Christ" (Mark 8:27-29). Ask, and it will be given to you; seek, and you will find; knock, and it will be opened to you. For everyone who asks for receives, and he who seeks finds, and to him who knocks it will be opened (Matthew 7:7-8). Faith is the substance of things hoped

for, the evidence of things not seen. For by it the elders obtained a good testimony (Hebrews 11:1-2). The prayer of faith will save the sick, and the LORD will raise him up. And if he has committed sins, he will be forgiven. Confess your trespasses to one another, and pray for one another, that you may be healed. The effective, fervent prayer of a righteous man avails much (James 5:15-16). Be hospitable to one another without grumbling. As each one has received a gift, minister it to one another, as good stewards of the manifold grace of GOD (1 Peter 4:9-10). Likewise you younger people, submit yourselves to your elders. Yes, all of you be submissive to one another, and be clothed with humility, for GOD resists the proud, but gives grace to the humble (1 Peter 5:5). Beloved, I pray that you may prosper in all things and be in health, just as your soul prospers (3 John 1:2). Abide faith, hope, love, there three; but the greatest of these is love (1 Corinthians 13:13).

The LORD is my shepherd; I shall not want. He makes me to lie down in green pastures; He leads me beside the still waters. He restores my soul; He leads me in the paths of righteousness for His name's sake. Yea, though I walk through the valley of the shadow of death, I will fear no evil; For You are with me; Your rod and Your staff, they comfort me. You prepare a table before me in the presence of my enemies; You anoint my head with oil; My cup runs over. Surely goodness and mercy shall follow me all the days of my life; And I will dwell in the house of the LORD forever (Psalms 23).

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CHAPTER I

INTRODUCTION

Background

During the past decade, the exhibition industry has been performing an important economic function in attracting huge number of people whose purpose is to share updated information and knowledge, to buy or sell products and services, to launch new products, and to negotiate contracts and deals (Rogers, 2003). Sandler (1994) reported that, with these distinctive functions, exhibitions have been widely recognized as a promotional channel in the U.S., Asia, and Europe. Sandler also noted that the percentage of corporate marketing and communication budgets for the exhibition market is greater than ten percent in the US and twenty percent in Europe. These figures indicate the importance of the exhibition industry in the western world.

McCabe (2001) found that the exhibition industry also provides various business opportunities with the “potential” to accelerate contracts and promotions. Bonoma (1983) described the potential of exhibitions as an effective and efficient marketing pathway not only to announce new products, provide new information, and introduce new technology, but also to interact and communicate with people face-to-face. Thus, Blythe (2002) stated that exhibitions are regarded as a tactical marketing technique to achieve a firm’s business aim and to enhance communications with existing and potential customers.

As domestic and international exhibitions have become greater in numbers, customers have shown stronger intentions of participating in exhibitions (Rice & Almosawi, 2002; Smith, Hama, & Smith, 2003). The main reasons that customers attend exhibitions are to acquire new information or knowledge, and to enjoy the interesting and exciting programs and performances (Robbe, 2000). Customers also wish to take part in exhibitions because they are interested in the various displays presented at the exhibitions (Kim, Sun, & Ap, 2008).

Interesting activities and low entrance fees motivate customers to attend exhibitions. However, many people may envision an exhibition as simply a quiet place where new products are displayed. Luckhurst (1951) defined an exhibition as not only an event that displays a collection of new products but also as an event that provides exciting human activities, performances, entertainment, and other dynamic activities for the exclusive purpose of achieving the marketing goals of companies.

Various opinions exist about the utility of the marketing function. Kotler (1971) explained that marketing is not the art of discovering intelligent ways of disposing the products of firms but the art of generating authentic customer value. Luckhurst (1951) and Kotler (1971) commonly emphasized that marketing should be designed with special features which will draw customers' attention. Kotler and Levy (1969) noted that marketing is a pervasive societal activity that goes considerably beyond the selling of products alone. They asserted that the nature of marketing function is to increase product sales by improving communication with customers.

Lee (2007) indicated that exhibitions and marketing have a common objective – to enhance sales through improved promotions, business interactions, and human

activities. In order to increase business interactions and human activities, exhibition managers organize interesting programs, performances, and entertainment because such activities draw customers' attention and increase exhibition attendance.

Previous studies in industrial marketing management suggest that exhibition organizers and managers should develop a strategic plan to meet marketing objectives prior to the exhibitions in order for such events to be successful (Bello & Lohtia, 1993; Kijewski, Yoon, & Young, 1993). To encourage more customers to attend exhibitions, it is important to understand the desires of the customers before participating in exhibitions since a large number of customers attending exhibitions is the key factor in evaluating the success of exhibitions (Ling-Yee, 2006). However, no research has been conducted to investigate the constraints which prevent customers from attending exhibitions or the relationships between exhibition participation and such constraints.

The author of this study used Leisure Constraints Theory in order to investigate any existing and potential constraints which prevent customers from attending exhibitions. Leisure Constraints Theory is a set of ideas to describe tangible and intangible constraints which intervene between the preference for and participation in leisure activities (Crawford & Godbey, 1987). Leisure Constraints Theory has been used by several researchers to examine any constraints which interrupt leisure activity participation (Jackson, 2000; Samdahl & Jekubovich, 1997). Constraints in Leisure Constraints Theory were defined as influential factors that may prevent people from engaging in leisure activities although they may want to do so (Jackson, 1988). Leisure constraints are comprised of intrapersonal constraints, interpersonal constraints, and structural constraints. These three distinct categories of constraints identify the three major types of

constraints that influence leisure activity participation (Jackson, 1993). Very briefly, intrapersonal constraints are the constraints related to individual psychological states such as stress, anxiety, and depression. Interpersonal constraints are the constraints of leisure activity related to unavailability of leisure partners. Structural constraints are the constraints related to physical obstacles excluding intrapersonal and interpersonal constraints such as weather conditions, availability of transportation, and availability of leisure facilities.

The author of this study surmised that similar constraints may exist in the exhibition industry because exhibition centers have also been used as a place for leisure activities. Exhibition attendees are likely to obtain new information and knowledge; to relax with family and friends; to participate in conferences; and to have special experiences while attending exhibitions. Leisure activity participants also expect to have opportunities to continue social networking, spend time with family and friends, and join exciting programs. There may be additional common attributes for attending exhibitions and partaking in leisure activities. It is an important fact that sharing common attributes of constraints between exhibition participation and leisure activity participation provides reasonable support for applying the Leisure Constraints Theory to the exhibition industry. Therefore, it is essential to investigate the constraints which prevent customers from attending exhibitions using the Leisure Constraints Theory and to assess the tactical strategies for reducing the tangible and intangible constraints.

Problem Statement

In previous exhibition research, attention mainly focused on understanding the factors influencing exhibition effectiveness and performance (Abratt, 1986; Traynor & Traynor, 1989), satisfaction levels of exhibition participants (Hultsman, 2001; Smith, Hama, & Smith, 2003), and the perceptions about convention and exhibition center facilities (Nelson, 1998; Wu & Weber, 2005). In spite of the significant features of exhibitions such as entertainment, performances, recreation, and leisure activities which may attract many customers to exhibitions, few researchers have examined the influence of such exhibition attributes. In addition, constraints that negatively impact customer participation in exhibitions have also been rarely investigated.

In the past, exhibitions were regarded as an event for business people to interact and trade their products in order to increase sales and negotiate contracts. However, that sort of unidimensional perception about exhibitions has disappeared as more dynamic and entertaining performances and multifaceted facilities have been added to the exhibition industry. For example, a larger number of customers who enjoy leisure activities attend exhibitions for their entertainment value. This modern phenomenon has become an issue of interest to exhibition researchers and practitioners as they have striven to discover tactical marketing strategies to increase the number of exhibition attendees. Thus, research on exhibition marketing should also be conducted to analyze the relationships between exhibition participation and leisure constraints in order to understand any existing and potential constraints which may discourage customers from participating in exhibitions. Such constraints may be significant barriers that prevent the exhibition industry from flourishing.

A better understanding of the tangible and intangible constraints of exhibition participation also has great theoretical and practical value for the development of the exhibition industry. Eliminating major constraints is an effective way to increase customer participation in exhibitions. In addition, the findings of this research may suggest efficient promotional strategies for exhibition managers and organizers. Furthermore, this research is valuable because there is no previous research to verify the causal relationships between exhibition participation and leisure constraints.

Therefore, it is necessary to investigate the constraints for exhibition participation with a new perspective on leisure. The purpose of this study is to develop a model that explains the causal relationship between exhibition participation and leisure constraints and to investigate the tangible and intangible constraints which prevent customers from participating in exhibitions.

Research Questions

In light of the discussion above, the following research questions were developed:

1. Is there a relationship between the demographic characteristics of exhibition attendees and the leisure constraints perceived by them?
2. Is there a correlation between intrapersonal, interpersonal, and structural constraints in the exhibition industry in South Korea?
3. Are there any causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions?

The above three questions are the essence of this research by focusing on the key issues of exhibition attendance constraints and their influence on the preference-participation gap that may exist. The influence of the demographic characteristics is also explored.

Scope of the Study

There are a few issues that must be discussed with respect to the scope of this study. This study, by design, was limited to specific exhibitions which were situated in the second quadrant on the Preference-Participation Analysis matrix. The second quadrant represents high preference but low participation. The researcher did not consider exhibitions which were located in the first, the third, and the fourth quadrants on the Preference-Participation Analysis matrix. The matrices represent high preference and high participation, low preference and low participation, and low preference and high participation, respectively.

The study was limited to only leisure constraints. There might be more constraints occurring in reality that may inhibit exhibition participation such as extenuating factors which include severe weather disasters, acts of terrorism, and unexpected government restrictions. Such adverse factors were not considered in this study because of the difficulty in predicting and analyzing them.

This study was limited to specific items within the potential list of leisure constraints. Needless to say, an exhaustive list of all possible leisure constraints is very difficult to comprise and analyze. Therefore, the researcher conducted the study considering the more common leisure constraints faced by a typical exhibition attendee. Such a list was compiled after completing an exhaustive review of previous research.

For the purpose of this study, only a few selected socio-economic and demographic factors were considered to be critical based on previous research in other similar industries. In that regard, only gender, age, marital status, education, annual income, and place of residence were considered. All the other potential respondent

characteristics may be considered in future studies. Similarly, this study was also limited to South Korean exhibition attendees and South Korean residents who lived in Seoul, Gyeonggi, Incheon, and Chungcheong provinces, since the focus was only on South Korean exhibition attendees. To enable efficiencies in the data collection process, the study was limited to two major exhibition centers in South Korea: the Convention and Exhibition Center (COEX) located in Seoul and the Korea International Exhibition Center (KINTEX) located in Goyang's West Ilsan District. With such a focus, the preference and participation tendencies of South Korean exhibition attendees in smaller towns and cities were not considered.

Definition of Key Terms

The researcher of this study developed specific definitions of the key constructs considered in this study. The following section provides a brief definition of the constructs utilized in this study.

- **Exhibition:** A temporary event designed not only to supply new information and knowledge to attendees about the products and services offered but also to provide entertainment, opportunities for leisure activities and other dynamic human networking interactions in order to enhance the marketing goals of firms participating in the exhibition.
- **Attendee:** People visiting or/and attending and living in the vicinity of major exhibition centers in South Korea.
- **Leisure constraints:** The constraints which prevent a willing attendee from participating in leisure activities even if they prefer such activities. Leisure constraints negatively influence both preference for and participation in leisure activities.
- **Intrapersonal constraints:** The constraints which influence an individual's psychological state of preference for leisure activities. The examples of intrapersonal constraints are stress, anxiety, fatigue, depression, lack of interest, lack of curiosity, lack of information, just to name a few.
- **Interpersonal constraints:** The constraints originating from external relationships of an individual such as spouse, family, friends, etc. Interpersonal constraints largely rely on marital status, family size, cooperative assistance of companions, financial support of companions, and intentions of companions. The examples of

interpersonal constraints are lack of companions, companion's lack of interest, companion's lack of time, and companion's lack of economic support.

- **Structural constraints:** The constraints which interrupt leisure preference and participation. Structural constraints are physical obstacles excluding intrapersonal constraints and interpersonal constraints. The examples of structural constraints are inconvenient transportation, transportation fees, entrance fees, lack of interesting programs, lack of entertainment, lack of special experiences, geographic distance, overcrowding, and unpleasant weather conditions, just to name a few.
- **Importance-Performance Analysis (IPA):** A scientific technique to measure managerial effectiveness and efficiency of firms. Importance-Performance Analysis examines consumer acceptance of particular features of marketing programs and discovers strategic ways to allocate limited resources into right places in order not only to improve the quality of product or service but also to enhance customer satisfaction.
- **Preference-Participation Analysis (PPA):** An analytical method used to scientifically estimate preference for and participation in leisure activities. In this research, Preference-Participation Analysis helps not only to measure the levels of individuals' preferences for and participation in exhibitions but also to examine the difference between the preference for and participation in exhibitions.

Significance of the Study

Theoretical Contribution One

The theoretical contribution of this study is the application of Leisure Constraints Theory to the exhibition industry. In previous research, leisure constraints have been used to analyze barriers which negatively influence leisure activity participation. Each of the constraints is either significantly or non-significantly related with each other and there is either a positive or negative impact on leisure activity participation in the previous leisure studies. This research was conducted using the same components of leisure constraints. However, the focus is to analyze the positive or negative effect of leisure constraints on exhibition participation instead of leisure participation. Therefore, the application of Leisure Constraints Theory to the exhibition industry will be of significant value in research on analyzing major constraints of exhibition participation.

Theoretical Contribution Two

Importance-Performance Analysis (IPA) has been used in hospitality and tourism research since the 1970s (Evans & Chon, 1989; Go & Zhang, 1997; Hollenhost, Olson, & Fortney, 1992; Martilla & James, 1977; Zhang & Chow, 2004). Even though IPA is useful, marketing researchers have critical views toward IPA (Deng, Kuo, & Chen, 2008; Oh, 2001). Therefore, this research was conducted using Preference-Participation Analysis rather than Importance-Performance Analysis. This research also suggests valid and reliable evidence to indicate the causality between exhibition participation and leisure constraints in exhibitions positioned on the second quadrant of the PPA matrix.

Practical and Managerial Contribution

No research has been conducted to investigate constraints of exhibition participation using Leisure Constraints Theory. In modern exhibitions, more customers consider exhibitions to be a public event to experience exciting programs, entertainment, performances, and leisure activities. Thus, exhibition organizers and managers strive to provide more exciting programs, dynamic performances, and leisure activities within exhibition as it is an important marketing strategy to motivate more customers to attend exhibitions. Therefore, it is necessary for exhibition researchers, practitioners, organizers, and managers to investigate any hidden constraints existing in exhibitions so as to increase exhibition attendance. This research will have practical significance to various parties:

- The literature review will help industry professionals understand why exhibitions may be considered a place to experience leisure activities.
- The results of this study will help exhibition researchers and practitioners comprehend the relationships between leisure constraints and exhibition participation.
- The findings and conclusions of this study will help exhibition managers and organizers to develop marketing strategies to increase exhibition participation by eliminating constraints.

CHAPTER II

REVIEW OF LITERATURE

This chapter presents the literature related to the exhibition industry, Leisure Constraints Theory, and Preference-Participation Analysis compared to Importance-Performance Analysis. The review of literature is divided into the following major sections:

1. The exhibition industry
2. Leisure Constraints Theory
3. Importance-Performance Analysis
4. Preference-Participation Analysis

Historical definitions, types, and themes of exhibitions are examined in this chapter. The size, scope, growth rate, and competitiveness of the exhibition industry in South Korea are compared with international exhibition statistics. The attributes for marketing of exhibitions are explained in detail. The definitions and relationships of leisure constraints are explained along with an explanation for using Leisure Constraints Theory in the exhibition industry. Definitions, functions, utilities, and criticisms with respect to both Importance-Performance Analysis and Preference-Participation Analysis are also provided.

The Exhibition Industry

Definitions of Exhibitions

Morrow (2001) described an exhibition as an impermanent and time-sensitive marketing event organized by an individual or corporation, where buyers and sellers interact with each other in order not only to purchase products and services but also to achieve marketing goals, either at the time of presentation or at a future date. Many terms have been used to describe the direct buyer-seller environment with fair, exhibition, and exposition being the most common terms used in the exhibition industry (Morrow, 2001). Waters (1939) noted that a fair is an event at which people display and sell goods and it is one of primeval forms that may have existed in the inception of the tradition of barter and trade. Luckhurst (1951) also explained fairs as basic and natural places for merchants to bring living commodities in order to sell them on the spot.

Morrow (2001) noted that exhibition is a relatively new word and exhibitions are different from fairs in four ways. First, exhibitions are usually one-time events and many exhibitions run for months, years, or longer while fairs run for a short period of time. Second, exhibitions are housed in permanent facilities built specifically for the exhibition. Third, exhibitions are highly organized events while fairs are less organized even though they are held regularly. Lastly, exhibitions are different from fairs in that business is conducted and that they stimulate future sales.

Konikow (1986) indicated that exhibitions are events for marketing opportunities, stimulating the interests of customers for business, and targeting specific markets through personal contact and interaction. Bello (1992) and Blythe (2002) noted that exhibitions

offer marketers a unique opportunity to influence key existing and potential customers who may not be easily reachable through field sales and other promotional methods.

Findling and Pelle (1990) noted that the word *exposition* is an old French word, with the meaning of displaying or putting on a show. They indicated the use of the term exposition: “exposition is a word that etymologically bridges the gap between fair and exhibition” (p. 22). An exposition is defined by the International Association for Exhibition and Events (IAEE) as a temporary marketplace which facilitates present and future transitions and exchanges between buyers and sellers through displaying products and providing services. From the previous discussion, exhibitions can be defined as a temporary marketplace to interchange and exchange information and ideas between exhibitors and attendees through the combination of advertisement, sales promotion, personal selling, and public relations.

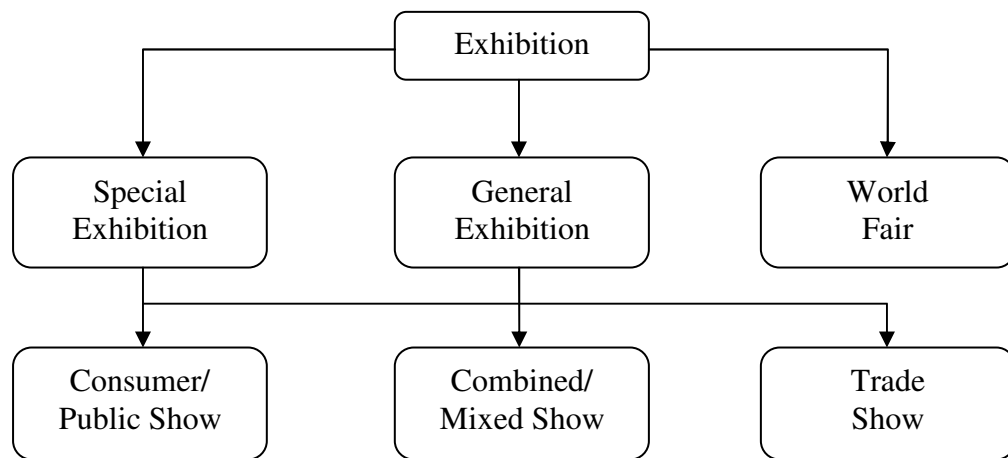
Types of Exhibitions

Exhibitions are categorized into various types as shown in Figure 2-1.

Exhibitions are classified into three groups: special exhibitions, general exhibitions, and world fairs. Special exhibitions are further separated into consumer shows, mixed shows, and trade shows (CEIR, 1996). In the exhibition industry, the above terms are used interchangeably and some exhibitions are not clearly defined since they may have similar characteristics. However, an entrance limit is one standard used to classify exhibitions into separate categories. An entrance limit is a way for exhibition organizers to allow different groups of attendees to come to exhibitions on different days. Table 2-1 shows the entrance limits for consumer/public shows, combined/mixed shows, and trade shows.

For example, consumer shows are open to the public and they include distinguishing characteristics such as entertainment, recreation, performances, education sessions, and other interactive activities. These promotional activities influence the amount of sales and contracts; thus, exhibitors of companies in consumer shows strive to integrate their marketing approach with entertainment factors (Lee, 2007).

Figure 2-1. Classification of Exhibitions



Source: CEIR (1996). The power of exhibitions II: Summary results: What successful exhibitors do to get results, Bethesda MD: Center for Exhibition Industry Research.

The Center for Exhibition Industry Research (CEIR) categorized each event and show based on limitations of the business field, entrance limits, and types of attendees, as shown in Table 2-1. Special exhibitions are broadly categorized into three types based on features and characteristics of exhibitions: trade shows, consumer and public shows, as well as combined and mixed shows.

Even though exhibitions are distinguished by certain features and characteristics, the classification has less meaning to attendees since hundreds of exhibitions open every year and millions of attendees participate in exhibitions irrespective of the classification.

In addition, fairs, exhibitions, and trade shows have shown similar characteristics. For example, business people participate not only in trade shows and mixed shows but also in consumer shows. Exhibitors also attend various types of exhibitions included consumer shows that generate sales similar to trade shows and mixed shows, yet the rate of consumer and public shows is only 13 percent of all shows in the North American exhibition industry. International exhibitions are more commonly acknowledged as trade shows. Historically, trade fairs have been recognized as a primary marketing medium of exporting products and raw materials to other countries. Buyers are usually business members of an industry and international trade fairs represent a cost-effective and efficient means of purchasing products and services from the global marketplace (Morrow, 2001).

Table 2-1. Differences of Special Exhibitions

Type	Trade Show	Consumer/Public Show	Combined/Mixed Show
Industry	Industrial B2B Business to Business	Consumer Industry B2C Business to Consumer	Trade show & Combined Consumer Show
Exhibitor	Manufacture Distributor	Retail outlets Manufacturer	Manufacturer Distributor
Visitor	Buyer End-user	General Public	Buyer General Public
Entrance Limit	Buyer Invitation	No entrance limit	Different dates to participate based on exhibition types
Market Share	49% in U.S.	13% in U.S.	38 % in U.S.

Source: CEIR (1996). The power of exhibitions II: Summary results: What successful exhibitors do to get results, Bethesda MD: Center for Exhibition Industry Research.

Trade shows or business-to-business shows have certain distinguishing characteristics that set them apart from consumer or combined shows. Trade shows are more commonly related with manufacturers and product distributors (Morrow, 2001). Trade shows are only for invited attendees and business interactions are of highest concern. However, trade shows are open to the public on certain days. Trade shows are a popular medium for advertising, promoting, and selling products and services. In the U.S., more than 91,000 firms display their goods to more than 31 million prospective buyers at some 8,000 trade shows at a cost of \$7 billion annually (Clever, 1982; Trade Show Bureau, 1993).

The popularity of trade shows is exemplified by the high level of expenditure expended by firms. Firms are estimated to allocate 25% or more of their average annual advertising and sales promotion budgets to this promotional activity (Trade Show Bureau, 1983). Thus, the importance of trade shows is increasing. Among the promotional tools used by industrial marketing firms, trade shows ranked second behind personal selling and ahead of print advertising and direct mail in terms of influencing the purchase decision-making process of industrial buyers (Parasuraman, 1981).

Moriarty and Spekman (1984) also illustrated the growing importance of trade shows and reported that trade shows have a significant influence on the industrial purchasing process at the need recognition stage and later during the vendor evaluation stage of the buying process. Bonoma (1983) and Cavanaugh (1976) pointed out that trade shows have a much broader role. For example, many firms participate in trade shows for several reasons other than only making sales. These firms consider image enhancement, gathering competitive information, and improving corporate esprit de

corps. In these firms, the role of trade shows has expanded beyond solely selling objectives.

Consumer shows are exhibitions that are open to the general public, represent an expanding marketing opportunity for consumer-based companies, and play a prominent role in consumer product marketing. According to industry classifications, consumer shows include home furnishings and interior design, sporting goods and recreation, landscape and garden suppliers, education, computer and computer applications, and health care (Morrow, 2001). Many companies participate in consumer shows as a testing place for new products and a convention for expanding and maintaining positive public relations (CEIR, 1994). In addition, there is no limitation for customers to participate in consumer shows; thus, customers are involved in business interactions as well as leisure activities such as entertainment, recreation, and other attractive performances (CEIR, 1996). With increasing interactions, such as exciting entertainment and performances, consumer and public shows typically feature activities for education, entertainment, performances, and leisure. Attendees regard those activities in consumer and public shows as important.

Convenient purchasing values, educational functions, and entertaining activities are major benefits and advantages involved in consumer and public shows (Quain, 1994). Customers who have two specific interests usually participate in exhibitions; one is to be entertained and the other is to obtain new information and expertise from exhibitors in order to compare each displayed product (Robbe, 2000). Quain (1994) also pointed out that consumer and public shows provide many exciting opportunities and performances such as music festivals, physical exercise shows, symposiums, and so forth.

A combined and mixed show is a combination of trade and public shows. This is an exposition that is open both to business people and to the public. Combined and mixed shows occupied 35 percent of exhibitions held in the United States (Morrow, 2001). In contrast to consumer shows, combined and mixed shows are open to the public and business people during specific dates. It also includes entertaining features and leisure activities.

Table 2-2 shows the various themes of exhibitions. Hundreds of exhibitions are held every year and are categorized not only by type but also by theme. The themes of exhibitions are as follows: information and technology, manufacturing, fashion and fibers, culture and education, computers, housing and construction, consumer goods, agricultural and marine products, tourism, ecology and environment, economy and finance, medical science, electricity, sports and recreation, art, religion, and so on. More than 200 exhibitions opened in 2005 and more than 15 million attendees participated in exhibitions in South Korea (Korean National Tourism Organization, 2005). In South Korea in 2005, exhibitions pertinent to art had the highest participation followed by exhibitions related to culture and education.

Table 2-2. Themes of Exhibitions

Theme	Year 2005			Year 2004		
	Freq	Percent	Total Attendee	Freq	Percent	Total Attendee
Technology & Information	19	8.92	864,819	16	10.00	636,860
Manufacturing	26	12.21	1,808,580	24	15.00	2,999,826
Fashion & Fibers	9	4.23	234,508	4	2.50	126,750
Culture & Education	15	7.04	2,108,199	9	5.63	581,653
Computers	10	4.69	407,960	10	6.25	708,696
Housing & Construction	13	6.10	1,458,879	9	5.63	769,796
Consumer goods	23	10.80	584,339	21	13.13	697,246
Agricultural & Marine products	19	8.92	1,535,607	13	8.13	1,086,129
Tourism	8	3.76	593,332	3	1.88	218,202
Ecology & Environment	10	4.69	1,115,047	6	3.75	105,421
Economy & Finance	6	2.82	103,680	5	3.13	162,000
Medical Science	9	4.23	236,003	10	6.25	301,614
Electricity	16	7.51	459,507	7	4.38	265,754
Sports & Recreation	7	3.29	271,346	9	5.63	391,305
Art	8	3.76	3,176,724	5	3.13	279,012
Religion	-	-	-	-	-	-
Other	15	7.04	464,039	9	5.63	267,784
Total	213	100.00	15,422,569	160	100.00	9,598,048

Source: Korean National Tourism Organization, 2005.

Size and Scope of the Exhibition Industry

In this section, the size of exhibition centers, the number of international exhibitions, and support rate of export promotion programs for exhibition participation in South Korea are analyzed in comparison to the international exhibition industry. Table 2-3 shows the size comparison between international and South Korean exhibition centers. The size of exhibition centers in Hannover, Germany is 2.84 times larger than that of exhibition centers in South Korea. In addition, the total size of German exhibition centers located in Hannover, Frankfurt, Cologne, Dusseldorf, Munich, Berlin, and Nuremberg is 10.39 times larger than that of exhibition centers in South Korea. The size of exhibition centers in Milano, Italy is two times larger than that of exhibition centers in South Korea.

Table 2-3. Size Comparisons between International and South Korean Exhibition Centers

Rank	Exhibition Center	Size (Unit: 1,000m ²)	Times to South Korean Exhibition Centers
1	Hannover	495	2.84 times
2	Milano	348	2.00 times
3	Frankfurt	324	1.86 times
4	Cologne	286	1.64 times
5	Dusseldorf	234	1.34 times
6	Valencia	231	1.33 times
7	Paris Expo	222	1.28 times
8	Chicago	204	1.17 times
9	Orlando (Orange County)	195	1.22 times
10	Paris-Nord	191	1.09 times
11	Birmingham	184	1.09 times
12	Las Vegas	160	1.06 times
13	Munich	160	0.92 times
14	Berlin	160	0.92 times
15	Nuremberg	152	0.87 times

Source: Korean National Tourism Organization, 2005.

Table 2-4 shows the number of international exhibitions organized in three major continents in 2003. According to a report published by m+a directory, the United States held the highest number of international exhibitions in 2003 (796). In Europe, the total number of international exhibitions in Germany was 547 which was the second highest number of exhibitions, followed by France (536), Italy (460), and the U.K. (430). Among Asian countries, international exhibitions were held the most in China (381), followed by Japan (122), Singapore (86), Hong Kong (64), and Taiwan (62). The report indicates that international exhibitions were held most frequently in the United States and in Europe.

Table 2-4. The Number of International Exhibitions in the World (2003)

Region	Country	KOTRA directory	m+a directory
America	U.S.A.	417	796
Europe	Germany	435	547
	France	164	536
	United Kingdom	155	430
	Italy	119	460
Asia	Japan	221	122
	Singapore	48	86
	China	239	381
	Taiwan	48	62
	Hong Kong	38	64

Source: KOTRA, 2003/2004 International Fair Directory; m+a publishers for Fairs, Exhibitions and Conventions; *International Tradeshow Directory*, 32, 2003.

Table 2-5 shows the founding year and size of South Korean exhibition centers. There are eleven exhibition centers in South Korea and the largest exhibition center is the Korea International Exhibition Center (KINTEX) which is located in Goyang's West Ilsan District. The second largest exhibition center in South Korea is the Convention and Exhibition Center (COEX) which is located in Seoul. The South Korean government signed a contract in 2006 agreeing to build Asia's largest exhibition center in Incheon, South Korea with Italian Fiera Milano SpA. The construction of the Fiera Milano Incheon is going to be completed in 2012.

Table 2-5. South Korean Exhibition Centers

Exhibition Center	Year Found	Size (m ²)
aT Center	2002	7,422
Convention & Exhibition Center (COEX)	1988	36,027
Korea International Exhibition Center (KINTEX)	2005	53,541
Seoul Trade Exhibition & Convention (SETEC)	1999	7,948
Song-do Convention Center (SCC)	2008	8,416
Kotra Exhibition Center, Daejeon (KOTREX)	1995	4,200
Busan Exhibition & Convention Center (BEXCO)	2001	26,508
Changwon Exhibition Convention Center (CECO)	2005	7,826
Daegu Exhibition & Convention Center (EXCO)	2001	11,616
Kimdaejung Convention Center	2005	9,072
International Convention Center (ICC Jeju)	2003	2,394
Total		174,970

Source: Korean National Tourism Organization, 2005

Table 2-6 shows the number of exhibitions held in South Korea per year. In 1996, 106 exhibitions were held and 5,464,933 people attended exhibitions. In 2005, 231 exhibitions were held and 15,422,569 people attended exhibitions. The growth rate of the number of exhibitions in 2005 compared to the previous year was approximately 33 percent. In addition, the total number of participants in 2005 was more than three times compared to the number of participants in 1996. The number of exhibitions and the growth rate indicate how fast the exhibition industry in South Korea has grown during the past decade.

Table 2-6. The Number of Exhibitions in South Korea per Year

Year	Exhibition held	Exhibition Growth Rate From Previous Year	Total Participants	Participation Growth Rate From Previous Year
1996	106	10.42	5,464,933	-
1997	104	-1.89	5,336,571	-5.50
1998	93	-10.58	7,721,692	44.69
1999	112	20.43	7,918,801	2.55
2000	117	4.46	8,609,892	8.73
2001	128	9.40	12,570,584	46.00
2002	130	1.56	7,765,913	-36.63
2003	154	18.46	10,175,257	27.73
2004	160	3.90	9,598,048	-5.67
2005	231	33.13	15,422,569	60.68

Source: Korean National Tourism Organization, 2005

Table 2-7 shows the export promotion programs support for exhibition participation by country. Many countries strive to provide assistance to their prospective exhibitors through export promotion programs. Support for corporate participation in international exhibitions is becoming a major component of the export promotion programs because it is difficult to participate in the overseas market where cultures are so different from home (Hansen, 1996; Seringhaus & Rosson, 2001). Italy supported the most to invite international exhibition attendees and to promote international exhibitions. The support frequency of Italy was 414, followed by the United Kingdom (350), and Hong Kong (214), respectively. However, the support frequency of South Korea was only 70. The statistics indicate a need for more governmental support for the South Korean exhibition industry.

Table 2-7. Support for Exhibition Participation by Country

Country	Organization	Support Frequency	Export Promotion Programs Support Ratio (%)
France	CFME-ACTIM	79	40
Germany	AUMA	89	50
United Kingdom	BCC	350	Lease/installation 45%
Italy	ICE	414	48
Taiwan	CETRA	80	50
Japan	JETRO	13	33
China	CCPIT	20	100
Hong Kong	HKTDC	214	50
Singapore	STDB	30	Service support
South Korea	KOTRA	70	50

Source: KOTRA, 2002

The Attributes of Exhibitions

The economic impact of the exhibition industry is much greater than other marketing efforts made by companies (Kim, Chon, & Chung 2003; Yoo & Weber, 2005). The exhibition industry has a huge economic and social impact on business for the following reasons. First, exhibitions are commercial in nature as deals between sellers and buyers are frequently made during exhibitions. Second, exhibitions invite representatives from a range of interrelated industries in order to generate extensive economic effects (Kim, Sun, & Ap, 2008). Thus, many researchers have surmised that exhibitions are highly beneficial to companies and offer a unique marketing medium that customers can use (Kaminer, 1992; Rosson & Seringhaus, 1995).

Jim (1998) explained the attributes of exhibitions, showing the reasons why many customers and exhibitors attend exhibitions. He reported that customers and exhibitors have a primary goal, which is to gain new information and technology while attending exhibitions. In addition, customers and exhibitors take into consideration that exhibitions provide a wide array of activities and opportunities to interact with a variety of economic agents in the distribution network. They are able to participate in social events, seminars, and activities with the aim of establishing and maintaining connections (Bello & Lohtia, 1993). Other exhibition researchers also indicated that an exhibition is an industrial promotional tool (Parasuraman, 1981) and a well-organized communication channel (Moriarty & Spekman, 1984).

Accordingly, many larger firms have utilized exhibitions as an important activity by including them in an annual budget allocation (Trade Show Bureau, 1989). Exhibitors who represent their firms are able to obtain opportunities to test new product ideas,

improve customer perceptions of the product or service, develop channel relationships, analyze new trends, as well as gather market information (Banting & Blankhorn, 1974). Moreover, they recognize that exhibitions are a more productive way to facilitate product sales for retailers and manufactures than the general marketing approach to sell products directly to customers (Bellizzi & Lipps, 1984).

Customers also hope to extend considerably beyond purchasing plans to updating of their knowledge about product and technology while participating in exhibitions (Trade Show Bureau, 1991). Exhibition attendees participate in exhibitions with high purchasing power (Kaminer, 1992), and the decision making ability to buy goods and services (Rosson & Seringhaus, 1995). However, they also consider an exhibition as an ideal opportunity to begin or enhance the process of information collection and product evaluation (Bello & Barczak, 1990). Thus, Hutt and Speh (1981) insisted that more diverse experiences and opportunities should be added to exhibitions to help customers obtain more information and knowledge.

In summary, the key attributes of exhibitions can be described as follows: sales, marketing tools, business interaction, exchange of information or technology, advertisement, promotion, personal selling, and public relations (Lee, 2007).

Exhibition Marketing

During the past decade, there has been an extensive growth in the exhibition industry and exhibitions have become an essential part of the industrial marketing communications profile (Browning & Adams, 1988). Studies have shown that over half of the attendees at exhibitions were planning on purchasing products in the near future (Trade Show Bureau, 1991). Understandably, the rate of the corporate marketing communication budget for the exhibition market is more than 10 percent in the U.S. market and 20 percent in the European market (Sandler, 1994). Bonoma (1983) was one of the first to recognize the trend and recommend that firms' investment of exhibition marketing activities be expanded.

Ling-Yee (2007) emphasized the importance of exhibitions as a means for developing and improving channel relationships for improving the effectiveness of marketing effort. Exhibitions are seen as an important opportunity for companies to establish, develop, defend or extend their position within the network (Rosson & Seringhaus, 1995). This indicates that a firm's participation in exhibitions can be an opportunity to develop the most useful contacts and conduct purchases in a complementary way (Barreyre & Letrein, 1990; Blythe, 2002). Blattberg and Dayton (1996) also explained the importance of exhibition marketing activities. They pointed out that the major marketing goals are customer acquisition and retention which can be accomplished by consistent marketing activities.

For several decades, numerous marketing objectives of exhibitions have been identified in the literature in order to discover effective and efficient marketing strategies (Bello & Lohtia, 1993; Blythe, 2002; Bonoma, 1983; Browning & Adams, 1988;

Dekimpe, Francois, Gopalakrishna, Lilien, & Van den Bulte, 1997; Herbig, O'Hara, & Palumbo, 1994; Kijewski, Yoon, & Young, 1993; Siskind, 1997; Tanner & Chonko, 1995). The marketing objectives can be summarized as follows: (1) taking sales orders, (2) entering new (export) markets and developing new prospects, (3) introducing and testing new products, (4) building relationships with other companies, (5) gaining information about the competition, (6) meeting with current customers, (7) enhancing the company image, (8) finding new agents and distributors, (9) attending seminars or workshops, and (10) gaining information about industry trends.

Many industry participants, such as companies, experts, and sector-related associations, have participated in exhibitions and obtained desired information (Sharland & Balgoh, 1996) because they perceive an exhibition as a means of acquiring knowledge, preparing for the future, and discovering tactical marketing strategies (Rosson & Seringhaus, 1995). Basically, firms attending exhibitions have a marketing objective not only to evaluate new products but also to improve their competitiveness (Hansen, 1996; Munuera & Ruiz, 1999; Sharland & Balgoh, 1996). Companies can discover a lot of useful information while investigating their competitors' marketing performance (Sharland & Balgoh, 1996). While attending exhibitions, they also promote their company's image, assess customer reactions toward products, conduct market research, and engage in a marketing campaign (Carol, 1980).

Therefore, exhibitions are a unique setting for firms not only to conduct marketing research and activities for customers but also to examine other competitors' marketing strategies (Bello & Barczak, 1990; Hansen, 1996). In addition, exhibitions are a highly profitable marketing media for delivering a message to current or potential

customers at a relatively low cost. The success of exhibition marketing activities depends on the careful setting of objectives in order to best match the message and the audience (Cavanaugh, 1976). Table 2-8 shows the references for exhibition's marketing objectives.

Table 2-8. References for Exhibition's Marketing Objectives

Criteria	Categories	References
Marketing objectives	Customer acquisitions and retention	Banting & Blenkhorn, 1974; Bello & Lohtia, 1993; Blythe, 2002; Dekimpe et al., 1997; Hansen, 1996; Kijewski et al., 1993; Munuera & Ruiz, 1999; Rosson & Seringhaus, 1995; Seringhaus & Rosson, 2001
	Distribution networks	Moriarty & Spekman, 1984; Munuera & Ruiz, 1999; Rosson & Seringhaus, 1995; Sharland & Balgoh, 1996
	Product scanning	Bello & Barczak, 1990; Bello & Lohtia, 1993; Blythe, 2002; Godar & O'Connor, 2001; Munuera & Ruiz, 1999; Rosson & Seringhaus, 1995
	Marketing research	Dekimpe et al., 1997; Munuera & Ruiz, 1999; Rosson & Seringhaus, 1995; Seringhaus & Rosson, 2001; Sharland & Balgoh, 1996

Source: Berne, C., & Garcia-Uceda, M. E. (2008). Criteria involved in evaluation of trade shows to visit. *Industrial Marketing Management*, 37, 565-579.

Leisure Activities in Exhibitions

In order for the exhibition industry to flourish more effectively, previous studies in industrial marketing management recommend that exhibition managers should develop a specific plan to meet marketing objectives prior to the exhibition (Bello & Lohtia, 1993; Godar & O'Connor, 2001; Sharland & Balogh, 1996; Tanner & Chonko, 1995). In addition, managers should select the right exhibitions to match the right types of buyers with their products (Kijewski, Yoon, & Young, 1993; Shoham, 1992), as well as coordinate pre-exhibition, at-exhibition, and post-exhibition efforts to initiate and build relationships with key accounts (Blythe, 2002). Lastly, exhibition managers should evaluate exhibitions to make the budget payoff (Herbig, O'Hara, & Palumbo, 1994; Lilien, 1983). However, exhibition practitioners underestimate the possibilities that exhibitions can be used for providing leisure activity opportunities for attendees. Even though exhibitions offer valuable opportunities for leisure activities, people normally consider exhibitions as a business interaction environment or a place where pictures, sculptures and other objects are displayed for observation and appreciation. Luckhurst (1951) insists that exhibitions should include exciting human activities and entertaining events in order to increase not only business interactions but also human interactions. Through transforming exhibition features, modern exhibitions provide various opportunities for customers to interact with each other not only to share information, technology, and products, but also to experience leisure activities (McLean, 1994).

Exhibitions are usually regarded as effective promotional settings for business people and customers to interact. In the modern exhibition industry, the attributes of exhibitions have transformed in varied ways. For example, an exhibition maintains its

original features including displays of products, advertisements of companies, and other business communication, while adding entertaining facilities, exciting performances and experiences, as well as leisure activities (Lee, 2007).

Following in line with this new thought of mingling business with entertainment, the South Korean government signed a contract in 2006 agreeing to build Asia's largest exhibition center in Incheon, South Korea with Italian Fiera Milano SpA, which is one of the largest exhibition companies in the world. The mayor of Incheon is convinced that the exhibition center "Fiera Milano Incheon" will be one of the major economic hubs in Northeast Asia. An exhibition center is no longer used only for small-scale social and economic transactions. Its functional and operational range has extended to upscale social and economic mega-events and festivals. Thus, exhibitions have noticeable features to promote sales, enhance human activities, encourage entertainment, and improve leisure activities. With important recreational and tourism attractions available in the vicinity, an exhibition center can be a necessary engine for a local economy and therefore warrant more research.

McLean (1994) suggested that exhibitions are the place not only for sharing information and products with others, but also for sharing leisure activities. In South Korea, the use of exhibition centers as a tourism attraction for leisure activities has increased rapidly. Currently, exhibition centers are one of the strongest attractions that satisfy customers' needs for tourism and leisure activities. This indicates that the exhibition industry has a lot of potential to develop local economies and related industries. Exhibitions have the advantage of providing participants with new information, new experiences, new sightseeing, and new entertainment. Various exhibitions have been

held in South Korea every year and each metropolitan city has an upscale modernized exhibition center. In addition, people have strongly demanded more tourism destinations for leisure activities and the South Korean government has suggested exhibition centers as one of the efficient and effective means for providing a solution. Therefore, exhibitions can be regarded as a place for customers to experience entertainment, performances, and leisure activities.

Leisure Constraints Theory

Research on leisure constraints has continuously been conducted since the 1950s, identifying constraints in leisure participation activities (Reeder & Linkowski, 1976; Thomas, 1956; Witt & Goodale, 1981; Wood, 1971). Leisure constraints have become a distinctive sub-field of leisure studies while a coherent body of literature has gradually changed and developed (Jackson, 1991). Crawford, Jackson and Godbey (1991) explained that various constraints could exist in leisure and those constraints prevented leisure attendees from being involved in activities even though they are willing to join. Such impediments are called “*leisure constraints*.”

Early researchers of leisure constraints raised the issue of barriers to recreation activity participation (Searle & Jackson, 1985). The word *barriers* tends to point researchers' attention in the direction of only one type of constraint, which intervenes between preference and participation (Crawford & Godbey, 1987). However, a much more comprehensive and complex range of constraints is now recognized than was previously the case when barriers was the dominant terminology (Crawford, Jackson, & Godbey, 1991; Henderson, Stalnaker, & Taylor, 1988; Jackson, 1990). The more inclusive term *constraints* is now preferred to *barriers*, because the latter fails to express the entire range of meaning of constraints in leisure activity participation (Jackson, 1988). Therefore, constraints have been more widely used than barriers and they represent not only the physical and external to the individual but also the internal and social (Crawford & Godbey, 1987; Crawford & Huston, 1993).

Leisure constraints research has expanded in range and gained complexity since the beginning of the 1980s, and it has been regarded as a distinct academic area of leisure studies (Jackson, 1991). Leisure constraints were conceptualized as a mechanism for better understanding barriers to leisure activity participation (Buchanan & Allen, 1985; Jackson & Searle, 1985). Leisure constraints have been used to explain changing trends in leisure preferences over time (Jackson, 1990; Jackson & Witt, 1994) and to understand variation in leisure choices and experiences for different segments of the population (Henderson, Bedini, Hecht, & Schuler, 1993; Henderson, Stalnaker, & Taylor, 1988; Jackson, 1993; Jackson & Henderson, 1995; McGuire, Dottavio, & O'Leary, 1986; Shaw, 1994).

Crawford and Godbey (1987) insisted that constraints influence not only leisure activity participation but also acquisition of leisure preferences. They formulated a leisure constraints model in order to analyze leisure constraints scientifically, and the model has been elaborated upon continually with the addition of Jackson. Crawford, Jackson, and Godbey (1991) previously examined leisure constraints using data from interviews in which people discussed their ordinary daily routines. Based on the findings in the interviews, they finally generated the model of leisure constraints which has made a significant contribution in leisure study (Crawford, Jackson, & Godbey, 1991). Jackson (1988) explained that constraints are “best viewed as a subset of reasons for not engaging in particular behavior and leisure constraints represent a limit to obstructing leisure activity participation” (p. 207).

Leisure constraints have been widely recognized as main factors that could prevent, reduce, or modify participation, or could negatively influence the quality of enjoyment of

leisure activities (Shaw, 1999). The model of leisure constraints generated by Crawford, Jackson, and Godbey (1991) indicates that there are three dimensions of constraints impacting the intentions of individuals to participate in leisure activities: intrapersonal constraints, interpersonal constraints, and structural constraints. A more detailed explanation of these three dimensions of constraints follows.

Intrapersonal Constraints

Crawford and Godbey (1987) explained that intrapersonal constraints are individual psychological states (e.g., stress, anxiety, fatigue, depression), as well as religiosity, prior socialization into specific leisure activities, perceived self-skill, and subjective evaluations of the appropriateness and availability of various leisure activities. They identified that those attributes of intrapersonal constraints influence preference rather than interrupting between preference and participation and finally lead to nonparticipation. They also described the physical and mental conditions of individuals as intrapersonal constraints. Such constraints are relatively unstable and may change within a short period of time (Nyaupane & Andereck, 2008).

Crawford, Jackson, and Godbey (1991) also indicated that intrapersonal constraints must be negotiated, followed by interpersonal and then structural constraints. According to the hierarchical model that they introduced, those who are restrained by intrapersonal constraints are prevented from experiencing higher order constraints. Accordingly, Crawford, Jackson, and Godbey (1991) named intrapersonal constraints as proximal, while structural constraints are distant. However, Hudson, Gilbert, and Hudson (2000) did not support the hierarchy of leisure constraints in their research of a ski market

and insisted that the hierarchical model might depend on the population and types of leisure activities. Researchers of leisure constraints still have not reached a consensus regarding the hierarchy of leisure constraints.

In summary, examples of intrapersonal constraints include lack of interest, lack of curiosity, stress, fatigue, depression, anxiety, religiosity, perceived self-skill, and subjective evaluations of the appropriateness and availability toward leisure activity participation.

Interpersonal Constraints

Interpersonal constraints are the factors which influence relationships with one's family members, spouse, friends, colleagues and other companions whom could provide cooperative assistance as well as financial support (Crawford, Jackson, & Godbey 1991). Individuals may experience an interpersonal constraint if their participation in leisure is influenced by other people, such as family, friends, or partners (Raymore, Godbey, Crawford, & von Eye, 1993). Crawford, Jackson, and Godbey (1991) explained that constraints associated with family life cycle and marital relationships are characteristic of the interpersonal category.

Crawford and Godbey (1987) explained that, contrary to intrapersonal constraints, interpersonal constraints interact with both preferences and participation, are likely to change across life stages, and largely depend on marital status, family size, and the intentions of companions. They also pointed out that interpersonal constraints occur as a result of unavailability of other people, which interrupt an individual's participation in activities which require at least one partner or in which there is a strong preference for a

co-participant. Accordingly, people experience interpersonal constraints when they are unable to connect with friends, family members, or partners who are willing to participate in leisure activities with them.

The problems created by interpersonal constraints result from lack of interpersonal interactions or the relationship between individuals' characteristics. Individuals may experience an interpersonal leisure constraint if he or she could not find a suitable partner who is able to join a particular leisure activity (Crawford & Godbey, 1987).

In summary, interpersonal constraints are limitations of leisure activity that emerge from relationships with family, friends, and others, for example, family responsibilities, absence of a leisure partner, and a mismatched leisure partner (Samdahl & Jekubovich, 1997).

Structural Constraints

Structural constraints are the most important, most researched, and most challenging and demanding constraints for researchers to investigate (Jackson, 2005). Structural constraints are the interrupting factors between leisure preference and participation, including lack of time, money, opportunity, information and access, and influence of bad weather (Walker & Virden, 2005).

Jackson (2000) verified that cost-related and time-related constraints ranked among the most widely and intensely experienced constraints. He reported that some variation among structural constraints occur due to the different ages and incomes. For example, young people's leisure activity is affected by opportunity and expenses. In comparison

with the young, opportunity and expenses are not significant constraints to adults as time-related and cost-related constraints decline in older adulthood. However, he indicated that is frequently a major constraint to adults due to family and employment. In addition, geographic isolation becomes an important leisure constraint to the elderly.

Other examples of structural constraints include family life-cycle stage, family financial resources, season, climate, the scheduling of work time, availability of opportunity and knowledge of such availability, and reference group attitudes concerning the appropriateness of certain activities (Crawford & Godbey, 1987). Structural constraints also encompass lack of transportation, geographic distance, and overcrowding (Jackson, 2005; Walker & Virden, 2005). Daniels, Drogin Rodgers, and Wiggins (2005) suggested that structural constraints are frequently found to be negotiated through intrapersonal or interpersonal constraints.

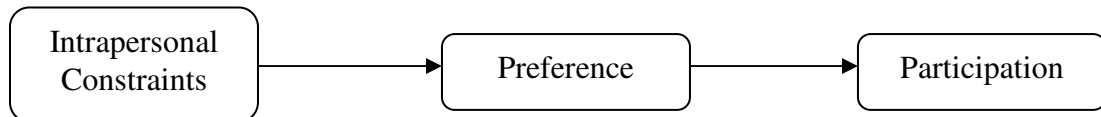
In summary, structural constraints are the factors such as inconvenient transportation, transportation fees, entrance fees, lack of interesting programs, lack of entertainment, lack of special experiences, geographic distance, overcrowding, unpleasant weather conditions, and so on.

Figure 2-2 indicates leisure constraints model of Crawford and Godbey. Intrapersonal constraints influence the development of leisure preferences. Part A in Figure 2-2 indicates that intrapersonal constraints which include individual psychological states and attributes that influence preference, rather than intervening between preference and participation, and lead to nonparticipation (Crawford & Godbey, 1987). Individuals experience intrapersonal constraints when they are tired, fatigued, or depressed. In addition, intrapersonal constraints also affect preference when individuals do not have

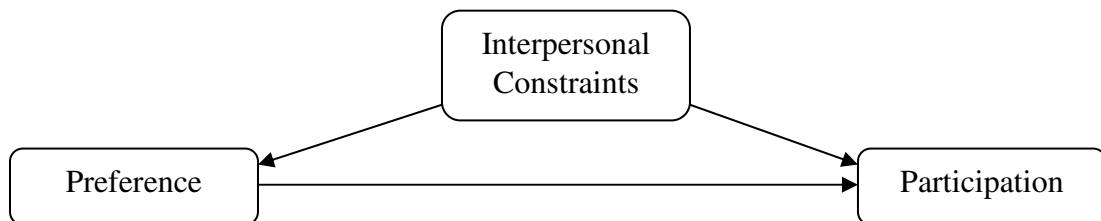
perceived-skills for leisure activities and have an indirect negative effect on leisure activity participation. Compared to intrapersonal constraints, interpersonal constraints affect the development of both leisure preferences and leisure participation.

Figure 2-2. Leisure Constraints Model of Crawford and Godbey

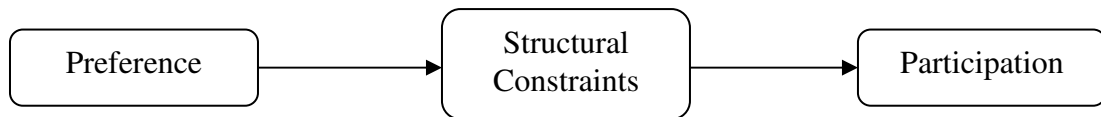
Part A: Intrapersonal Constraints



Part B: Interpersonal Constraints



Part C: Structural Constraints



Source: Crawford, D. W. & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9, 123-124.

Part B in Figure 2-2 indicates that interpersonal constraints interact with both preferences and participation of leisure activities. Interpersonal constraints are likely to change according to marital status, the number of family members, and types of leisure activities (Crawford & Godbey, 1987). Unlike intrapersonal and interpersonal constraints, structural constraints intervene between development of leisure preferences and leisure participation. Crawford and Godbey (1987) indicated that intrapersonal and interpersonal constraints directly influence leisure preferences whereas structural

constraints intervene between preferences and participation of leisure activities. For example, structural constraints which represent lack of time, money, opportunity for special experiences, and bad weather conditions have a direct negative effect on leisure participation. These constraints interrupt a connection between preference and participation of individuals' leisure activities and finally reduce participation in a negative way.

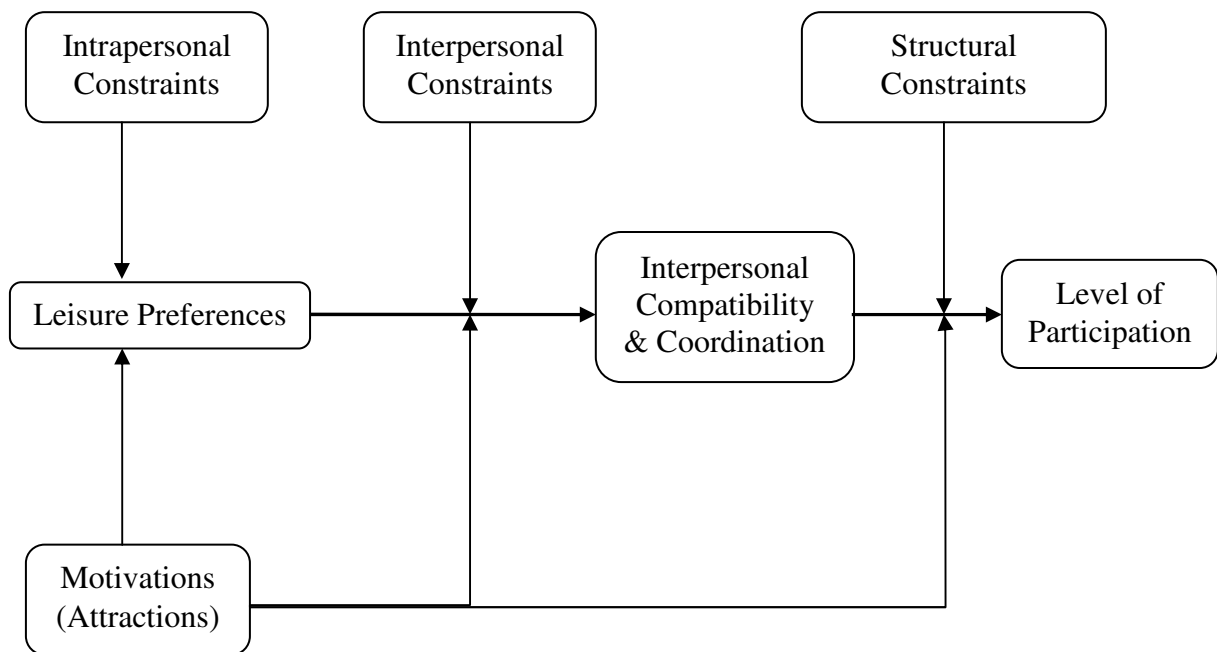
Hierarchical Leisure Constraints

Crawford, Jackson, and Godbey (1991) extended the scope of their perception by presenting a new hierarchical model of leisure constraints, which explains that intrapersonal and interpersonal constraints impact leisure preferences while structural constraints cause disjuncture between preferences and participation.

Figure 2-3 indicates the hierarchical model of leisure constraints. Crawford, Jackson, and Godbey (1991) and Jackson, Crawford, and Godbey (1993) suggested that constraints are “nested” in a single model comprised of a hierarchy of these three categories. Crawford, Jackson, and Godbey (1991) explained that the hierarchical model indicates that intrapersonal constraints are encountered first and must be negotiated, followed by interpersonal and then structural constraints. They also pointed out that individuals first experience intrapersonal constraints such as lack of interest, fatigue, stress, depression, and so forth, and then if they overcome the intrapersonal constraints, then they encounter interpersonal constraints which occur due to absence of family and friends. Nyaupane and Andereck (2008) indicated that leisure constraints are hierarchical in nature. According to the hierarchical model, those who are constrained by

intrapersonal factors are prevented from experiencing higher order constraints. They explained that people who have an interest in leisure activities are prevented from participating in those activities if there is no companion who is eager to join the same activities. Even though individuals overcome intrapersonal and interpersonal constraints, structural constraints, including expensive costs, lack of facilities, or bad weather conditions, may negatively impact participation in leisure activities.

Figure 2-3. The Hierarchical Model of Leisure Constraints



Sources: Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, 13, 313.

In summary, hierarchical leisure constraints influence the individual in a hierarchical order. It indicates that intrapersonal constraints impact an individual's leisure preferences first, and then interpersonal constraints are encountered afterward. Lastly, structural constraints adversely influence an individual's leisure activity participation.

Leisure Constraints Negotiation

In order to overcome or eliminate leisure constraints, researchers and practitioners of leisure studies have examined negotiation strategies of leisure constraints for several years (Kay & Jackson, 1991). Researchers have applied constraints negotiation theory into a broader context by examining the relations between leisure constraints, negotiation, motivation, and activity participation (Alexandris, Tsorbatzoudis, & Grouios, 2002; Hubbard & Mannell, 2001).

It has become increasingly clear that leisure constraints are not necessarily fixed obstacles that result in nonparticipation since those constraints, once encountered, might be overcome or negotiated (Crawford, Jackson, & Godbey, 1991; Jackson, Crawford, & Godbey, 1993; Kay & Jackson, 1991; Scott, 1991).

Negotiation strategies include time management, skill acquisition, interpersonal coordination, and financial resource management and strategies (Hubbard & Mannell, 2001). In addition, the outcomes of the negotiation process rely on the relative strength of constraints, interactions between constraints, and motivation for participation (Crawford, Jackson, & Godbey, 1991).

In summary, leisure constraints negotiation indicates that intrapersonal, interpersonal, and structural constraints interact with each other. Leisure constraints can be eliminated through the negotiation strategies of time and financial management as well as interrelated coordination.

Importance-Performance Analysis

Importance-Performance Analysis (IPA) has been used not only in business marketing research but also in hospitality and tourism research for several decades (Oh, 2001). Beginning with the seminal work of Martilla and James (1977), the set of rules, ideas, and structures of the Importance-Performance Analysis have been accepted and used widely in various fields of study by many researchers and practitioners such as service quality (e.g., Ennew, Reed, & Binks, 1993), in travel and tourism (e.g., Evans & Chon, 1989; Go & Zhang, 1997), in leisure and recreation (e.g., Guadagnolo, 1985; Hollenhorst, Olson, & Fortney, 1992), in education (e.g., Alberty & Mihalik, 1989; Ortinau, Bush, Bush, & Twible, 1989), and in healthcare marketing (e.g., Dolinsky, 1991; Dolinsky & Caputo, 1991; Hawes & Rao, 1985). In addition, Importance-Performance Analysis has been applied when identifying the critical performance factors in the customer satisfaction survey data for products or services (O'Neill & Palmer, 2004; Tikkanen, Alajoutsijarvi, & Tahtinen, 2000; Yavas & Shemwell, 1997; Zhang & Chow, 2004).

Martilla and James (1977) invented the model of Important-Performance-Analysis as a scientific instrument to develop management strategies for firms. They conducted attribute research in order to examine consumer acceptance of particular features of their marketing programs. They also attempted to discover the solution to a problem in translating the results into action. They pointed out two particular problems: (1) management may find it difficult to understand the practical significance of research findings expressed in terms of “coefficients of determination” and “levels of stress”; and,

(2) the research may have examined only one side of the consumer acceptance question – either attribute importance or attribute performance – rather than both.

Martilla and James (1977) concluded their research, *Importance-Performance Analysis*, with the following summary: “Importance-Performance Analysis provides a number of advantages for evaluating consumer acceptance of a marketing program. It is a low-cost, easily-understood technique that can generate important insights into which aspect of the marketing mix a firm should dedicate more attention to, as well as identify specific arenas that may be consuming too many resources” (p. 78). They explained that the presentation of the results on the importance-performance grid facilitated management interpretation of data and increased the usefulness in making strategic marketing decisions.

In summary, the model of Importance-Performance Analysis is a simple, effective, and efficient technique that can support marketing researchers and practitioners in identifying improvement priorities for product or service attributes, evaluating consumer acceptance of marketing programs, and guiding appropriate quality-based marketing strategies (Hansen & Bush, 1999).

The Principal of the IPA Model

The principal of the IPA model is to measure the “importance and performance” of attributes using a two-dimensional grid in order to interpret data with ease and suggest practical applications (Oh, 2001). Duke and Persia (1996) suggested that Importance-Performance Analysis can provide insight into customer evaluations on critical issues in

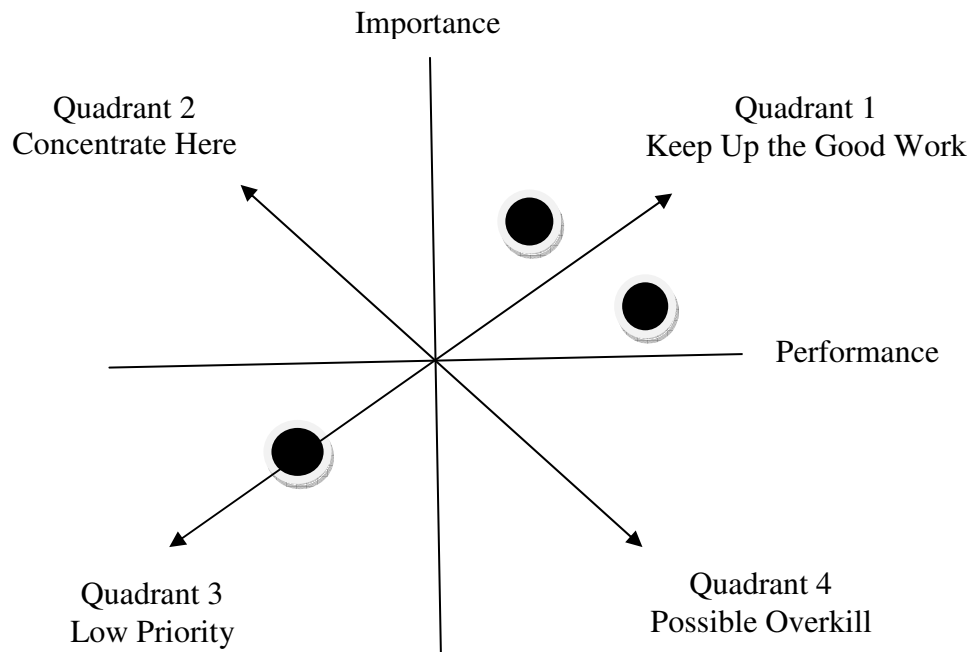
the tourism industry by comparing perceived importance and performance on the IPA grid, which allows managers to identify the relative features of successful tours.

Originally, Martilla and James (1977) applied the IPA technique to analyze the performance of an automobile dealer's service department and recommended use of the median values rather than mean so as to avoid unexpected conditions. For example, an insufficient amount of variance may be found or the importance ratings may show an unusual distribution patterns. Using the median values, they divided the matrix of the IPA model into four quadrants.

There are three key variables in Importance-Performance Analysis: importance, performance, and customer satisfaction. IPA is a method to measure customer satisfaction toward services and products offered; analyze what attributes are important to users before using the products and the services; and, evaluate what attributes are performed well from the perspectives of the users. Thus, IPA is a method to evaluate attributes importance and performance simultaneously in order to increase customer satisfaction. Importance in IPA identifies which attributes are important for customers' purchase decision and also enhance customer satisfaction. Performance in IPA indicates the products and services that customers purchase that are meeting their performance expectations and therefore creating satisfaction. Attribute importance needs to be measured prior to an actual purchase decision while attribute performance needs to be measured using the same set of attributes after the product or service use, in order to compare importance and performance of the attributes directly. Customer satisfaction measures the customers' satisfaction level with the products and services that they bought and is dependent on the actual performance.

Using IPA, companies may evaluate what products and services are important to customers by measuring customer satisfaction in order to successfully compete with others. In addition, companies may identify what important attributes significantly influence customer satisfaction and performance. Financial constraints may limit a company's ability to allocate resources. So, it is important to allocate resources judiciously. Customer satisfaction is determined by the relationships between specific important attributes and the customers' expectations of the performance of these attributes. Therefore, IPA is an easily-applied technique for measuring attribute importance and performance simultaneously not only to develop effective marketing programs and management strategies but also to uncover solutions for improving customer satisfaction.

Figure 2-4. Traditional Importance-Performance Grid



Source: Oh, H. (2001). Revisiting Importance-Performance Analysis. *Tourism Management*, 22, 617-627.

Figure 2-4 shows the traditional importance-performance grid. There are four quadrants in the grid: The first quadrant, 'keep up the good work', represents the attributes that customers think are important to their purchase decision and the company (or product) performed better than expected. The second quadrant, 'concentrate here', indicates the attributes that are important to customers' purchase decisions, but on which the company did not perform well. The third quadrant, 'low priority', represents low importance attributes in which there was low performance. Lastly, the attributes falling in the fourth quadrant, 'possible overkill', are relatively less important, but the company performed better than expected on these attributes (Oh, 2001).

Customers consider specific attributes before using products and services and their satisfaction with the products and services are higher if the attributes' performance is in accordance to their expectations. There is a relationship between importance, performance, and customer satisfaction. A positive importance-performance relationship (the first quadrant on the IPA matrix) increases customer satisfaction. The first quadrant on the IPA matrix indicates 'keep up the good work' which represents the attributes of products that are important to customers' purchase decision and the attributes are performing well. Thus, customers who use such products keep using them because they are satisfied with their performance. In contrast, there is also a positive importance-performance relationship which indicates the third quadrant on the IPA matrix. The positive relationship is highlighted by the positive slope of the diagonal line that originates from the origin and extends into the first quadrant. The third quadrant indicates 'low priority' on the IPA matrix which represents the attributes that are relatively less important to customers' purchase decision and the attributes are not performing well. Thus, customers perceive a low priority on such products because

both importance and performance ratings are lower than the average. The relationships between importance and performance in the third quadrant also affect customer satisfaction.

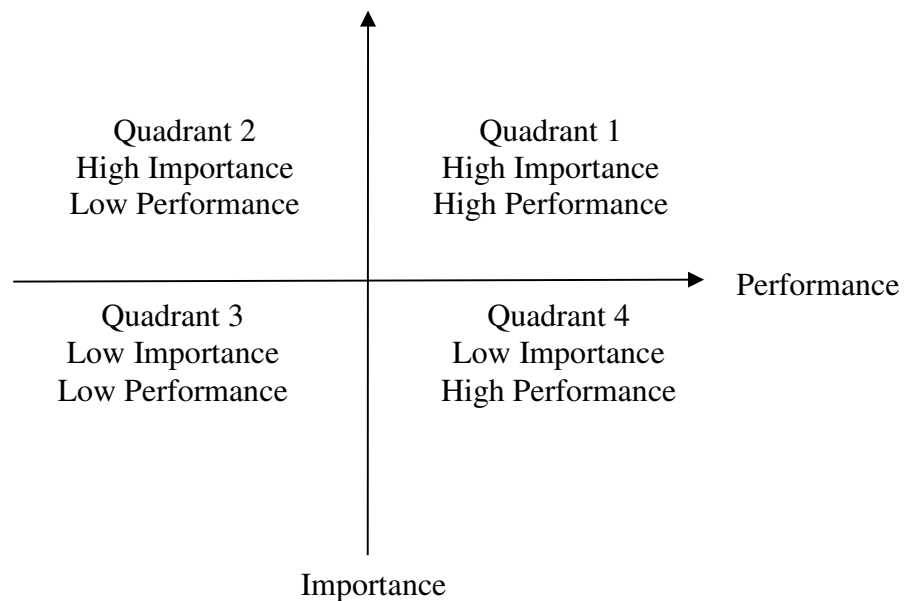
A negative importance-performance relationship, which indicates the second quadrant on the IPA matrix, decreases customer satisfaction. The attributes of the products in this quadrant have high importance but low performance. The negative importance-performance relationships may cause a decrease in customer satisfaction. Thus, products caught in this quadrant may want to improve their status to increase customer satisfaction by discovering solutions to improve attribute performance. In contrast, a negative importance-performance relationship which represents the fourth quadrant on the IPA matrix indicates that the attributes of the products are less important but the products are performing well. The efforts in this quadrant should be balanced and over-allocated resources should be reassigned to other areas.

Thus, the attribute importance and the attribute performance generate either positive or negative relationships. Furthermore, the relationship between attribute importance and attribute performance is causal. Lastly, the positive and negative relationships between the attribute importance before using a product and the attribute performance after using the product affect customer satisfaction.

Figure 2-5 shows the four quadrants of IPA. Zhang and Chow (2004) described the IPA model using a table. Their interpretation of the IPA model is as follows: The first quadrant indicates that attributes are perceived to be very important to respondents, and at the same time, the organization seems to have high levels of performance in these activities. The message here is to keep up the good work. The second quadrant indicates

that attributes are perceived to be very important to respondents, but performance levels are fairly low. This suggests that improvement efforts should be concentrated here. The third quadrant indicates that attributes are rated as both low importance and low performance. Although performance levels may be low in this cell, managers should not seriously be concerned since the attributes in this cell are not perceived to be very important. The fourth quadrant represents the cell that contains attributes of low importance, but performance is relatively high. Respondents are satisfied with the performance of the organization, but managers should consider present efforts on the attributes of this cell as being superfluous or unnecessary.

Figure 2-5. Importance-Performance Analysis (IPA)



Many researchers and practitioners who use the IPA model primarily focus on the second quadrant, which indicates high importance and low performance. They inspect the problems which make important levels lower than average and discover a solution to the problems. It is important to allocate limited resources into right places in order to

meet customer needs and maximize firm's productivity while satisfying customers. The second quadrant on the IPA matrix represents problems that firms should perform well in order to increase customer satisfaction.

Controversial Issues of the IPA Model

As mentioned in the previous discussion, there are many advantages for using Importance-Performance Analysis. The first advantage of IPA is to easily identify what product and service attributes are important to customers and which of those attributes are performing well. The second advantage of IPA is not only to discover specific areas that companies should pay more attention in order to increase customer satisfaction but also to identify specific areas that are consuming too many resources without increasing customer satisfaction. The third advantage of IPA is to help company owners and managers easily interpret what products and services should be considered as being important to enhancing customer satisfaction. Lastly, IPA easily provides useful information to plan management strategies and marketing decisions by balancing and re-allocating limited resources in order to meet the customers' needs.

Even though Importance-Performance Analysis is an extremely valuable method, previous studies have revealed some controversial issues (Deng, Kuo, & Chen, 2008). Matzler, Bailom, Hinterhuber, Renzl, and Pichler (2004) noted that the original IPA had two implicit assumptions: (1) attribute importance and attribute performance are independent variables and (2) the relationship between attribute performance and overall performance is linear and symmetrical.

However, these assumptions are incorrect or only partly correct in the real world as showed by other studies. The relationship between attribute-level performance and overall customer satisfaction is asymmetrical (Kano, Seraku, Takahashi & Tsuji, 1984; Matzler & Sauerwein, 2002; Matzler, Sauerwein, & Heischmidt, 2003; Matzler, Bailom, Hinterhuber, Renzl, & Pichler, 2004; Ting & Chen, 2002). The relationship between attribute performance and attribute importance is not independent all the time (Matzler, Bailom, Hinterhuber, Renzl, & Pichler, 2004; Oh, 2001; Sampson & Showalter, 1999).

In addition, Oh (2001) argued that the IPA literature does not provide a clear definition of attribute importance. He noted that many researchers in the hospitality and tourism field have a tendency to use the concept of importance simply with regards to the levels of importance. Jaccard, Brinberg, and Ackerman (1986) suggested that at least five additional definitions of importance exist, with one example being the importance that can be derived from memory-based free elicitation. Jacoby (1975) also noted that another type of importance is reflected in goal-oriented search attributes in which consumers actively look for their target product and consider whether they will purchase the products or not. Wyer (1974) suggested that consumers have subjective intentions when considering a certain quality and feature in a purchase decision, which reflects an additional definition of importance.

Oh (2001) pointed out another critical issue which frequently incites confusion among researchers between the concepts of importance and expectation. Martilla and James (1977) explained the difference between the two concepts with less clear illustrations. For example, they reported that “consumer satisfaction is a function of both expectations related to certain important attributes and judgments of attribute

performance” (p. 79). With ambiguous and multidimensional definitions, IPA researchers have experienced confusion while measuring and interpreting importance (Chon, Weaver, & Kim, 1991; Evans & Chon, 1989; Hollenhorst, Olson, & Fortney, 1992). Oh (2001) indicated that the following issues should be clearly identified in order to improve conceptual validity in applying Importance-Performance Analysis: “lack of a clear definition for the concept of importance, absence of a clear criterion variable for the IPA framework as a whole, mixed uses of importance and expectation, lack of research on absolute versus relative importance, the implications of relationships between importance and performance and among the attributes, absence of guidelines for developing a set of attributes to be used, use of unidirectional versus bi-directional measurement scales for the concept of importance, use of actual means versus scale means in constructing the IPA grid, and a philosophical issue related to strategic suggestions” (p. 624).

The author of this research also agrees with some critical issues of IPA that several researchers discussed previously. The attribute importance and the attribute performance should be measured independently. For example, customers assume 5-star hotel employees provide high quality service even though they actually do not experience it before. For the concept of importance it is controversial to use unidirectional measurement scales representing ‘not at all important’ to ‘very important’ while bidirectional measurement scales representing ‘very unimportant’ to ‘very important’ (Oh, 2001). There are situations where there is a need to compare similar attributes. In case of similar attributes, relative importance is considered. Absolute importance is considered while comparing different attributes. The results of IPA could be totally

different if researchers drew a cross-hair point of the grid using actual means or scale means. When actual means are used, attributes usually fall and are scattered in a different quadrant on the IPA matrix. In contrast, attributes usually fell in the first quadrant when scale means are used. There is confusion in understanding the difference between importance and expectations. Customers perceive that some attributes are important to their purchase decision so they expect that these attributes would be performed well. This shows that customers' expectations of the attributes may affect their satisfaction levels. The relationship between attribute-level performance and overall customer satisfaction is asymmetrical. It implies that the negative performance of some attributes has more effect on overall customer satisfaction than the positive performance. In contrast, the positive performance of some attributes has more effect on overall customer satisfaction than the negative performance. For example, children that play computer games simulating car driving expect them to make car noises that excite them. However, if the game does not make the expected noises, the children will be disappointed. The negative performance in such situations usually has more effect on customer satisfaction than positive performance. This example shows that the relationship between performance and customer satisfaction is not always symmetrical. All of these limitations have been controversial issues for researchers to interpret the results of IPA.

Preference-Participation Analysis

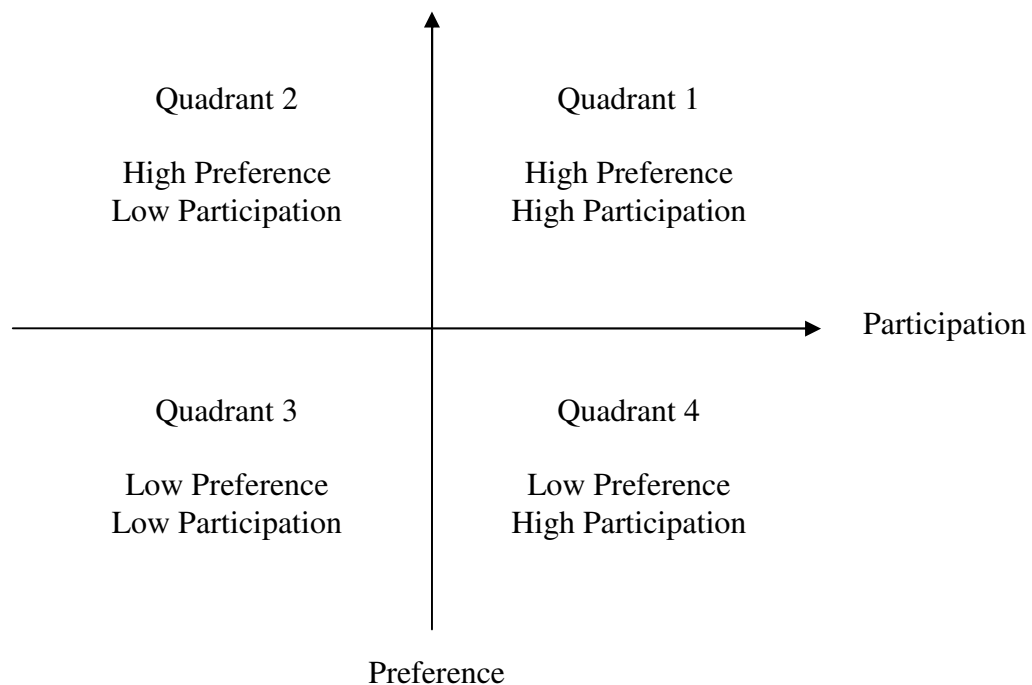
Many researchers and practitioners that have used the IPA model in their studies recommend considering the controversial shortcomings such as, definition of the concepts and corresponding interpretations; specification of a common criterion concept; causal modeling of attribute importance; absolute versus relative importance; determination of a set of attributes; scale construction; and, modifications (Oh, 2001).

The author of this study applies the Preference-Participation Analysis (PPA) with Leisure Constraints Theory in order to avoid the shortcomings when employing the IPA model. The terms ‘preference’ and ‘participation,’ which have been used in leisure studies, are applied instead of the terms ‘importance’ and ‘performance’ in this study. The IPA model itself cannot verify causality between importance and performance. However, the PPA model can be used to verify causality between preference and participation using Leisure Constraints Theory. In addition, two controversial issues, ‘lack of a clear definition for the concept of importance’ and ‘the implications of relationship between importance and performance,’ are examined using the PPA model. Furthermore, it is important to use ‘actual means’ or ‘scale means’ to classify each quadrant in the PPA model (Lee, Jeong, Jeong, Lee, & Jeong, 2004).

Figure 2-6 illustrates the model of the Preference-Participation Analysis. The author of this study used actual means rather than scale means because each response can be different according to personal perceptions. The explanations of each quadrant are provided in the following section.

The first quadrant indicates high preference and high participation. It means that customers who have high levels of preference also represent high levels of participation. The second quadrant of the PPA model indicates high preference and low participation. The second quadrant is the focus area of this study because customers strongly prefer specific exhibitions yet are often unable to participate in those exhibitions. Tangible and intangible constraints may influence exhibition attendees not to be able to participate in their preferred exhibitions. In this study, tangible and intangible constraints are examined using Leisure Constraints Theory.

Figure 2-6. Preference-Participation Analysis (PPA)



The third quadrant is the area of both low preference and low participation. The exhibitions that customers have low interest in attending are located in the third quadrant. The fourth quadrant of the PPA model indicates low preference and high participation. In the fourth quadrant, customers have low interest in attending exhibitions, but they

continually participate in those exhibitions because of comparably low constraints and certain benefits such as gifts or incentives.

Relationships exist among preference, participation, and leisure constraints. When individuals prefer certain exhibitions, they also have a strong desire to attend those exhibitions. Thus, it is possible to predict a linear relationship between preference for and participation in exhibitions.

Preference-Participation Analysis is a clear and simple instrument to scientifically estimate preference for and participation in leisure activities. In this research, Preference-Participation Analysis helps not only to measure the levels of individuals' preference for and participation in exhibitions but also to examine the difference between the preference for and participation in exhibitions. Based on the results of the Preference-Participation Analysis, the second quadrant was chosen in order to examine tangible and intangible constraints which prevent customers from participating in exhibitions. In addition, Leisure Constraints Theory was used to verify causality of the differences between high preference for and low participation in exhibitions.

Research Model

Crawford and Godbey (1987) originally generated a model of Leisure Constraints Theory which was further developed by Crawford, Jackson, and Godbey (1991). They mentioned that the overall leisure constraints are comprised of three components: intrapersonal constraints, interpersonal constraints, and structural constraints. Each leisure constraint is correlated or non-correlated with another constraint based on the findings of their research.

Based on the research model, this study was primarily conducted to examine the relationships among leisure constraints. The relationships between leisure constraints may have indirect positive effects on the difference between the preference for and participation in exhibitions. The author investigated the positive effect of each leisure constraint on the gaps between high preference and low participation. Such differences indicate the gaps of customer perception between strongly preferred exhibitions but weakly attended exhibitions.

Based on the results of Preference-Participation Analysis, the differences between the preference for and participation in exhibitions were examined. Preference-Participation Analysis helped identify exhibitions that are located in the four different quadrants on the Preference-Participation Analysis matrix. The author of this study only analyzed exhibitions that were in the second quadrant on the PPA matrix indicating high preference and low participation. Each leisure constraint was evaluated to see if it had a direct positive effect on the preference-participation gap.

Figure 2-7. Research Model

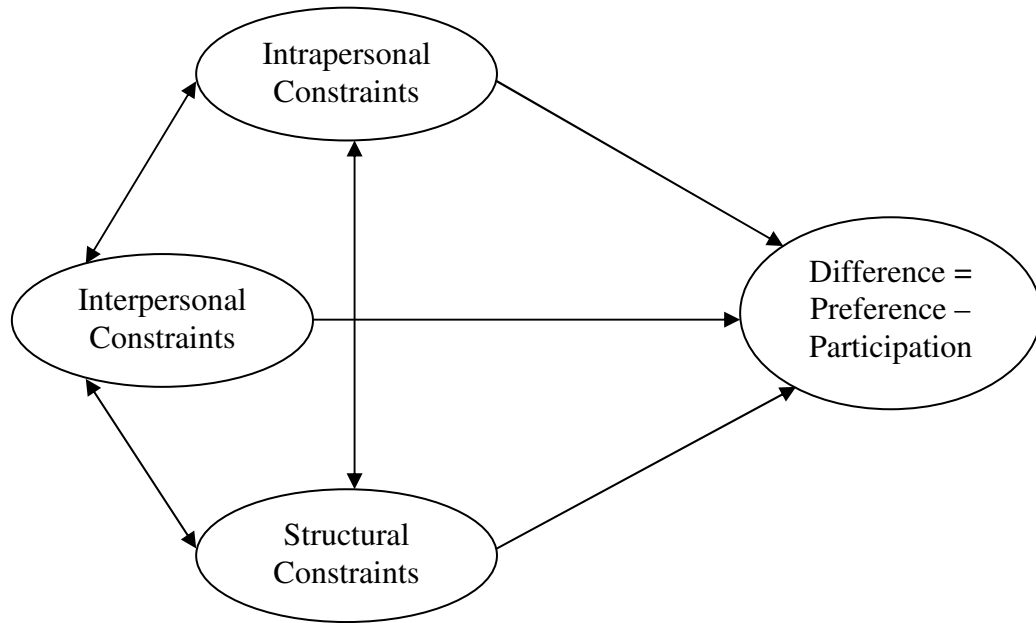


Figure 2-7 illustrates the research model used in this study. Following Crawford and Godbey's (1987) suggestions, the model shows that intrapersonal, interpersonal, and structural constraints interact with each other. However, keeping with the focus of this study, the preference-participation gap is shown as a separate construct in the figure. The essence of this research is to examine the causal relationships between the three leisure constraints and the potential preference-participation gap as shown by the progressive arrows in the figure.

In summary, the focus of this study was to investigate the differences between the preference for and participation in exhibitions using the Preference-Participation Analysis and to discover the causal relationships between the differences and leisure constraints using Leisure Constraints Theory.

Based on the above model, several hypotheses were developed for each of the research questions as listed below. It should be noted that in the final analysis, several sub-hypotheses were also tested given the abundance of data and variables available for this study. A full listing of all the hypotheses along with the statistical significance test results is provided in the results section of this study.

Research Question One and Hypotheses

Is there a relationship between demographic characteristics of exhibition attendees and the leisure constraints perceived by them?

Intrapersonal Constraints:

H_{1a}: Gender has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

H_{1b}: Marital status has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

H_{1c}: Age has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

H_{1d}: Education has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

H_{1e}: Annual income has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

H_{1f}: Place of residence has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

Interpersonal Constraints:

H_{2a}: Gender has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

H_{2b}: Marital status has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

H_{2c}: Age has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

H_{2d}: Education has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

H_{2e}: Annual income has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

H_{2f}: Place of residence has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

Structural Constraints:

H_{3a}: Gender has no effect on the degree of structural constraints perceived by exhibition attendees.

H_{3b}: Marital status has no effect on the degree of structural constraints perceived by exhibition attendees.

H_{3c}: Age has no effect on the degree of structural constraints perceived by exhibition attendees.

H_{3d}: Education has no effect on the degree of structural constraints perceived by exhibition attendees.

H_{3e}: Annual income has no effect on the degree of structural constraints perceived by exhibition attendees.

H_{3f}: Place of residence has no effect on the degree of structural constraints perceived by exhibition attendees.

Research Question Two and Hypotheses

Is there a correlation among intrapersonal, interpersonal, and structural constraints in the exhibition industry in South Korea?

H_{4a}: There is no correlation between intrapersonal and interpersonal constraints in the South Korean exhibition industry.

H_{4b}: There is no correlation between interpersonal and structural constraints in the South Korean exhibition industry.

H_{4c}: There is no correlation between intrapersonal and structural constraints in the South Korean exhibition industry.

Research Question Three and Hypotheses

Are there any causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions?

H_{5a}: There is no relationship between the mean for intrapersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea.

H_{5b}: There is no relationship between the mean for interpersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea.

H_{5c}: There is no relationship between the mean for structural constraints and the mean difference between the preference for and participation in exhibitions in South Korea.

The above listed hypotheses were tested using several statistical methods such as *t*-tests, ANOVA, and Structural Equation Modeling (SEM). It should also be emphasized that data reduction methods such as Factor Analysis were first used to simplify the analysis to only include the key variables in the study. A detailed description of the analytical methods used for each of the hypotheses is provided in the next section.

CHAPTER III

METHODOLOGY

Research Design

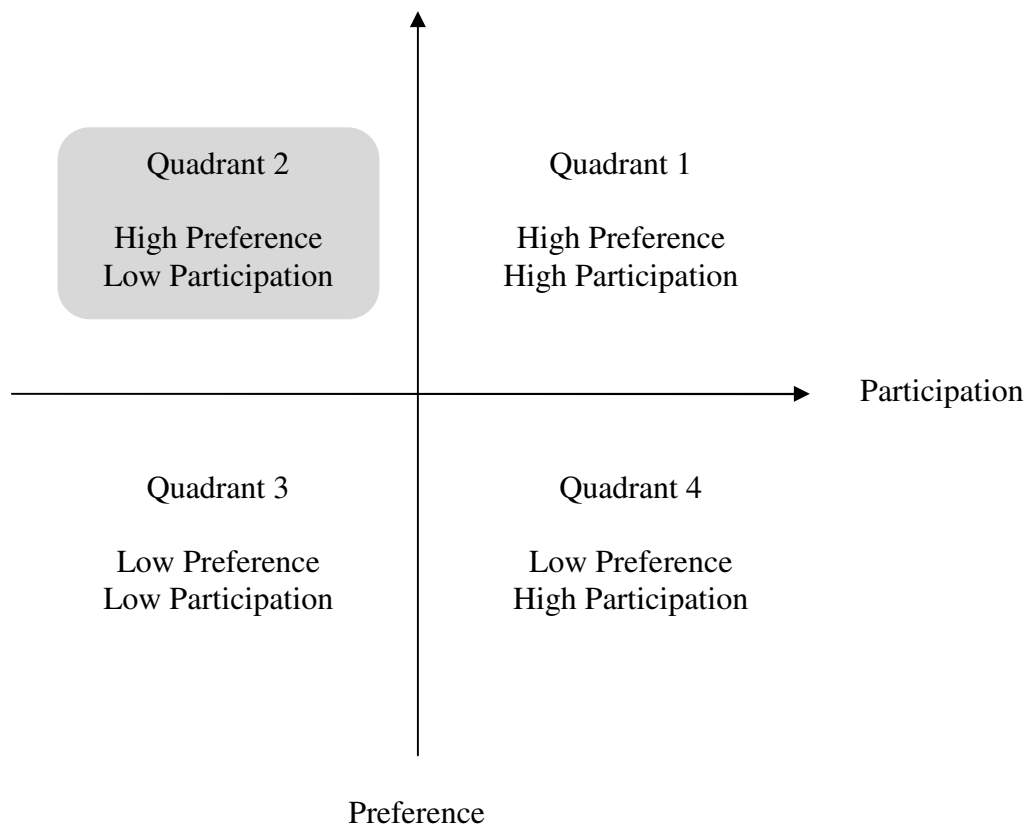
Cross-sectional descriptive and causal research designs were employed in this study. In this study, only the exhibitions that were strongly preferred but weakly attended were examined. In addition, research to discover particular reasons why customers prefer specific exhibitions but are not able to participate in those exhibitions was studied, using Leisure Constraints Theory.

Churchill and Brown (2007) noted that cross-sectional descriptive designs involve researching a sample of elements from the population of interest and sample members are measured only once. It is the opposite of a longitudinal study which is measured over a long period of time by a panel. In addition to a cross-sectional research design, a causal research design was used for testing cause-and-effect relationships. Causal research design was employed to investigate the causal relationships between leisure constraints and exhibitions in which customers represented high preference but low participation.

Preference-Participation Analysis was employed to examine exhibitions which were positioned in the second quadrant on the preference-participation matrix (Figure 3-1). Leisure Constraints Theory was used to overcome one problem of the IPA model, which is failing to explain why high importance and low performance exist on the second

quadrant. Major constraints which have a positive effect on high preference and low participation of exhibitions were verified by using Leisure Constraints Theory. The author of this study provided exhibition researchers and practitioners with tactical solutions to eliminate tangible and intangible constraints and to increase exhibition participation.

Figure 3-1. The Focus Area of the Study on the PPA Matrix



Validity and Reliability

Validity

It is important to measure the validity of a questionnaire before distributing it to the survey respondents. Both content validity and construct validity were measured in order to prepare a valid questionnaire. Validity is the extent to which a scale or set of measures accurately represents the concept of interest (Hair, Anderson, Tatham, & Black, 1998). To confirm the content validity, the author investigated an important set of assessment items that researchers and practitioners have used to examine leisure constraints during the years 1951 to 2007.

Construct validity is regarded as the most difficult type of validity to establish (Churchill, 1979). Researchers may establish construct validity by correlating a measure of a construct with the number of other items in the instrument that should be associated with it theoretically (Nunnally & Bernstein, 1994). Leisure Constraints Theory represents a set of assessment items to measure intrapersonal constraints, interpersonal constraints, and structural constraints. These items in each category are theoretically correlated based on the results of the previous research. In addition, a pilot study was also conducted to confirm the content validity and the construct validity.

Reliability

Reliability refers to the ability of an instrument to obtain consistent scores for the same object, trait, or construct across time, across different evaluators, or across the items (Churchill & Brown, 2007). In the pilot study, the primary data collection effort was executed by distributing a self-administered questionnaire to visitors to the COEX center and residents in Seoul, Gyeonggi, and Incheon provinces from July 30, 2008 through August 5, 2008. A total of 50 useful surveys were collected. The collection rate was 100 percent.

A survey questionnaire is considered reliable if its repeated application results in consistent scores. The extracted factors from Factor Analysis were examined whether they possessed reliability or not, using Cronbach's Alpha. To test reliability, three methods are commonly used: (1) test-retest reliability, (2) alternative forms reliability, and (3) internal consistency reliability. Internal consistency reliability analysis was conducted in the pilot study.

Table 3-1 shows that Cronbach's Alpha of intrapersonal constraints was 0.568, interpersonal constraints was 0.652, and structural constraints was 0.768. Researchers normally accept an alpha of 0.6 or 0.7 as a minimum. Nunnally & Bernstein (1994) recommend 0.7 which indicates reasonable levels of internal consistency. In the pilot study, the scores of Cronbach's Alpha were relatively low because of small sample size of the pilot study. The small sample size caused low values of Cronbach's Alpha in both intrapersonal constraints and interpersonal constraints. In spite of low scores of Cronbach's Alpha, all three instruments' internal consistency scores were above 0.5, which still represents a reasonable internal consistency (George & Mallery, 2003).

Because of the acceptable internal consistency obtained in the pilot test, the author applied the instrument for the full study as planned. No further modifications were made to the instrument and additional reliability tests were performed with the full data during the initial stages of data analysis.

Table 3-1. Reliability Analysis with Cronbach's Alpha in the Pilot Study

Constraint factors	Number of Variable	Cronbach's Alpha
Intrapersonal constraints	3	0.568
Interpersonal constraints	2	0.652
Structural constraints	5	0.768

Sampling Plan

Target Population

The target population was customers who had an interest in exhibitions. The Institutional Review Board (IRB) approved the questionnaire prior to conducting the survey in Seoul, Gyeonggi, Incheon, and Chungcheong provinces in South Korea. Each survey participant received a cover letter explaining the purpose of this research and asserting that survey participation in the research was absolutely voluntary.

Sample Size

Burns and Bush (1995) noted that in order to determine an appropriate sample size, three factors should primarily be measured: (1) the amount of variability ensured to be in the population, (2) the desired accuracy, and (3) the level of confidence required in the estimates of the population values. It suggests that 385 is a proper sample size if a 95% confidence interval and 5% margin-of-error is desired. Moreover, they indicated that the amount of variability in the population is estimated to be 50%, a figure that is widely used in social research. Many researchers choose the 50% level of variability in the population because it results in the most conservative sample size. In order to meet the minimum sample size requirements, a total of 500 people were invited to participate in the survey from August 22, 2009 through September 30, 2009 and a total of 419 usable surveys were collected. The response rate was 83.8 percent.

Sample Approach

A non-probability sampling method was used to distribute the questionnaire to the target population in this research. A non-probability sampling method relies on personal judgment in the respondent selection process. While personal judgment may sometimes result in good estimates of populations' characteristics, there is no way of ensuring that the sample is representative of the population (Churchill & Brown, 2007). Even though there is a risk in confirming that the sample is representative of the population, 500 is a large enough sample size that it may ensure that the sample is representative of the population. That assumption was tested in the initial stages of the analysis.

Among non-probability sampling procedures, a convenience sampling method was employed to collect the data for this research. A convenience sampling method is one in which the researcher finds a suitable location for the study where many people are members of the population and are willing to be interviewed or surveyed (Churchill & Brown, 2007). The questionnaire was distributed using a convenience sampling method to the public who visited or participated in the COEX (Convention & Exhibition) center, which is the largest convention and exhibition center in Seoul. In addition, the KINTEX (Korea International Exhibition) center located in Goyang's West Ilsan District, and the residents who live in Seoul, Gyeonggi, Incheon, and Chungcheong provinces were also surveyed.

Instrument Development and Data Collection

Questionnaire Development

The questionnaire was comprised of three sections. The first section listed various exhibitions, which included recreation, entertainment, and leisure activities. The survey respondents were asked to mark their preference for specific exhibitions and their intentions to participate in them in future. The first section was used to classify exhibitions using Preference-Participation Analysis and to identify specific exhibitions positioned in the second quadrant of the matrix (high preference, low participation).

The second section of the questionnaire measured the leisure constraints of the respondents. Nineteen questions were generated based on the literature review to measure the leisure constraints. The respondents were asked to respond to the questions using a five-point Likert type scale in the first and the second sections of the survey. The descriptors ranged from “strongly disagree (1)”, “disagree (2)”, “neutral (3)”, “agree (4)”, and “strongly agree (5)”.

There were three subgroups of questions in the second section, one each for intrapersonal constraints, interpersonal constraints, and structural constraints. Six assessment items were used for intrapersonal constraints which included: (1) no interest (In the type of exhibition), (2) no concern (The exhibition is not related to their field of expertise), (3) not comfortable (Feel emotional or psychological embarrassment if attending such events e.g. men attending flower shows or women attending hardware tools shows), (4) fatigue (May not be able to attend the exhibition because of some personal or psychological limitations), (5) lack of information (The potential attendees

had incomplete knowledge about the details of the exhibition such as date and time open to public, or the type of exhibitors showcasing their products and services), and (6) no idea of the event (The attendee had absolutely no knowledge about the exhibitions). Four assessment items were used for interpersonal constraints which included: (1) companion's lack of interest (Although the attendee was interested in attending the exhibition, the attendee's companions, whoever it may be such as spouse, friends, siblings or parents, was not interested in attending the same exhibition), (2) lack of companions (Lack of availability of a friend or relative that could attend the exhibition), (3) companion's lack of time (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because the companion could not attend because of a time or scheduling conflict), and (4) companion's lack of economic support (Although the potential attendee was keenly interested in attending the exhibition, he/she did not have the financial or other related resources to attend the event at the time it was available). Nine assessment items were used for structural constraints which included: (1) lack of time to participate (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because of a time conflict), (2) other important work (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because he/she had to attend to a higher priority task), (3) poor transportation service (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because of lack of proper personal or public transportation to the venue from their place of residence), (4) expensive traffic expenses (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because the expenses involved in travel to the venue

were prohibitive), (5) expensive admission (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because of the high entrance fees at the venue. The price-value relationship for attending the exhibition was not considered to be high), (6) lack of exciting programs (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because the programs offered were not compelling enough), (7) lack of opportunity for special experiences (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because the programs offered did not include anything new that the attendee could learn), (8) lack of entertaining facilities (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because the venue lacked good facilities for entertainment such as stages and theaters for performances; restaurants and bars for dining; and retail outlets for shopping), and (9) bad weather conditions (Although the potential attendee was keenly interested in attending the exhibition, he/she could not do so because of a temporary weather condition). Table 3-2 shows the assessment items that former researchers have used for analyzing leisure constraints during the years 1951 to 2009.

The third section was designed to solicit demographic information, which included gender, age, marital status, education, occupation, annual income, and place of residence. All the demographic information was measured using nominal scales.

Table 3-2. The History of the Assessment Items of Leisure Constraints

Assessment items		1	2	3	4	5	6
Intrapersonal Constraints	No interest	•		•	•	•	•
	No concern	•		•		•	•
	Not comfortable	•		•			•
	Fatigue	•	•	•	•		
	Lack of information						•
	No idea of the event						•
Interpersonal Constraints	Companion's lack of interest						•
	Lack of companions			•	•	•	•
	Companion's lack of time			•			•
	Companion's lack of economic support						•
Structural Constraints	Lack of time to participate	•	•	•	•	•	•
	Other important work						
	Poor transportation service	•	•	•	•	•	•
	Expensive traffic expenses	•	•	•	•	•	•
	Expensive admission	•	•	•	•	•	•
	Lack of exciting programs						•
	Lack of opportunities for special experience						•
	Lack of entertaining facilities						•
Bad weather condition	•	•	•		•		

1) Lewin, 1951; 2) McGuire, 1984; 3) Crawford & Godbey, 1987; 4) Henderson, Stalnaker, & Taylor, 1988; 5) Lee et al., 2004; 6) Lee, D. H., 2007

Survey Procedure

The questionnaire for this study was distributed to the public who visited and participated in exhibitions at the COEX (Convention & Exhibition) center and the KINTEX center. The COEX center is the largest exhibition center in Seoul and includes Asia's largest underground shopping mall, restaurants, and entertainment facilities. The KINTEX center has five exhibition halls and is the largest exhibition center in South Korea.

The questionnaire for this study was also distributed to the public who lived in Seoul, Gyeonggi, Incheon, and Chungcheong provinces in South Korea. Gyeonggi, Incheon, and Chungcheong provinces are near Seoul and it takes approximately one to three hours to reach the COEX center and the KINTEX center from Seoul, Gyeonggi, Incheon, and Chungcheong provinces by private or public transportation.

Various exhibitions are open in South Korea with many different themes. In this study, strongly preferred but weakly attended exhibitions were selected through Preference-Participation Analysis. Constraints that prevented attendees from participating in the exhibitions, even when there was interest, were analyzed using Leisure Constraints Theory.

Data Analysis

The collected data was analyzed using the Statistical Package for Social Science (SPSS) and AMOS 7.0 software. Statistical methods used to analyze the data included Reliability Analysis, Principal Components Analysis, Factor Analysis, Independent Samples *t*-tests, Paired Samples *t*-tests, Analysis of Variance (ANOVA), and Structural Equation Modeling (SEM). In order to accomplish the objectives of the research, Preference-Participation Analysis was conducted to discover which specific exhibitions are located in the second quadrant on the preference-participation matrix. Reliability Analysis examined whether the survey questionnaire was reliable through the calculation of Cronbach's Alpha statistic.

Principal Component Analysis transformed a number of possibly correlated variables into a small number of factors that were easier to understand and analyze further (Pearson, 1901). Factor Analysis was conducted to identify important leisure constraints that customers evaluated while considering both preference for and participation in exhibitions. Factor Analysis is essentially a multivariate statistical technique that can summarize the information from a large number of variables into a much smaller number of variables or factors (Hair, Anderson, Tatham, & Black, 1998).

In this study, 19 variables describing leisure constraints are a large number and some of them may be unrelated and uncorrelated. To summarize a large number of variables into a smaller number of variables, Principle Component Analysis was utilized. Then, these variables were rotated on the varimax (variance maximization) rotation procedure in order to identify which variables are independent of each other and which variables are correlated. Factor Analysis makes the factor loading of one variable close

to 1 and the other close to 0 so that researchers can better understand which one is the uncorrelated factor and which one is not. In this study, Factor Analysis explored the underlying structures of the data through data reduction.

Independent Samples *t*-tests and Paired Samples *t*-tests were used in this study. First, Independent Samples *t*-tests were used for examining whether there were significant differences in leisure constraints among the levels of gender (males and females) and marital status (married and unmarried). Second, Paired Samples *t*-tests were used for examining the mean differences in strongly preferred but weakly attended exhibitions. The results of the Paired Samples *t*-tests were used to draw a Preference-Participation Analysis matrix. One-way Analysis of Variance (ANOVA) was used to determine whether there was a significant difference in leisure constraints among the levels of age, education, annual income, and place of residence.

Lastly, Structural Equation Modeling (SEM) using the maximum-likelihood estimation procedure was developed not only to estimate the strength and the direction of the linear relationship between the leisure constraints but also to measure the direct relationships between leisure constraints and the exhibitions that were strongly preferred but weakly attended. The primary purpose of SEM is to simultaneously test hypothesized structural associations between or among a set of latent constructs (Kline, 1998; Reisinger & Turner, 1999). Therefore, the entire process of data analysis helped examine and verify which leisure constraints were significant in preventing customers from participating in exhibitions even though they preferred them.

Research Question One, Hypotheses and Statistical Methods

Is there a relationship between demographic characteristics of exhibition attendees and the leisure constraints perceived by them?

Intrapersonal Constraints:

H_{1a}: Gender has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for both male and female exhibition attendees. (An Independent Samples t-test was used.)

H_{1b}: Marital status has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for married and unmarried exhibition attendees. (An Independent Samples t-test was used.)

H_{1c}: Age has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all age groups. (One-way Analysis of Variance was used.)

H_{1d}: Education has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all education levels. (One-way Analysis of Variance was used.)

H_{1e}: Annual income has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all annual income levels. (One-way Analysis of Variance was used.)

H_{1f}: Place of residence has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all the levels of place of residence. (One-way Analysis of Variance was used.)

Interpersonal Constraints:

H_{2a}: Gender has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for both male and female exhibition attendees. (An Independent Samples t-test was used.)

H_{2b}: Marital status has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for married and unmarried exhibition attendees. (An Independent Samples t-test was used.)

H_{2c}: Age has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all age groups. (One-way Analysis of Variance was used.)

H_{2d}: Education has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all education levels. (One-way Analysis of Variance was used.)

H_{2e}: Annual income has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all annual income levels. (One-way Analysis of Variance was used.)

H_{2f}: Place of residence has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all the levels of place of residence. (One-way Analysis of Variance was used.)

Structural Constraints:

H_{3a}: Gender has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for both male and female exhibition attendees. (An Independent Samples t-test was used.)

H_{3b}: Marital status has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for married and unmarried exhibition attendees. (An Independent Samples t-test was used.)

H_{3c}: Age has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all age groups.

(One-way Analysis of Variance was used.)

H_{3d}: Education has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all education levels. (One-way Analysis of Variance was used.)

H_{3e}: Annual income has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all annual income levels. (One-way Analysis of Variance was used.)

H_{3f}: Place of residence has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all the levels of place of residence. (One-way Analysis of Variance was used.)

Research Question Two, Hypotheses and Statistical Methods

Is there a correlation among intrapersonal, interpersonal, and structural constraints in the exhibition industry in South Korea?

H_{4a}: There is no correlation between intrapersonal and interpersonal constraints in the South Korean exhibition industry. (Structural Equation Modeling was used.)

H_{4b}: There is no correlation between interpersonal and structural constraints in the South Korean exhibition industry. (Structural Equation Modeling was used.)

H_{4c}: There is no correlation between intrapersonal and structural constraints in the South Korean exhibition industry. (Structural Equation Modeling was used.)

Research Question Three, Hypotheses and Statistical Methods

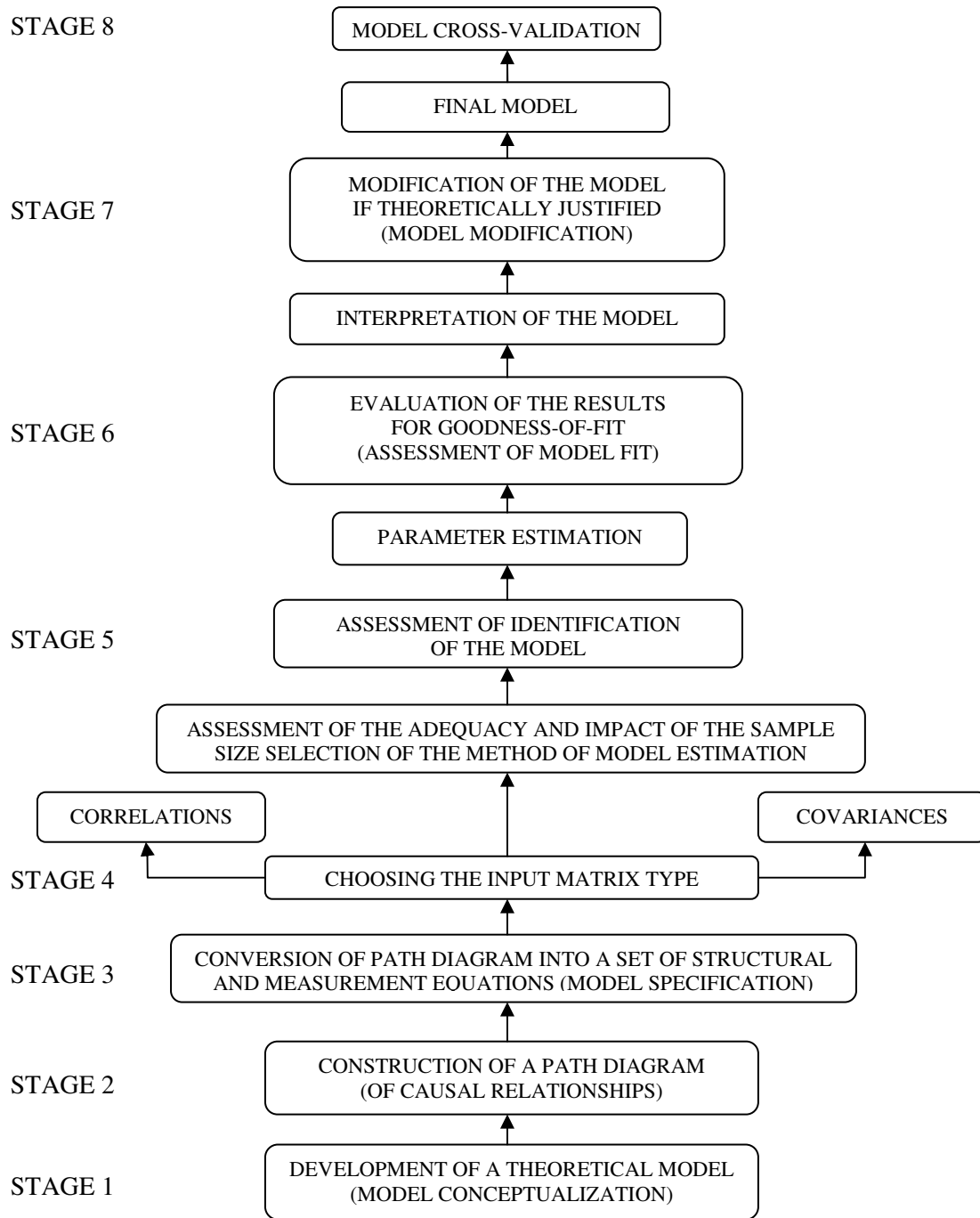
Are there any causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions?

H_{5a}: There is no relationship between the mean for intrapersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Structural Equation Modeling was used.)

H_{5b}: There is no relationship between the mean for interpersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Structural Equation Modeling was used.)

H_{5c}: There is no relationship between the mean for structural constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Structural Equation Modeling was used.)

Figure 3-2. Stages of the Application of Structural Equation Modeling.



Source: Hair, Anderson, Tatham, & Black (1995). *Multivariate Data Analysis with Readings* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall International.

CHAPTER IV

FINDINGS AND DISCUSSION

A total of 500 questionnaires were distributed to respondents using a convenient sampling method. In all, 419 usable responses were collected, representing a response rate of 83.8%.

Demographic Profile of Respondents

The demographic profile of the respondents is presented in Table 4-1. There were 181 (43.2%) male respondents and 238 (56.8%) female respondents. In terms of age, the main age group was 18-24, representing 41.5% of the respondents. The other age groups were 25-34 (22.7%), 45-54 (14.3%), 35-44 (12.9%), and over 55 (8.6%) respectively. In terms of marital status, there were 155 (37%) married respondents and 264 (63%) unmarried respondents.

More than two-thirds of the respondents attended or completed a college or university, accounting for 80.7 % of the total respondents. Only 11.5 % of the respondents attended or completed graduate school, while 7.9 % of the respondents completed high school. As for occupation, the results indicated that 122 (29.1%) of the respondents were students, 71 (16.9%) were company employees, 56 (13.4%) were business people, 54 (12.9%) were professionals, 52 (12.4%) were housewives, and 35 (8.4%) were public service employees. In addition, 19 (4.5%) respondents had a

background in other business fields and 9 (2.1%) respondents had a background in sales or service fields.

In terms of annual income, 10.7% of respondents earned an annual income more than \$80,000, 11.2% between \$60,000 and \$79,999, 24.3% between \$40,000 and \$59,999, 33.4% between \$20,000 and \$39,999, and 20.3% less than \$20,000. More than half of the respondents were Seoul residents, accounting for 59.7% of the total respondents. Incheon residents accounted for 22.7% of the respondents, Gyeonggi residents, 14.1%, and Chungcheong residents, 3.6%.

Table 4-1. Demographic Profile of the Respondents (N=419)

Variables	Frequency	Percentage (%)
Gender		
Male	181	43.2
Female	238	56.8
Age		
18-24	174	41.5
25-34	95	22.7
35-44	54	12.9
45-54	60	14.3
Over 55	36	8.6
Marital Status		
Married	155	37.0
Unmarried	264	63.0
Education		
Completed High School	33	7.9
Attended or Completed College or University	338	80.7
Attended or Completed Graduate School	48	11.5
Occupation		
Company employee	71	16.9
Businesspeople	56	13.4
Public service employee	35	8.4

Professional	54	12.9
Housewife	52	12.4
Student	122	29.1
Sales or service jobs	9	2.1
Manufacturing or engineering	1	0.2
Others	19	4.5
Annual Income		
Under \$20,000	85	20.3
\$20,000 ~ \$39,999	140	33.4
\$40,000 ~ \$59,999	102	24.3
\$60,000 ~ \$79,999	47	11.2
\$80,000 or above	45	10.7
Place of Residence		
Seoul	250	59.7
Incheon	95	22.7
Gyeonggi	59	14.1
Chungcheong	15	3.6

Factor Analysis and Reliability Analysis

In this study, leisure constraints were comprised of 19 variables. In order to identify the key variables, Principal Components Analysis was utilized using the varimax (variance maximization) rotation procedure. Even though the confirmatory factor analysis is generally conducted in a structural equation model, the exploratory factor analysis was conducted in order to gain a better understanding of the underlying structure of the data (Pitt & Jeantrout, 1994). The researcher of this study used a factor loading cut-off point of 0.50 for retaining items in the Factor Analysis. Only factors which had an eigenvalue equal to or greater than 1 were retained in the study. After analyzing the data by using Principal Component Analysis with a varimax rotation, the 19 variables were reduced to three factors, which explained approximately 71% of the total variance. The communality of each variable was moderately acceptable, ranging from 0.428 to 0.839 (Table 4-2). If a score of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) is equal to or greater than 0.5, it indicates that the correlation matrix of variables is suitable for conducting Factor Analysis (Mantzopoulos, 1995). The KMO-MSA score for Factor Analysis for leisure constraints in this study was 0.786, which confirmed that the correlation matrix of leisure constraints was suitable for conducting Factor Analysis. Bartlett's test of sphericity tests whether the strength of the relationship among variables is strong (Diekhoff, 1996). The Bartlett's test of sphericity χ^2 for this study was 1858.908 at the observed significance level of alpha 0.001, indicating a high level of strength among the variables (Table 4-2).

Reliability Analysis tests the consistency of a set of measurements. If repeated measurements give different results, measuring instruments are generally considered to

be unreliable (Rudner & Shafer, 2001). Table 4-2 summarizes the Cronbach's Alpha measures of reliability. The Cronbach's Alpha for intrapersonal constraints was 0.809, for structural constraints was 0.878, and for interpersonal constraints was 0.761. These values indicate reasonable levels of internal consistency of measuring instruments in this study. Therefore, the results suggest that the variance of the original values was explained adequately by the three factors – intrapersonal constraints, interpersonal constraints, and structural constraints (Table 4-2). It should be noted that although the Cronbach's Alpha scores for the leisure constraints were relatively low during the pilot study because of the small sample size, the final scores were all relatively high validating the use of the original instrument.

Table 4-2. Factor Analysis and Reliability Analysis

Leisure Constraint Domains & Items	Factor loadings			Communality
	Intrapersonal Constraints	Structural Constraints	Interpersonal Constraints	
Intrapersonal Constraints				
Intra1 No concern	0.899			0.826
Intra2 No interest	0.888			0.795
Intra3 Not comfortable	0.770			0.647
Intra4 Lack of information	0.509			0.428
Structural Constraints				
Stru1 Lack of opportunities		0.905		0.839
Stru2 Lack of entertaining facilities		0.874		0.805
Stru3 Lack of exciting programs		0.855		0.767
Interpersonal Constraints				
Inter1 Companion's lack of time			0.842	0.748
Inter2 Companion's lack of economic support			0.784	0.632
Inter3 Lack of companions			0.762	0.635
Total variance explained				
% of variance explained	25.420	24.334	21.471	71.225
Cronbach's Alpha	0.809	0.878	0.761	
Eigenvalue	2.542	2.433	2.471	

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA): 0.786; Bartlett's Test of Sphericity, $\chi^2 = 1858.908$, significance at $p < 0.001$.

Independent Samples *t*-tests

An Independent-Samples *t*-test was conducted to determine whether there was any significant difference in the mean scores for the degree of the leisure constraints when comparing male respondents with female respondents. Among all three types of leisure constraints (intrapersonal, interpersonal, and structural), there was no significant difference between the means for males and females. This shows that gender is not an important factor to consider while determining the differences among the three leisure constraints. Please see Table 4-3 for a summary of the results.

Table 4-3. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Gender

Leisure Constraint Domains & Items	Male M(SD)	Female M(SD)	<i>t</i> -value
Intrapersonal Constraints			
No concern	2.46(0.99)	2.34(0.93)	1.27 ⁺
No interest	2.53(1.05)	2.42(0.98)	1.11 ⁺
Not comfortable	2.47(1.05)	2.29(0.89)	1.89 ⁺
Lack of information	3.27(1.05)	3.17(1.01)	1.01 ⁺
Interpersonal Constraints			
Companion's lack of time	3.15(1.00)	3.04(0.95)	1.12 ⁺
Companion's lack of economic support	2.86(1.00)	2.71(1.04)	1.55 ⁺
Lack of companions	3.13(0.99)	3.00(1.03)	1.27 ⁺
Structural Constraints			
Lack of opportunities	3.33(0.96)	3.45(0.98)	-1.21 ⁺
Lack of entertaining facilities	3.27(1.01)	3.39(0.97)	-1.21 ⁺
Lack of exciting programs	3.38(0.92)	3.43(0.97)	-0.59 ⁺

⁺ *Not significant*

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

An Independent-Samples *t*-test was conducted to determine if there was a significant difference in the mean scores for the degree of leisure constraints between married and unmarried respondents. In terms of intrapersonal constraints and structural constraints, there was no significant difference in the mean for married and unmarried respondents. However, in terms of interpersonal constraints, there was a significant difference in the means for married and unmarried respondents. Specifically, married respondents (M = 2.97; SD = 0.99) had a higher mean score than unmarried respondents (M = 2.66; SD = 1.02) for the item “companion’s lack of economic support” [$t(417) = 3.02$; $p < 0.01$] (Table 4-4).

Table 4-4. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Marital Status

Leisure Constraint Domains & Items	Married M(SD)	Unmarried M(SD)	<i>t</i> -value
Intrapersonal Constraints			
No concern	2.41(0.92)	2.49(0.98)	0.30
No interest	2.49(0.94)	2.46(1.04)	0.27
Not comfortable	2.49(0.92)	2.30(0.98)	1.91
Lack of information	3.30(0.97)	3.16(1.06)	1.40
Interpersonal Constraints			
Companion’s lack of time	3.14(0.98)	3.06(0.97)	0.88
Companion’s lack of economic support	2.97(0.99)	2.66(1.02)	3.02**
Lack of companions	3.00(0.94)	3.09(1.06)	-0.81
Structural Constraints			
Lack of opportunities	3.40(0.92)	3.40(1.00)	-0.05
Lack of entertaining facilities	3.27(1.01)	3.38(0.97)	-1.04
Lack of exciting programs	3.30(0.95)	3.47(0.95)	-1.69

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

Analysis of Variance (ANOVA)

One-way Analysis of Variance (ANOVA) was conducted to examine whether there was any significant difference in the mean scores of the different age groups among the leisure constraints (Table 4-5). In terms of intrapersonal constraints, the results of the ANOVA test indicated that there were significant mean differences for the items “not comfortable” [$F(4, 414) = 3.62; p = 0.006$] and “lack of information” [$F(4, 414) = 2.43; p = 0.047$]. Duncan’s post hoc test was used to discover the significant mean difference among different age groups. For the item, “not comfortable”, the four age groups: 25-34 ($M = 2.4; SD = 0.9$), 35-44 ($M = 2.5; SD = 0.9$), 45-54 ($M = 2.5; SD = 0.9$), and over 55 ($M = 2.5; SD = 0.9$), had higher mean scores than the youngest age group, 18-24 ($M = 2.1; SD = 0.9$). For the item, “lack of information”, the age group 35-44 ($M = 3.5; SD = 0.8$) had a higher mean score than the other age groups (Table 4-5).

In terms of interpersonal constraints, the results of the ANOVA test indicated that there were significant mean differences for the items “companion’s lack of time” [$F(4, 414) = 3.27; p = 0.012$] and “companion’s lack of economic support” [$F(4, 414) = 3.49; p = 0.008$]. Duncan’s post hoc test revealed that two age groups, 35-44 ($M = 3.4; SD = 0.9$) and 45-54 ($M = 3.3; SD = 0.9$), had higher mean scores than the other groups for the item “companion’s lack of time”. For the item, “companion’s lack of economic support”, the age groups, 35-44 ($M = 3.0; SD = 0.9$) and 45-54 ($M = 3.1; SD = 1.0$), had higher mean scores than the other age groups (Table 4-5). In terms of structural constraints, there was no significant mean difference among the different age groups (Table 4-5).

Table 4-5. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Age

Leisure Constraint Domains & Items	18-24	25-34	35-44	45-54	Over 55	F-value
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	
Intrapersonal Constraints						
No concern	2.2(0.9)	2.5(0.9)	2.5(0.9)	2.4(0.9)	2.5(1.0)	1.80
No interest	2.3(1.0)	2.4(0.9)	2.7(0.9)	2.5(0.9)	2.6(0.9)	1.79
Not comfortable	2.1(0.9)a	2.4(0.9)b	2.5(0.9)b	2.5(0.9)b	2.5(0.9)b	3.62**
Lack of information	3.1(1.0)a	3.0(1.0)a	3.5(0.8)c	3.2(1.0)b	3.2(1.0)b	2.43*
Interpersonal Constraints						
Companion's lack of time	3.0(0.9)b	3.0(0.9)b	3.4(0.9)c	3.3(0.9)c	2.8(1.1)a	3.275*
Companion's lack of economic support	2.6(1.0)a	2.7(0.9)ab	3.0(0.9)c	3.1(1.0)c	2.7(1.1)ab	3.491**
Lack of companions	3.0(1.0)	3.0(1.0)	3.1(1.0)	3.1(0.8)	2.7(0.9)	1.274
Structural Constraints						
Lack of opportunities	3.3(1.0)	3.4(0.9)	3.6(0.8)	3.3(0.8)	3.2(0.9)	0.949
Lack of entertaining facilities	3.3(0.9)	3.3(1.0)	3.5(0.7)	3.1(1.0)	3.2(1.0)	1.464
Lack of exciting programs	3.4(0.9)	3.3(0.9)	3.5(0.8)	3.2(1.0)	3.2(0.9)	1.603

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

One-way Analysis of Variance (ANOVA) was conducted to determine whether there was any significant difference in the mean scores of the different levels of education among the leisure constraints (Table 4-6). In terms of intrapersonal constraints, the results of the ANOVA test indicated that there were significant mean differences for the items “no concern” [$F(2, 416) = 6.755; p = 0.001$] and “no interest” [$F(2, 416) = 8.197; p = 0.001$]. Duncan’s post hoc test revealed that respondents who completed high school ($M = 2.96; SD = 0.76$) had a higher mean score than the other categories for the item “no concern”. Duncan’s post hoc test also revealed that respondents who completed high school ($M = 3.12; SD = 0.89$) had a higher mean score than the other categories for the item “no interest” (Table 4-6). In terms of interpersonal and structural constraints, there was no significant difference in the means of the different levels of education (Table 4-6).

Table 4-6. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Education

Leisure Constraint Domains & Items	Completed High School M(SD)	Attended or Completed College or University M(SD)	Attended or Completed Graduate School M(SD)	F-value
Intrapersonal Constraints				
No concern	2.96(0.76) a	2.36(0.96) b	2.25(0.91) b	6.755***
No interest	3.12(0.89) a	2.43(1.00) b	2.27(0.98) b	8.197***
Not comfortable	2.63(0.69)	2.35(0.98)	2.31(0.99)	1.368
Lack of information	3.15(1.17)	3.18(1.02)	3.50(0.96)	2.051
Interpersonal Constraints				
Companion’s lack of time	2.96(0.76)	3.06(0.98)	3.35(0.99)	2.097
Companion’s lack of economic support	3.03(0.84)	2.73(1.03)	2.91(1.04)	1.756
Lack of companions	3.21(0.96)	3.03(1.04)	3.12(0.86)	0.563
Structural Constraints				
Lack of opportunities	3.36(0.92)	3.38(0.98)	3.54(0.89)	0.554
Lack of entertaining facilities	3.36(1.14)	3.33(0.98)	3.37(0.98)	0.037
Lack of exciting programs	3.36(1.02)	3.41(0.94)	3.41(1.00)	0.047

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

One-way Analysis of Variance (ANOVA) was conducted to determine whether there was any significant difference in the mean scores of the different levels of annual income among the leisure constraints (Table 4-7). The results of the ANOVA test indicated that there was no significant difference in the means of the different levels of annual income among the leisure constraints (Table 4-7).

Table 4-7. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Annual Income

Leisure Constraint Domains & Items	Under \$20,000	\$20,000-\$39,999	\$40,000-\$59,999	\$60,000-\$79,999	Over \$80,000	F-value
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	
Intrapersonal Constraints						
No concern	2.3(1.0)	2.4(0.9)	2.4(1.0)	2.3(0.9)	2.3(0.9)	0.435 ⁺
No interest	2.4(1.1)	2.4(0.9)	2.5(1.0)	2.3(1.0)	2.4(1.0)	0.171 ⁺
Not comfortable	2.3(0.9)	2.3(0.9)	2.4(1.0)	2.4(0.9)	2.4(0.9)	0.328 ⁺
Lack of information	3.0(1.1)	3.2(1.0)	3.3(1.0)	3.0(0.9)	3.3(1.0)	1.250 ⁺
Interpersonal Constraints						
Companion's lack of time	2.9(1.0)	3.1(0.9)	3.1(0.9)	3.0(1.0)	3.0(1.0)	0.845 ⁺
Companion's lack of economic support	2.7(1.0)	2.8(1.0)	2.7(0.9)	2.4(1.0)	2.8(1.0)	1.437 ⁺
Lack of companions	3.0(1.1)	3.1(1.0)	3.0(0.9)	3.0(0.9)	2.9(0.8)	0.565 ⁺
Structural Constraints						
Lack of opportunities	3.3(0.9)	3.4(0.9)	3.4(1.0)	3.4(0.9)	3.3(0.8)	0.204 ⁺
Lack of entertaining facilities	3.3(0.9)	3.3(1.0)	3.3(1.0)	3.4(1.0)	3.2(0.9)	0.230 ⁺
Lack of exciting programs	3.3(0.9)	3.4(0.9)	3.4(1.0)	3.4(1.0)	3.2(0.9)	0.700 ⁺

⁺ *Not significant*

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

One-way Analysis of Variance (ANOVA) was conducted to determine whether there was any significant difference in the mean scores of the degree of constraints among the different levels of place of residence (Table 4-8). In terms of intrapersonal constraints, the results of the ANOVA test indicated that there were significant mean differences for the items “no concern” [$F(3, 415) = 3.744; p = 0.011$], “no interest” [$F(3, 415) = 3.978; p = 0.008$], and “not comfortable” [$F(3, 415) = 3.978; p = 0.008$]. Duncan’s post hoc test was used to discover the significant mean difference among the different levels of place of residence. The respondents who lived in Chungcheong province ($M = 2.7; SD = 0.7$) had the highest mean score than the other categories for the item “no concern”. In addition, the respondents who lived in Chungcheong province ($M = 2.8; SD = 0.8$) had the highest mean score than the other categories for the item “no interest”. For the item, “not comfortable”, the respondents who lived in Gyeonggi province ($M = 2.6; SD = 1.0$) had the highest mean score than the other categories. In terms of interpersonal and structural constraints, there was no significant difference in the means of the different levels of place of residence (Table 4-8).

Table 4-8. Significant Difference in the Mean Scores for the Degree of Leisure Constraints According to Place of Residence

Leisure Constraint Domains & Items	Seoul M(SD)	Incheon M(SD)	Gyeonggi M(SD)	Chungcheong M(SD)	F-value
Intrapersonal Constraints					
No concern	2.4(1.0)ab	2.1(0.8)a	2.5(0.9)b	2.7(0.7)b	3.744*
No interest	2.5(1.0)ab	2.1(0.9)a	2.6(0.9)ab	2.8(0.8)b	3.978**
Not comfortable	2.4(0.9)ab	2.1(0.8)a	2.6(1.0)b	2.4(0.8)ab	3.978**
Lack of information	3.2(1.0)	3.2(1.0)	3.2(1.0)	2.9(0.8)	1.312
Interpersonal Constraints					
Companion's lack of time	3.1(1.0)	2.9(0.9)	2.9(0.9)	3.4(0.9)	2.256
Companion's lack of economic support	2.8(1.0)	2.6(1.0)	2.7(0.9)	2.9(1.0)	0.722
Lack of companions	3.1(1.0)	2.9(1.1)	2.8(0.8)	3.2(0.7)	2.014
Structural Constraints					
Lack of opportunities	3.4(0.9)	3.4(1.0)	3.3(0.8)	3.1(0.8)	0.728
Lack of entertaining facilities	3.3(1.0)	3.3(0.9)	3.3(0.8)	3.0(0.7)	0.458
Lack of exciting programs	3.4(0.9)	3.3(1.0)	3.3(0.7)	3.2(1.0)	0.452

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

Mean scores of the degree of leisure constraints in exhibitions are presented in Table 4-9. In terms of intrapersonal constraints, the respondents had the highest mean score for the item “lack of information” (M = 3.21; SD = 1.03). In terms of interpersonal constraints, the respondents had the highest mean score for the item “companion’s lack of time” (M = 3.09; SD = 0.98). In terms of structural constraints, the respondents had the highest mean score for the item “lack of exciting programs” (M = 3.41; SD = 0.96).

Table 4-9. Mean Scores for the Degree of Leisure Constraints in Exhibitions

Leisure Constraints Domains & Items	N	Minimum	Maximum	Mean	Std. Deviation
Intrapersonal Constraints					
No concern	419	1.00	5.00	2.40	0.96
No interest	419	1.00	5.00	2.47	1.01
Not comfortable	419	1.00	5.00	2.37	0.97
Lack of information	419	1.00	5.00	3.21	1.03
Interpersonal Constraints					
Companion’s lack of time	419	1.00	5.00	3.09	0.98
Companion’s lack of economic support	419	1.00	5.00	2.77	1.02
Lack of companions	419	1.00	5.00	3.05	1.01
Structural Constraints					
Lack of opportunities	419	1.00	5.00	3.40	0.97
Lack of entertaining facilities	419	1.00	5.00	3.34	0.99
Lack of exciting programs	419	1.00	5.00	3.41	0.96

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

The Results of the Hypotheses of Research Question One

Summary of significant results between leisure constraints and demographic characteristics is presented in Table 4-10. The results of each of the hypotheses are as follows:

Research Question One:

Is there a relationship between demographic characteristics of exhibition attendees and the leisure constraints perceived by them?

Intrapersonal Constraints:

H_{1a}: Gender has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for both male and female exhibition attendees. (Accepted, Table 4-3 lists the results for all constraints)

H_{1b}: Marital status has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for married and unmarried exhibition attendees. (Accepted, Table 4-4 lists the results for all constraints)

H_{1c}: Age has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all age groups. (Rejected) “not comfortable” [F(4, 414) = 3.62; p = 0.006]; “lack of information” [F(4, 414) = 2.43; p = 0.047].

H_{1d}: Education has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all education levels. (Rejected) “no concern” [F(2, 416) = 6.755; p = 0.001]; “no interest” [F(2, 416) = 8.197; p = 0.001]

H_{1e}: Annual income has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all annual income levels. (Accepted, Table 4-7 lists the results for all constraints)

H_{1f}: Place of residence has no effect on the degree of intrapersonal constraints perceived by exhibition attendees.

The mean score of the degree of intrapersonal constraints is the same for all the levels of place of residence. (Rejected) “no concern” [F(3, 415) = 3.744; p = 0.011]; “no interest” [F(3, 415) = 3.978; p = 0.008]; “not comfortable” [F(3, 415) = 3.978; p = 0.008].

Interpersonal Constraints:

H_{2a}: Gender has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for both male and female exhibition attendees. (Accepted, Table 4-3 lists the results for all constraints)

H_{2b}: Marital status has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for married and unmarried exhibition attendees. (Rejected) “companion’s lack of economic support” [t(417) = 3.02; p<0.01].

H_{2c}: Age has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all age groups. (Rejected) “companion’s lack of time” [F(4, 414) = 3.27; p = 0.012]; “companion’s lack of economic support” [F(4, 414) = 3.49; p = 0.008].

H_{2d}: Education has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all education levels. (Accepted, Table 4-6 lists the results for all constraints)

H_{2e}: Annual income has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all annual income levels. (Accepted, Table 4-7 lists the results for all constraints)

H_{2f}: Place of residence has no effect on the degree of interpersonal constraints perceived by exhibition attendees.

The mean score of the degree of interpersonal constraints is the same for all the levels of place of residence. (Accepted, Table 4-8 lists the results for all constraints)

Structural Constraints:

H_{3a}: Gender has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for both male and female exhibition attendees. (Accepted, Table 4-3 lists the results for all constraints)

H_{3b}: Marital status has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for married and unmarried exhibition attendees. (Accepted, Table 4-4 lists the results for all constraints)

H_{3c}: Age has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all age groups. (Accepted, Table 4-5 lists the results for all constraints)

H_{3d}: Education has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all education levels. (Accepted, Table 4-6 lists the results for all constraints)

H_{3e}: Annual income has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all annual income levels. (Accepted, Table 4-7 lists the results for all constraints)

H_{3f}: Place of residence has no effect on the degree of structural constraints perceived by exhibition attendees.

The mean score of the degree of structural constraints is the same for all the levels of place of residence. (Accepted, Table 4-8 lists the results for all constraints)

Table 4-10. Summary of Significant Results between Leisure Constraints and Demographic Characteristics

Leisure Constraint Domains & Items	Married M(SD)	Unmarried M(SD)				t-value
Interpersonal Constraints						
Companion's lack of economic support	2.97(0.99)	2.66(1.02)				3.02**
	18-24 Years M(SD)	25-34 Years M(SD)	35-44 Years M(SD)	45-54 Years M(SD)	Over 55 Years M(SD)	F-value
Intrapersonal Constraints						
Not comfortable	2.1(0.9)a	2.4(0.9)b	2.5(0.9)b	2.5(0.9)b	2.5(0.9)b	3.62**
Lack of information	3.1(1.0)a	3.0(1.0)a	3.5(0.8)c	3.2(1.0)b	3.2(1.0)b	2.43*
Interpersonal Constraints						
Companion's lack of time	3.0(0.9)b	3.0(0.9)b	3.4(0.9)c	3.3(0.9)c	2.8(1.1)a	3.275*
Companion's lack of economic support	2.6(1.0)a	2.7(0.9)ab	3.0(0.9)c	3.1(1.0)c	2.7(1.1)ab	3.491**
		Completed High School M(SD)	Attended or Completed College or University M(SD)	Attended or Completed Graduate School M(SD)	F-value	
Intrapersonal Constraints						
No concern		2.96(0.76) a	2.36(0.96) b	2.25(0.91) b	6.755***	
No interest		3.12(0.89) a	2.43(1.00) b	2.27(0.98) b	8.197***	
Leisure Constraint Domains & Items	Seoul M(SD)	Incheon M(SD)	Gyeonggi M(SD)	Chungcheong M(SD)	F-value	
Intrapersonal Constraints						
No concern	2.4(1.0)ab	2.1(0.8)a	2.5(0.9)b	2.7(0.7)b	3.744*	
No interest	2.5(1.0)ab	2.1(0.9)a	2.6(0.9)ab	2.8(0.8)b	3.978**	
Not comfortable	2.4(0.9)ab	2.1(0.8)a	2.6(1.0)b	2.4(0.8)ab	3.978**	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

Exhibition Preferences

The results of exhibition preferences are presented in Table 4-11. The mean scores for all exhibition preferences ranged from 3.875 to 2.663 on a scale of 1 to 5 where 1 = not very likely to prefer and 5 = very strongly to prefer. The exhibition which had the highest mean score for preference was the World Travel Fair with the theme of tourism (M = 3.875; SD = 1.095), followed by the Music Festivals (M = 3.837; SD = 1.124), and the Les Dix Commandments Musical Performance (M = 3.696; SD = 1.147).

The exhibition which had the lowest mean score for preference was the International Textile Fair with the theme of fibers (M = 2.663; SD = 1.064). The exhibition which had the second-lowest mean score for preference was the Kids English Experience Fair (M = 2.992; SD = 1.105), preceded by the Medical Dental Expo with the theme of medical science (M = 2.995; SD = 1.134). These three exhibitions had a mean score for exhibition preference under 3.0 (neutral) while the other exhibitions had a mean score for exhibition preference over 3.0. Thus, approximately 77% of exhibitions selected in this study were above neutral in preference (Table 4-11).

Table 4-11. Exhibition Preferences

Theme	Type of Exhibitions	N	Mean	Std. Deviation
Science Technology	Electronic Fair, Invention Fair	419	3.124	1.117
Information	IT Show, Motion Control Fair	419	3.004	1.102
Experience	Kids English Experience Fair	419	2.992	1.105
Economy	Franchise Show	419	3.102	1.096
Amusement	International Music Instruments Fair	419	3.114	1.089
Recreation	Leisure Industry Show	419	3.570	1.038
Education	Book Fair, Education Fair, Kids Fair	419	3.551	1.073
Culture	Inter Culture Fair, World Doll Fair	419	3.620	1.122
Housing	Housing Brand Fair	419	3.350	1.073
Performance	Les Dix Commandments Musical Performance	419	3.696	1.147
Manufacturing	Motor Show, Motorcycle Show	419	3.429	1.154
Preference	Finance	419	3.019	1.155
	Art	419	3.501	1.085
	Health	419	3.389	1.167
	Festivals	419	3.837	1.124
	Fibers	419	2.663	1.064
	Fashion	419	3.520	1.180
	Construction	419	3.343	1.069
	Environment	419	3.064	1.088
	Tourism	419	3.875	1.095
	Sports	419	3.097	1.137
	Medical Science	419	2.995	1.134
	Food	419	3.682	1.114

Exhibition Participation

The results of exhibition participation are presented in Table 4-12. The mean scores for all exhibition participation ranged from 3.732 to 2.539 on a scale of 1 to 5 where 1 = not very likely to participate and 5 = very likely to participate. The exhibition which had the highest mean score for participation was the Music Festivals (M = 3.372; SD = 1.117), followed by the World Travel Fair with the theme of tourism (M = 3.680; SD = 1.148), and the Les Dix Commandments Musical Performance (M = 3.513; SD = 1.151).

The exhibition which had the lowest mean score for participation was the International Textile Fair with the theme of fibers (M = 2.539; SD = 1.113). The exhibition which had the second-lowest mean score for participation was the Kids English Experience Fair (M = 2.708; SD = 1.143), preceded by the Medical Dental Expo with the theme of medical science (M = 2.797; SD = 1.169). Thirteen exhibitions had a mean score for exhibition participation of over 3.0 (neutral) while the other ten exhibitions had a mean score for exhibition participation under 3.0. Thus, approximately 43% of exhibitions selected in this study were less than neutral in attendance (Table 4-12).

Table 4-12. Exhibition Participation

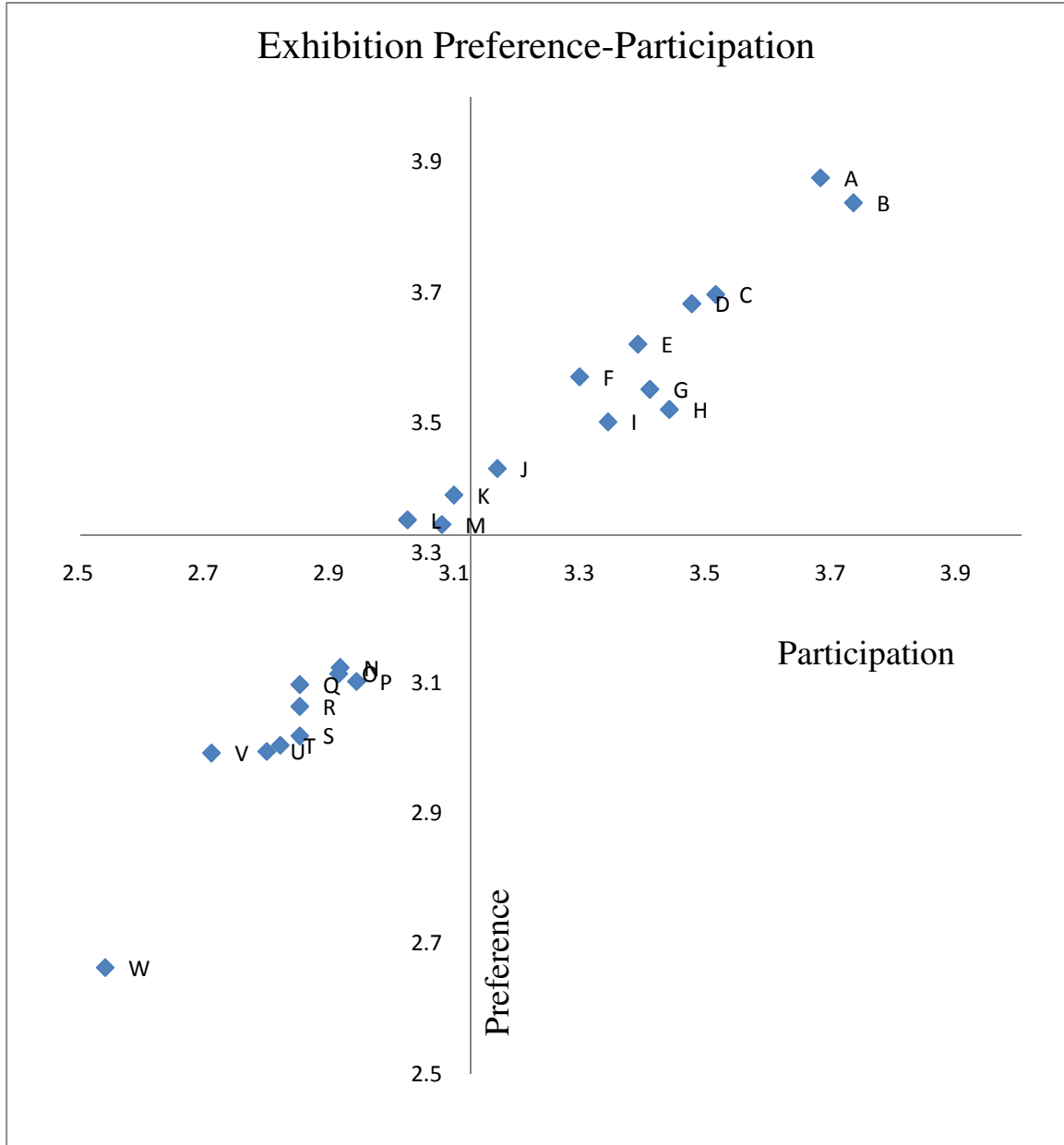
Theme	Type of Exhibitions	N	Mean	Std. Deviation
Science Technology	Electronic fair, Invention fair	419	2.914	1.137
Information	IT Show, Motion Control Fair	419	2.818	1.136
Experience	Kids English Experience Fair	419	2.708	1.143
Economy	Franchise Show	419	2.940	1.138
Amusement	International Music Instruments Fair	419	2.911	1.136
Recreation	Leisure Industry Show	419	3.295	1.108
Education	Book Fair, Education Fair, Kids Fair	419	3.408	1.086
Culture	Inter Culture Fair, World Doll Fair	419	3.389	1.167
Housing	Housing Brand Fair	419	3.021	1.156
Performance	Les Dix Commandments Musical Performance	419	3.513	1.151
Manufacturing	Motor Show, Motorcycle Show	419	3.164	1.231
Participation	Finance	419	2.849	1.144
	Art	419	3.341	1.155
	Health	419	3.095	1.182
	Festivals	419	3.732	1.117
	Fibers	419	2.539	1.113
	Fashion	419	3.439	1.207
	Construction	419	3.076	1.144
	Environment	419	2.849	1.112
	Tourism	419	3.680	1.148
	Sports	419	2.849	1.165
	Medical Science	419	2.797	1.169
	Food	419	3.474	1.182

Preference-Participation Analysis

The results of the Preference-Participation Analysis are presented in Figure 4-1. Each exhibition is plotted in the four quadrants of the PPA matrix. The Preference-Participation Analysis was conducted to discover which exhibition is located in the second quadrant on the PPA matrix. The four quadrants were developed based on the grand mean value of the preferences for the twenty-three exhibitions and the participation of the twenty-three exhibitions. The grand mean value of exhibition preferences was 3.328 and the grand mean value of exhibition participation was 3.122. The PPA grid lines were drawn using these two grand means.

The PPA grid lines were used to discover specific exhibitions located in the second quadrant which represented high preference and low participation. There were three exhibitions which were strongly preferred but weakly attended: the Housing Brand Fair with the theme of housing (Preference = 3.350; Participation = 3.021), the Spa & Aqua Expo with the theme of health (Preference = 3.389; Participation = 3.095), and the Architecture Fair with the theme of construction (Preference = 3.343; Participation = 3.076).

Figure 4-1. The Results on the Preference-Participation Analysis Matrix



Notes:

- | | | | |
|--------------------|------------------|----------------|----------------|
| A. Tourism | B. Festival | C. Performance | D. Food |
| E. Culture | F. Recreation | G. Education | H. Fashion |
| I. Art | J. Manufacturing | K. Health | L. Housing |
| M. Construction | N. Science Tech | O. Amusement | P. Economy |
| Q. Sports | R. Environment | S. Finance | T. Information |
| U. Medical Science | V. Experience | W. Fiber | |

Paired Samples *t*-tests

A Paired Samples *t*-test was used to determine whether there is any significant mean difference between paired observations (Jaccard & Becker, 2002). The results of the Paired Samples *t*-test between preference and participation are presented in Table 4-13. In this study, the preference and participation mean scores of three exhibitions, the Housing Brand Fair with the theme of housing [$t(418) = 6.262$; $p < 0.001$], the Spa & Aqua Expo with the theme of health [$t(418) = 6.090$; $p < 0.001$], and the Architecture Fair with the theme of construction [$t(418) = 5.484$; $p < 0.001$] were calculated using a Paired Samples *t*-test. The results of the tests indicated that there was a significant mean difference between preference ($M = 3.35$; $SD = 1.10$) and participation ($M = 3.02$; $SD = 1.16$) of the Housing Brand Fair (Mean difference = 0.33; $p < 0.001$). In addition, there was a significant mean difference between preference ($M = 3.38$; $SD = 1.16$) and participation ($M = 3.09$; $SD = 1.18$) of the Spa & Aqua Expo (Mean difference = 0.29; $p < 0.001$), and between preference ($M = 3.34$; $SD = 1.09$) and participation ($M = 3.08$; $SD = 1.14$) of the Architecture Fair (Mean difference = 0.26; $p < 0.001$).

Table 4-13. Paired Samples *t*-test

Exhibition	Preference		Participation		Preference - Participation Mean	<i>t</i> -value	<i>p</i> -value
	Mean	Std. Deviation	Mean	Std. Deviation			
Housing	3.35	1.10	3.02	1.16	0.33	6.262	<0.001
Health	3.38	1.16	3.09	1.18	0.29	6.090	<0.001
Construction	3.34	1.09	3.08	1.14	0.26	5.484	<0.001

1-Not very likely to prefer & not very likely to participate 2-Not likely to prefer & not likely to participate 3-Neutral
4-Strongly to prefer & likely to participate 5-Very Strongly to prefer & very likely to participate

Structural Equation Modeling (SEM)

A hypothesized model was constructed and tested through Structural Equation Modeling (SEM) using SPSS 16.0 and AMOS 7.0 in order to determine whether leisure constraints have a direct positive effect on the difference between the preference for and participation in exhibitions at the observed significance level. Maximum likelihood estimation was used to develop the hypothesized model. The summary of fit indices for the hypothesized model is presented in Table 4-14. The result of the chi-square test was 130.747 ($df = 59, p < 0.001$). The GFI (Goodness-of-Fit Index), AGFI (Adjusted Goodness-of-Fit Index), and CFI (Comparative Fit Index) tests were all above the benchmark criteria as shown in Table 4-13. Similarly, RMR (Root Mean square Residual index) and RMSEA (Root Mean Square Error of Approximation) tests were above the minimum required. Therefore, the results indicated a good fit.

Table 4-14. Summary of Fit Indices for the Hypothesized Model

	χ^2	df	χ^2/df	RMR	GFI	AGFI	CFI	RMSEA
Criterion of Indices			<5	<0.05	>0.90	>0.80	>0.90	<0.05
Hypothesized Model	130.747	59	2.216	0.058	0.955	0.930	0.962	0.054

The results of covariance and correlation of unobserved variables which represent intrapersonal, interpersonal, and structural constraints are presented in Table 4-15. In statistics, a correlation coefficient indicates the strength and direction of a linear relationship between two random variables (Mantzopoulos, 1995). AMOS 7.0 was used to determine if leisure constraints were positively correlated with each other. The results indicated that intrapersonal constraints and interpersonal constraints were positively correlated ($r = 0.261$; C.R. = 5.886; $p < 0.001$). The results indicated that interpersonal

constraints and structural constraints were also positively correlated ($r = 0.268$; C.R. = 6.146; $p < 0.001$) and intrapersonal constraints and structural constraints were similarly positively correlated ($r = 0.183$; C.R. = 4.318; $p < 0.001$). Interpersonal constraints were therefore strongly correlated with both intrapersonal constraints and structural constraints. However, intrapersonal constraints and structural constraints were weakly correlated. The results suggested that the significant correlations between leisure constraints have indirect effects on the difference between the preference for and participation in exhibitions.

Table 4-15. Results of Covariance and Correlation among Leisure Constraints

Hypotheses	Covariance	C.R.*	<i>p</i> -value	Correlation
H _{4a} : Intrapersonal↔Interpersonal	0.26	5.886	<0.001	0.261
H _{4b} : Interpersonal↔Structural	0.27	6.146	<0.001	0.268
H _{4c} : Intrapersonal↔Structural	0.18	4.318	<0.001	0.183

* Critical Ratio

The Results of the Hypotheses of Research Question Two

The results of each of the hypotheses of the research question two are as follows:

Research Question Two:

Is there a correlation among intrapersonal, interpersonal, and structural constraints in the exhibition industry in South Korea?

H_{4a}: There is no correlation between intrapersonal and interpersonal constraints in the South Korean exhibition industry. (Rejected) [$r = 0.261$; C.R. = 5.886; $p < 0.001$]

H_{4b}: There is no correlation between interpersonal and structural constraints in the South Korean exhibition industry. (Rejected) [$r = 0.268$; C.R. = 6.146; $p < 0.001$]

H_{4c}: There is no correlation between intrapersonal and structural constraints in the South Korean exhibition industry. (Rejected) [$r = 0.183$; C.R. = 4.318; $p < 0.001$]

The results of the hypothesized model are presented in Table 4-16 and the structural equation model for explaining exhibition participation and leisure constraints is presented in Figure 4-2. AMOS 7.0 was employed to measure causal relationships between leisure constraints and the exhibitions which are strongly preferred but weakly attended. The results indicated that intrapersonal constraints did not have a direct positive effect on the difference between the preference for and participation in exhibitions (estimated coefficient = 0.03; C.R. = 0.463; $p = 0.644$). In addition, interpersonal constraints did not have a direct positive effect on the difference between the preference for and participation in exhibitions (estimated coefficient = -0.133; C.R. = -1.618; $p = 0.106$). In contrast, structural constraints had a direct positive effect on the

difference between the preference for and participation in exhibitions (estimated coefficient = 0.213; C.R. = 2.976; $p < 0.01$).

Table 4-16. Results of Hypothesized Model

Hypotheses	Estimate	S.E.	C.R.*	<i>p</i> -value	Results
H _{5a} : Intrapersonal → Difference**	0.030	0.066	0.463	0.644	Rejected
H _{5b} : Interpersonal → Difference	-0.133	0.082	-1.618	0.106	Rejected
H _{5c} : Structural → Difference	0.213	0.072	2.976	<0.01	Accepted

* Critical Ratio

** Difference = Preference – Participation

The Results of the Hypotheses of Research Question Three

The results of each of the hypotheses of the research question three are as follows:

Research Question Three:

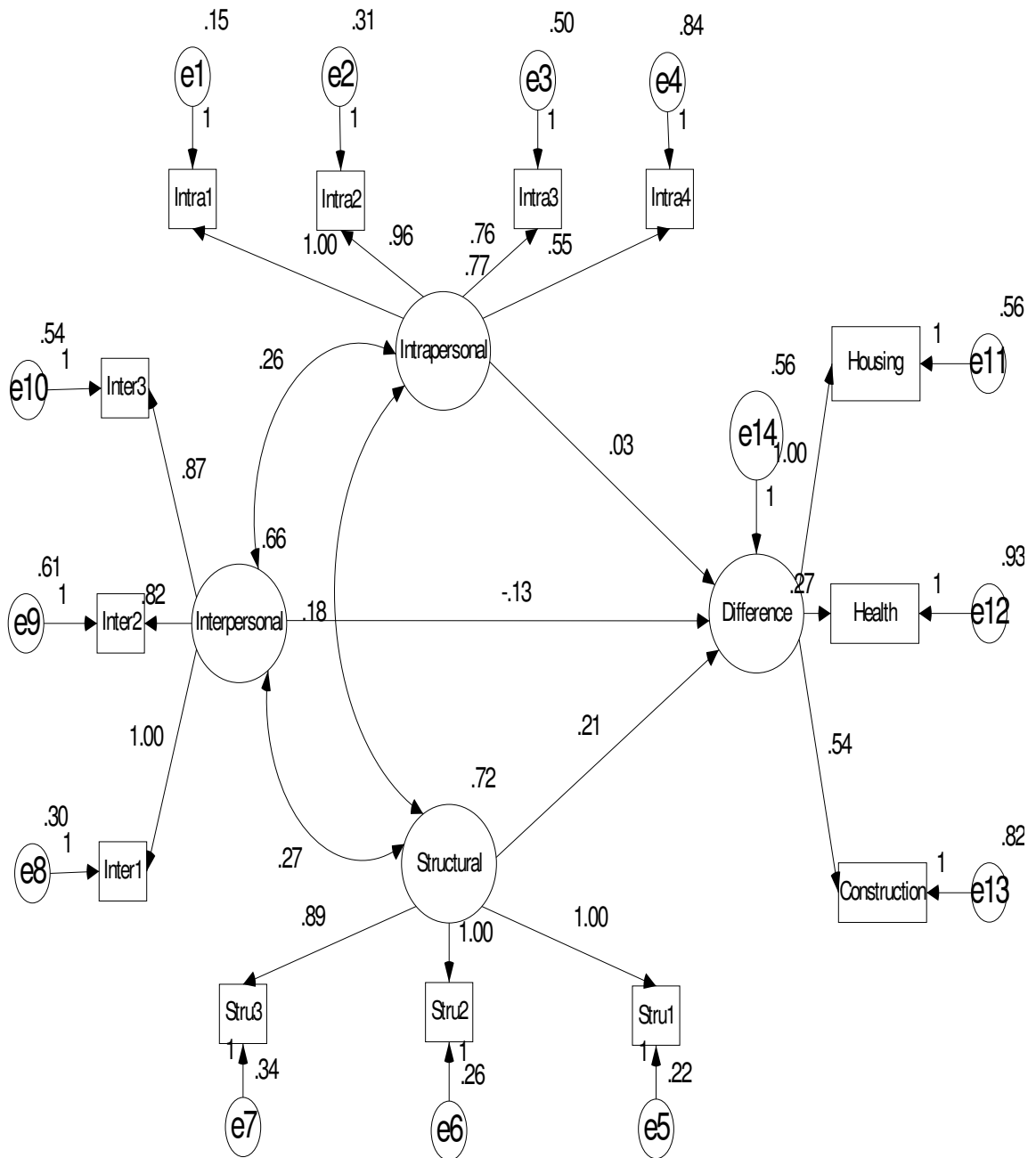
Are there any causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions?

H_{5a}: There is no relationship between the mean for intrapersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Accepted) [estimated coefficient = 0.03; C.R. = 0.463; $p = 0.644$]

H_{5b}: There is no relationship between the mean for interpersonal constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Accepted) [estimated coefficient = -0.133; C.R. = -1.618; $p = 0.106$]

H_{5c}: There is no relationship between the mean for structural constraints and the mean difference between the preference for and participation in exhibitions in South Korea. (Rejected) [estimated coefficient = 0.213; C.R. = 2.976; $p < 0.01$]

Figure 4-2. Structural Equation Model of Leisure Constraints and Differences



CHAPTER V

CONCLUSION

Exhibition centers have been used for various purposes. The primary purpose of exhibition centers has been to use them as a place to encourage business interactions. As the size and scope of exhibition centers is getting larger and more leisure activities are added, not only do business people but also the general public expect to experience a gamut of leisure activities while attending exhibitions. However, some exhibitions are crowded and some exhibitions are less attended, irrespective to their popularity. The author of this study surmised that there were particular exhibitions that were strongly preferred but weakly attended because of various reasons which were intended to be discovered through this study. In order to confirm these reasons for impediment to attending exhibitions, Leisure Constraints Theory was considered to be an appropriate model to use. The theory helped to develop the causality between leisure activity participation and exhibition attendance. Therefore, the objectives of this study were to (1) examine exhibitions which were strongly preferred but weakly attended; (2) verify the significant relationships between leisure constraints which prevent customers from attending exhibitions; and (3) estimate the causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions.

Conclusions from Factor Analysis:

According to the results of the Factor Analysis, specific leisure constraints were identified as being the key factors for causing the unpredictability of the relationship between the preference for and participation in exhibitions. Nineteen leisure constraints explored from the review of literature were examined. To reiterate, exhibition attendees significantly considered four intrapersonal constraints, three interpersonal constraints, and three structural constraints. Intrapersonal constraints were comprised of “no concern”, “no interest”, “not comfortable”, and “lack of information”. Interpersonal constraints were comprised of “lack of companions”, “companion’s lack of time”, and “companions’ lack of economic support”. Structural constraints were comprised of “lack of exciting programs”, “lack of opportunities for special experiences”, and “lack of entertaining facilities”. The conclusions that can be drawn for this stage of the analysis are based on the evaluation of the summary results for each of the demographic characteristics. The conclusions are described in the following paragraph.

Conclusions from Independent Samples *t*-tests and ANOVA:

Effect of Marital Status of Attendees:

- When it comes to interpersonal constraints, only “companion’s lack of economic support” seems to be more significant for married attendees compared to unmarried attendees.

Overall conclusion: Married attendees may have to make a higher financial/economic commitment than unmarried attendees, thereby forcing them to show a higher level of interpersonal constraint. This fact is verified by the above significant result.

Effect of Age of Attendees:

- When considering intrapersonal constraints, the different age showed significantly different constraints as described below:
 - Attendees in the age group 18-24 years perceived significantly less constraint with respect to “not comfortable,” compared to the other age groups.
 - Attendees in the age group 25-34 years perceived significantly less constraint with respect to “lack of information,” compared to the other age groups.
 - Attendees in the age group 35-44 years perceived significantly more constraint with respect to “lack of information,” compared to the other age groups.
- When considering interpersonal constraints, the different age showed significantly different constraints as described below:
 - Attendees over the age of 55 years perceived significantly less constraint with respect to “companion’s lack of time,” compared to the other age groups.
 - Attendees over the age of 35 to 44 years perceived significantly more constraint with respect to “companion’s lack of time,” compared to the other age groups.
 - Attendees in the age group 18-24 years perceived significantly less constraint with respect to “companion’s lack of economic support,” compared to the other age groups.

- Attendees in the age group 45-54 years perceived significantly more constraint with respect to “companion’s lack of economic support,” compared to the other age groups.

Overall conclusion: It is interesting that attendees in the age group 35- 44 years showed the most significant intrapersonal and interpersonal constraints with regards to attending exhibitions. Such behavior may be explained by the expected lack of time and resources available to this busy demographic group that is in the prime of their lives. Such a busy life may not allow them to have enough time to explore all available options for attending exhibitions.

Effect of Education Level of Attendees:

- When considering intrapersonal constraints, the different education levels showed significantly different constraints as described below:
 - Attendees who attended or completed graduate school perceived significantly less constraint with respect to “no concern,” compared to the other educational level groups.
 - Attendees who completed high school perceived significantly more constraint with respect to “no concern,” compared to the other educational level groups.
 - Attendees who attended or completed college or university perceived significantly less constraint with respect to “no interest,” compared to the other educational level groups.

- Attendees who completed high school perceived significantly more constraint with respect to “no interest,” compared to the other educational level groups.

Overall conclusion: Attendees with higher levels of education showed lower levels of intrapersonal constraints with regards to attending exhibitions. This may be true since many other aspects in life are also linked with the education level such as, income, occupation, etc. Therefore, all such other factors may also be confounding the issues and preventing the attendees with lower levels of education from attending exhibitions. Additional research may be needed in this area.

Effect of Place of Residence:

- When considering intrapersonal constraints, the different places of residence showed significantly different constraints as described below:
 - Attendees who lived in Incheon province perceived significantly less constraint with respect to “no concern,” compared to the attendees who lived in other places of residence.
 - Attendees who lived in Chungcheong province perceived significantly more constraint with respect to “no concern,” compared to the attendees who lived in other places of residence.
 - Attendees who lived in Incheon province perceived significantly less constraint with respect to “no interest,” compared to the attendees who lived in other places of residence.

- Attendees who lived in Chungcheong province perceived significantly more constraint with respect to “no interest,” compared to the attendees who lived in other places of residence.
- Attendees who lived in Incheon province perceived significantly less constraint with respect to “not comfortable,” compared to the attendees who lived in other places of residence.
- Attendees who lived in Gyeonggi province perceived significantly more constraint with respect to “not comfortable,” compared to the attendees who lived in other places of residence.

Overall conclusion: It can be concluded that, residents living further away show more intrapersonal constrains for attending exhibitions compared to residents living closer to the exhibition venues.

Conclusions from Preference-Participation Analysis:

Preference-Participation Analysis was used to discover the exhibitions which were strongly preferred but weakly attended. Preference-Participation Analysis was a simple technique to examine the relationship between the attributes’ preferences and the attributes’ participation. There have been two controversial arguments for researchers who used Importance-Performance Analysis because of the asymmetrical relationship between the attribute importance and the attribute performance and the usage between actual means and scale means in order to decide a cross-hair point. The author of this study chose actual means rather than scale means because individuals’ perception toward exhibitions might be difficult to determine by only one reference. Researchers avoid

using scale means because all the attributes examined were usually positioned in the first quadrant of Importance-Performance Analysis. In Preference-Participation Analysis with actual means, exhibitions examined in this study were scattered in the first, second, and third quadrants on the PPA matrix. With the results of the symmetrical relationship between preference and participation and the usage of actual means, the application of Preference-Participation Analysis was not arguable to uncover specific exhibitions which were strongly preferred but weakly attended in this study.

In this study, only exhibitions which were strongly preferred but weakly attended were examined. These exhibitions were located in the second quadrant on the Preference-Participation Analysis matrix. Three exhibitions are the Housing Brand Fair with the theme of housing, the Spa & Aqua Expo with the theme of health, and the Architecture Fair with the theme of construction.

Overall conclusion: The type of exhibition has no effect on their placement on the PPA matrix. Any of the exhibitions may randomly be placed in any of the quadrant of the matrix and therefore no specific standards can be applied. For example, in the current study, two consumer shows (Housing Brand Fair with the theme of housing and Spa & Aqua Expo with the theme of health), and one trade show (Architecture Fair with the theme of construction) were located in the second quadrant.

Conclusions from Structural Equation Modeling:

This study examined the significant correlations between intrapersonal, interpersonal, and structural constraints. Correlations indicated a direction and strength of the relationship. According to the results of Structural Equation Modeling, leisure

constraints were strongly correlated with each other. Specifically, the strength of the relationship between interpersonal constraints and structural constraints was the most, followed by intrapersonal constraints and interpersonal constraints, and intrapersonal constraints and structural constraints, respectively. All the directions of the relationships between leisure constraints were positive. It implies that leisure constraints significant influence with each other in order to magnify the strength of the relationships. It is an important finding because their significant relationships may have indirect negative effects on the difference between the preference for and participation in exhibitions.

In addition, Structural Equation Modeling was used to estimate the causal relationship between leisure constraints and the difference between the preference for and participation in exhibitions. According to the results, the hypothesized research model had a good fit to analyze the causality. Among leisure constraints, only structural constraints had a direct positive effect on the difference between the preference for and participation in three exhibitions. It shows that exhibition attendees demand exciting programs, opportunities for special experiences, and entertaining facilities in attending exhibitions. It also indicates that attendees may attend exhibitions if less structural constraints existed. Structural constraints enlarge the difference between the preference for and participation in exhibitions. Hence, more exhibition attendees may attend their preferred exhibitions if more entertaining facilities, more exciting programs, and more opportunities for special experiences were provided.

IMPLICATIONS

Traditionally, exhibitions have been regarded as a tactical marketing tool and an effective marketing pathway not only to increase business interactions and human activities but also to enhance communication with exhibition attendees. The number of exhibitions has quickly increased worldwide because of these business and social benefits. However, the increasing number of exhibition centers does not guarantee the growth of the exhibition industry.

The following requirements must be met to guarantee the success of the exhibition industry. Exhibition researchers and practitioners should (1) examine the reasons customers attend exhibitions, (2) investigate the most effective ways to equip exhibitions, (3) uncover the best approach to effectively promote exhibitions, (4) explore strategies to increase customer satisfaction in exhibitions, (5) investigate what constraints interrupt and reduce exhibition attendance, (6) discover the alternatives to resolving the constraints, (7) evaluate the whole process of exhibitions as-well-as customer satisfaction. The response to these requirements may be found through identifying, understanding, and analyzing the needs of exhibition attendees.

Some important implications that results from the conclusions of this study are described below.

Conclusion One: Married attendees may have to make a higher financial/economic commitment than unmarried attendees, thereby forcing them to show a higher level of interpersonal constraint.

Implication: This conclusion implies that exhibition marketing also needs to pay attention to the marital status of the potential attendees. There is a difference in how married or unmarried attendees perceive the interpersonal constraints. Therefore, marketing efforts must be made to reduce the perceived interpersonal constraints of married attendees who may bring their families along to the exhibitions. Therefore, family marketing campaigns offering group discounts or free tickets may help exhibition attendees who may lack the economic support from their companions. In addition, group package tour to exhibitions may reduce economic burdens in attending exhibitions.

Conclusion Two: It is interesting that attendees in the age group 35- 44 years showed the most significant intrapersonal and interpersonal constraints with regards to attending exhibitions. Such behavior may be explained by the expected lack of time and resources available to this busy demographic group that is in the prime of their lives. Such a busy life may not allow them to have enough time to explore all available options for attending exhibitions.

Implication: In order to attract this busy demographic group, exhibition promoters must entertain alternate or additional times of operations to make it more viable for them to attend. For example, the age group 35-44 years may not have enough time to attend exhibitions during the regular work hours, however, if the exhibition is open till 10 p.m. or midnight, they may be able to attend and participate in all the leisure activities.

Conclusion Three: Attendees with higher levels of education showed lower levels of intrapersonal constraints with regards to attending exhibitions. This may be true since

many other aspects in life are also linked with the education level such as, income, occupation, etc. Therefore, all such other factors may also be confounding the issues and preventing the attendees with lower levels of education from attending exhibitions.

Implication: This conclusion implies that exhibition marketers should be more prudent and precisely target groups of potential attendees based on their specialized interests which in turn may be dependent on their educational levels. For example, more professional exhibitions should be created to increase the number of attendees who have higher levels of education. In addition, attendees with lower levels of education may be enticed to specific shows by informing them about the utility of such shows since they can enhance the depth of knowledge in their specialized field. Exhibition managers need to strengthen marketing campaigns to encourage attendance.

Conclusion Four: Residents living further away show more intrapersonal constraints for attending exhibitions compared to residents living closer to the exhibition venues.

Implication: The distance of the exhibition center from place of residence is an impediment to attending exhibitions. Exhibition managers need to inform far-distant residents of the benefits which may be gained from attending exhibitions via email or other communication tools. More specific campaigns that target residents from distant areas may need to be conducted. For example, an entrance fee that is based on a “tier-system” hinged on the distance traveled by the attendee might do the trick. Attendees coming from further away may get a deep discount for their effort.

Conclusion Five: The type of exhibition has no effect on their placement on the PPA matrix. Any of the exhibitions may randomly be placed in any of the quadrant of the matrix and therefore no specific standards can be applied. For example, in the current study, two consumer shows (Housing Brand Fair with the theme of housing and Spa & Aqua Expo with the theme of health), and one trade show (Architecture Fair with the theme of construction) were located in the second quadrant.

Implication: This conclusion implies that Preference-Participation Analysis should be a tool used by exhibition marketers only to analyze and develop strategies to move exhibitions from one quadrant to another, if they so wish. However, the matrix should not be considered a tool to classify or categorize a specific type of exhibition into a specific quadrant. Therefore, the exhibition marketers could use the PPA matrix for visualization and analysis of existing operations rather than as a forecasting tool for classifying exhibitions.

Conclusion Six: Among leisure constraints, only structural constraints had a direct positive effect on the difference between the preference for and participation in three exhibitions.

Implication: The conclusion implies that exhibition attendees demand exciting programs, opportunities for special experiences, and entertaining facilities for attending exhibitions. It also implies that attendees may attend exhibitions if less structural constraints existed. Structural constraints enlarge the difference between the preference for and participation in exhibitions. Hence, an increased number of exhibition attendees may attend their

preferred exhibitions if more entertaining facilities, exciting programs, and opportunities for special experiences are provided.

The findings of this study may suggest usable alternatives not only to increase exhibition attendance but also to develop the exhibition industry. In order to increase exhibition attendance, exhibitions should provide more exciting programs, opportunities for special experiences, and entertaining facilities. In addition, exhibitions should be effectively and efficiently promoted because 'lack of information' was one of the serious constraints that reduced exhibition attendance. The findings of this study also give exhibition planners, organizers, managers, and researchers, useful information for discovering strategies in order to reduce the tangible and intangible constraints which prevent customers from attending exhibitions. The study's implications suggest that exhibition marketers must pay more attention to understand the nuances within each of the potential attendee demographic groups and develop more targeted campaigns.

LIMITATIONS

The limitations in this study are mostly related to sampling and data collection methodologies. The data collected for this research was from South Korean consumers attending exhibitions and visiting exhibition centers during a specific and limited time period in 2009. This limits the generalizability of the results obtained. Many cultural and idiosyncratic differences exist between South Korean exhibition attendees and other such attendees in the Western world. South Korean exhibition attendees may be more inclined to attend such events because of the newness of such massive events in the country as a consequence of the booming economy in South Korea. Therefore, South Korean attendees may be more inclined to attend such events than people in the Western world. On another note, South Korean attendees also expect to find entertainment with information while they attend exhibitions whereas such a combination may not necessarily be required in the Western world. Such subtle differences may influence some of the reasons why people attend exhibitions in both the regions.

The fact that the researcher used a convenience sampling methodology may also have biased some of the results. This becomes obvious when comparing the profile of the average South Korean exhibition attendee and the profile of the respondents of this study. The average profile of the exhibition attendees in South Korea includes mostly people between the ages of 25 and 34 while the age group of the majority of respondents to this survey was 18 to 24 years. Similarly, in terms of gender, males attend exhibitions more often than females in South Korea while the majority of the respondents to this

survey were females (57%). Such differences in the respondent profiles may have led to a sampling bias.

The original instrument for this study was developed in English and then translated into Korean for administration in South Korea. However, no independent reverse translation (Korean back to English) was performed to test the accuracy of the semantics across the languages. Therefore some semantic differences may have existed in the final Korean questionnaire that may not have accurately reflected the original intent of the researcher. The language barrier may have also played a minor role in data analysis.

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APPENDICES

APPENDIX A

APPROVAL FORM FOR RESEARCH INVOLVING
HUMAN SUBJECTS (IRB FORM)

Oklahoma State University Institutional Review Board

Date: Friday, June 05, 2009
IRB Application No HE0939
Proposal Title: A Structural Equation Model for Explaining Exhibition Participation and Leisure Constraints

Reviewed and Exempt
Processed as:

Status Recommended by Reviewer(s): Approved Protocol Expires: 6/4/2010

Principal Investigator(s):

Daehui Peter Lee
210 HES
Stillwater, OK 74078

Radesh Palakurthi
210 HES
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sheila Kennison, Chair
Institutional Review Board

APPENDIX B

QUESTIONNAIRE

SURVEY QUESTIONNAIRE

Spring 2009

Dear Survey Participant:

Our research team in the School of Hotel and Restaurant Administration (HRAD) at Oklahoma State University is currently conducting a survey experiment *A Structural Equation Model for Explaining Exhibition Participation and Leisure Constraints*.

The purpose of this study is to demonstrate a structural model that explains the causal relationships between exhibition participation and leisure constraints and to investigate tangible and intangible constraints which prevent customers to participate in exhibitions.

We are requesting that you take 10 minutes to fill out the questionnaire. The specific information collected for this study will be reported as aggregate data. There will be no association between the specific data collected and individuals. The results of this survey will not be linked to your name in any way. The researchers will not have any record of which participants completed the survey and which did not. This ensures confidentiality. Participation is completely voluntary, and can be discontinued at any time. There are no penalties for not participating.

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

There are no known risks associated with this research study which are greater than those ordinarily encountered in daily life. The study is strictly on a voluntary basis and you may decline to participate. Are you willing to participate in this research study?

Yes _____ I am willing to participate in this study.
No _____ I am not willing to participate in this study.

If you have any questions, please do not hesitate to contact me at peter.lee@okstate.edu.

Thank you very much and God bless you.

Sincerely

Daehui Peter Lee
Ph. D. Candidate
The School of Hotel & Restaurant Administration
Oklahoma State University, U.S.A.

(Part 1) Exhibition Preference and Participation

Please select the number that best describes the extent of your intention with each of the following statements regarding exhibition preference and participation.

How likely are you to prefer and participate in exhibitions below?

1-Not very likely to prefer & not very likely to participate 2-Not likely to prefer & not likely to participate 3-Neutral
4-Strongly to prefer & likely to participate 5-Very Strongly to prefer & very likely to participate

Preference and Participation		Preference					Participation				
Theme	Type of Exhibitions	1	2	3	4	5	1	2	3	4	5
Science Technology	Electronic Fair, Invention Fair	1	2	3	4	5	1	2	3	4	5
Information	IT Show, Motion Control Fair	1	2	3	4	5	1	2	3	4	5
Experience	Kids English Experience Fair	1	2	3	4	5	1	2	3	4	5
Economy	Franchise Show	1	2	3	4	5	1	2	3	4	5
Entertainment	International Music Instruments Fair	1	2	3	4	5	1	2	3	4	5
Recreation	Leisure Industry Show	1	2	3	4	5	1	2	3	4	5
Education	Book Fair, Education Fair, Kids Fair	1	2	3	4	5	1	2	3	4	5
Culture	Inter Culture Fair, World Doll Fair	1	2	3	4	5	1	2	3	4	5
Housing	Housing Brand Fair	1	2	3	4	5	1	2	3	4	5
Performance	Les Dix Commandments Musical	1	2	3	4	5	1	2	3	4	5
Manufacturing	Motor Show, Motorcycle Show	1	2	3	4	5	1	2	3	4	5
Finance	Emigration & Investment Fair	1	2	3	4	5	1	2	3	4	5
Art	Art Fair, Budding Artists Dream	1	2	3	4	5	1	2	3	4	5
Health	Spa & Aqua Expo	1	2	3	4	5	1	2	3	4	5
Festivals	Music Festivals	1	2	3	4	5	1	2	3	4	5
Fibers	International Textile Fair	1	2	3	4	5	1	2	3	4	5
Fashion	Wedding Fair	1	2	3	4	5	1	2	3	4	5
Construction	Architecture Fair	1	2	3	4	5	1	2	3	4	5
Environment	Environmental Tech Fair	1	2	3	4	5	1	2	3	4	5
Tourism	World Travel Fair	1	2	3	4	5	1	2	3	4	5
Sports	Sports Expo	1	2	3	4	5	1	2	3	4	5
Medicine	Medical Dental Expo	1	2	3	4	5	1	2	3	4	5
Food	Seafood Show	1	2	3	4	5	1	2	3	4	5

(Part 2) Leisure Constraints

Please select the number that best describes the extent of your agreement with each of the following statements regarding leisure constraints.

How would you rate the participation constraints on the following items?

1-Strongly Disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly Agree

Constraints	Constraints Items	SD	D	N	A	SA
Intrapersonal Constraints	I am not interested in exhibitions.	1	2	3	4	5
	I don't concern myself with exhibitions.	1	2	3	4	5
	I am not comfortable participating in exhibitions.	1	2	3	4	5
	I am too tired to participate in exhibitions.	1	2	3	4	5
	I don't have enough information about exhibitions.	1	2	3	4	5
	I don't know whether exhibitions are held or not.	1	2	3	4	5
Interpersonal Constraints	My companion is not interested in exhibitions.	1	2	3	4	5
	There is a lack of companions to go to exhibitions together	1	2	3	4	5
	My companions don't have time to go exhibitions.	1	2	3	4	5
	My companions have a lack of economic support.	1	2	3	4	5
Structural Constraints	There is lack of time to participate	1	2	3	4	5
	There is other important work to do.	1	2	3	4	5
	It is difficult to go to an exhibition center because of poor transportation service.	1	2	3	4	5
	I feel a burden of traffic expenses to attend exhibition centers	1	2	3	4	5
	I feel a burden of an admission fee.	1	2	3	4	5
	There is lack of exciting programs in exhibitions.	1	2	3	4	5
	There is lack of opportunities for special experience.	1	2	3	4	5
	There is lack of entertaining facilities in exhibitions.	1	2	3	4	5
I can't go to exhibitions because of bad weather conditions.	1	2	3	4	5	

(Part 3) Demographic Profiles

1. Your gender Male _____ Female _____

2. Your age 1) 1) 18~24 2) 25~34 3) 35~44 4) 45~54 5) over 55

3. Marital status Yes _____ No _____

4. What is your highest level of education?
 - 1) Completed High School
 - 2) Attended or Completed College or University
 - 3) Attended or Completed Graduate School

5. What is your occupation?
 - 1) company employee 2) business people 3) public service employee
 - 4) professional 5) housewife 6) engineer 7) student 8) sales or service jobs
 - 9) manufacturing or engineering 10) others

6. Which of the following best describes your total household income per year?
 - 1) Under \$20,000
 - 2) \$20,000 ~ \$39,999
 - 3) \$40,000 ~ \$59,999
 - 4) \$60,000 ~ \$79,999
 - 5) \$80,000 or above

7. Where do you live?
 - 1) Seoul 2) Gyeonggi 3) Incheon 4) Chungcheong

Thank you so much for your cooperation.

God bless you!

설문 조사

안녕하십니까?

저는 오클라호마 주립대학교 호텔경영학을 전공으로 박사과정에 재학 중이며,

‘구조방정식을 통한 전시회 참여와 여가제약 관계 분석’이라는 주제로 연구 및 조사를

진행하고 있습니다. 귀하의 응답은 전시회 발전을 위해 귀중한 자료로 활용될 것이며 모든

질문들에 진지하고 솔직하게 응답해 주시면 감사하겠습니다.

본 조사에 대한 귀하의 응답은 익명으로 처리될 것이며, 학문적 목적 이외에는 절대로

이용되지 않을 것임을 약속 드립니다.

설문에 응해 주셔서 감사드리며, 귀하의 가정에 하나님의 축복이 충만하기를 기도합니다.

귀하는 본 연구의 응답에 참여하시겠습니까?

참여하시길 원하시면 ‘예’에 표기해 주시고 다음 질문들에 답변을 해 주십시오. 예 ()

참여하시길 원하지 않으시면 ‘아니오’에 표기해 주시고 더 이상 답변을 하지 말아주십시오.

아니오 ()

이 대 휘 (Daehui Peter Lee)

대학원 연구 조교

박사과정

호텔경영학과

오클라호마 주립 대학교

스틸워터. 오클라호마. 미국. 74078

(Part 1) 전시회 선호도 및 참여도에 관한 측정 문항

귀하는 다음 전시회들에 관해 얼마나 선호하시고 또한 참여할 의사를 가지고 있습니까? 귀하의 선호도와 참여의사를 아래의 측정 항목에 표기하여 주십시오.

- 1 - 전혀 선호하지도 전혀 참여할 의사도 없다, 2 - 선호하지도 참여할 의사도 없다, 3 - 보통이다,
4 - 선호하며 참여의사를 가지고 있다, 5 - 매우 선호하며 매우 높은 참여의사를 가지고 있다

전시회의 주제 및 종류		선호도					참여도				
주제	전시회의 종류	1	2	3	4	5	1	2	3	4	5
과학기술	전자전시회, 발명전시회	1	2	3	4	5	1	2	3	4	5
정보	IT 정보기술박람회	1	2	3	4	5	1	2	3	4	5
체험	어린이영어체험박람회	1	2	3	4	5	1	2	3	4	5
경제	프랜차이즈 쇼	1	2	3	4	5	1	2	3	4	5
오락	국제악기전시회	1	2	3	4	5	1	2	3	4	5
레크레이션	여가산업전시회	1	2	3	4	5	1	2	3	4	5
교육	세계책박람회, 교육박람회	1	2	3	4	5	1	2	3	4	5
문화	세계문화유산박람회	1	2	3	4	5	1	2	3	4	5
주거	주택브랜드박람회	1	2	3	4	5	1	2	3	4	5
공연	뮤지컬십계, 세계인형전시회	1	2	3	4	5	1	2	3	4	5
제조업	자동차전시회, 오토바이전시회	1	2	3	4	5	1	2	3	4	5
재정 및 금융	이민박람회, 투자박람회	1	2	3	4	5	1	2	3	4	5
예술	세계예술박람회	1	2	3	4	5	1	2	3	4	5
건강	스파사우나 해양엑스포	1	2	3	4	5	1	2	3	4	5
축제	뮤직페스티벌	1	2	3	4	5	1	2	3	4	5
섬유	세계모직및섬유산업전시회	1	2	3	4	5	1	2	3	4	5
패션	결혼박람회	1	2	3	4	5	1	2	3	4	5
건축	건축박람회	1	2	3	4	5	1	2	3	4	5
생태 및 환경	환경보전기술박람회	1	2	3	4	5	1	2	3	4	5
관광	세계여행박람회, 여행엑스포	1	2	3	4	5	1	2	3	4	5
스포츠	레저스포츠쇼	1	2	3	4	5	1	2	3	4	5
의학	의료엑스포	1	2	3	4	5	1	2	3	4	5
음식	세계음식박람회, 해산 식품박람회	1	2	3	4	5	1	2	3	4	5

(Part 2) 참여제약요소에 관한 측정 문항

귀하는 전시회 참여에 있어서 다음의 제약 요소들에 관해 어떻게 생각하십니까?

- 1 - 매우 동의하지 않는다, 2 - 동의하지 않는다, 3 - 보통이다,
4 - 동의한다, 5 - 매우 동의한다

참여제약 측정 문항		1	2	3	4	5
내재적제약	나는 전시회에 흥미가 없다.	1	2	3	4	5
	나는 전시회에 관심이 없다.	1	2	3	4	5
	나는 전시회에 참여하는 것에 불편함을 느낀다.	1	2	3	4	5
	나는 전시회에 참여하기에는 피곤(피로)하다.	1	2	3	4	5
	나는 전시회에 관한 충분한 정보를 가지고 있지 않다.	1	2	3	4	5
	나는 전시회의 개최여부에 관해 전혀 알지 못한다.	1	2	3	4	5
대인적제약	내 주변 사람들은 전시회에 관심이 없다.	1	2	3	4	5
	내 주변에는 전시회에 함께 갈 수 있는 사람들이 부족하다.	1	2	3	4	5
	내 주변 사람들은 전시회에 참여할 시간이 없다.	1	2	3	4	5
	내 주변 사람들은 전시회에 참여할 수 있는 재정적 여유가 부족하다.	1	2	3	4	5
구조적제약	전시회에 참여할 시간이 부족하다.	1	2	3	4	5
	다른 중요한 일들 때문에 전시회에 참여할 수 없다.	1	2	3	4	5
	전시회 행사장까지의 교통이 불편하다.	1	2	3	4	5
	전시회 참여에 있어서 교통비용이 부담스럽다.	1	2	3	4	5
	전시회 입장료가 부담스럽다.	1	2	3	4	5
	전시회에는 흥미로운 프로그램들이 부족하다.	1	2	3	4	5
	전시회에는 특별한 체험을 할 수 있는 기회들이 부족하다.	1	2	3	4	5
	전시회에는 흥미있는 시설물들이 부족하다.	1	2	3	4	5
나는 날씨때문에 전시회에 참여하지 못한다.	1	2	3	4	5	

(Part 3) 다음은 귀하의 일반적 사항에 대한 질문입니다.

1. 귀하의 성별은? 1) 남 2) 여
2. 귀하의 연령은? 1) 18~24 2) 25~34 3) 35~44 4) 45~54 5) 55 이상
3. 귀하는 결혼을 하셨습니까? 1) 예 2) 아니오
4. 귀하의 최종 학력은?
 - 1) 고등학교 졸업 2) 대학 재학 및 졸업 3) 대학원 재학 및 졸업
5. 귀하의 직업은?
 - 1) 회사원
 - 2) 사업가 (자영업)
 - 3) 공무원
 - 4) 전문직
 - 5) 가정주부
 - 6) 기술자
 - 7) 학생
 - 8) 판매 및 서비스업
 - 9) 제조업
 - 10) 기타
6. 가족 전체의 평균 연소득은 어떻게 되십니까?
 - 1) 2,000 만원 이하
 - 2) 2,000 만원 ~ 3,999 만원
 - 3) 4,000 만원 ~ 5,999 만원
 - 4) 6,000 만원 ~ 7,999 만원
 - 5) 8,000 만원 이상
7. 귀하의 현재 거주지는 어디입니까?
 - 1) 서울 2) 경기 3) 인천 4) 충청

질문에 성의껏 응답해주셔서 진심으로 감사드립니다.

귀하의 가정에 하나님의 축복이 넘치기를 기원합니다.

VITA

Daehui Peter Lee

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE INFLUENCE OF LEISURE CONSTRAINTS ON PREFERENCE FOR AND PARTICIPATION IN EXHIBITIONS IN SOUTH KOREA

Major Field: Human Environmental Sciences

Biographical:

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Name: Daehui Peter Lee

Date of Degree: May, 2010

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE INFLUENCE OF LEISURE CONSTRAINTS ON PREFERENCE FOR AND PARTICIPATION IN EXHIBITIONS IN SOUTH KOREA

Pages in Study: 154

Candidate for the Degree of Doctor of Philosophy

Major Field: Human Environmental Science

Scope and Method of Study: The purpose of this study was to (1) examine exhibitions which were strongly preferred but weakly attended; (2) verify the significant relationships between leisure constraints which prevent customers from attending exhibitions; and (3) estimate the causal relationships between leisure constraints and the difference between the preference for and participation in exhibitions. This study involved cross-sectional descriptive and causal research designs. Among non-probability sampling procedures, a convenience sampling method was employed to collect the data for this study. A total of 419 useful responses were collected. A total of 19 intrapersonal, interpersonal, and structural constraints were reduced to 10 key leisure constraints for further analysis.

Findings and Conclusions: The results of this study indicated that leisure constraints were significantly different in marital status, age, education, and place of residence. Specifically, structural constraints affected exhibition attendance more than intrapersonal constraints and interpersonal constraints. The combination of leisure constraints may magnify negative effects to reduce exhibition attendance. Furthermore, the significant relationships between leisure constraints have an indirect effect on the difference between the preference for and participation in exhibitions. Based on Preference-Participation Analysis, three exhibitions were strongly preferred but weakly attended: the Housing Brand Fair with the theme of housing, the Spa & Aqua Expo with the theme of health, and the Architecture Fair with the theme of construction. Lastly, Structural Equation Modeling (SEM) was conducted in order to estimate any causal relationship. The results indicated that only structural constraints have a direct positive effect on the difference between the preference for and participation in those exhibitions. This implies that structural constraints significantly prevent existing and potential exhibition attendees from attending exhibitions. Thus, structural constraints enlarge the difference between the preference for and participation in exhibitions. It implies that higher levels of structural constraints generate more gaps between the preference for and participation in exhibitions. Hence, an increased number of exhibition attendees may attend their preferred exhibitions if more entertaining facilities, exciting programs, and opportunities for special experiences are provided.

ADVISER'S APPROVAL: Dr. Radesh Palakurthi