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EXPLORING HOUSING SATISFACTION AND ADJUSTMENT  
PROCESSES OF CROSS-CULTURAL SOJOURNERS:  
THE CASE OF KOREAN SOJOURNERS IN THE UNITED  
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presented by

EUNSIL LEE

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EXPLORING HOUSING SATISFACTION AND ADJUSTMENT PROCESSES  
OF CROSS-CULTURAL SOJOURNERS:  
THE CASE OF KOREAN SOJOURNERS IN THE UNITED STATES

By

Eunsil Lee

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Human Environment: Design and Management

2008



## **ABSTRACT**

### **EXPLORING HOUSING SATISFACTION AND ADJUSTMENT PROCESSES OF CROSS-CULTURAL SOJOURNERS: THE CASE OF KOREAN SOJOURNERS IN THE UNITED STATES**

By

EUNSIL LEE

This study investigated factors influencing the housing satisfaction of Korean sojourners and their housing adjustment processes in the context of cross-cultural temporary residence.

This study used a mixed method design, combining quantitative and qualitative methodologies. Data sources included questionnaires and interviews. Two hundred and thirty-five questionnaires comprising both a paper version and an online version of the survey were analyzed using regression analysis and path analysis. Twenty-seven case-study participants were selected from respondents to the survey. The case studies involved analyses of interview data.

Factors influencing housing satisfaction of Korean sojourners were investigated by testing a conceptual framework based on actual-aspirational gap theory of residential satisfaction (Marans and Spreckelmeyer, 1981) and Morris' and Winter's model of housing adjustment (1978). Findings from quantitative analyses revealed that sojourner characteristics, housing deficits, and housing perceptions were important determinants of sojourners' housing satisfaction. Housing condition and past sojourning experience significantly influenced sojourners' housing satisfaction both directly and indirectly through housing perceptions. Housing perceptions acted as more important mediators on housing satisfaction of sojourners than did housing deficits. Results suggested that

sojourners' housing satisfaction is better explained by Marans and Spreckelmeyer's model (1981) than by Morris' and Winter's model (1978). Cultural factors were found to influence housing satisfaction indirectly yet significantly through perceptions of physical attributes, perceptions of neighborhoods, and attachment.

The case study investigated sojourners' housing adjustment processes and delivered several important findings. Four representative cases of sojourner groups were categorized based on two main constraints of sojourners: their planned total time of sojourning and length of residence in the U.S. By most sojourners, surrounding natural environment and built-in storage were perceived as satisfactory, while carpeted floors, interior lighting, noise and outdated structures were perceived as unsatisfactory. Overall, newcomers showed more need for cultural amenities while long-term sojourners were more concerned with better physical quality. Four types of housing adjustments of sojourners were identified: (1) change behaviors, (2) modify housing attributes, (3) endure inconveniences, and (4) move out.

This study suggests the importance of providing culturally-responsive housing designs for sojourner populations which are growing quickly in the United States.

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This dissertation is dedicated to  
my family for their unconditional love and support  
and to God for Making all this possible.

## ACKNOWLEDGMENTS

Successful completion of my long doctoral journey was rendered possible by considerable support from many. In this space, I express to them my sincere appreciation.

First, I express gratitude to members of my dissertation committee for their constant encouragement, guidance, expertise and time. From my dissertation committee chair, Dr. Nam-Kyu Park, I received invaluable support. She always allocated priority to my success in the doctoral program, offering endless encouragement. Thank you for her patience, expertise and insightful feedback, and for being so readily available to respond to my needs. She has been a true mentor, in every sense of that word.

My sincere thanks, also, to Professor Roberta Kilty, a true “teacher” to me from my undergraduate years, and remarkably supportive in multiple ways throughout my doctoral program. Equally, I am indebted to committee members Drs. Tariq Abdelhamid and John Schweitzer for their guidance and instruction regarding my conceptual and methodological approaches, for their insights into my study, and for their precise comments and suggestions.

To my Michigan State University colleagues and friends, unfailingly excellent advisors and friends all, my many thanks. Especially, I thank Dr. Jounghwa Choi for her help in statistical analysis. My friends in the prayers meeting, “Sisters of Lydia” have my appreciation for their love, supplications, and sharing of my moments of sorrow and happiness; they include Miran Kim, Kumhee Yang, Jee Young Bang, Jeonghee Noh, Jin Young Choi, Yoo-mi Chin, Sunhee Moon, Sang Eun Lee, Jung Eun Lee, Hyunjoo Ha, Myung Sun Huh, Han Sook Choi, Jaemin Cha, Heejung Hong, and Christina Dokter. For

my doctoral years they have been my family, helping me overcome setbacks. I am especially grateful to Miran Kim for her smiles, prayers and collegiality. Additionally, I thank those Korean students, visiting scholars, and their families who responded to my survey and participated in the case studies. Without them, this study could not have been possible.

My doctoral study could not have been completed without support and love from my family. I express deep gratitude to my husband, Hyungchan Kim, who sacrificed endlessly for my graduate study, and to my precious daughter, Ayoung Kim, for her love and endurance all these years. Also I am greatly indebted to my mother-in-law, Eunjae Kim, for her support and patience. Special thanks to my parents HakHyun Lee and Hwaja Cho for their unconditional love and support. My sisters, sisters-in-law, brother, brothers-in-law, and my nephews deserve similar, special thanks.

Most important, my highest thanks to God Who Blessed me with these amazing people and Made all this possible. Thank You, Lord.

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# **CHAPTER I**

## **INTRODUCTION**

During the last two decades or so, the United States has experienced a significant growth in the number of temporary international visitors traveling, studying, or working abroad. According to the *2004 Yearbook of Immigration Statistics* (U.S. Department of Homeland Security, 2006), there has been a steady increase in non-immigrants admitted to the United States, from 16.1 million in 1989 to 30.8 million in 2004. Not only has the number of tourists and short-term visitors increased considerably, but also long-term visitors - temporary workers, intra-company transferees, exchange visitors, students and their families - have increased significantly in the same period. And the number of temporary visitors to the United States is expected to continue to increase (U.S. Department of Commerce, 2007).

A temporary visitor to another country is referred to as a sojourner; this term generally includes tourists, students, diplomats, business persons, or others visiting and/or living in a foreign country for a short while (Kennedy, 1994). One of the most important issues for these cross-cultural sojourners is adjusting their thinking and behaviors to fit the new environment. The term “culture shock” refers to sojourners’ behavioral, emotional, mental, and physical responses to the unfamiliar (Rhinesmith, 1985). Sojourners’ adaptations to the host culture, acculturation, is the focus of various studies from several areas as the number of sojourners has grown (Adelman, 1988; Aycan, 1997; Berry, Kim, Power, Young, & Bujaki, 1989; Berry, 1997; Ward, 1996; Zheng & Berry, 1991). For example, according to Wagner and Hollenback (1995), 16% to 40% of U.S. personnel who go abroad return home prematurely because they are unable to adapt to

foreign surroundings, and the costs of this failure to adjust to new environments are critical. Well-adjusted sojourners are more effective in their new jobs, with less stress and better cultural integration (Aycan, 1997).

To pursue subsequent needs for social relationships, self-esteem, and personal development, sojourners' fundamental needs, such as food and housing, for physical well-being should be met effectively (Maslow, 1943). Satisfactory housing, especially, is an important contributor to general well-being (Andrews & Withey, 1976), yet in the area of housing, although housing studies about immigrants have increased, there is a marked absence of knowledge about the housing adjustment of sojourner populations.

According to Jun et al. (1993), preferences for permanent or temporary residency significantly influence cultural identification. Those wishing to continue to stay in the host society tend to identify more with the host culture, while those who view their stays as temporary identify more with their cultures of origin. It is necessary to study the housing adjustments of sojourner populations because such adjustments may differ from those of immigrants. To fill this research gap, the present study examines how sojourners adjust to the housing environment of their host countries, with particular reference to Korean sojourners temporarily resident in the U.S. While the population of such Korean sojourners is relatively small, it is one of the fastest growing ethnic populations.

According to the U.S. Department of Commerce (2007), Korea is the seventh-largest trading partner of the U.S., and, during the 2006 calendar year, about 758,000 Korean visitors came to the U.S. for tourism and business travel, representing the fifth-largest national group. In addition, Korean students account for the largest number of international students enrolled in U.S. universities (U.S. Immigration and Customs

Enforcement, 2006). There were some 94,000 Korean Students in USA in 2006 (14.9% of all international students), plus their dependents accompanying the students to America. Furthermore, since the number of Korean sojourners is expected to increase significantly if Korea becomes a participant in the Visa Waiver Program (VWP) in the near future (U.S.-Korea VWP Coalition, 2006), Korean sojourners' housing demand is also likely to increase accordingly.

### **The Purpose of this Study**

Given the increasing number and diversity of sojourner populations and limited housing research concerning sojourner populations, this study's main purpose is two-fold: (1) to identify factors influencing Korean sojourners' housing satisfaction, by developing and testing a conceptual model based on previous housing studies and (2) to investigate, in depth, Korean sojourners' housing adjustment processes.

First, considering that sojourners' adjustment in the host country is measured by their satisfaction levels (Lysgaard, 1995; Berry & Kim, 1988), one of this study's main purposes is to investigate factors influencing such housing satisfaction of sojourners. By examining determinants of that housing satisfaction, this study aims to identify how sojourners adapt to their housing environments and what factors are the main constraints or facilitators in their housing adjustment processes. While there have been various studies about the housing satisfaction of a variety of populations, the housing satisfaction of sojourner populations had not yet been studied effectively. Thus, this study develops and tests a conceptual model for sojourners' housing satisfaction, drawn from the (1) actual-aspirational gap theory of residential satisfaction (Campbell et al., 1976;

Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985) and (2) Morris' and Winter's model of housing adjustment (1978).

Second, based on the notion that a house is not merely a structure but also a cultural phenomenon best suited to the way of life of a people (Rapoport, 1969), this study's purpose is to understand the comprehensive processes of sojourners' housing adjustment. This study aims at elaborating how Korean sojourners choose, perceive, and adjust to the housing environment in the context of the cultural adjustment process.

The specific research objectives in examining factors influencing the housing satisfaction of sojourners are:

1. To investigate how sojourner characteristics (i.e., demographic characteristics, sojourning characteristics, and housing characteristics) influence housing deficits.
2. To investigate how sojourner characteristics (i.e., demographic characteristics, sojourning characteristics, and housing characteristics) influence housing perceptions.
3. To investigate how sojourner characteristics (i.e., demographic characteristics, sojourning characteristics, and housing characteristics), housing deficits, and housing perceptions influence housing satisfaction.

The specific research objectives in exploring the housing adjustment processes of sojourners are:

1. To examine main constraints in housing adjustment processes of Korean sojourners.



2. To examine how Korean sojourners choose their first and/or current housing in the U.S. and what housing features are perceived to be important when they choose it.
3. To examine how Korean sojourners feel about their housing environment and with which housing features Korean sojourners are satisfied or dissatisfied.
4. To examine what adjustments have been made to their housing and to what cultural attributes Korean sojourners feel it is easier or more difficult to adapt to.

### **Significance of the Study**

Theoretically, this study is to develop and test a model of the housing satisfaction of sojourners which is drawn from (1) actual-aspirational gap theory of residential satisfaction (Campbell et al., 1976; Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985) and (2) Morris' and Winter's model of housing adjustment (1978). By developing an appropriate model for the housing satisfaction of sojourners, the present study attempts to contribute to the body of knowledge of cultural housing studies. In addition, this study can contribute to research in cross-cultural adjustment by exploring how the phases of sojourners' cultural adjustment (Oberg, 1960; Rhinesmith, 1985; Winkelman, 1994) explain housing adjustment processes of Korean sojourners.

Practically, by investigating determinants of the housing satisfaction of sojourners and the overall process of housing adjustment in host countries, the present study

attempts to provide housing practitioners and policy makers with a knowledge base to understand housing problems related to specific cultural sojourner groups in the U.S. The findings are anticipated to help develop more culturally-responsive housing environments for not only Korean sojourners but also for other subculture groups. Furthermore, this study is expected to contribute to the development of specific housing policies related to the variability of housing design. Finally, for Korean sojourners themselves, the findings of this study will help understanding of, preparing for, and better adapting to, both cultural- and functional differences in USA housing environments.

### **Overview of the Following Chapters**

From this point, this dissertation is organized thus:

Chapter II, the literature review, comprises two main parts. The first describes the background of cross-cultural housing adjustment, including general phases of cultural adjustment, cultural factors in housing, and cross-cultural housing adjustment of Koreans. The second explains the theoretical background and conceptual framework. The conceptual model of this study is presented along with research questions.

Chapter III describes research method details. First, the rationale for choosing a mixed method is given. Then, a description of population and sample, pilot study, instrument, and data collection procedure for survey is provided. Next, participants and data collection procedure for the case study are described. Finally, specific data analyses for the survey and case study are discussed.

Chapter IV reports findings on factors influencing the housing satisfaction of sojourners. First, the results of descriptive statistics, the reliability test, and the correlation

are provided. Then findings from regression analysis and path analysis, employed to examine the influences of three groups of factors (i.e., sojourner characteristics, housing deficits, and housing perceptions) on the housing satisfaction of sojourners is reported.

Chapter V presents an analysis of the case study to describe how Korean sojourners adjusted to their housing environments in the U.S. The chapter opens with four representative Cases of sojourners. Then, the chapter provides findings about how Korean sojourners chose, perceived, and adjusted to their housing environments.

Chapter VI discusses the findings of the study and its theoretical and practical implications. Then limitations of the study and recommendations for future studies are presented.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter comprises two sections providing background for this study. In the first, the background of cross-cultural housing adjustment is discussed. In the second, the theoretical background for this study is discussed. Previous models of housing satisfaction are reviewed, and the conceptual framework for the present study is presented.

#### **Background of Cross-Cultural Housing Adjustment**

##### ***General Phases of Cultural Adjustment***

Cross-cultural psychologists refer to temporary visitors to another country as “cultural sojourners, who go abroad voluntarily, spending a moderate length of time (six month to five years), with intention of returning home, and with more specific and goal-oriented motives” (Furnham & Bochner, 1987). When sojourners experience cultural differences in foreign countries, they can feel loss of their own cultural surroundings and suffer from facing new environments (Byrnes, 1966; Oberg, 1960; Rhinesmith, 1985, Winkelman, 1994). These reactions to the unfamiliar are called “culture shock” by cross-cultural researchers (Rhinesmith, 1985).

Although culture shock generally is linked to negative psychological indicators, if it is handled appropriately, sojourners can recover and adapt to new cultural circumstances and feel at home (Oberg, 1960). Several researchers have considered culture shock to be not a singular phenomenon but a sequence of different stages of cultural adjustment ranging from four (Ferraro, 1990; Kohls, 1984; Oberg, 1960; Preston,

1985) or five (Adler, 1975) to eight phases (Rhinesmith, 1985). For example, Oberg (1960) first suggested that the four stages of cultural adjustment of international sojourners consisted of (1) “the honeymoon stage,” where sojourners are excited about being in a new place, (2) “the crisis stage,” where sojourners face cultural differences leading to culture shock, (3) “the recovery stage,” where sojourners gradually discover how to function better in their new cultures, and (4) “the adjustment stage,” where sojourners are comfortable and function successfully in the new culture. Cross-cultural adaptation, or acculturation, also refers to this process of fitting in to a new culture and adapting comfortably new environments (Kim & Gudykunst, 1988).

When researchers explored the relationship between sojourners’ satisfaction levels and the time spent in the new environment, a sequential “u-curve” pattern is perceived (Lysgaard, 1955; Berry & Kim, 1988). In his cross-sectional study of 200 Norwegians who previously had studied in the U.S. for 0-6 months, 6-18 months, or more than 18 months, Lysgaard (1955) described this curvilinear function and referred to it as the u-curve phenomenon. Also, Berry and Kim (1988) noted a pattern of a “u-curve” in terms of satisfaction level in the acculturation process, as the conflict stage creates the highest level of dissatisfaction.

The u-curve pattern of adjustment has not always been supported by empirical research, however. For example, Church (1982) found evidence for the u-curve “weak, inconclusive, and overgeneralized.” A longitudinal study of Japanese students in New Zealand examined this issue (Ward et al., 1998) and clearly showed that, in contrast to the u-curve of adjustment, adjustment problems were greatest at the entry point and decreased over time.

### ***Cultural Factors in Housing Environments***

According to Rapoport (1969), the primary determinant of physical environment is not physical factors - climate, need for shelter, materials, socioeconomics, defense, and religion, but cultural factors, which are modified by the above physical factors. The cultural “template” shapes both physical environments and lifestyles (Rapoport, 1977). As much as lifestyles, or activity systems, vary from one culture to another, so does housing as a system of physical settings within which certain activities occur from one culture to another (Rapoport 1980).

There has been increasing number of studies about the relationship between culture and physical environment. One of the first systematic studies was conducted by Hall (1966) who in his *The Hidden Dimension* suggested that individuals from different cultural backgrounds vary in their spatial behaviors because of different cultural norms influencing the use of space within diverse societies. He found cross-cultural differences and similarities in spatial usage among European and non-European (e.g., Arab and Japanese) cultures. Canter and Canter (1971) also found use of rooms in houses is diverse in different countries. For example, in most far-eastern countries (e.g., Japan, China, and Korea), more flexible use of rooms was developed, unlike the American tradition. Lawrence (1982) strongly argued that socio-cultural attributes of a society are more influential than architectural design in explaining the difference in the use and meaning of kitchens.

Studies have also found that culturally-responsive housing is likelier to meet psychological and physical housing needs than is technically or physically sound housing. For example, Brascugli (1982) found that traditionally-built houses of Gilla

River Indians have a higher satisfaction rating for them than more expensive standard housing. Studies about the housing adjustment of Korean immigrants have shown that socio-cultural attributes are important factors in creating satisfactory housing environments (Lee, 1982; Lee, 1998; Song, 1990). Therefore, it is expected that sojourners' housing adjustments and housing satisfactions can be much better understood in a cultural context as well as in a physical context.

### ***Cross-Cultural Adjustment in Housing***

For sojourners, re-shaping the nature of space is one of the challenges of the new country. A study of a migrant settlement on a Greek island (Noussia, 2003) suggested that migrants' cultural attitudes are culturally translocated in an attempt to replicate aspects of their housing culture in their home country, or that there is a cultural transformation via which cultural practices in the host country are adopted and often modified.

Similarly, in a study of the adhesive socio-cultural adaptation of Korean immigrants to the U.S., Hurh and Kim (1984) conceptualized adjustment needs related to housing in three parts: acculturation needs, cultural needs, adhesive needs. Acculturation needs are immigrants' desires to be integrated into their host societies, while cultural needs are their desires to maintain a major part of their own culture without modification; desire to balance the two ends make up their adhesive needs. Immigrants may want to be acculturated into their host societies but without modifying any important elements of their own cultural values. Likewise, sojourners' attitudes toward the cultural aspects of their host societies affect the scope and extent of housing adjustments.

There is an extensive body of research on the cultural identity of migrants. Studies have examined the importance of housing in retaining cultural identity (Miller, 2000) and the importance of home interiors and furnishings for maintaining a sense of belonging (Yalcin-Heckmann, 1995) or presentation of cultural identity through possession and display of interior objects (Birdwell Pheasant and Lawrence-Zuniga, 1999). In a study of cultural pluralism within cultural heritage in Australia, Armstrong (2000) explored the relationship of migrants with place and the process of place-making.

Studies have shown that one of the influential factors for cultural adjustment in housing environments is the length of residence in the host country. In a study of the housing adjustments of Korean immigrants in the Houston area, Lee (1998) found that cultural amenity needs were related negatively to length of residence in the U.S. Cultural amenity needs were most predominant with newly-arrived immigrants, while the longer a household resided in the U.S., the less the household was dissatisfied with cultural amenity needs. Similarly, Song's (1990) results showed that the longer the immigrants stayed in the U.S., the higher their satisfaction with their residence.

On the other hand, Liu (2005) found that length of residence in the U.S. was not a significant predictor of housing satisfaction for Asian and Pacific Islanders. Based on Morris' and Winter's Housing adjustment theory and using the 2002 American Housing Survey Metropolitan Sample (AHS-MS), Liu compared the housing satisfaction of an Asian and Pacific Islander group to a non-Hispanic White group. Although Asian and Pacific Islanders have cultural values different from their past housing experience, the cultural factors do not play a significant role in their housing satisfaction in the U.S.



## ***Cross-Cultural Housing Adjustment: The Case of Korean Immigrants***

***Cultural Background of Korean Housing.*** These days, many Koreans live in western-style houses or apartments, which appear closely similar to the living style of Americans; however, cultural differences between Korea and the U.S. make their space layouts and uses of spaces different. Table 1 presents the characteristics of Korean housing and Koreans' housing behaviors, which can be traced back to traditional beliefs, Confucian ethics, and their customs and habits.

First, traditional beliefs influencing Korean housing are Feng-shui, Geomancy, and Yin-Yang philosophy (Hong, 1975). These traditional beliefs affect building layout and design, location and orientation of the house in natural surroundings, and the placement of furniture and objects within rooms. Since ideal location and orientation are considered to bring good fortune, a house facing south traditionally has been one of the most important design elements (Hong, 1975). In addition, being highly dependent on natural lighting inside their dwellings, Koreans have strong preferences for south-facing housing to optimize natural lighting. A large south-facing door, wall, or window is also preferred to maintain a full view of the outside. Because of their beliefs that every built thing ultimately decays and returns to its original state, furniture and objects in the house are not built-in but flexible in Korea (Lee, 1994).

Confucian ethics influence distinguishable behavioral characteristics of Koreans including barefoot living and sitting on the floor rather than on chairs. Generally, the entrance hall of a Korean house is one step lower than the living space to provide a place to take off shoes before entering. Also, it is common to have a shoe storage closet in the entrance hall. Because of sitting on the floor, radiant floor heating systems, called

*On-dol*, are still generally used in Korea.

Another influence of Confucian ethics is the concept of privacy and personal space. In Korea, the family is a social unit which has priority over individuals, and there is little concern with privacy or personal space inside. Therefore, Koreans have developed flexible use of rooms. That is, the same area can serve several functions. On the contrary, personal space is important inside houses in the U.S. because people usually view privacy inside the home as more than, or at least as important as, that of outside (Rapoport, 1969).

Table 1. *The Characteristics of Korean Housing and Behaviors*

Housing behaviors	Housing characteristics
Barefoot living inside	Shoes closet at entrance Lowered level of entrance hall
Sitting directly on floor	Radiant floor heating <i>On-dol</i> Hard floor materials
Little privacy & personal space inside housing	Multipurpose rooms Outdoor fence Outdoor main entrance
Depending on natural lighting	Daylight oriented housing layout South-facing orientation
Being closer to nature	Large south-facing door for outside view Natural cooling, ventilation
View of nature Preserving surplus food	Flexible furniture rather than built-in Extra storage space for food supplies Kitchen window over sink to remove odors

Korean food and eating habits influence distinguishable characteristics of Korean culture. Korean food exists largely in the form of preserves, hence a need for extra storage space. Also traditionally, a kitchen window installed over the sink has become an important design solution to remove cooking odors. Customs and habits have changed over time but still affect house form and use of dining, kitchen, and food

storage areas in Korean housing.

***Housing Adjustments of Korean Immigrants in the U.S.*** The first study of housing adjustments of Korean immigrants in the U.S. was conducted by Lee (1982), who attempted to explore family housing adjustment behaviors in response to cultural change. Basing her study on a conceptual framework developed from models of Morris and Winter (1978) and Michelson (1977), Lee surveyed 32 Korean immigrant households in the Washington D.C. area. The study found that Korean immigrants were generally satisfied with their housing after successfully adapting to their new circumstances. Korean immigrants were dissatisfied, relatively so, with kitchens inconvenient for Korean food, lack of proximity to Korean communities, and outside appearances of their houses. Positive characteristics reported as important to the majority of respondents were that it was a good place to rear children, its quietness, and schools' quality. The traditional floor-heating system *On-dol* was the most desired characteristic of Korean families in the Washington D.C. area.

Song (1990) studied settlement processes of immigrants in the Detroit area, using data from questionnaires administered to 148 Korean households and interviews with sub-samples of 39 households. Findings from this study indicated that immigrants' residential settlement processes showed some routine patterns: they started at their relatives' dwellings, subsequently settled into a rental unit near their relatives, and finally settled into their own dwellings. Findings also indicated that children's needs played an important role in housing adjustments of Korean immigrants.

More recently, Lee (1998) studied housing adjustments of Korean immigrants in the Houston area. By using surveys and subsequent interviews, Lee studied Korean

immigrants' needs for functional spaces and cultural amenities. Results showed that immigrants valued both functional spaces and cultural amenities simultaneously and more-recently-immigrated Korean households were more sensitive to cultural needs. Overall, Korean households tended to evaluate their housing more positively as they become more integrated into their host society. Unlike Lee (1982), Lee's (1998) study indicated that *On-dol* floor heating for rooms was not a preferred cultural amenity among Korean families in Houston because of the modifying factor of the hot, humid climate there.

As Rapoport suggested, child-rearing is an important criterion for housing selection in the settlement processes of Korean immigrants. The needs of children and especially the school district are significant in choosing housing (Song, 1990). The same finding was shown in the studies of Kim (1977), Choi (1979), and Lee (1982).

### **Theoretical Background**

Two main purposes of the study were (1) to investigate factors influencing the housing satisfaction of sojourners, (2) to examine the processes of sojourners' housing adjustments. The actual-aspirational gap theory of residential satisfaction (Francescato et al., 1974; Marans & Spreckelmeyer, 1981) and Morris' and Winter's model of housing adjustment (1978) provided a theoretical framework for this study.

#### ***The actual-aspirational gap theory of residential satisfaction***

The actual-aspirational gap theory of residential satisfaction suggests that people perceive salient attributes of their physical environment and evaluate them based on

certain standards of comparison, especially the standard defined by what people believe they may reasonably aspire to. The extent to which there is little gap between perceived *actual* environment and *aspired-to* environment provides the measure of satisfaction. The research implications of this approach are that objective features of the environment, and personal characteristics that presumably influence perceptions and evaluations, must be identified (Campbell et al., 1976; Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985).

Francescato et al. (1974) first considered residents' housing satisfaction with physical and social environments. In evaluating residents' satisfaction in housing for low- and moderate- income families, Francescato et. al. (1974) initially proposed a model that viewed residents' housing satisfaction as being a direct function of three categories of variables: objective personal characteristics of the residents (e.g., age, sex, previous housing experience), objective physical characteristics of housing environments (e.g., density, site layout, dwelling size), and residents' subjective perceptions or beliefs about three aspects of their housing environment (e.g., the physical environment, housing management, and other residents). Their model considered housing perceptions as determinants of housing satisfaction, although intermediate aspects of people's perceptions were not considered.

Marans & Rodgers' (1975) residential satisfaction model suggests the intermediate link of perceptions between objective environmental attributes and residential satisfaction. Basically, the model suggests that an individual's expressed satisfaction with his or her residential environment is dependent upon his or her evaluation or assessment of several attributes of that environment. An individual's

perception of a particular attribute is dependent on but distinct from the objective environmental attributes itself. The characteristics of an individual are seen as affecting his or her perceptions and assessments of environmental attributes and the standards for comparisons used. As an extension of this framework, it has been posited that satisfaction with the residential environment together with satisfaction with other life domains can influence the quality of life that an individual experiences.

The original conceptualization was developed for residential environments, but these relationships were applied to the analysis of data covering a variety of environmental settings, such as office buildings (Marans & Spreckelmeyer, 1981), recreational environments (Marans & Fly, 1981) and institutional settings (Canter et al., 1980).

In their case study of office buildings, Marans and Spreckelmeyer (1981) suggested a conceptual model derived in part from a previous model of Marans and Rodgers (1975). They presented a conceptual model explaining the relationships between objective conditions of the physical environment, subjective experiences, residential satisfaction, and behavior. Their model implies that a person's behavior (e.g., moving) is influenced by housing satisfaction, as housing satisfaction is affected by the perceptions and assessments of objective environmental attributes. Residential satisfaction is seen as contributing both to selected behaviors of residents and to the extent to which these behaviors occur within the residential setting. The core of the model is represented by direct and indirect links between objective environmental attributes, people's subjective responses to these attributes, overall environmental satisfaction, and some specific behaviors.

### ***Morris' and Winter's Housing Adjustment Model (1978)***

Morris' and Winter's housing adjustment model has been used by researchers in a number of disciplines to explain housing needs, norms, and adjustment behaviors (Eichner & Morris, 1984; Ha & Weber, 1991; Kinsey & Lane, 1983; Lee, 1995; Whiteford & Morris, 1986). The main idea of the housing adjustment model is that families evaluate their housing conditions in terms of their norms. When their current housing conditions do not meet these norms, a deficit is generated. Whenever this normative deficit is perceived, a reduction in housing satisfaction results, and a family responds to reduce the deficit. That is, dissatisfied families move to other housing units, modify their housing, change their family make-up, or change their norms (Morris & Winter, 1978).

Cultural norms are the rules or standards, both formal and informal, for the conduct and life conditions of members of a particular society. Family norms are family-specific standards with respect to their own behaviors and conditions they apply to themselves or specific housing demands or desires of the family (Morris & Winter, 1994). Housing deficits are calculated by housing conditions in terms of norms. Morris and Winter (1978) classified six basic norms for housing: 1) tenure, 2) structure type, 3) cost, 4) crowding level, 5) dwelling quality, and 6) neighborhood environment.

Morris' and Winter's model of housing adjustment has been applied and analyzed in a number of empirical studies. The concept of normative housing deficit was demonstrated empirically as a useful notion in explaining housing satisfaction and housing adjustment processes (Baillie, 1990; Bross, 1975; Crull et al., 1991; Harris, 1976; Morris et al., 1976; Yocky, 1976). Some empirical studies have indicated that

housing satisfaction serves as an intervening variable between demographic variables and housing adjustment desires of families (Crull et al., 1991; Lee et al., 1994; Morris et al., 1976).

### **Conceptual Framework**

In this section, the conceptual definitions of variables are reviewed and then the conceptual model of this study is proposed, along with specific research questions.

#### ***Housing adjustment***

According to Morris and Winter (1975), general housing satisfaction is the influential factor that causes a family's housing adjustment behaviors. The housing dissatisfaction produced by normative deficits motivates four types of responses: (1) residential mobility, (2) residential alterations, (3) structural family adaptations, and (4) normative family adaptations. The first two represent housing adjustment behaviors, while the second two represent adaptive responses. The family chooses residential mobility or residential alteration to remove the deficit. If behavioral responses cannot be accomplished, the family adapts either their family structure or their family housing norms. After housing adjustment occurs, satisfaction can be expected to rise (Morris & Winter, 1978).

According to Lee (1998), Korean immigrants in the U.S. tended to relieve a significant part of their deficiencies through mobility, rather than through minor physical or behavioral corrections. Moving to another housing unit, particularly buying a better house, was the first priority among Houston Korean immigrants. Renters are likelier free to move due to relatively low costs involved in mobility; this leads renters



to live close to other Koreans.

Residential alterations refer to changing the present dwelling rather than moving to another. Parrot (1988) found that satisfied people are likelier to personalize their housing. In Lee's (1982) study of the housing adjustments of Korean families in the U.S., the number of Korean immigrant respondents who had made alterations to their present homes was relatively low, while over one-half of the respondents desired to move to a new dwelling unit. In a study of the housing satisfaction of East Asian students in a university setting, Qadir (1993) found that, because of different cultural backgrounds on campus, student residents often modified their rented university apartments slightly to better fit their cultural needs for maximum housing satisfaction

According to Morris and Winter (1978), when constraints are so serious that adjustment is not feasible, the household takes adaptive actions, including making changes in resource allocations, family norms, roles, and compositional structure. Compositional adaptation will generally be reflected by a reduction or limitation of household size in response to perceived high levels of crowding. A family might lower its housing expectations or it might change its perception of deficits (Morris and Winter, 1978, 1985). According to Lee (1982), Korean immigrants tended to change their Korean lifestyles to adapt to their new circumstances, including their manner of sitting, caring for children, and role division among family members. They tended to change their behaviors instead of altering their housing environments to reduce conflict between environment and behavior.

### ***Housing satisfaction***

Housing satisfaction is described by Morris and Winter (1978) as "a state of the

level of contentment with current housing conditions” (p. 80). From the perspective of the actual-aspirational gap approach, housing satisfaction can be a criterion for evaluating the quality of the residential environment, by measuring the effect of perceptions and assessments of the objective environment upon satisfaction (Weidemann & Anderson (1985). The level of satisfaction of residents relates to how well the housing meets expectations of the residents (Galster, 1987b).

Since the 1970s, there has been a rising concern with the development of satisfaction measures as subjective indicators of quality of life or social well-being (Andrews & Withey, 1976; Campbell & Converse, 1972; Cutter, 1982; Galster & Hesser, 1981; Marans & Rodgers, 1975; Weidemann & Anderson, 1982). Also, studies have indicated that housing satisfaction is a significant predictor of a variety of behaviors, including residential mobility and modification (Crull et al., 1991; Guthrie & Barclay, 1981; Lee et al., 1994; Morris et al., 1976; Morris & Winter, 1978; Newman & Duncan, 1979; Premius, 1986; Speare, 1974).

The way housing satisfaction is measured is important in empirical analysis because it directly influences findings. Measurement of housing satisfaction can be both objective and subjective. In their test of the housing adjustment model of residential mobility using two tests, Crull et al. (1991) used two different six-item subjective indices to measure housing satisfaction. Kinsey and Lane (1983) objectively measured the number of deficiencies in plumbing, security, building structure, pests, and insulation or heating systems. While objective are specific, reflecting the true picture of housing and its environment, subjective measurements provide a general view of how the individual sees his or her housing's condition (Liu, 2005). Morris et al. (1976) and

Galster (1987) used a single, overall evaluation because it represents a comprehensive measure of the satisfaction with various features of the house and is a more appropriate measurement than is an arbitrary index or summation.

Most empirical studies of housing satisfaction measure the effects of various types of housing, neighborhoods, and demographic characteristics on housing satisfaction (Baillie & Peart, 1992; Galster, 1987; Ha & Weber, 1991; Maran & Rodgers, 1975). Even though there has been consistent agreement that certain factors contribute to housing satisfaction, there have also been inconsistent findings for several variables.

***Determinants of housing satisfaction.*** Studies by Campbell, Converse, and Rogers (1976) and Morris and Winter (1978) found that socioeconomic and demographic characteristics and also features of the dwelling units were related to total measurements of housing satisfaction.

A number of important determinants of housing satisfaction, such as income, tenure, life cycle stage, house size, and housing quality were demonstrated empirically (Crull, 1994; Galster & Hesser, 1981; Morris & Winter, 1978; Morris & Winter, 1993). Family life-cycle stage is an important indicator of residential satisfaction, and married people with children are likelier to be satisfied (Lu, 1999; Marans & Rodgers, 1975) while household size is correlated negatively with satisfaction (Foot et al., 1960; Galster & Hesser, 1981). In general, higher socio-economic groups are likelier to experience residential satisfaction (Fried, 1982). Males are slightly likelier to be residentially satisfied than are women (Lu, 1999). The elderly are likelier to be satisfied with their homes than are younger householders, when other characteristics are held constant

(Galster, 1987; Kentish, 2000; Loo, 1986).

On the other hand, Morris et al. (1976) showed that none of the demographic and socioeconomic variables have an independent effect on satisfaction when normative housing deficits are included in the analysis. Similarly, in the study of Varady (1983), age of householder, race, length of residence, and other factors had direct effect on the likelihood of moving but not on the level of housing and neighborhood satisfaction.

Morris and Winter (1982) also found that, although female-headed households are likelier to live in unconventional housing, they are not different from the jointly headed households in level of housing satisfaction. Similarly, Heywood (2002) argues that, although low-income homeowners apparently are satisfied with their poor housing conditions, they are fully aware of the extent to which their homes are in poor condition. If people are aware of their housing's problems but still rate their homes highly, it is probable that other elements regarding housing are more important to them than housing conditions (Heywood, 2002).

Length of residence is an important factor in housing satisfaction. The longer an individual lives in an area, the stronger his or her ties to that area tend to become, and the higher the likelihood that he or she is satisfied residentially (Tognoli, 1987). Traditional assimilation theories consider the length of residence in the host society and naturalization as a key determinant of immigrants' success (Park & Burgess, 1967). The more years immigrants reside in the host society, the better they understand the norms of functioning in that society (Hao, 2003).

Objective housing quality (Fried, 1982) is critically important to general residential satisfaction (Lu, 1999; Marans & Rodgers, 1975; Weidemann et al., 1982).

Related to the general conditions of the dwelling, and of significant importance to public renters, is the repeated finding that the level of maintenance and the quality of management and administration of rental housing are highly important to the formation of residential satisfaction (Burby & Rohe, 1989; Fried, 1982; Weidemann et al., 1982).

### ***Housing deficits***

Morris and Winter (1975, 1978) suggested that a deficit between present housing and normative housing will affect reported levels of housing satisfaction. Based on the six basic norms for housing, six housing deficits are presented: tenure, structure, expenditure, space, dwelling quality, and neighborhood. To calculate the value of a deficit, the norm is subtracted from the actual conditions. Positive values indicate surplus, negative values indicate shortages.

Tenure and structure type are defined as deficits with deviations from the norms in either direction being undesirable. For example, if residents desired to be renters but were actually owners, they had tenure deficits. Space is based on the number of bedrooms and is considered a deficit only where a shortage of bedrooms is undesirable. Expenditure deficit is based on monthly payment. The norm was measured by the amount a household thought it should be spending on housing. Expenditure deficit is a deficit where paying too much for housing is undesirable. The deficits are totaled to yield an index of the total deficit for each household.

Morris et al. (1976) found that normative deficits of structure and space strongly influence housing satisfaction. Studies have found that tenure status is an important factor influencing housing satisfaction and the decision to move (Crull et al., 1991; Morris & Jakubczak, 1988; Rossi, 1955). Homeowners expressed higher levels of life

satisfaction than did renters (Fried, 1982) and contributed to residential and neighborhood satisfaction (White & Schollaert, 1993). Danes and Morris (1986) found that renters reported lower satisfaction with their housing than did owners. Generally, inadequate housing is commoner among renters than owners (Apgar, 1989).

Housing type is an important factor in housing satisfaction and has significant direct effect on propensity to move (Baillie, 1990). Space, often measured by the number of bedrooms, is the most important factor for consideration in purchasing or renting family housing (Morris, 1972). Dwelling size and amount of space available positively relate to housing satisfaction (Kinsey & Lane, 1983; Morris et al., 1976). In the U.S., space is evaluated by the number of bedrooms. Person-per-room ratio is often used by the Census Bureau to measure overcrowding. A person is considered to be living in an overcrowded situation if there is more than one person, including children, per room (Meeks, 1980). Different cultures have different norms regarding the gender and ages of individuals who may share a sleeping room. A typical standard for housing expenditure in America is that a household should spend no more than 30% of its household income on housing, especially if renting. Generally, renters suffer greater housing cost burdens. (Cook et al., 1994).

### ***Housing perceptions***

Subjective environment is highly important to understand residential satisfaction. The same residential characteristics can be filtered differently by each individual resident as either positive or negative, and the outcome for residential satisfaction is based upon perceptions, rather than “the actual configuration of residential conditions” (Amerigo & Aragonés, 1997; Lu, 1999).

In an attempt to address the multidimensional nature of housing (Shlay, 1995), various aspects of housing are included in the analysis. In measuring housing perceptions, Shea and Inman (1994) suggested four levels of residential environments, reflecting physical, social, psychological, and cultural criteria. Physical criteria include public and private spaces and floor plans. Social criteria include interaction with the neighborhood and community system. Psychological criteria include a sense of belonging and attachment. Cultural criteria refer to the overarching ideology, values, norms, and customs of a society (Shea and Inman, 1994).

Although Shea's and Inman's model was developed for older adults, the key elements of Shea and Inman (1994) are used in this study to measure sojourners' perceptions of the different aspects of their residential environments. Hwang and Ziebarth (2006) used Shea's and Inman's ecological model for the assessment of housing for older adults. Results revealed that a sense of belonging and neighborhood social environment and community related positively to housing satisfaction, while physical environment was not significantly related to housing satisfaction.

A benefit of good housing is place attachment (Brown & Perkins, 1992). Such attachment is described as an emotional bond between an individual and his or her physical and social environment (Mesch & Manor, 1998). The feeling of place attachment was identified as an important variable in predicting housing satisfaction (Altman & Low, 1992). Generally, homeownership is a key positive indicator of attachment, although renters are also capable of having high levels of neighborhood attachment (Mesch & Manor, 1998). Housing quality correlates positively with elderly people's place attachment (Eshelman & Evas, 1998; Kweon et al., 1998)

Perceptions of neighborhoods appear to affect housing satisfaction (Peck & Stewart, 1990; Vrbka & Comb, 1993; Varady & Preiser, 1998). Perceptions of neighborhood quality have been measured in many different ways but, regardless the indicator used (clean streets, green areas, quiet, clutter), all point to the physical quality of a neighborhood being central to perceptions of residential satisfaction.

Neighborhood factors often include personal assessments of different aspects of their neighborhood, including relations with neighbors, neighborhood's appearance, and other issues such as noise and safety. Access to nature and green areas was found to be either highly important (Bender et al., 1997), or the most important neighborhood factor contributing to residential satisfaction (Bender et al., 1997; Fried, 1982). Perceived safety within homes and neighborhoods has a well established relationship with the residential satisfaction (Amerigo & Aragonés, 1997; Cook, 1997; Greenberg, 1999; Lee, 1986; Varady & Preiser, 1998; Weidemann et al., 1982).

Contribution of social environment to residential satisfaction of individuals and households is significant. Friendship ties were found highly important to residential satisfaction (Tognoli, 1987) and neighbor relationships were an important local social tie (Amerigo & Aragonés, 1997; Marand & Rodgers, 1975; Weidemann et al., 1982).

In a study of Korean immigrants, tenure status affected immigrants' perceptions of their housing and neighborhoods (Lee, 1998; Song, 1990). Song (1990) showed that tenure status and house value affected immigrants' evaluations of their present residences. Homeowners who lived in relatively higher-priced dwellings gave high marks to both their neighborhood and dwelling attributes, including quietness, privacy, and amount of yard space. Similarly, Lee (1998) showed that renters were most sensitive to complaints



about housing situations and lack of cultural amenities, which suggests that ownership status is closely aligned to the housing problem.

### ***A conceptual model of the study***

***Factors influencing housing satisfaction.*** For the purpose of the study to examine factors influencing housing satisfaction of sojourners, the conceptual model was developed based on the actual-aspirational gap theory of residential satisfaction and Morris' and Winter's (1978) model of housing adjustment. The actual-aspirational gap theory of residential satisfaction suggests that housing satisfaction is influenced by subjective perceptions of objective environment attributes (Campbell et al., 1976; Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985). Morris' and Winter's model of housing adjustment (1978) introduced the concept of a normative housing deficit causing a reduction in housing satisfaction. Based on these two housing satisfaction models, the conceptual model of the present study in Figure 1 suggests that housing satisfaction is influenced directly and indirectly by sojourner characteristics, housing deficits, and housing perceptions.

Figure 1 shows there are two categories of variables in the model: exogenous and endogenous. Exogenous variables include sojourner characteristics, comprising (1) demographic characteristics: household size, respondents' ages, respondents' gender, and household income; (2) sojourning characteristics: past sojourning experience, length of residence in the U.S., time until return, and (3) housing characteristics: housing condition and duration at current housing. Housing deficits and housing perception are considered intervening variables between exogenous variables and housing satisfaction. Specific

research questions to be tested are listed below:

- RQ 1. How do sojourner characteristics influence housing deficits?
- RQ 2. How do sojourner characteristics influence housing perception?
- RQ 3. How do sojourner characteristics, housing deficit, and housing perception influence housing satisfaction?

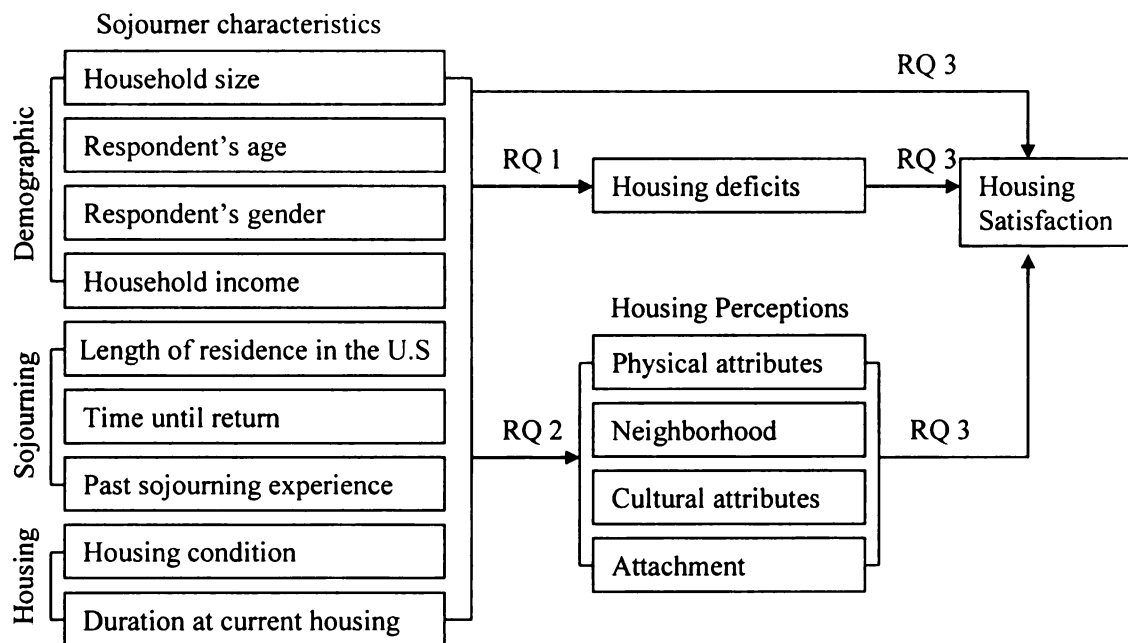


Figure 1. *Conceptual path model of the study*

***Process of housing adjustment.*** Morris' and Winter's (1978) model of housing adjustment suggests that households choose and evaluate their housing based on their housing norms, and if households are dissatisfied with their housing, such dissatisfied families tend to engage in adjustment behaviors: moving to another housing unit, modifying their housing, changing their family make-up, or changing their family norms (Morris & Winter, 1978). Based on Morris' and Winter's (1978) model of

housing adjustment, the process of sojourners' housing adjustments links the choice, evaluation, and adjustments in a cross-cultural context. Specific research questions are developed as follows:

- RQ 4. What are the Korean sojourners' main constraints in the process of housing adjustment: housing choice, evaluation, and adjustment?
- RQ 5. How do Korean sojourners choose their first and/or current housing in the U.S., and what housing features are perceived to be important when they choose their housing in the U.S.?
- RQ 6. How do Korean sojourners feel about their current housing, and with what features of housing are Korean sojourners satisfied or dissatisfied?
- RQ 7. What adjustments (i.e., alterations, improvements, or repairs) have been made to the current housing and what cultural attributes do Korean sojourners feel easier or harder to adapt to?

## **CHAPTER III**

### **RESEARCH METHODS**

This chapter presents research methods. First, the research design for investigating research questions and a rationale for choosing a mixed method design are presented. Then are described the details of survey method: participants, methods of data collection, data collection instrument, and details of case study. Lastly, methods of data analysis are explained.

#### **Research Design**

##### ***Rationale for Research Method***

This study used a mixed method combining quantitative and qualitative approaches. The main reason for such combining was that the qualitative case study complemented the quantitative method. While quantitative methodology gives a broad, generalizable set of findings by obtaining responses from many people, qualitative methodology permits collection of the more in-depth and detailed information that quantitative methodology would miss by focusing on a small number of people (Patton, 1990).

Main purpose of the study was to identify what factors influence housing satisfaction of sojourners and to describe the processes of sojourners' housing adjustments. While the survey was good at examining relationships between factors influencing housing satisfaction, it was difficult to design it to look at an overall holistic picture of the sequential process of housing adjustments. To obtain a more complete understanding of sojourners' housing experiences and more convincing and accurate findings, the case study method was also utilized in this study.

## **Survey Method**

### ***Population and Sample***

The target population consisted of Korean sojourners in the Lansing area. Furnham and Bochner (1987) defined a sojourner as “one who goes abroad voluntarily, spending a moderate length of time (six months to five years), with intention of returning home, and with more specific and goal-oriented motives.” Thus, respondents to the surveys were essentially defined as Korean sojourners, 18 or older, who viewed their stay in the Lansing area as temporary, and who had a definite intention to return to Korea. To investigate Korean sojourner’s housing adjustment processes when they were new to the culture of the U.S., Korean Americans born and raised in the U.S., Korean immigrants, and those who had stayed in the U.S. more than eight years were not considered as respondents.

Since Korean sojourners in the Lansing area constitute a small portion of the population in that area, a conventional probability sampling procedure would be inefficient (Marshall, 1996). To study this underrepresented population, participants were selected based on a convenience sampling method.

To recruit participants, Korean churches were first chosen because many Koreans in the Lansing area are affiliated with Korean churches not only for religious reasons but also for other purposes, such as their children’s education, socialization, and ethnic solidarity (Kim, 1981). It is possible to recruit a large number of Koreans at churches on Sunday. Additionally, two Korean markets, Korean restaurants, apartment complexes, and shopping malls known to be popular with Koreans in the Lansing area were chosen. A snowball sampling technique was also utilized: a respondent who completed the

questionnaire was asked to identify other members of his or her group for potential participation.

A total of 125 Korean sojourners participated in the survey, and the overall response rate was about 55%. Because of insufficient numbers of participants in the surveys, additional participants were recruited from directories of Michigan State University, Korean students' associations, and professional associations in the study area for an online survey based on accessibility and availability. A total of 168 Korean sojourners participated in the online survey, the overall response rate for which was about 42%.

### ***Pilot study***

To understand general housing experiences of Korean sojourners in the Lansing area and to develop the survey questionnaire, a pilot study was conducted. Three focus group interviews were carried out with twelve housewives of Korean sojourner households in the Lansing area in July 2006. Through these focus group interviews, overall characteristics of Korean sojourners, housing conditions, housing perceptions, and adjustment behaviors were identified. These interviews provided insights into processes of Korean sojourners' housing adjustments in relation to their length of residence and planned total time for sojourning. Also, the wording sojourners used to describe their housing conditions and perceptions were examined. Participants' opinions and perceptions form emergent themes that help guide creation and modification of survey questions.

### ***Survey instrument and measurement***

The instrument was developed on the basis of previous housing studies (Marans

& Spreckelmeyer, 1981; Morris & Winter, 1978; Weidermann & Anderson, 1985) and interview data from the pilot study, and was modified for the purposes of this study.

The questionnaire used in the study comprised six sections: (1) housing conditions, (2) housing norms, (3) housing adjustment behaviors, (4) housing perceptions about physical attributes, neighborhood attributes, and cultural attributes, (5) satisfaction with housing and neighborhood, and (6) demographics and sojourning conditions. The measurement and scale for each variable are as follows:

***Sojourner Characteristics.*** The demographic characteristics contained household size, respondent's age, respondent's gender, and household income. Household size was measured by the total number of household members currently living in the dwelling. Respondents were asked to write their ages in years. Household income was gross income before any deductions and included the income of all occupants of the housing unit. Respondents were asked to report their household income by categories, with the lowest being less than \$8,999 to the highest being \$120,000 or more.

Sojourning conditions included the length of residence in the U.S., time until return, and past sojourning experience. Respondents were asked to write how long they had lived in the U.S. and what their remaining planned time until returning home was. The past sojourning experience was measured by the question to respondents "Have you ever stayed in another country for more than three months?"

Housing characteristics included housing conditions and duration at current housing. Housing condition was self-assessed by respondents on a five-point Likert scale: "1" for very poor condition to "5" for excellent condition. Although this housing

condition was subjective, prior research indicated that it was an accurate report of housing condition (Morris and Winter, 1978). To measure their duration at current housing, respondents were asked to write months and years for the question “How long have you lived in your current home?”

***Housing Deficits.*** According to Morris and Winter (1993), housing deficit is defined as the mismatch between sojourners’ housing norms and their current housing conditions. Among six housing deficits - tenure, structure, expenditure, space, dwelling quality, neighborhood (Morris & Winter, 1978), the four deficits of tenure, structure, expenditure, and space were considered in this study. Housing conditions matched to family housing norms was considered to be no deficit, while the unmatched housing condition was considered to be a deficit. Tenure status refers to the two categories, owned or rented. Generally, renting is considered a cultural deficit in the housing norms of North America, but in this study, when their family norms for tenure do not match their tenure conditions, it is considered that a housing deficit exists. Type of structure was categorized into five possibilities; “1” for single family detached house, “2” for apartment, “3” for Condos, duplex (multi-family attached), “4” for mobile home, and “5” for other. Expenditure was monthly payment and measured by categories with the lowest of less than \$500 to the highest of \$1,700 or more. Space deficit was measured by number of bedrooms.

***Housing Perceptions.*** Housing perception variables were measured in various ways: perceptions of physical attributes, perceptions of neighborhoods, perceptions of cultural attributes, and attachment. Initially, eight items for perceptions of physical attributes and eleven for perceptions of neighborhood were derived from previous



housing scales (Marans & Spreckelmeyer, 1981, Weidemann & Anderson, 1985), and were reduced by using factor analysis and reliability test. The final items for the perception of physical attributes were five items of space layout, quality of FF & E<sup>1</sup>, quality of structure, indoor air quality, and view. A seven-point Likert scale: “1” for terrible to “7” for excellent was used for measuring perception of physical attributes. Final items for perception of neighborhood were six items of noise, greenery, building appearance, friendliness of neighbors, and safety, measured using a seven-point bi-polar scale: “1” for the most negative to “7” for the most positive.

Perception of cultural attributes was measured by how much respondents were acculturated to the condition of their current housing. Items for cultural attributes were derived from previous studies (Lee, 1982; Lee, 1998; Song, 1990) as well as focus group interviews of pilot study. Participants were asked how satisfied or dissatisfied they were with floor material, interior lighting, bathroom with no floor-drain system, and heating system in their current housing, using a seven-point Likert scale: “1” for extremely dissatisfied to “7” for extremely satisfied. Perception of psychological attributes was measured by respondents’ attachment to their current housing by asking whether or not the respondents felt their current housing was really “their home” using a seven-point Likert scale: “1” for strongly disagree to “7” for strongly agree.

***Housing Satisfaction.*** Housing satisfaction can be assessed by a single item or a scale made up of the summation or other weighted combination of indication of satisfaction with specific aspects of housing (Morris & Winter, 1978). Several studies (Harris, 1976a; Morris, 1976; Yockey, 1976a) have found that scales based on several items had significant correlations with a single item on overall housing satisfaction.

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<sup>1</sup> FF & E (Furniture, Fixtures, & Equipment)

Therefore, satisfaction with housing in this study was measured by a single question, asking, “In general, how satisfied or dissatisfied are you with your current housing?” Overall satisfaction with housing was measured using a seven-point Likert scale from “1” for extremely dissatisfied to “7” for extremely satisfied.

### ***Data Collection***

Quantitative data was collected via a standardized, self-administered survey questionnaire. Prior to data collection, a description of this study and the data collection instruments were reviewed and approved by the Institutional Review Board (IRB) of Michigan State University. Following IRB guidance, participants were informed by the investigator that participation was completely voluntary and that the results of the participation would remain confidential and would not be released in any individually identifiable form. Participants were also informed that anonymity would be protected, as consent is established when the questionnaire is completed and returned to the researcher.

The survey questionnaire was originally written in English. To improve the reliability and validity of the study, translation and back translation was utilized. The English questionnaire was translated into Korean by the investigator, and the questionnaire that was translated into Korean was translated back to English by another translator. The original and back translated questionnaires were compared, edited, and verified. A pilot study was conducted to test the measuring instrument prior to conducting the final study as well as to collect data from research subjects to serve as a guide for the major study. Based on feedback from field testing, the questionnaire was revised.

***Paper Version.*** Survey data was collected through two different approaches: the paper version and the online version. First, a set of data from the paper version of the

questionnaire was collected from May to June, 2007. Next, a set of data was collected with an online version of the questionnaire from June to July, 2007.

The paper version of the questionnaire was collected on site rather than through the mail survey, to have higher response rates, as Babbie (1973) and Bailey (1994) suggested. All four Korean churches in the Lansing area were visited on Sundays in May, 2007 and questionnaires were distributed to respondents to be filled out during the luncheon immediately followed by Sunday worship service. In addition, three Korean markets, three Korean restaurants, apartment complexes, schools, and any places where Koreans generally gathered were selected and visited.

Respondents were approached by the investigator and asked about participating in the survey. To screen for sojourners, a short screening process was used to confirm residency as temporary. The questionnaire required approximately 10-15 minutes to complete. If respondents could not complete the survey due to lack of time, a prepaid return envelope was provided. A total of 125 surveys were collected with the paper version of the questionnaire (55% response rate).

***Online Version.*** Due to difficulties of finding participants for the paper version of questionnaire, an online survey was also employed using the web-based survey tool *SurveyMonkey* to recruit more participants. Advantages of online surveys include faster response rates, easier sending of reminders to participants, easier processing of data, and expenses (Hewson, Yule, Laurent, & Vogel, 2003; Porterm & Whitcomb, 2003) relatively lower than other competitive methods such as mail surveys and telephone surveys.

A survey package was emailed to potential Korean participants from the

directories of Michigan State University, Korean churches, Korean students' associations, and professional associations. The survey package consists of a cover letter and the questionnaire. To screen participants, the cover letter explained (in both Korean and English) the purpose of the study and encouraged people to participate in the survey if they were sojourners. A total of 400 surveys were sent via *SurveyMonkey*. After the initial email was sent to the target population, two email reminders were sent to those who had not yet responded. The final survey response rate was 42% (N= 168).

Prior to combining the two sets of data, 58 cases (23 from the paper version and 35 from the online version) were dropped because they were found to be inappropriate for the analysis (e.g., immigrants, those whose length of residence in the U.S. was more than eight years, those who were not sure to go back to Korea). To combine the two sets of data, demographic characteristics of participants in these two data sets were compared. Because there were no significant differences between the two sets of data, they were combined for the analyses. A total of 235 final data (N of paper version= 102, N of online version = 133) were utilized for further analysis.

## **Case Study**

### ***Participants***

Participants for the case study were selected purposively from the respondents of the survey who volunteered to participate in the case study. Because the purpose of the case study is to understand the overall process of housing adjustment, a stratified purposive sampling strategy was used to include sojourners whose length of residence and planned total time of sojourning varied. All 27 participants were housewives in

Korean sojourner households in the Lansing area.

### ***Data Collection***

Interviews were conducted in participants' homes. Each interview lasted approximately 60-90 minutes. The interview was designed to elicit data on the overall process of housing adjustment: How they chose their initial and/or current housing units, how they perceived their current housing units, and how they adjusted to their housing environment in the U.S. A semi-structured interview protocol was used to ensure consistent coverage of important questions but, once it began, each interview was allowed to take its own direction. Based on what each participant said during the interviews, questions were added. Prior to starting the interview, participants consented to being tape-recorded. Each interview was numbered and tape-recorded.

## **Data Analysis**

### ***Survey Data***

Survey data was analyzed in three steps. First, preliminary statistics were obtained using the Statistical Package of the Social Sciences (SPSS). Descriptive statistics were obtained to determine the distributional characteristics of each variable, including the mean, standard deviation, skewness, and kurtosis. For three perception variables (i.e., perception of physical attributes, neighborhood attributes, and cultural attributes), reliability test was employed to examine internal consistency of scales. Next, correlations among variables were examined. After these statistics were examined, a regression analysis was run to examine relative direct influences of the variables and possibilities that housing deficits or housing perception variables were mediating exogenous variables

on housing satisfaction. Based on the results of regression analysis, a path analysis was conducted to investigate both direct and indirect effects and adequacy of the overall model.

### ***Case Study Data***

Case study interview data were analyzed via the following steps: First, interviews were transcribed into printed text. Then transcribed interviews were coded using open, axial, and selective coding. By reading the transcribed text carefully, a general sense of the information was obtained and a list of themes emerged, based on the research questions. A third step was to code the content of transcripts in relation to these themes. N-vivo computer software was used to categorize responses. All responses related to each theme were placed in the appropriate theme category. Next, analytic case study narratives were written for each case. Finally, cases were compared to each other to understand patterns of similarities and dissimilarities across cases.

## **CHAPTER IV**

### **FACTORS INFLUENCING HOUSING SATISFACTION OF CROSS- CULTURAL SOJOURNERS**

This chapter presents findings on the relationships of sojourner characteristics (i.e., demographic characteristics, sojourning characteristics, and housing condition), housing deficit, and housing perception on housing satisfaction. This chapter begins with results of preliminary analysis. The second section presents findings from the regression analysis, and the last section presents a report of the findings from path analysis examining direct and indirect effects of factors on housing satisfaction and overall model fit.

#### **Preliminary Analyses**

As a first step of preliminary analyses, descriptive statistics were examined for each variable included in the present study to describe basic features of data.

#### ***Descriptive Statistics***

##### ***Exogenous Variables***

Exogenous variables were sojourner characteristics including demographic characteristics, sojourning characteristics, and housing characteristics.

***Demographic Characteristics.*** Table 2 presents the frequency and percentage distributions for the demographic characteristics of the sample: household size, respondent age, respondent gender, and household income.

Table 2. *Percentage Distribution of Demographic Characteristics*

Demographic Characteristics		Frequency	%
Household size	1	77	35.3
	2	35	16.1
	3	53	24.3
	4+	53	24.3
	<i>Total</i>	218	100
Respondent age	20s	59	27.4
	30s	107	49.8
	40s	42	19.5
	50s	7	3.3
	<i>Total</i>	215	100
Respondent gender	Male	88	40.7
	Female	128	59.3
	<i>Total</i>	216	100
Household income	\$8,999 or less	22	10.3
	\$9,000-39,999	82	38.3
	\$40,000-79,999	52	24.3
	\$80,000-119,999	46	21.5
	\$120,000+	12	5.6
	<i>Total</i>	214	100

Household size ranged from one to five. Slightly over one-third ( $n = 77$ , 35.3%) of respondents were single households while the rest ( $n = 141$ , 65.7%) of the respondents lived with their families: two (16.1%); three (24.3%); four and more (24.3%). The average age of participants was 34.38, ranging from 20 to 51. About half ( $n = 107$ , 49.8%) of the participants were in their 30s, and nearly one-third ( $n = 59$ , 27.4%) of participants were in their 20s. Female was the dominant gender (female:  $n = 128$ , 59.3%; male:  $n = 88$ , 40.7%). In terms of household income levels, 82 (38.3%) reported their annual income to be between \$9,000 and \$39,999 per year, 52 (24.3%) reported their income as between \$40,000 and \$79,999, and 46 (21.5%) reported their income to be between \$80,000 and \$119,000.



Table 3. *Percentage Distribution of Sojourning Characteristics*

Sojourning characteristics		Frequency	%
Length of residence in the U.S.	Less than a year	73	32.4
	1-2 years	42	18.7
	2-3 years	20	8.9
	3-4 years	17	7.6
	4-5 years	23	10.2
	More than 5 years	50	22.2
Time until return	Less than a year	74	39.6
	1-2 years	38	20.3
	2-3 years	23	12.3
	3-4 years	19	10.2
	4-5 years	20	10.7
	More than 5 years	13	7.0
	<i>Total</i>	187	100
Past sojourning experience	Yes	89	40.1
	No	133	59.9
	<i>Total</i>	222	100

***Sojourning Characteristics.*** Table 3 shows the percentage distribution of sojourning characteristics of the sample: length of residence in the U.S., time until return, and past sojourning experience. Regarding length of residence in the U.S., the greatest number of participants ( $n = 73$ , 32.4%) had lived in the U.S. for one year or less, about one-quarter ( $n = 42$ , 18.7%) had lived in the U.S. between one to two years, and about one-third ( $n = 73$ , 32.4%) had lived in the U.S. for over four years. Participants' planned time until returning home ranged from three months to seven years. About 40% ( $n = 74$ ) of respondents reported they would return home within one year, and about 20% ( $n = 38$ ) reported they would return home in somewhere between one and two years. As for past sojourning experience, about 60% ( $n = 133$ ) of the respondents indicated that they had no past sojourning experience, while 40% ( $n = 89$ ) of the respondents reported that they had had a sojourning experience before.

Table 4. *Percentage Distribution of Housing Characteristics*

Housing characteristics		Frequency	%
Housing condition	Very poor condition	1	0.4
	Poor condition	8	3.4
	Adequate condition	42	17.9
	Good condition	132	56.4
	Excellent condition	51	21.8
Time at current housing	Less than a year	131	58.0
	1-2 years	54	23.9
	2-3 years	17	7.5
	3-4 years	12	5.3
	4-5 years	7	3.1
	More than 5 years	5	2.2
<i>Total</i>		226	100

***Housing characteristics.*** Frequency and percentage distribution of housing characteristics, including housing condition and duration at current housing, is presented in Table 4. For the question regarding the physical condition of their current housing, more than half ( $n = 132$ , 56.4%) of the respondents indicated that their housing was in a good condition, and about one-fifth ( $n = 51$ , 21.8%) reported their housing condition to be excellent. Less than 4% indicated their housing was in poor ( $n = 8$ , 3.4%) or very poor condition ( $n = 1$ , 0.4%). Respondents' time at their current housing varied from three months to over five years. Far more than half the respondents ( $n = 131$ , 58%) had lived in their current housing for less than one year, about a quarter ( $n = 54$ , 23.9%) indicated they had lived in their current housing between one to two years, and only 18.2% ( $n = 41$ ) had lived in their current housing over two years.

### ***Endogenous variables***

Endogenous variables in this study include housing deficit, housing perceptions, and housing satisfaction. Housing perceptions consist of (1) perception of physical attributes, (2) perception of neighborhood, (3) perception of cultural attributes, and (4)

attachment.

***Housing deficit.*** Housing deficit was measured by the fit between respondents' housing norms and their current housing conditions (Morris and Winter, 1978). Four types of housing deficit were considered in this study: (1) tenure, (2) structure type, (3) expenditure, and (4) space. Table 5 presents the frequency and percentage distributions of housing deficits.

Regarding tenure status, 93.6% ( $n = 220$ ) of the respondents were renters, while 83.4% ( $n = 196$ ) reported that renting was their tenure norm during their sojourn period. About 11.1% ( $n = 26$ ) had a deficit in their tenure status.

As for structure type, at the time, the majority of respondents ( $n = 199$ , 84.7%) lived in an apartment, about 8% ( $n = 19$ ) lived in single-family detached housing, and about 7% ( $n = 17$ ) lived in multi-family attached housing (e.g., townhouse, condominium, etc.). In terms of respondents' norms for the structure, about 62% ( $n = 145$ ) of respondents considered living in an apartment as their structural norm during their sojourning in the U.S., 24.3% ( $n = 57$ ) considered living in a townhouse or condominium as their structural norm. As a result, about 27.4% ( $n = 64$ ) had deficit in structure type, whereas 72.6% ( $n = 170$ ) did not have a deficit in their structure.

Regarding expenditure, about half the respondents paid between \$700 and \$899 monthly, and about 38.2% ( $n = 82$ ) paid less than \$700 per month, while 57.5% ( $n = 134$ ) felt they should pay less than \$700 for their apartment and only 28.8% ( $n = 67$ ) felt they should pay about \$700 - \$899 monthly. Therefore, 41.7% ( $n = 91$ ) of the respondents felt an expenditure deficit in payments for their housing.

Space norm was measured by the number of bedrooms (Morris and Winter,

1978). About 63.4% ( $n = 149$ ) of the respondents lived in two-bedroom units, 23.4% ( $n = 55$ ) lived in one-bedroom units, and only 8.9% ( $n = 21$ ) lived in three-bedroom units, while 34.9% ( $n = 82$ ) of the respondents reported that they needed three-bedroom units. More than 45% ( $n = 106$ ) showed a deficit in the number of bedrooms.

Table 5. *Percentage Distribution of Housing Condition, Housing Norm, and Housing Deficit*

Deficit types	Housing condition Frequency (%)	Housing norm Frequency (%)	Deficit	
			Yes (%)	No (%)
<b><i>Tenure</i></b>			26(11.1)	209(88.9)
Rented	220(93.6)	196(83.4)		
Owned	15(6.4)	38(16.2)		
<b><i>Total</i></b>	<b>235(100)</b>	<b>234(100)</b>		
<b><i>Structure</i></b>			64(27.4)	170 (72.6)
Rental apartment	199(84.7)	145(62.0)		
Single family housing	19(8.1)	32(13.7)		
Townhouse, condos.	17(7.2)	57(24.3)		
<b><i>Total</i></b>	<b>235(100)</b>	<b>234(100)</b>		
<b><i>Expenditure</i></b>			91(41.7)	127(58.3)
Less than \$700	82(38.2)	134(57.5)		
\$700-899	109(50.7)	67(28.8)		
\$900-1099	14(6.5)	17(7.3)		
\$1100-1299	6(2.8)	3(1.3)		
\$1300+	4(1.9)	12(5.1)		
<b><i>Total</i></b>	<b>215(100)</b>	<b>233(100)</b>		
<b><i>Space</i></b>			106(45.1)	129(54.9)
1	55(23.4)	43(18.3)		
2	149(63.4)	97(41.3)		
3	21(8.9)	82(34.9)		
4+	10(4.3)	13(5.5)		
<b><i>Total</i></b>	<b>235(100)</b>	<b>235(100)</b>		

As Table 5 presents, respondents showed the highest deficit in space norm, which was measured by number of bedrooms, closely followed by their expenditure deficit. The lowest deficit was shown in tenure status, indicating that the majority of sojourners

considered renting to be their tenure norm during their sojourning period.

Table 6. *Descriptive Statistics for Housing Deficit Variables*

Total Number of Deficit Per Household					Mean	SD	N
Frequency (%)							
No deficit	One deficit	Two deficits	Three deficits	Four deficits	1.26	1.039	216
54(25)	85(39.4)	50(23.1)	20(9.3)	7(3.2)			

As reported in Table 6, the total number of housing deficits per household ranged from 0 to 4, with a mean of 1.26 and a standard deviation of 1.039. A quarter of respondents ( $n = 54$ , 25%) did not have any housing deficits in their current housing units, while about 40% ( $n = 85$ ) showed one deficit, and 23.1% ( $n = 50$ ) showed two deficits.

***Perceptions of physical attributes.*** Table 7 presents the percentage distribution and descriptive statistics of participants' perceptions of physical attributes in their current housing. The five physical attributes include 1) space layout, 2) quality of FF & E, 3) quality of structure, 4) indoor air quality, and 5) view.

Table 7 indicates that participants were generally positive about all five attributes. As for the space layout, about one-third ( $n = 72$ , 31%) of respondents reported the space layout in their housing as fair, while more than half evaluated it as good ( $n = 67$ , 28.8%) or very good ( $n = 55$ , 23.6%). Concerning quality of FF & E, slightly over one-third ( $n = 80$ , 34.3%) of the respondents reported that the FF & E in their housing was fair. About one-fifth ( $n = 46$ , 19.7%) perceived it to be good, while roughly one-fifth ( $n = 43$ , 18.5%) felt it was poor.

Table 7. *Percentage Distribution of Perceptions of Physical Aspects*

Variables	Scale	Frequency	(%)	Mean	SD	n
Space layout	1 Terrible	2	9	4.77	1.192	233
	2 Very poor	7	3.0			
	3 Poor	17	7.3			
	4 Fair	72	30.9			
	5 Good	67	28.8			
	6 Very good	55	23.6			
	7 Excellent	13	5.6			
Quality of FF & E	1 Terrible	7	3.0	4.08	1.335	233
	2 Very poor	21	9.0			
	3 Poor	43	18.5			
	4 Fair	80	34.3			
	5 Good	46	19.7			
	6 Very good	29	12.4			
	7 Excellent	7	3.0			
Quality of Structure	1 Terrible	8	3.4	4.03	1.398	232
	2 Very poor	27	11.6			
	3 Poor	40	17.2			
	4 Fair	74	31.9			
	5 Good	50	21.6			
	6 Very good	23	9.9			
	7 Excellent	10	4.3			
Indoor Air quality	1 Terrible	9	3.9	4.30	1.496	233
	2 Very poor	20	8.7			
	3 Poor	39	16.9			
	4 Fair	55	23.8			
	5 Good	52	22.5			
	6 Very good	44	19.0			
	7 Excellent	12	5.2			
View	1 Terrible	1	4	5.26	1.260	231
	2 Very poor	5	2.1			
	3 Poor	14	6.0			
	4 Fair	43	18.5			
	5 Good	57	24.5			
	6 Very good	76	32.6			
	7 Excellent	37	15.9			

Regarding quality of structure, about one-third ( $n = 74$ , 32%) of the respondents perceived it to be fair. Slightly over one-fifth ( $n = 50$ , 21.6%) perceived it to be good, while a little less than one-fifth ( $n = 40$ , 17.2%) perceived it to be poor. Indoor

air quality was evaluated to be fair by 23.8% ( $n = 55$ ) of respondents, to be good by 22.5% ( $n = 52$ ), and to be very good by 19% ( $n = 44$ ). About the view, nearly 60% of the respondents rated the view in their current housing to be very good ( $n = 76$ , 32.6%) or good ( $n = 57$ , 24.5%), and about 16% ( $n = 37$ ) rated it to be excellent.

Of the five physical attributes, view was the most positively evaluated, with a mean of 5.26, followed by space layout, with a mean of 4.77, whereas quality of structure ( $M = 4.03$ ) and quality of FF & E ( $M = 4.08$ ) had lower ratings, being close to neutral.

***Perceptions of the neighborhood.*** Table 8 presents descriptive statistics and percentage distribution of respondents' perceptions of their neighborhoods. Five neighborhood attributes include 1) noise, 2) greenery, 3) building appearance, 4) friendliness of neighbors, and 5) safety.

As for noise, slightly less than one-third ( $n = 73$ , 31.2%) of the respondents reported that their neighbors were very noisy ( $n = 29$ , 12.4%) or noisy ( $n = 44$ , 18.8%), while a little over one-third ( $n = 80$ , 35%) felt that their neighbors were quiet ( $n = 38$ , 16.2%) or very quiet ( $n = 42$ , 17.9%). Regarding greenery, over 70% ( $n = 163$ ) of the respondents agreed that greenery was very sufficient ( $n = 74$ , 31.9%) or extremely sufficient ( $n = 89$ , 38.4%). Regarding building appearance, a little less than half of the respondents reported that the building appearance was attractive ( $n = 56$ , 24.0%) or very attractive ( $n = 54$ , 23.2%), while a quarter ( $n = 59$ , 25.3%) rated it as just average. Friendliness of neighbors was reported to be just average by 41.3% ( $n = 97$ ) of the respondents, as friendly by 20.4% ( $n = 48$ ), and as very friendly by 21.3% ( $n = 50$ ). Concerning safety, more than 60% ( $n = 142$ ) of the respondents perceived their neighborhood to be very safe ( $n = 86$ , 36.9%) or safe ( $n = 56$ , 24%), and, about 18% ( $n$

=42) said that their neighborhoods were extremely safe.

Table 8. *Percentage Distribution of Perceptions About Neighborhood Environment*

Variables	Scale	Frequency	%	Mean	SD	n
Noise	1 Extremely noisy	19	8.1	4.07	1.731	234
	2 Very noisy	29	12.4			
	3 Noisy	44	18.8			
	4 Average	44	18.8			
	5 Quiet	38	16.2			
	6 Very quiet	42	17.9			
	7 Extremely quiet	18	7.7			
Greenery	1 Extremely insufficient	2	.9	5.85	1.255	232
	2 Very insufficient	2	.9			
	3 Insufficient	5	2.2			
	4 Average	31	13.4			
	5 Sufficient	29	12.5			
	6 Very sufficient	74	31.9			
	7 Extremely sufficient	89	38.4			
Building Appearance	1 Extremely unattractive	12	5.2	4.56	1.522	233
	2 Very unattractive	14	6.0			
	3 unattractive	21	9.0			
	4 Average	59	25.3			
	5 Attractive	56	24.0			
	6 Very attractive	54	23.2			
	7 Extremely attractive	17	7.3			
Friendliness of Neighbors	1 Extremely unfriendly	1	.4	4.81	1.157	234
	2 Very friendly	1	.4			
	3 Unfriendly	16	6.8			
	4 Average	97	41.3			
	5 Friendly	48	20.4			
	6 Very friendly	50	21.3			
	7 Extremely friendly	21	8.9			
Safety	1 Extremely unsafe	2	.9	5.41	1.250	233
	2 Very unsafe	4	1.7			
	3 Unsafe	12	5.2			
	4 Average	31	13.3			
	5 Safe	56	24.0			
	6 Very safe	86	36.9			
	7 Extremely safe	42	18.0			



As Table 8 indicates, participants gave positive rating to all five neighborhood attributes. Among the five neighborhood attributes, greenery was the most positively evaluated attribute, with a mean of 5.85, followed by safety ( $M = 5.41$ ), while noise was the most negatively rated attributes, with a mean of 4.07.

***Perceptions of cultural attributes.*** Table 9 shows descriptive statistics and percentage distributions of participants' perceptions of cultural attributes in their current housing. Four cultural attributes include 1) floor material, 2) interior lighting 3) bathroom floor without drain system, and 4) heating system.

Table 9 indicates that the overall ratings for the perception of cultural attributes were very low. Respondents reported their negative perceptions about the lack of cultural amenities, with a mean ranging from 2.27 to 3.38. Regarding the floor material, the mean was 3.21. More than half the respondents were dissatisfied ( $n = 34$ , 14.7%), very dissatisfied ( $n = 15$ , 22%), or extremely dissatisfied ( $n = 42$ , 18.1%). The mean for the perception of interior lighting condition was 2.72. Extreme dissatisfaction was revealed by 22.8% ( $n = 53$ ). Also about half were very dissatisfied ( $n = 62$ , 26.7%) or dissatisfied ( $n = 47$ , 20.3%). Having bathrooms without floor drain systems in their current housing was evaluated as extremely dissatisfactory by 28.4% ( $n = 66$ ) of the respondents, as very dissatisfactory by 24.6% ( $n = 57$ ), and as dissatisfactory by 11.6% ( $n = 27$ ). The mean for perceptions of bathrooms without floor drain systems was 2.82. As for the heating system in their current housing, half the respondents were extremely dissatisfied ( $n = 37$ , 15.9%), very dissatisfied ( $n = 42$ , 18.1%), or dissatisfied ( $n = 34$ , 14.7%), while about 30% ( $n = 68$ ) were neither satisfied nor dissatisfied. The mean for the perception of heating system was 3.38.

Among the perception of four cultural attributes, interior lighting was the most negatively rated by participants, with the mean of 2.72, closely followed by the bathroom floor without drain system with the mean of 2.82.

Table 9. *Percentage Distribution of the Perception of Cultural Aspects*

Variables	Scale	Frequency	%	Mean	SD	n
Floor Material	1 Extremely dissatisfied	42	18.1	3.21	1.646	232
	2 Very dissatisfied	51	22.0			
	3 Dissatisfied	34	14.7			
	4 No difference	58	25.0			
	5 Satisfied	24	10.3			
	6 Very Satisfied	15	6.5			
	7 Extremely satisfied	8	3.4			
Interior Lighting	1 Extremely dissatisfied	53	22.8	2.72	1.400	232
	2 Very dissatisfied	62	26.7			
	3 Dissatisfied	47	20.3			
	4 No difference	48	20.7			
	5 Satisfied	14	6.0			
	6 Very Satisfied	5	2.2			
	7 Extremely satisfied	3	1.3			
Bathroom w/o floor drain	1 Extremely dissatisfied	66	28.4	2.82	1.709	232
	2 Very dissatisfied	57	24.6			
	3 Dissatisfied	27	11.6			
	4 No difference	48	20.7			
	5 Satisfied	14	6.0			
	6 Very Satisfied	9	3.9			
	7 Extremely satisfied	11	4.7			
Heating System	1 Extremely dissatisfied	37	15.9	3.38	1.634	232
	2 Very dissatisfied	42	18.1			
	3 Dissatisfied	34	14.7			
	4 No difference	68	29.3			
	5 Satisfied	26	11.2			
	6 Very Satisfied	16	6.9			
	7 Extremely satisfied	9	3.9			

***Attachment to the Current Housing.*** Table 10 presents descriptive statistics and frequency of the perception of psychological attributes measured by respondents'

attachment to their housing. Overall, respondents' attachment to their current housing was close to neutral with the mean of 4.25 and a standard deviation of 1.568. More than one-third of respondents were somewhat agreed ( $n = 40$ , 17.2%) or agreed ( $n = 41$ , 17.6%) on the statement they feel their housing is really "my home." About a quarter of respondents were somewhat disagreed ( $n = 33$ , 14.2%) or disagreed ( $n = 24$ , 10.3%) to the statement that they feel their housing is really "my home." Roughly one-third reported their attachment to the current housing as neutral ( $n = 67$ , 28.8%).

Table 10. *Percentage Distribution of the Attachment to the Current Housing*

Variables	Scale	Frequency	%	Mean	SD	n
Attachment	1 Strongly disagree	11	4.7	4.25	1.568	233
	2 Disagree	24	10.3			
	3 Somewhat disagree	33	14.2			
	4 Neutral	67	28.8			
	5 Somewhat agree	40	17.2			
	6 Agree	41	17.6			
	7 Strongly agree	17	7.3			

Table 11. *Percentage Distribution of Housing Satisfaction*

Variables	Scale	Frequency	%	Mean	SD	n
Housing satisfaction	1 Extremely dissatisfied	5	2.2	4.81	1.407	232
	2 Very dissatisfied	10	4.3			
	3 Dissatisfied	23	9.9			
	4 No difference	57	24.6			
	5 Satisfied	45	19.4			
	6 Very Satisfied	74	31.9			
	7 Extremely satisfied	18	7.8			

**Housing Satisfaction.** Table 11 presents descriptive statistics and frequency of housing satisfaction. Respondents reported that they were satisfied overall with their current housing, with the mean of 4.81 and a standard deviation of 1.407.

More than half the respondents were satisfied ( $n = 45$ , 19.4%) or very satisfied ( $n = 74$ , 31.9%), and about 7.8% of the respondents were extremely satisfied with their housing. About a quarter of respondents were neither satisfied nor dissatisfied with their housing.

### ***Reliability Test***

In preparation for further analysis, the perception of physical attributes, neighborhood attributes, and cultural attributes were measured from summated scale by assembling items. The physical perception was measured by assembling five items: space layout, quality of FF & E, quality of structure, indoor air quality, and view. To measure the neighborhood perception, five items including noise, greenery, building appearance, friendliness of neighbors, and safety were combined. The cultural perception was measured by assembling four items: floor material, interior lighting, bathroom with no floor drain, and heating system.

A factor analysis and reliability analysis using Cronbach's alpha was employed to test the internal consistency of scales measuring variables. Results of composite reliability estimates for three the perception variables are listed in Table 12. The reliability of three perception variables ranged from .62 to .76 according to Cronbach's alpha. Since each of these alpha levels is above the acceptable threshold for reliability (Nunnally, 1970), these variables were used for further analysis. The reliability of housing deficit variable ( $\alpha = .35$ ) was below the acceptable level, but it was not considered a serious problem in this study, because the housing deficit variable was measured by the total deficit scores of different aspects of housing deficit: tenure, structure, expenditure, and space.

Table 12. *Results of Reliability Analysis*

Variables	N of items	Min.	Max.	Mean	SD	Cronbach's Alpha
Physical aspects	5	2	7	4.53	.942	.76
Neighborhood	5	2	7	4.81	.876	.73
Cultural aspects	4	1	7	2.79	.933	.62

### ***Correlations among Variables***

Table 13 displays correlation coefficients among all fifteen variables: the nine exogenous variables (i.e., household size, respondents' ages, respondents' gender, household income, length of residence in the U.S., time until return, past sojourning experience, housing condition, and duration at current housing), housing deficit, the four housing perception variables (i.e., perceptions of physical attributes, perceptions of neighborhood, perceptions of cultural attributes, and attachment), and housing satisfaction.

Correlation coefficients ranged from .00 to .66. Most demographic variables, except respondents' ages, showed weak correlations with housing satisfaction. Among the exogenous variables, housing condition was the most significantly correlated to the three perception variables: perceptions of physical attributes ( $r = .56, p < .01$ ), perceptions of the neighborhood ( $r = .30, p < .01$ ), and attachment ( $r = .39, p < .01$ ), as well as housing satisfaction ( $r = .49, p < .01$ ). All four housing perception variables were correlated significantly with each other and correlated significantly with housing satisfaction: perceptions of physical attributes ( $r = .59, p < .01$ ), perceptions of neighborhoods ( $r = .46, p < .01$ ), perceptions of cultural attributes ( $r = .28, p < .01$ ), and attachment ( $r = .66, p < .01$ ). Among the four housing perception variables, attachment

had the highest correlation coefficients ( $r = .66, p < .01$ ), followed by perceptions of physical attributes ( $r = .59, p < .01$ ).

The conceptual model of this study (Figure 1 in Chapter 2) suggests housing deficits and housing perception variables as mediating variables between exogenous variables and housing satisfaction. Generally, mediating variables are expected to be related strongly to housing satisfaction, and exogenous variables are expected to be related weakly to housing satisfaction, due to indirect relationships. Results of the Pearson correlations in Table 12 imply such relations to some degree.

Table 13. *Pearson Correlations*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Household size	1													
2 Respondents' ages	.55**	1												
3 Respondents' genders	.08	.20**	1											
4 Household income	.16*	.27**	.06	1										
5 Past sojourning experience	-.07	-.03	.03	-.08	1									
6 Length of residence in the U.S.	-.06	-.12	-.00	-.11	-.14*	1								
7 Time until return	-.13	-.26**	.03	-.08	-.11	.32**	1							
8 Housing condition	-.09	-.11	.14*	.09	.06	-.06	.04	1						
9 Duration at current housing	-.00	-.13	.01	-.13	-.12	.56**	.13	-.01	1					
10 Housing deficit	.10	.02	-.06	.02	.02	.07	.24**	.00	-.04	1				
11 Perceptions of physical attributes	-.14*	-.16*	.14*	.05	.10	-.06	-.02	.56**	.01	-.13	1			
12 Perceptions of neighborhood	.11	.07	.00	.14*	.18*	.04	-.05	.30**	.11	-.03	.51**	1		
13 Perceptions of cultural attributes	-.20**	-.11	-.02	-.07	.00	.20**	-.03	.09	.23**	-.23**	.25**	.26**	1	
14 Attachment	-.13	-.20**	.12	-.03	.14*	.04	-.04	.39**	.11	-.17**	.54**	.38**	.28**	1
15 Housing satisfaction	-.06	-.16*	.09	-.05	.24**	-.01	-.14	.49**	.11	-.22**	.59**	.46**	.28**	.66**

\* p&lt;.05; \*\* p&lt;.01 (two-tailed)

## Determinants of Housing Satisfaction

To investigate determinants of housing satisfaction, regression analysis was run with two purposes: (1) to examine relative direct effects of three groups of variables (i.e., exogenous variables, housing deficit, and housing perception) on housing satisfaction and (2) to examine whether housing deficits and housing perceptions are mediating the influence of exogenous variables on housing satisfaction. As a first step, hypothesized influences of the exogenous variables on housing deficits and housing perception variables were tested individually.

Table 14. *Results of Regression Analysis of Housing Deficit on Exogenous Variables*

Variable	Housing deficit	
	Beta	t
<i>Demographic characteristics</i>		
Household size	.123	1.597
Respondent's age	.019	.228
Respondent's gender	-.077	-1.159
Household income	.017	.247
<i>Sojourning characteristics</i>		
Length of residence in the U.S.	.072	.896
Time until return	.229*	3.315
Past sojourning experience	.054	.824
<i>Housing characteristics</i>		
Housing condition	.016	.237
Duration at current housing	-.087	-1.115
R <sup>2</sup>	.074	
Adjusted R <sup>2</sup>	.037	
F (9,225)	1.987*	

\*p<.05; \*\*p<.01

### *Effects of sojourner characteristics on housing deficits*

Results of the regression analysis of housing deficits on the exogenous variables



are presented in Table 14. In the proposed path model of this study (Figure 1 in Chapter 2), it was hypothesized that exogenous variables directly influence housing deficits. The model was statistically significant,  $F(9,225) = 1.987, p < .05$ . The  $R^2$  value of .07 ( $R^2_{Adj} = .04$ ) indicated that about 7% of the variance in housing deficit was explained by sojourner characteristics. It showed that most of the exogenous variables do not contribute significantly to the housing deficit. Only time until return had significant effects on housing deficit ( $\beta = .23, p < .05$ ). It indicated that those whose time to remain in the U.S. is longer tend to have more housing deficits than those whose home-return time approaches.

#### ***Effects of sojourner characteristics on housing perceptions***

Housing perception variables were hypothesized to be directly affected by exogenous variables (Figure 1 in Chapter 2). Results of the regression analysis for housing perceptions on the exogenous variables are shown in Tables 15 through 18.

***Perceptions of physical attributes.*** Table 15 presents the results of a regression analysis of sojourner characteristics on the perceptions of physical attributes. The model is statistically significant,  $F(9,229) = 12.28, p < .01$ . The  $R^2$  value of .33 ( $R^2_{Adj} = .30$ ) indicates that about 30% of the variance in perceptions of physical attributes is explained by sojourner characteristics. Results indicate that all the demographic and sojourning characteristics did not significantly contribute to perceptions of physical attributes. Housing condition was the only significant determinant of perceptions of physical attributes ( $\beta = .52, p < .01$ ). Results suggest that the better the housing condition was, the more the respondents felt positively about physical attributes of their current housing.

Table 15. *Results of the Regression Analysis of Perceptions of Physical Attributes on Exogenous Variables*

Variable	Perceptions of Physical Aspects	
	Beta	t
Demographic characteristics		
Household size	-.045	-.681
Respondent's age	-.102	-1.455
Respondent's gender	.077	1.362
Household income	.036	.629
Sojourning characteristics		
Length of residence in U.S.	-.033	-.490
Time until return	-.055	-.931
Past sojourning experience	.057	1.015
Housing characteristics		
Housing condition	.521**	9.259
Time at current home	.040	.602
R <sup>2</sup>	.329	
Adjusted R <sup>2</sup>	.303	
F (9,225)	12.279**	

\*p<.05; \*\*p<.01

**Perceptions of neighborhood.** Results of the regression analysis in Table 16 show the effects of sojourner characteristics on perceptions of neighborhood. The model is statistically significant ( $F(9,225) = 4.774, p < .01$ ). The  $R^2$  value of .16 ( $R^2_{Adj} = .13$ ) indicates that about 16% of the variance in perceptions of neighborhood is explained by sojourner characteristics. It shows that all of the demographic did not significantly contribute to perceptions of neighborhood. The significant effects were found in past sojourning experience and housing condition. It indicates that sojourners who had past sojourning experience are likely to have more positive perceptions about their neighborhood ( $\beta = .18, p < .01$ ). Households which live in better housing condition tended to perceive their neighborhood more positively ( $\beta = .30, p < .01$ ).

Table 16. *Results of the Regression Analysis of Perceptions of Neighborhood on Exogenous Variables*

Variable	Neighborhood Environment	
	Beta	t
Demographic characteristics		
Household size	.106	1.442
Respondent's age	.038	.476
Respondent's gender	-.064	-1.015
Household income	.113	1.751
Sojourning characteristics		
Length of residence in USA	.040	.518
Time until return.	-.029	-.444
Past sojourning experience	.184**	2.945
Housing characteristics		
Housing condition	.299**	4.747
Time at current home	.125	1.681
R <sup>2</sup>	.160	
Adjusted R <sup>2</sup>	.127	
F(9, 225)	4.774**	

\* $p < .05$ ; \*\* $p < .01$

**Perceptions of cultural attributes.** Results of the regression analysis in Table 17 show the effects of sojourner characteristics on perceptions of cultural attributes of sojourners in their current housing. The model is statistically significant ( $F(9, 225) = 2.755, p < .01$ ). The  $R^2$  value of .10 ( $R^2_{Adj} = .06$ ) indicates that about 10% of the variance in perceptions of cultural attributes is explained by sojourner characteristics.

Table 17 shows that household size and the time at their current housing related significantly to sojourners' perceptions of cultural attributes in their current housing. Household size showed a negative relationship with perceptions of cultural attributes ( $\beta = -.20, p < .05$ ), indicating that the larger the household size was, the more the sojourners negatively perceived the lack of cultural amenities in their current housing. Duration at

current housing related positively to perceptions of cultural attributes ( $\beta = .16, p < .05$ ), meaning that sojourners who had lived in their current housing for longer times tended to have more positive perceptions about the lack of cultural amenities in their current housing.

Table 17. *Results of the Regression Analysis of Perceptions of Cultural Attributes on Exogenous Variables*

Variable	Perceptions of Cultural Aspects	
	Beta	t
Demographic characteristics		
Household size	-.195*	-2.569
Respondent's age	.036	.440
Respondent's gender	-.022	-.341
Household income	-.021	-.314
Sojourning characteristics		
Length of residence in U.S.	.115	1.450
Time until return	-.088	-1.288
Past sojourning experience	.011	.176
Housing characteristics		
Housing condition	.087	1.338
Time at current home	.162*	2.096
R <sup>2</sup>	.099	
Adjusted R <sup>2</sup>	.063	
F (9, 225)	2.755**	

\* $p < .05$ ; \*\* $p < .01$

**Attachment to current housing.** Results of the regression analysis in Table 18 show the effects of sojourner characteristics on attachment to their current housing. The model is statistically significant, ( $F(9, 225) = 6,629, p < .01$ ). The  $R^2$  value .21 ( $R^2_{Adj} = .18$ ) indicates that about 21% of the variance in attachment to the current housing was explained by sojourner characteristics. The results indicate that respondent age has a

significant negative relationship with attachment ( $\beta = .17, p < .05$ ). The younger the sojourner was, the more the sojourner tended to feel attachment to his or her current housing. Housing condition related positively to sojourner's housing attachment ( $\beta = .35, p < .01$ ). The better the housing condition was, the more the sojourners felt attachment to their current housing.

Table 18. *Results of the Regression Analysis of Attachment to Current Housing on Exogenous Variables*

Variable	Perceptions of Cultural Aspects	
	Beta	t
Demographic characteristics		
Household size	-.009	-.132
Respondent's age	-.168*	-2.200
Respondent's gender	.098	1.587
Household income	.002	.028
Sojourning characteristics		
Length of residence in U.S.	.025	.338
Time until return.	-.098	-1.530
Past sojourning experience	.110	1.812
Housing characteristics		
Housing condition	.354**	5.794
Time at current home	.097	1.337
R <sup>2</sup>	.210	
Adjusted R <sup>2</sup>	.178	
F (9, 225)	6.629**	

\* $p < .05$ ; \*\* $p < .01$

### ***Effects of Sojourner Characteristics, Housing Deficits, and Housing Perceptions on Housing Satisfaction***

Based on the proposed path model in Figure 1 (Chapter 2), housing satisfaction was hypothesized to be affected directly by sojourner characteristics, housing deficits,

and housing perceptions. It also was suggested that housing satisfaction would be affected indirectly by sojourner characteristics through mediating variables, housing deficits, and housing perceptions. To examine direct and potential indirect effects on housing satisfaction, a hierarchical regression analysis was conducted with sojourner characteristics in the first block, housing deficits in the second block, and housing perceptions in the last block. Each successive model adds one more group of factors, so the results show how much each group contributes independently to housing satisfaction. Table 19 presents the results of the hierarchical regression analysis.

Model 1, which contains only exogenous variables (See Model 1 on Table 19), was statistically significant, ( $F(9,225) = 12,525, p < .001$ ) and explained 33.4% of the variance in housing satisfaction ( $R^2 = .33; R^2_{Adj} = .31$ ). In Model 2, a housing deficit variable was added to the exogenous model (See Model 2 in Table 19). The overall fit of Model 2 was found to be statistically significant, ( $F(10,224) = 13,207, p < .001$ ), and explained 37.1% of the variance in housing satisfaction ( $R^2 = .37; R^2_{Adj} = .34$ ). The addition of housing deficits slightly improved the predictions of housing satisfaction ( $R^2 \text{ change} = .04, p < .01$ ).

In the third step of the hierarchical regression, housing perception variables were added to Model 2. The overall fit of Model 3 was found to be statistically significant, ( $F(14,220) = 23,396, p < .001$ ), and about 60% of the variance in housing satisfaction was explained by Model 3 ( $R^2 = .60; R^2_{Adj} = .57$ ). Addition of housing perception variables considerably improved predictions of housing satisfaction ( $R^2 \text{ change} = .23, p < .001$ ).

Table 19. *Results of Hierarchical Regression Analysis*

Variable	Model 1 Exogenous Variables		Model 2 Housing Deficits		Model 3 Housing Perceptions	
	Beta	t	Beta	t	Beta	t
<i>Sojourner Characteristics</i>						
Household size	.059	.901	.083	1.305	.080	1.523
Respondent's age	-.147*	-2.092	-.143*	-2.092	-.069	-1.231
Respondent's gender	.044	.786	.029	.524	-.006	-.136
Household income	-.043	-.746	-.039	-.706	-.061	-1.335
Length of residence in U.S.	-.006	-.095	.008	.119	-.012	-.216
Time until return	-.171**	-2.915	-.125*	-2.138	-.092	-1.947
Past sojourning experience	.198**	3.548	.208**	3.837	.130**	2.896
Housing condition	.468**	8.334	.471**	8.614	.201**	3.832
Time at current home	.135*	2.040	.118	1.820	.060	1.142
<i>Housing Deficits</i>						
Housing deficits			-.200**	-3.636	-.108*	-2.358
<i>Housing Perceptions</i>						
Physical aspects					.186**	3.013
Neighborhood					.117*	2.195
Cultural aspects					.046	.942
Psychological aspects					.373**	6.928
R <sup>2</sup> (change in R <sup>2</sup> )	.334 (.334**)		.371 (.037**)		.598 (.227**)	
Adjusted R <sup>2</sup>	.307		.343		.573	
F statistics (df)	12,525 (9,225)**		13,207 (10,224)**		23,396 (14,220)**	

\*p<.05; \*\*p<.01

***Effects of sojourner characteristics.*** When housing deficits and housing perceptions were not controlled (see Model 1 on Table 19), five sojourner characteristics showed significant direct effects on housing satisfaction. The five variables were respondents' ages, past sojourning experience, time until return, housing condition, and duration at current housing.

When housing deficits and housing perceptions were controlled (see Model 3 on

Table 19), only past sojourning experience ( $\beta = .130, p < .01$ ) and housing condition ( $\beta = .201, p < .01$ ) continued to have significant direct effects on housing satisfaction, while effects of the other variables faded out. The relative strength of the direct effects of past sojourning experience and housing condition also dropped considerably after controlling for housing deficits and housing perceptions. Thus, also considering correlations among sojourner characteristics, housing perceptions, and housing satisfaction, as examined in the preliminary analysis section (Table 13), the possibilities of indirect effects of sojourner characteristics on housing satisfaction were suspected.

***Effects of housing deficit.*** Housing deficit had a significant effect ( $\beta = -.108, p < .05$ ) on housing satisfaction when sojourner characteristics and housing perception were controlled. The negative coefficient indicates that sojourners with less of a housing deficit tended to have higher satisfaction with their housing.

***Effects of housing perception.*** As Model 3 on Table 19 indicates, most of the housing perception variables, except the perception of cultural attributes, were found to be statistically significant, when controlling for sojourner characteristics and housing deficit. The results of Model 3 showed that attachment was the strongest indicator of housing satisfaction ( $\beta = .37, p < .01$ ), implying the more attached sojourners were to their current housing, the more satisfied they were with their current housing. The perception of physical attributes ( $\beta = .19, p < .01$ ) and the perception of neighborhood ( $\beta = .12, p < .05$ ) also showed significant effects on housing satisfaction. Results suggested that the more positively the sojourners evaluated physical attributes, or neighborhood, the more satisfied they were with their housing. Only the perception of cultural attributes was found to have insignificant effects on housing satisfaction,



although the perception of cultural attributes correlated significantly with housing satisfaction (Table 13).

These findings prompted further analysis. While the regression analysis showed how each variable influenced housing satisfaction, it did not allow for a more specific examination of indirect relationships among variables (Kline, 1998). Thus, a path analysis was conducted (1) to examine any indirect effects of variables on housing satisfaction, (2) to confirm the results of the regression analysis by testing the direct effects as well, and (3) to identify an overall model fit. These results are presented in the next section.

### **Path analysis**

A path analysis was conducted using Mplus 4 (Muthen & Muthen, 2006) because it allows (1) testing several specified causal relationships simultaneously and (2) postulating several alternative models identifying the model that most appropriately explains the data (Joreskog, 1993).

Missing data were distributed across variables and the missing pattern was not attributed to any design feature. Therefore, the full information maximum likelihood method (FIML) was employed as a model estimation method. For the purpose of evaluating the overall fit, goodness-of-fit was assessed by examining the following indices: chi-square statistic, comparative fit index (CFI), root-mean-square error of approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). In general, a model is considered to have a good fit when the *p*-value of the chi-square statistic is greater than .05, CFI exceeds .96, RMSEA is less than .06, and SRMR is less

than .10 (Hu & Bentler, 1999).

### ***Tests of Models***

The initial baseline model was constructed on the basis of the originally proposed path model for regression analysis. Table 20 presents the results of the path analysis of the initial baseline model. The goodness-of-fit-indices of the initial baseline model indicated that the fit of model was not acceptable. The *p*-value of the chi-square statistics was less than .001, CFI was less than .96, and RMSEA (.023) was greater than the acceptable level. Accordingly, a problem was perceived in the model's fit.

Table 20. *Results of Fit Indices in the Path Model*

	$\chi^2$	df	CFI	RMSEA	SRMR
Initial baseline model	130.68***	10	.768	.227 (90% CI = [.0193 to .262])	.062
Modified model	4.89	4	.998	.031 (90% CI = [.00 to .107])	.010

\*\*\* *p* < .001

Modification indices suggested that the model would be improved by specifying relationships 1) between the perception of cultural attributes and three other housing perception variables (i.e., perception of physical attributes, perception of neighborhood, and attachment), 2) among the three housing perception variables, and 3) between the perception of cultural attributes and housing deficit.

As for the relationships between the perception of cultural attributes and the three housing perception variables, indirect effects of cultural aspects of housing satisfaction through the perception of physical attributes, the perception of the neighborhood, and attachment was suspected. Although some literature has suggested the direct effects of

cultural aspects on housing satisfaction (Shea & Inman, 1994), no significant direct effects of cultural aspects were found in the earlier regression analysis. In addition, some literature has suggested that cultural norms influence housing perception. For example, Morris and Winter (1976) argued that people evaluate their housing with their cultural and family norms, suggesting that the perception of cultural aspects may influence housing perception and, in turn, affecting housing satisfaction. Besides, since the perception of cultural attributes was significantly correlated with the three housing perception variables: physical attributes, neighborhood, and attachment (see Table 13), it seemed to be appropriate to add the additional paths from the perception of cultural attributes to the other three housing perception variables:

The error terms of the three perception variables - physical attributes, neighborhood, and attachment, were allowed to covary. Since they all captured an aspect of respondents' perceptions concerning their housing conditions, it appeared reasonable to add the covariance among them. These three housing perception variables also showed high correlations.

Finally, the error covariance between the perceptions of cultural attributes and housing deficit was added. This is deemed to be reasonable, too, because both reflect some aspects of discrepancies in housing between one's ideal and one's reality; the perception of cultural attributes reflects cultural deficit concerning housing condition, while housing deficit concerns physical deficit. Because there is not enough supporting evidence to assume a causal relationship between the variables, a covariance was introduced rather than a causal path.

Based on the suggestions of modification indices, the original baseline model

was modified. The model fit of the modified model is presented in Table 20. The overall fit of the model was satisfactory:  $\chi^2(4) = 4.89, p > .05$ , CFI = .998, RMSEA = .031 (90% CI = [.000 to .107]), SRMR = .01. As the modified model fulfilled the fit criteria, individual direct and indirect paths were examined based on this modified model. The modified model is presented in Figure 2 along with path coefficients. Overall, 59% of the variance in housing satisfaction was explained by the modified path model, which tested both direct and indirect effects, explaining similarly a proportion of variance in housing satisfaction as the regression model. For simplicity of presentation, the path diagram (Figure 2) shows only significant paths with standardized parameter coefficients that represent the strength of direct influences of variables.

### ***Direct effects***

Most paths confirmed results of the hierarchical regression analysis. Two exogenous variables (i.e., past sojourning experience and housing conditions), housing deficit, and three housing perception variables (i.e., physical attributes, neighborhood, and attachment) showed significant effects on housing satisfaction. Attachment had the strongest direct influence on housing satisfaction ( $\beta = .38, p < .001$ ), followed by housing conditions ( $\beta = .20, p < .001$ ). The perception of physical attributes ( $\beta = .18$ ), the perception of neighborhood ( $\beta = .14$ ), and past sojourning experience ( $\beta = .13$ ) had significant direct effects on housing satisfaction at the 0.01 level while housing deficit ( $\beta = -.12$ ) had significant effects on housing satisfaction at the 0.05 level.

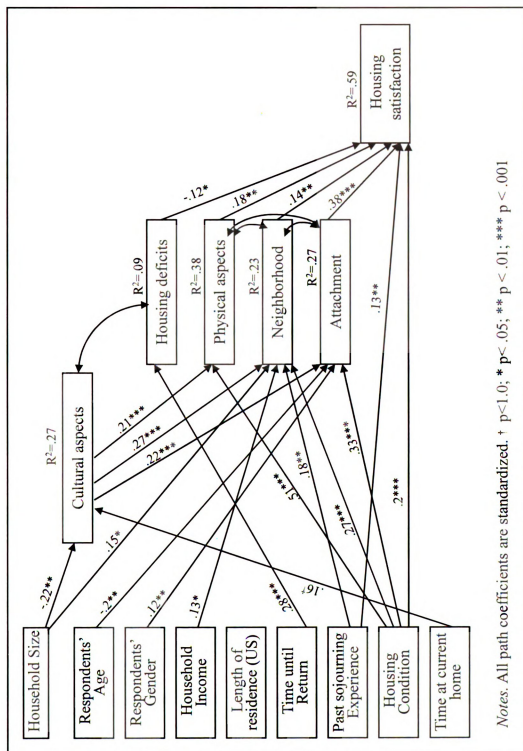


Figure 2. Modified Path Model

In the regression analysis, respondents' genders and household incomes did not contribute to effects on any endogenous variables, whereas results of the path analysis indicated that household size and household income had significant effects on positive perceptions of neighborhoods ( $\beta = .15, p < .05$  for household size;  $\beta = .13, p < .05$  for household income). In addition, respondents' genders were found to have significant effects on attachment ( $\beta = -.20, p < .01$ ). Results suggested that respondents with larger household sizes and those with higher household incomes are likelier to have positive perceptions about their neighborhoods. Also, results indicated that males tended to have higher attachment to their current housing than did females. Discrepancies between the two analyses seemed to result from treating missing data differently. Since the path analysis by Mplus 4 uses the full information maximum likelihood method (FIML), relying on the results of the path analysis seems more appropriate.

Respondents' perceptions about cultural aspects were found to have significant effects on all three perception variables: physical aspects ( $\beta = .21, p < .001$ ), neighborhood ( $\beta = .27, p < .001$ ), and attachment ( $\beta = .22, p < .001$ ).

### ***Indirect effects***

Table 21 presents variables found to have significant indirect effects on housing satisfaction in the modified path model. Among exogenous variables, household size, respondents' ages, past sojourning experience, and housing condition were found to have significant indirect effects on housing satisfaction.

Among those variables, housing condition had the strongest indirect effects on housing satisfaction through two routes. First, the housing condition had strong indirect effects on housing satisfaction through attachment (standardized indirect effect

coefficient = .13,  $p < .001$ ). Another route was that housing condition indirectly influenced housing satisfaction through perception of physical attributes (standardized indirect effect coefficient = .09,  $p < .01$ ).

Table 21. *Significant Indirect Effects on Housing Satisfaction*

Dependent variable	Effects of	Via	Standardized Indirect Effects
Housing satisfaction	Household size	→ Cultural aspects	-.02*
		→ Attachment	
	Respondents age	→ Attachment	-.08*
	Past sojourning experience	→ Neighborhood	.03*
	Housing condition	→ Physical aspects	.09**
		→ Attachment	.13***
	The perception of cultural attributes	→ Physical aspect	.04*
		→ Neighborhood	.04*
		→ Attachment	.08**

Notes. All coefficients are standardized. \*  $p < .05$ , \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Next to housing condition, past sojourning experience had the most significant indirect influence (standardized indirect effect coefficient = .03,  $p < .05$ ) on housing satisfaction through perception of neighborhood. Household size had significant indirect effects (standardized indirect effect coefficient = -.02,  $p < .05$ ) on housing satisfaction through two stages: first cultural aspects and then attachment. Although cultural aspects did not have direct effects on housing satisfaction, the results showed cultural aspects significantly influenced housing satisfaction through the perception of physical attributes (standardized indirect effect coefficient = .04,  $p < .05$ ), perception of neighborhood (standardized indirect effect coefficient = -.04,  $p < .05$ ), and attachment (standardized indirect effect coefficient = .08,  $p < .001$ ). Respondents' ages were found

to indirectly influence housing satisfaction through attachment (standardized indirect effect coefficient =  $-.08, p < .05$ ).

Table 22 presents the standardized direct, indirect, and total effects of exogenous variables and the perception of cultural attributes. Among all variables, housing condition appeared the most important factor with the highest total effects (standardized total effect coefficient =  $.47, p < .001$ ) for housing satisfaction, since it had not only strong direct effects (standardized total effect coefficient =  $.20, p < .001$ ), but also strongest indirect effects (standardized total effect coefficient =  $.27, p < .001$ ) on housing satisfaction.

Table 22. *Standard Estimates for Direct, Indirect, and Total Effects*

Dependent variable	Exogenous variables	Standardized direct effect	Standardized indirect effects	Standardized total effects
Housing satisfaction	Household size	.07	-.01	.06
	Respondents' ages	-.07	-.10	-.17*
	Respondents' genders	-.00	.06	.06
	Household income	-.06	.02	-.04
	Past sojourning experience	.13*	.06*	.19**
	Length of residence in the U.S.	.01	.02	.04
	Time until return	-.09	-.10*	-.19*
	Housing condition	.20***	.27***	.47***
	Duration at current housing	.05	.06	.11
	The perception of cultural attributes		.16***	.16***

*Notes.* All path coefficients are standardized. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



## **CHAPTER V**

### **HOUSING ADJUSTMENT PROCESSES OF CROSS-CULTURAL SOJOURNERS**

A main purpose of this study was to describe the comprehensive housing adjustment processes of Korean sojourners in the Lansing area. Case study data was analyzed to provide inclusive understanding of the whole process of how they choose, perceive, and adjust to their housing in the Lansing area.

Twenty-seven housewives of Korean sojourner households participated in the case study. As Table 23 presents, participants' ages ranged from 33 to 54, and household size varied from one to five. Twelve out of twenty-seven (44%) households came to Lansing for the Visiting International Professional Program (VIPP)<sup>2</sup> at Michigan State University, while ten out of twenty-seven (37%) households resided in the Lansing area for their own or their husbands' study in PhD programs. Participants' planned total time of sojourning ranged from one to seven years, and their length of residence in the U.S. ranged from about six months to about six years. All 27 participants lived in rental apartments in the Lansing area.

Participants in this case study showed their housing adjustment processes in a variety of ways, but similar adjustment patterns were identified in the context of the same planned total time of sojourning and length of residence in the Lansing area. Based on these two key aspects of sojourning, sojourners were classified into four groups. This chapter starts by presenting four representative cases of sojourners.

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<sup>2</sup> Visiting International Professional Program (VIPP), a part of International Studies and Program (ISP) at Michigan State University, is a non-degree certificate program for international professionals, businesses, and organizations (VIPP, 2007)

Table 23. *Characteristics of Participants in the Case Study*

ID	Age	Household size	Length of residence	Total sojourn	Purpose of visit	Apartment ***	Resident number
<b>Case 1 Short-term sojourners/Newcomer (n=11)</b>							
Joo	40	4	6 M*	1 Y*	VIPP	CM <sup>A</sup>	1
Suh	42	5	4 M	1 Y	VIPP	BW <sup>C</sup>	1
Hwang	41	4	6 M	1 Y	Visiting Professor	CM <sup>A</sup>	1
Song	40	4	6 M	1 Y	VIPP	CM <sup>A</sup>	1
Lee	38	4	5 M	1 Y	VIPP	CM <sup>A</sup>	1
Oh	36	4	5 M	1 Y	VIPP	CM <sup>A</sup>	1
Bang	54	2	5 M	1 Y	VIPP	CP <sup>A</sup>	1
Jun	38	4	6 M	1 Y	VIPP	CM <sup>A</sup>	1
Yoon	52	5	6 M	1 Y	VIPP	CP <sup>A</sup>	1
Kim	42	4	6 M	1 Y	VIPP	NK <sup>C</sup>	1
Lim	44	4	6 M	1 Y	VIPP	KH <sup>C</sup>	1
<b>Case 2 Short-term sojourners at their halfway or further r(n=4)</b>							
Lee2	43	3	13M	2 Y	VIPP	CP <sup>A</sup>	1
Min	52	3	15M	2 Y	Child rearing	KH <sup>C</sup>	1
Lee3	48	4	13M	1.5 Y	Visiting professor	CM <sup>A</sup>	1
Noh	38	4	12M	1 Y	VIPP	CP <sup>A</sup>	1
<b>Case 3 Long-term sojourners in their early part (n=4)</b>							
Choi	37	4	1 Y	5 Y	PhD student (S)**	CM <sup>A</sup>	2
Kim2	37	1	1.5 Y	5 Y	PhD student (R)**	TC <sup>C</sup>	3
Kim3	49	2	2 Y	4 Y	Child rearing	CP <sup>A</sup>	3
Lee4	39	2	1.5 Y	5 Y	PhD student (R)	CP <sup>A</sup>	2
<b>Case 4 Long-term sojourners in their later part (n=8)</b>							
Woo	34	4	4 Y	6 Y+	Visiting professor	CP <sup>A</sup>	4
Noh2	37	1	6 Y	7 Y	PhD student (R)	HT <sup>B</sup>	5
Choi2	35	1	6 Y	7 Y	PhD student (R)	HT <sup>B</sup>	5
Kim4	35	3	6 Y	5 Y	PhD student (S)	CM <sup>A</sup>	3
Kim5	34	4	5 Y	6 Y	PhD student (S)	PC <sup>C</sup>	4
Noh3	33	3	4 Y	5 Y+	PhD student (S)	PC <sup>C</sup>	3
Choi3	36	4	4 Y	5 Y+	PhD student (S)	TC <sup>C</sup>	4
Lee5	37	4	4 Y	5 Y+	PhD student (S)	TC <sup>C</sup>	2

Notes: \* M=months, Y=years

\*\* S= Respondent's spouse in PhD program, R= Respondent herself in PhD program

\*\*\* Apartment complexes in the Lansing area: CM, CP, BW, TC, PC, HT, NK, KH

A= Newly-built, rent in higher range

B= Old structure (about 30 years), rent in higher range

C= Old structure (about 30 years), rent in mid-low range

### **Four Cases of Sojourners**

Interview data revealed that sojourners' planned total time of sojourning played an important role as a main constraint in their housing adjustment because of the nature of temporary residency. Their length of residence in the U.S. was regarded as an acculturation index of sojourners (Berry & Kim, 1988; Lysgaard, 1995; Oberg, 1960). Based on these two key aspects of sojourning, four representative cases of sojourners emerged. First, participants in this case study were grouped into short-term and long-term groups based on their planned total time of sojourning in the U.S. Then, according to participants' lengths of residence in the U.S., they were categorized into two groups: newcomers and those more settled.

Figure 3 shows how respondents were identified in the four representative cases. The horizontal axis in Figure 2 shows the planned total time of sojourning in the U.S. The left side shows more short-term sojourners and the right side shows more long-term sojourners. The vertical axis in Figure 2 shows length of residence in the U.S. The upper end shows more settled sojourners and the lower end shows newcomers. The characteristics of participants in each case are presented in Table 23. Detailed characteristics of each case were as follows.

#### ***Case one: short-term/newcomer***

This group, located in the lower left corner in Figure 2, exemplified newly arrived short-term sojourners. As Table 23 presents, 11 of 27 participants (40%) were located in this group. Participants' ages ranged from 36 to 54, and household size varied from two to five. Participants in Case 1 had lived in the U.S. approximately six months or less, with sojourn plans of one year. The majority of this group ( $n=10$ , 91%) consisted of visiting scholars who were studying in the Visiting International Professional Program (VIPPP) at

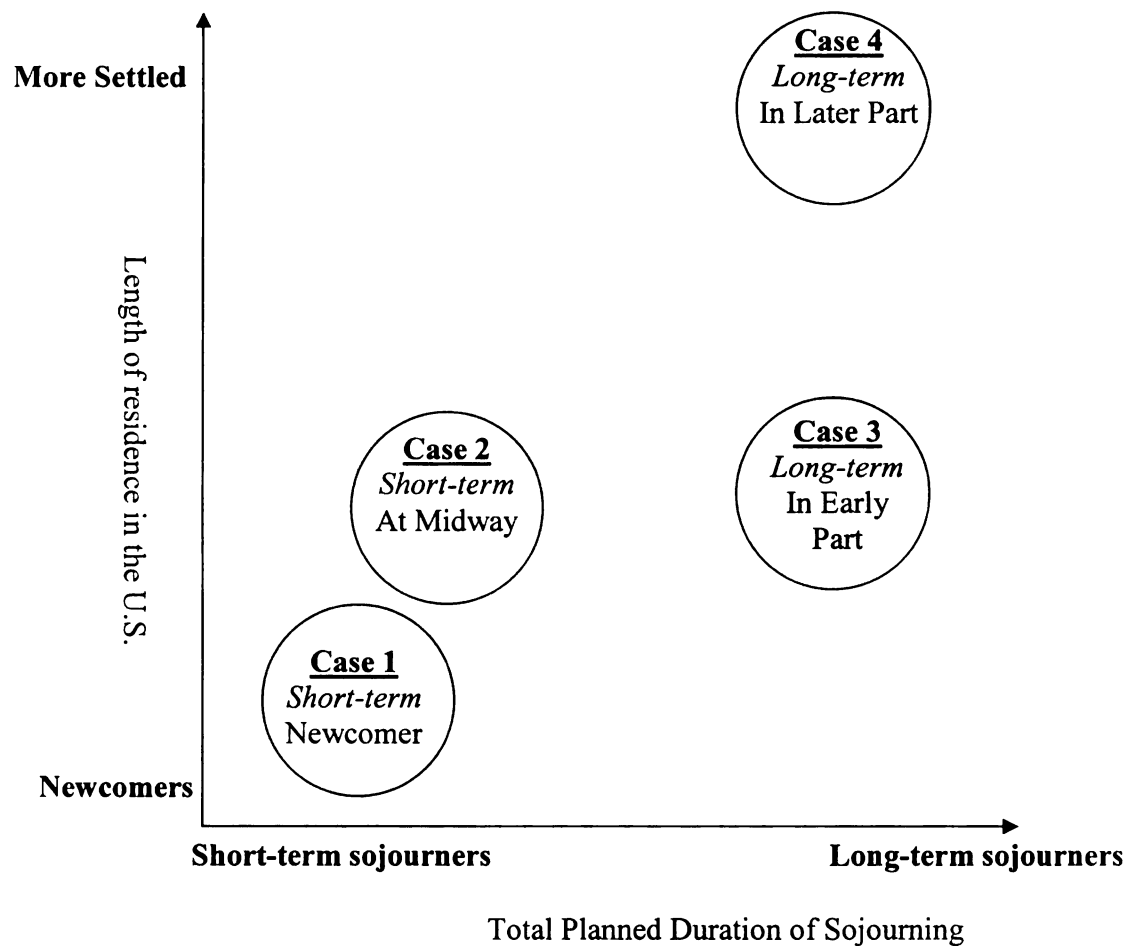


Figure 3. *Four Cases of Sojourners in Housing Adjustment Process*

According to an employee of the VIPP program at Michigan State University (2007), these household heads were generally employees of Korean public corporations, such as the Korean Land Corporation., the Korea Housing Corporation., or the Korea Gas Corporation. These public corporations select a team of 10 to 20 families each year and fund their studies in international programs at selected universities in the U.S., including

Michigan State University. When they return home after finishing their studies of generally six months to two years, the next team of visiting scholars in turn comes to the U.S. for their studies at international programs at the various universities.

***Case two: short-term sojourners halfway or further***

This group, located on the left, higher than Case 1, exemplified short-term sojourners at their halfway point or in the later part of their sojourn period (Figure 2). As Table 23 presents, 4 of 27 participants (15%) were located in this group. Respondents' ages ranged from 38 to 52, and household sizes were three or four. Respondents in this group had lived in the U.S. for about a year with their sojourn plan of one year to 18 months. Two of four household heads in this group also studied in the VIPP program at Michigan State University. Of the others, one was a visiting professor, and the other's household resided in the Lansing area for their children's education.

***Case three: long-term sojourners in their early part of sojourning***

This group was located at the low end on the right of Figure 2. Four of twenty-seven participants (15%) were located in this group, representing long-term sojourners in their early part of sojourning (Table 23). Respondents' ages ranged from 37 to 49, and the household size varied from one to four. Households in this group had lived in the U.S. about one to two years, with total of five to six year sojourn's plans. Three of four household heads in this group were doctoral students at Michigan State University and one household was visiting the Lansing area for their children's education.

***Case four: long-term sojourners in the later part of sojourning***

This group was located at the high end on the right, representing long-term sojourners whose return was approaching (Figure 2). A total of eight participants were

included in this group. Their household size varied from one to four and all respondents were in their 30s. Respondents in this group had lived about four to six years in the U.S. and planned to return home in two months to one year. The majority of household heads in this group ( $n = 7$ , 88%) consisted of doctoral students at Michigan State University.

### **Choice of Housing**

Housing choice is an essential component revealing the housing adjustment processes of sojourners with different socio-cultural characteristics (Song, 1990). Participants were asked to describe how they chose their current apartment units and what important features they wanted in their current apartment, to examine respondents' housing norms and cultural values in their housing choices.

As Table 23 indicates, all participants lived in rental apartment units. All short-term planned sojourner households in Cases 1 and 2 ( $n = 15$ , 56%) were living in their first apartment, while all long-term planned sojourner households in Cases 3 and 4 ( $n = 12$ , 44%) were living in their at-least-second apartment, indicating that they had moved at least once before. Data from short-term sojourners (Cases 1 and 2) revealed the process of moving from Korea and adjusting to their first apartments in the U.S. On the other hand, data from long-term sojourners (Cases 3 and 4) revealed the process of housing adjustments from their first apartment through to their current apartment. Thus, findings about sojourners' housing choices are reported in terms of the cases of short-term and long-term sojourners instead of for each of the four representative cases. The following section describes the process of the housing choice of short-term sojourners first, then moves to the case of long-term sojourners.

### ***Housing choices of short-term sojourners (Cases 1 and 2)***

***Finding and choosing initial housing.*** When asked how they found and chose their first apartments, the short-term sojourners in Cases 1 and 2 indicated that their colleagues, staff of the VIPP program, people in Korean churches, or friends helped them to find their apartments. As Table 24 presents, seven of fifteen respondents (47%) cited their colleagues and five of fifteen respondents (33%) cited staff of the VIPP program at Michigan State University.

In choosing their first apartments, since respondents could not do apartment searching by themselves, generally sojourners' housing norms were not effectively reflected, due to lack of information and limited choices. Although they tried to gather more information through other colleagues who had been in this area previously or by searching apartment websites to check floor plans, locations, or facility conditions, they did not have enough information about housing environments in the Lansing area. Their choices of apartments were limited as well. As a general rule, they simply picked one of the apartments recommended by their helpers in the Lansing area. So, interestingly, most new, short-term planned, sojourner households continued to choose the same couple of apartment complexes every year because they repeatedly were recommended. The majority of short-term sojourners ( $n = 11$ , 73%) in this case study were found to live in one of those apartments, for example, Club Meridian or Central Park in the Okemos area. One of the respondents, Jun stated:

I was told that many Koreans were living in Central Park or Club Meridian in Okemos area....new building...good schools... I was more inclined towards the staff's suggestion because there weren't much information on the apartments here. I had only vague idea about what life would be in the States, nor did I have chance to ask more information on the phone because I was in Korea.... Now I see many apartments with better living conditions and better rent around here...

only if I was given more choices... (Jun).

Table 24. *Information Sources for Housing Choices for Short-term Sojourners*

Sources	Case 1	Case 2	Total
Colleagues	7		7
VIPP staffs	3	2	5
Friends	1	1	2
Korean church		1	1
Total	11	4	15

Table 25. *Important Housing Attributes for Housing Choice of Short-term Sojourners*

Attributes	Number of		
	Case 1 (N=11)	Case 2 (N=4)	Total (N=15)
School district, Good school	5	3	8
Living area facing south	4	1	5
Close to school	3	1	4
Number of bedrooms or bathrooms	2	2	4
Clean and new structure	2	1	3
Utilities: Washer	2	1	3
Close to friends or other Koreans	1	1	2
Units on a specific floor (1 <sup>st</sup> or 2 <sup>nd</sup> floor)	1	1	2
Away from other Korean families	2		2
Easily taking over household goods	2		2
Facilities: workout facilities or swimming pool	2		2
Close to shopping		1	1
Low rent	1		1
Convenient bus route		1	1
Large size of bedrooms	1		1
Total mentions	28	13	41

**Important housing attributes.** When asked about what they considered to be important housing attributes for their apartments in the U.S., respondents mentioned a total of fifteen housing attributes (Table 25). Responses indicated that children of sojourner families played an important role in housing choices. Among a total of 41



mentions, almost half (20 mentions) were related to children: school district, close to schools, number of bedrooms, units on the first floor, and away from other Koreans. First, the respondents' main concern was the education of their children. More than half the respondents ( $n = 8$ , 53%) emphasized that a good school district was one of the most important factors in their housing choices. A few even said that everything else was a secondary consideration, but that the school district was the most influential factor in their choice of housing. One of the respondents, Min, in her 50s and with a daughter in high school, stressed that her key factor for choosing their home in the U.S. was her daughter's education. Being close to schools ( $n = 4$ , 27%) and living away from other Koreans ( $n = 2$ , 13%) were also related to the education of their children. Regarding her reason for wanting to live away from other Koreans, one of the respondents, Song explained:

We didn't want to have Koreans as neighbors. We are here only for about one year... Learning more English is really important while we are here. I thought my children would not benefit from hanging around with other Korean kids.... However, once we arrived here, I was disappointed, because there were too many Koreans in this apartment complex (Song).

Those with older children or teenagers put more emphasis on the number of bedrooms and bathrooms in choosing housing ( $n = 4$ , 27%). They called attention to the scarcity of decent three-bedroom apartments. Two respondents, renting three-bedroom apartments, complained that their families did not like their apartments at all, but they had no choice. On the other hand, those with young children reported that the number of bedrooms was unimportant to them. They expressed they did not care about crowding for a short period of sojourning. Rather, they considered living on the first floor to be an important attribute ( $n = 2$ , 13%) because they wanted their children to play freely at home

without bothering people downstairs.

Respondents revealed their cultural housing norms by emphasizing the importance of living areas facing south. About one-third ( $n = 5$ , 33%) of the respondents expressed the importance of living space that faces south, that is, the importance of a naturally well-lit interior; however, they realized that it was not easy to have an apartment facing south in the U.S. One of the respondents, Lim, complained:

Because my colleague did apartment searching for us, it was difficult to request apartment units facing the south. A friend of mine is living in an apartment facing the north, though she wanted the one facing the south....I was told that in the U.S., we shouldn't be concerned with the orientation of the houses. What can I do when Americans aren't concerned about the orientation of buildings? (Lim)

Table 26. *First Impression of Their Current Apartments*

	First impressions	Number of mentions
Negative	Interior space was very dark overall	3
	Carpeted floor was annoying	2
	Rooms looked small and felt closed in	1
	Building was old and in poor condition	2
	<i>Total</i>	8
Positive	Interior space was much more spacious than expected	1
	It was good overall	1
	Outside view was great	1
	Building exterior appearance was attractive	1
	<i>Total</i>	4
Total		12

An unexpected response was the importance of easily taking over house goods from the about-to-depart family. According to two respondents, there is a kind of tradition among these short-term sojourners that they hand over all their household goods to each other. Because of the fixed time of temporary residence, they did not want to spend money on household goods or furniture. That was why some families passed their

household goods on to newly-arrived families when they returned to their home country.

Other important attributes, having a new, clean apartment and the washer provided, were mentioned thrice each. Living close to Korean friends was mentioned as an important attribute for some families because they wanted to be able to get help from Korean friends when they started living in a new, unfamiliar environment.

***First impressions.*** When asked what were their first impressions of their current apartments, among a total of 12 mentions, 8 were negative (67%), 4 were positive (33%), as shown in Table 26. Most frequently mentioned negative impressions related to interior lighting and carpeted floors, while exterior building appearances and external views related to positive first impressions. Two respondents, Suh and Joo, recalled the first moments they entered their apartments:

When I got into my apartment at first, I thought the place was very spacious for three bedrooms ... but when I looked down and saw the carpeted floor, although I had already heard that most American houses have carpeted floors, I felt it was very unhygienic (Suh).

The first impression...the apartment felt closed in... Look here! As you can see, the hallway is poorly lit and narrow... The living room is dark... Compared to my apartment in Korea, which was really bright... Although I'm used to it now, I always feel that the house is very dark (Joo).

### ***Housing choices of long-term sojourners (Case 3 and 4)***

Twelve of twenty-seven participants (44%) were long-term sojourners (Case 3 and 4). As Table 23 indicates, participants of Case 3 ( $n = 4$ , 33%) had lived in the Lansing area for one to two years, with four- to five-year sojourning plans, while participants of Case 4 ( $n = 8$ , 53%) had lived in the Lansing area for four- to six-years, with five- to seven-year sojourning plans. Among long-term planned sojourner

households, the majority of respondents or respondents' spouses ( $n=10$ , 83%) were working on PhDs at Michigan State University.

Table 27. *Number of Relocations of Long-term Planned Sojourners*

Number of Moves	Case 3 ( $n=4$ )	Case 4 ( $n=8$ )	Total ( $n=12$ )
1	3	2	5
2	1	2	3
3 or more		4	4

As Table 27 shows, long-term planned sojourners tended to have high mobility. All long-term sojourners in Case 3 moved at least once during their first year of sojourning. Half the long-term sojourners ( $n=4$ , 50%) in Case 4 moved three or more times. As Table 28 presents, main reasons for leaving previous residences related to poor, inconvenient housing conditions, neighborhoods, financial reasons, and family matters.

***Reasons for Moving.*** Long-term planned sojourners' reasons for leaving previous apartments are presented in Table 28. Moving from university housing to off-campus apartments was one of the most frequently mentioned reasons for respondents' moving ( $n = 4$ , 33%). Those who started living in university housing at first reported that they moved out during their first year or two, complaining of the poor conditions of university housing. Noh recalled her experiences with university housing:

Whenever I entered my apartment, I didn't feel good... The floor plan was weird... The kitchen was very small. I thought all the apartments in the U.S. were the same way. But one day, I visited a friend at Trappers Cove, which was a really nice apartment, but the rent there was cheaper. I was so frustrated about my place that I didn't want to go back. So we decided to move right away. Even though we had to pay the fine because it was a rule to live in university apartments for at least three months, we just moved out (Noh).

Table 28. *Reasons for Leaving Previous Residences*

Reasons	Case 3 (n=4)	Case 4 (n=8)	Total (n=12)
Moving from university housing to off campus	1	3	4
Washer not furnished	1	3	4
Poor heating operation and insulation (too cold)		3	3
Poor maintenance		3	3
Poor water quality		3	3
Too crowded (baby, needed more room)		3	3
High rent, heating costs not included	1	2	3
Old structure		2	2
Relocation due to school transfer		2	2
Too far from work	1	1	2
Far from other Korean families	1	1	2
Poor surrounding environment	1		1
Wanted to move to house with wood floor	1		1
From north orientation to south	1		1
Total	8	26	34

Not having a furnished washer ( $n = 4$ , 33%) was also one of the most frequently mentioned reasons for leaving previous apartments. Respondents expressed the inconvenience of living without a washer at home, while they did not feel any inconvenience about not having a furnished dryer. Rather, even those with dryers provided in their apartment tended to use them infrequently because using dryers is not common in Korea. Respondents mentioned they felt that dryers wore out their clothes easily and quickly, and they preferred to hang the laundry inside home to make the indoor air quality more comfortable. The inconvenience of not having a furnished washer, however, made them consider moving to another apartment with a furnished washer.

Bang stated:

My first-child is a son, so I had to deal with a lot of laundry. Because the laundry facility was in the basement, the trip down to the basement was scary; it was also difficult to carry heavy loads of laundry down the steps, and I was worried about tripping on the steps at night... I didn't feel that the washed clothes were particularly clean either. I hated the laundry situation so much. My second child

was due any day, so I couldn't hand-wash the clothes... I wanted to move out as soon as possible (Bang).

Table 29. *Important Housing Attributes in Choice of Housing for Long-term Sojourners*

Attributes	Number of mentions		
	Case 3 (N=4)	Case 4 (N=8)	Total (N=12)
Nearness to Korean friends	1	2	3
Clean and new structure	1	2	3
Spaciousness and openness (size and space layout)		3	3
Close to school	1	1	2
Washer	1	1	2
Low rent	1	1	2
Living area facing south	1	1	2
Hard floor	1	1	2
Number of bedrooms or bathrooms	1		1
Close to work	1		1
Convenient bus route	1		1
Surrounding natural environment (trees, lawns, etc.)	1		1
Carport		1	1
Close to shopping		1	1
Safety		1	1
Efficient heating operation and insulation		1	1
Playground		1	1
Total mentions	10	17	27

Poor housing quality, including poor heating operation, poor maintenance, and poor water quality, also were frequently-mentioned reasons for moving. High rent and the need for one more bedroom caused respondents to move, also.

***Important attributes in choosing current apartments.*** When asked what attributes long-term planned sojourners considered important when they chose their current apartment, respondents provided a variety of housing attributes. As Table 29 presents, a total of 17 attributes were mentioned by respondents. Results revealed, unlike in the cases of short-term sojourners, that respondents' most frequent answers related to nearness to other Koreans ( $n = 3$ , 25%), clean new structures ( $n = 3$ , 25%), and

spaciousness ( $n = 3$ , 25%).

Living close to Korean friends was mentioned as important, especially by those with young children. They preferred to live close to their Korean friends with children of the same ages because they wanted their children to have friends in the neighborhood. Also, respondents themselves wanted to socialize with Korean friends. One respondent, Choi, stated:

I like to live near Koreans. I was very close to my Korean neighbors so after they returned to Korea, I was sad to see them go...I wanted to move to a place where there would be many playmates about the same age as my child.... (Choi)

Respondents also frequently cited that a newly-built, clean apartment was their first priority in choosing their current apartments because the building structures as well as home appliances in their previous apartments were outdated and shabby. Spaciousness of interior space was also one of the most frequently-cited housing attributes in choosing their current apartments. Respondents looked for spacious living rooms in terms of both size and layout. They showed preference for open-planning layouts and larger living rooms. Kim5 mentioned:

For me, spaciousness was the most important.... when the space was small, it seemed so closed in.... In my last apartment, the living room was too small and I couldn't even find place for a TV... In contrast, this apartment has open floor plan and it is also spacious...just like a new apartment in Korea (Kim5).

Two cultural attributes, a living room facing south ( $n = 2$ , 17%) and a hard floor ( $n = 2$ , 17%), were mentioned as important in choosing their current apartments.

Respondents emphasized the importance of south-facing living areas because living spaces facing south have been traditionally significant in Korean housing for natural lighting as well as for the belief that homes facing south bring good fortune. In addition,

the importance of a large window on the south wall was emphasized. One of the respondents, Lee5, explained:

As we were growing up, we were told that the house needs to be bright and have lots of sunlight coming in. Wherever we go, we look for south-facing houses. We heard that in the U.S., a lot of houses don't have the sunlight coming in so we asked a friend to pay particular attention to the orientation....my house faces the south so we get lots of sunlight (Lee5).

Three attributes, being close to schools, provided with a washer, and low rent were mentioned as important. In addition, their concerns about neighborhood (i.e., close to work, close to shopping, convenient bus route, safety, surrounding natural elements) and subsidiary service facilities (i.e., carports, playgrounds) were also mentioned in their responses.

### **Evaluation of current housing**

Once housing has been chosen, extent of the fit between housing norm and actual physical attributes may bring out an affective response in terms of evaluation (Francescato et al., 1974; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985). This section examines how Korean sojourners perceived and evaluated their current apartment conditions. Overall satisfactory and unsatisfactory attributes were explored along with differences and similarities in four representative cases.

#### ***Satisfactory housing attributes***

When asked what features in their current apartments respondents were most satisfied with, the most-frequently-mentioned features were surrounding natural environment and built-in storage (i.e., number and size of closets). As reported in Table 30, close to half of total mentions (30 of 70 mentions, 42%) related to these two



attributes, surrounding natural environment (15 of 70 mentions, 21%) and built-in storage (15 of 70 mentions, 21%). After these two attributes, a kitchen open to the living room (7 of 70 mentions, 10%) and exterior appearance (5 of 70 mentions, 7%) were mentioned most frequently as features they were satisfied with in their current apartments. In addition, subsidiary service facilities (i.e., workout facilities, swimming pool), quietness, and layout of interior space were somewhat evenly mentioned, thrice each.

***Surrounding natural environment.*** A spacious lawn, gardens, trees, animals, and fresh air impressed the respondents strongly; more than half ( $n = 16$ , 59%) the respondents mentioned surrounding natural environment and greenery as the most favorable features of their current apartments (Table 30). For example, the respondents mentioned:

We lived in several different apartments in Korea...a concrete jungle. However, the natural environment is much better here...I love seeing trees and landscapes in the backyard. I particularly like to see my children playing outside (Lee3).

The scenery is really good. I can see the forest through the window and there is a pond in the backyard like a cottage...I'm so thankful...I wasn't happy with the house when I came here for the first time but the moment that I saw rabbits and squirrels running around, it felt heavenly (Suh).

***Built-in storage:*** Satisfaction with both the number and size of built-in storage spaces was also mentioned most frequently. More than half ( $n = 15$ , 56%) the respondents mentioned closets, especially walk-in closets, as their most satisfactory attributes. Due to constraints of temporary residence, sufficient storage was considered beneficial because they did not want to spend money on buying furniture or furnishings. One respondent, Yoon, mentioned:

The interior isn't very different from Korea but there are a lot more storage spaces here... It makes moving easy...all we had to do was simply hang the clothes after

we moved... so it was convenient...it's easy to organize....I want to install the same built-in closet when we move back to Korea....(Yoon).

Table 30. *Satisfactory Housing Attributes*

Attributes	Number of mentions				
	Case 1 (n=11)	Case 2 (n=4)	Case 3 (n=4)	Case 4 (n=8)	Total (n=27)
<b><i>Natural environment</i></b>					
Greenery & natural surroundings	9	2	1	3	15
Personal yard in the back				1	1
<b><i>Neighborhood attributes</i></b>					
Feeling of safety	1				1
Enough parking space		1			1
Service facilities (workout, swimming pool, etc.)		1	1	1	3
Quietness			1	2	3
Korean families around				1	1
Close to shopping				1	1
Units on the ground floor	1				1
<b><i>Interior attributes</i></b>					
Closets (number and size, walk-in closets)	9	1	2	3	15
Kitchen open to living area	4	2	1		7
Carpet	1			1	2
Kitchen window	1		1		2
View outside			1		1
Spaciousness with high ceiling, open layout			1		1
Interior lighting			1		1
Fireplace				1	1
Separate zoning of private and public areas	2		1		3
<b><i>Building structure</i></b>					
Building appearance (exterior): shape and material	3	1	1		5
Heating operation			1		1
Low-rise buildings	1				1
New and clean structure				2	2
Appropriate rent				1	1
Total mentions	34	8	10	18	70

***Kitchen Open to Living Room:*** Over a quarter ( $n = 7$ , 26%) of respondents cited a kitchen layout open to the living room as their favorite feature in their current apartments. Respondents, particularly those with young children, preferred their kitchens open to their living rooms to be able to observe their children at play in living rooms when they

were working in kitchens. Respondents showed preferences for open-plan layouts of interior spaces, perceiving such to be family-oriented. Respondents expressed that working in kitchens was much more enjoyable in their current apartments, compared to their housing in Korea, because they could talk to their families. One respondent, Lee2, stated:

I was really surprised by the kitchen layout, which was completely open to the living room. In Korea, the kitchen was generally secluded from the living room. So, I felt isolated while working in the kitchen...I felt left out... other family members had fun in the living room... I really like having the kitchen open to the living room in my current home. I'm happy to work in the kitchen watching and talking to my family (Lee2).

***Exterior building appearance:*** The architectural form of the apartment building was mentioned frequently as a satisfactory feature. About one-fifth ( $n = 5$ , 19%) of the respondents cited exterior building appearance as attractive. Compared to the starkness of their high-rise concrete buildings in Korea, participants reported they were satisfied with living in beautiful low-rise buildings. One respondent, Hwang said:

The apartment I lived in Korea was on 25<sup>th</sup> floor. I felt uneasy about living that high. My favorite feature of this place is living on the 2<sup>nd</sup> floor. I like living near the ground (Hwang).

### ***Satisfactory attributes in the four representative cases***

Respondents in the four representative cases offered some differences and similarities in their perceptions of their housing conditions. Regarding satisfactory housing attributes, respondents in Case 1 provided a total of 34 mentions, which means that on average each person mentioned about three satisfactory attributes. More than half the total mentions (52%) were about natural environment (nine mentions) and built-in storage (nine mentions). A kitchen open to the living room, exterior appearance, and

interior layout were mentioned frequently also.

Respondents in Case 2 provided a total of eight mentions, which means on average each person cited about two satisfactory attributes. Most-frequently-mentioned attributes were natural environment (two mentions) and kitchens open to living rooms (two mentions).

Respondents in Case 3 presented a total of ten mentions about satisfactory housing features; that is, about two and a half mentions were provided by each person on average. Most frequently mentioned attribute was built-in storage (two mentions).

Respondents in Case 4 presented a total of 18 mentions, and about 2.25 mentions were provided by each person on average. Most-frequently-mentioned attributes were natural environment (three mentions) and built-in storage (three mentions).

In sum, about three satisfactory features were mentioned, on average, by each respondent in Case 1, who had been in the U.S. six months or less, while two features were cited, on average, by each respondent from Cases 2, 3, and 4, who had been in the U.S. at least a year. Surrounding natural environment was the most-frequently-mentioned satisfactory feature in all cases except Case 3. Built-in storage was also the most frequently mentioned in all cases except for Case 2.

### ***Unsatisfactory attributes overall***

When asked what features in their apartments they were most dissatisfied with, about 40% of the total mentions related to carpeted floors (17 of 129 mentions, 13%), poor interior lighting (15 of 129 mentions, 12%), and noise (15 of 129 mentions, 12%), as Table 31 presents. Next to these, respondents' unsatisfactory perceptions related to some cultural attributes (i.e., no water drains on bathroom floors, no shoe amenities in

entrances, types of heating system), poor building conditions (i.e., outdated structures and appliances, poor natural ventilations), and poor mechanical attributes (i.e., poor heating operations).

Table 31. *Unsatisfactory Housing Attributes*

Attributes	Number of mentions				
	Case 1 (n=11)	Case 2 (n=4)	Case 3 (n=4)	Case 4 (n=8)	Total (n=27)
<b><i>Interior layout and attributes</i></b>					
Carpeted floors	9	3	2	3	17
Interior lighting conditions	10	2	1	2	15
Entrance without any amenity for shoes	6	1	1		8
Outdated appliances/structure	2	2	2	3	9
Size of rooms	3			3	8
Long and narrow entrance	3				3
Height of sinks and cabinets	2			3	3
Separated kitchen	1				1
No kitchen window		1	1		2
Short of storage, few closets		1			1
Small windows in the living room				2	2
Living area not facing south			1		1
Poor door lock system				1	1
Kitchen open to living room	1				1
<b><i>Facilities</i></b>					
No playground	2			1	3
Laundry in the basement	1	1			2
<b><i>Bathroom</i></b>					
No water drain on the bathroom floor	7	1	1		9
Bathroom with two doors				1	1
Fixed showerhead	2				2
<b><i>Structure and mechanicals</i></b>					
Noise (poor acoustics, squeaks, mechanical)	10	2	1	2	15
Poor ventilation	5	1	1		7
Poor heating/cooling operation (too cold/hot)	5	2		1	8
Type of heating system	5		1	1	7
Poor construction	1				1
Far away from shopping centers		1			1
Far away from work				1	1
High rent	4				4
Total mentions	79	18	12	22	129

***Carpeted Floors.*** About two-thirds ( $n = 17$ , 63%) of respondents mentioned carpeted floor as their unsatisfactory feature in their apartment (Table 31). The majority of participants expressed strong dislike of carpeted floors in their apartments. The main reason for disliking carpeted floor related to their perceptions that carpet is unhygienic compared to hard floors in their homes in Korea. Respondents felt they could thoroughly clean the hard floor by mopping with a damp cloth in their apartments in Korea; however, respondents believed they could not remove all the dirt embedded in the carpet, no matter how carefully they vacuumed their carpeted floors. Due to the impression that carpeted floors are unhygienic, respondents felt extremely uncomfortable touching the carpet directly. One of the respondents, Oh, mentioned:

Because we like to sit on the floor, it's customary to mop the floor. The carpet looks luxurious, but the fact that we have to live with the carpeted floor is unhygienic. I've tried to keep it clean but it still feels dirty; I don't like the feeling I get when the carpet touches my skin. It feels as though there are creatures living under it. It feels even worse on rainy days due to the humidity (Oh).

Particularly, those with young children complained of maintenance problems because children often spill food or drinks on floors. Another reason for aversion to carpeted floors was dust; respondents stated that dust from carpet made them ill by worsening allergy symptoms or atopic dermatitis. The majority of participants showed a strong desire to change the flooring material to wood or vinyl flooring, which are more easily maintained, if possible. One respondent, Lee, cited:

I hated the carpet from the beginning. I didn't even put a small rug in Korea because I have young children. There's too much dirt in the carpet; it's unhygienic... I don't feel comfortable for my children to play or to sleep on the carpet... I'm worried about my children spilling juice and cleaning the stains after. I have dust allergy and the synthetic fibers make it worse. So despite the cold winter, we keep the windows open (Lee).

***Interior lighting conditions.*** Interior lighting was one of the most negatively perceived factors in their present housing. About two-thirds ( $n = 15$ , 63%) of respondents considered interior lighting to be the most unsatisfactory feature in their apartments (Table 31). Respondents cited how the dark interior lighting bothered them, and that they had had difficulty accustoming themselves to it. Compared to the level of bright lighting in their Korean homes, the main complaints about interior lighting related to low overall illumination levels because of a lack of lighting fixtures, use of incandescent lighting, and use of low-wattage bulbs. Respondents mentioned they felt confused initially because their living rooms do not have any general lighting, while it is a norm to place a central light on the ceiling in each room in Korea. In addition, respondents' key concerns about dark interior lighting related to their children. Generally, respondents believed that reading under low-lighting conditions may impair children's eyesight, so they expressed how they could not help but make their interior lighting brighter. Respondents stated:

My biggest complain is the lighting condition. Why does it have to be so dark here? I feel like I'm living in a cave. I turn on every available light but it's still dark...I don't understand why there's no general lighting in the living room (Bang).

At first, we thought our place was the only one without the lighting in the living room but that wasn't the case. The other apartments were just as dark. We like to have well lit place since the darkness can't be good for eyesight. My children have trouble studying and can't even read a book. Perhaps we were living with too much lighting in Korea but we always feel that lighting here is inadequate (Kim).

***Noise.*** Many participants ( $n = 15$ , 56%) complained about their experiences with noise, mainly due to wood frame buildings, poor soundproofing conditions, and mechanical operations. Respondents showed widely unfavorable reactions to wood house

frames as the main source of sound carrying and squeaks. Based on their experiences and expectations from housing in Korea, where concrete frames are common, they complained about lack of sound barriers between units and about squeaks from the floor. Being able to hear neighbors' voices in another unit appeared to be a bad experience. Footsteps from upstairs and squeaks from floors were pointed out by respondents as one of the most bothering attributes in their housing. They mentioned that they felt uneasy whenever the children walked and caused squeaks. One respondent, Kim, cited:

There's absolutely no soundproofing and the houses are built poorly. I can hear the sound of people walking, the floor squeaking, and even noises from bathrooms. It gets on my nerves. Sometime the noise from upstairs is so loud that it feels like the building is going to collapse. I'm startled by the noises in the bedroom, thinking there's a thief in my house. At first, my children had said there's King Kong living upstairs but when we met the person, he had a small stature. Maybe because they wear shoes in the house, the echo makes the sound louder (Kim).

Respondents mentioned that noise from heating operating, plumbing, and refrigerators also were stress factors for them and caused uneasiness.

**Bathroom.** The bathroom was also frequently mentioned by respondents as an unsatisfactory housing feature. About one-third ( $n = 9$ , 33%) of respondents complained that cleaning the bathroom was inconvenient due to the absence of a water drain on the bathroom floor. Since they were used to cleaning bathroom floors with running water and soap in their homes in Korea, newcomers who had been in the U.S. a relatively short time (e.g., Case 1) tended to be more dissatisfied with bathrooms in their current apartments. Fixed showerhead also was considered an inconvenient feature ( $n = 2$ , 17%) for those with young children because they found it difficult to wash their children therewith. One of respondent, Kim2, stated:



I'm not happy with the bathrooms. Since there's no drain, I can't clean the bathroom with water. It's inconvenient and I hate to clean the bathroom without washing the dirt away. In Korea, cleaning the bathroom with soap & water leaves the bathroom spotless. It would feel good if I could do that here. I'm not used to cleaning this way; it's uncomfortable. I don't know how people clean, but cleaning with a mop doesn't really clean the crevasses well. Not only that, because of the fixed shower head, I have hard time giving baths to my children (Kim).

**Main Entrance.** Nearly one-third ( $n = 8$ , 30%) of respondents mentioned the main entrance as an unsatisfactory feature in their apartments. Since Koreans do not wear shoes inside, the absence of amenities for organizing shoes in the entrance zone was considered unsatisfactory. Compared to their Korean housing, which typically has a separated foyer one step lower than the living space, respondents mentioned that unorganized shoes in entrances cluttered their living space and rendered it unhygienic. One respondent, Noh2, said:

I'm most unsatisfied with the entrance. The entry way is long and looks closed in. The closet by the entry is awkward & gets in the way when I put the shoes on. Not only that, the carpet gets dirty due to dirty shoes in the winter. In Korea, there was another door separating the entry so it was tidier. Since we don't wear shoes in the house, I like having a separation at the entrance. For the people who don't wear shoes inside, the current layout is cumbersome (Noh2).

**Heating System.** The traditional heating system in Korean housing is a floor heating method, called *On-dol*, which is an age-old radiant heating device. Modernized *On-dol* is still one of the most common heating systems in Korea. Respondents complained that the forced air heating system in their current apartment was the main source of harmful, low-quality indoor air. Respondents expressed how their dissatisfaction with the forced air heating system increased their preference for *On-dol* in their homes in Korea. One of the respondents, Noh2, cited:

Nobody cleans the air duct. We took a look inside the duct & it was filled with dust. How disgusting it was. There was an enormous amount of dirt that came out of the duct when we cleaned it. No wonder I wasn't feeling well. As time passes, I think the "*On-dol*" is the best and I can't wait to get back to Korea to lay on the "*On-dol*" (Noh2).

### ***Unsatisfactory attributes in the four Cases***

As Table 31 indicates, respondents in Case1 provided a total of 79 mentions of unsatisfactory features, indicating that each person provided about 7 mentions on average. The most frequently mentioned unsatisfactory features were carpeted floors, interior lighting conditions, and noise. Respondents in Case 2 presented a total of 18 mentions about unsatisfactory features in their apartment, meaning each person provided about 4 mentions on average. Similarly to Case 1, carpeted floor, interior lighting condition, and noise were the most-frequently-mentioned unsatisfactory attributes. Respondents in Case 3 provided a total of 12 mentions, indicating that each respondent provided about 3 mentions on average. The most-frequently-mentioned unsatisfactory attributes in Case 3 were carpeted floors and outdated structures and home appliances. Respondents in Case 4 offered a total of 22 unsatisfactory features, indicating that 2.75 mentions were provided by each person on average. Carpeted floors, outdated structures and small room sizes were most-frequently-mentioned as unsatisfactory housing features.

In sum, about seven unsatisfactory features were mentioned on average by each respondent in Case 1, who had been in the U.S. six months or less, while about three to four unsatisfactory features were cited on average by each respondent from Cases 2, 3, and 4, who had been in the U.S. at least a year. Respondents in Case 1 cited twice as many unsatisfactory features about their current apartment as those in other cases. For the

short-term sojourners in Cases 1 and 2, the most-frequently-mentioned unsatisfactory features were carpeted floors, interior lighting conditions, and noise. On the other hand, the long-term sojourners in Case 3 and 4 most frequently mentioned carpeted floors and outdated structures as unsatisfactory features.

### **Housing Adjustment Patterns**

According to Morris and Winter (1978), housing dissatisfaction motivates four types of responses. That is, dissatisfied families move to other housing units, modify their housing, change their family make-up, or change their norms (Morris & Winter, 1978). Similarly, in this study of sojourners' housing adjustments, four patterns of housing adjustments were identified: 1) changing their behaviors, 2) modifying existing housing attributes, 3) enduring inconvenience, and 4) moving (Table 32).

#### ***Changing behaviors to fit housing attributes***

Respondents reported that their behaviors in their apartments changed to fit their current apartment conditions. As Table 32 presents, in relation to carpeted floors, which was the most frequently mentioned unsatisfactory feature, respondents' behavioral changes took place in their ways of cleaning their homes. There were two contrasting ways of behavioral changes: cleaning house less frequently and cleaning much harder. Over one-fifth ( $n = 6$ , 22%) of the respondents cited that they cleaned their current apartments much less frequently than they did their homes in Korea. Since dirt on carpeted floors is less visible, they often forget to vacuum their homes. As the respondents stated:

Table 32. *Housing Adjustment Patterns*

Adjustment Patterns /Attributes	Number of Mentions				
	Case 1 (n=11)	Case 2 (n=4)	Case 3 (n=4)	Case 4 (n=8)	Total (n=27)
<b><i>Changing behaviors to fit housing attributes</i></b>					
<i>For Carpeted floor</i>					
Cleaned home less frequently	2	1	1	2	6
Cleaned home much harder	1		1	1	3
Wore slippers inside	2	1			3
<i>For indoor lighting</i>					
Spent more time in dining area	2				2
<i>For not having a furnished washer</i>					
More hand-washing of clothes	2				2
<i>For noise</i>					
Controlled children make less noise	1				1
Walked carefully at home	1				1
<i>For poor ventilation</i>					
Changed eating habits	2				2
<b><i>Modifying attributes to fit their life styles</i></b>					
<i>For Carpeted floor</i>					
Used cotton mats	2				2
Used bamboo mats	1	2		3	6
<i>For indoor lighting</i>					
Uncovered lighting fixtures	2	1		1	4
Used high wattage lamps	3	2	1	1	7
Replaced incandescent bulb with fluorescent		2	1	1	4
Added more incandescent lighting fixtures	5	1	1	2	9
Hung extra fluorescent lighting fixtures	1	1	2	1	5
<i>For main entrance</i>					
Put shoe shelves at the entrance	1	1		2	4
<i>For bathroom</i>					
Replaced fixed showerhead with a moveable showerhead	1	1			2
<b><i>Enduring without having</i></b>					
Gave up on vinyl or foam mats	2				2
Gave up on movable shower head	2				2
Gave up on washer	1				1
Gave up on movable storage, drawers	2				2
Gave up on wood flooring	1				1
Gave up on fluorescent lighting fixtures	1				1
<b><i>Moving out</i></b>					
Yes			4	8	12
No	11	4			15

In Korea, if I don't clean the house, I see the dust accumulating, so I can't stop cleaning, and I had to mop. Although the feeling of cleanness is great, it's hard on the body. With the carpet, I can't see the difference with vacuum so I clean less. If you think about it, it doesn't feel so great. But since I don't mop here, it's convenient. At times, I don't vacuum for a week, although I should clean more often (Oh & Choi)

In contrast, about 11% of respondents ( $n = 3$ ) cited that they cleaned and vacuumed their homes more often than they did in Korea. The reason was that they could not stand the feeling of the invisible, harmful dirt embedded inside the carpet. Suh mentioned:

I probably overreact. Whenever the kids spill something, I quickly clean after and scold them. I vacuum several times a day but I feel it is still unhygienic. It feels as though there are bugs hiding under the carpet so I hate when the carpet touches my skin (Suh).

Because of their aversion to touching carpets directly, wearing slippers inside the home was also a frequently-mentioned behavioral change ( $n = 3$ , 11%) because they generally did not wear slippers in living rooms in Korea. Respondents mentioned that they tended to force their children to wear slippers at home as well.

Two respondents mentioned how the dark interior lighting conditions caused them to spend more time around their dining table because the dining area was the brightest area with general lighting, while other rooms were dark without any general lighting. On the other hand, regarding interior lighting, some respondents mentioned that they soon adapted to the existing lighting conditions and did not have feelings of darkness in their current apartment after overcoming the uncomfortable feeling in two or three months. Hwang, in Case 1, mentioned:

In Korea, we lived with much more lighting but after moving, we had gotten accustomed to having less lighting. We were uncomfortable for first couple of

months but after we were accustomed to it (Hwang).

Noh2, in Case 4, who had lived in the U.S. for about five years, stated that she felt uncomfortable in bright interior lighting now:

At first, I felt my home was too dark, but now I'm used to it. On contrary, if the light is too bright, it's hard on my eyes.....When I visited Korea this summer, I was not comfortable with the bright fluorescent lights in my home in Korea (Noh2).

Due to noise from the neighbors, especially from upstairs, respondents cited that they tried to live more carefully, not to bother neighbors with their noises. Respondents with young children also mentioned that they told their children not to jump or run inside, and respondents themselves tried to walk quietly at home, especially late at night and early in the morning. One respondent, Lee, stated:

Because of our children, we are well aware of how loud the sound can be when they play. I tell the children not to scream or jump; I also pay attention not to make loud noises when I go to the bathroom at night (Lee).

Respondents living in apartments not furnished with washers reported that they did more hand-washing because of the inconvenience of going out to do the laundry. One of the respondents, Suh, said:

I hand-washed the laundry often. Not that I was obsessed with cleanness, but with the laundry machine, the clothes weren't so clean. At first, I started to hand wash some dirty spots and put them into laundry machine. But now, I just wash small loads by hand. It helps the air quality as the clothes dry inside room instead of using a humidifier (Suh).

### ***Modifying housing attributes to fit their lifestyles***

Due to living in rental apartment units, it was not possible to alter or renovate existing housing attributes. However, respondents showed several ways of personalizing

and making minor corrections to fit their apartments to their lifestyles. Small changes to make living more comfortable in their current apartments mainly related to carpeted floors and dark interior lighting. To not to touch the carpet directly, about one-third ( $n = 8$ , 30%) of respondents mentioned that they overlaid some kinds of floormats to cover the carpeted floor. Mostly, cotton mats, bamboo mats, or interlocking foam mats were used to overlay carpets. Lee5 explained her case:

My child was young and I couldn't let him roam freely on carpet because I felt it wasn't sanitary. I had floor mats and blocked areas with blankets so that the baby could crawl without touching the carpet. I've brought many cotton pads from Korea because someone told me that I would need them for the baby's room and the living room (Lee5).

Due to poor interior lighting conditions, respondents brightened up their interior spaces in several ways. A frequently mentioned modification was to add to the number of incandescent light bulbs. About one-third ( $n = 9$ , 33%) of respondents added more incandescent lamps. Over a quarter ( $n = 7$ , 26%) of respondents cited that they replaced existing light bulbs with higher wattage bulbs (e.g., 100 watts or more). About one-fifth ( $n = 5$ , 19%) of respondents stated that they bought and hung extra fluorescent lighting fixtures on ceilings or walls. Some respondents ( $n = 4$ , 15%) mentioned they uncovered lighting fixtures on ceilings to brighten their rooms. Replacing incandescent light bulbs with fluorescent light bulbs ( $n = 4$ , 15%) was also one of the frequently mentioned modifications. Lee5 said:

I couldn't stand the lighting. The florescent light bulb isn't as bright as Korea's. I installed few florescent lights but it's still dark. I prefer to have the study areas brighter for the children...still, it's not satisfactory. I bought long florescent lights for the living room, which keeps the room slightly brighter (Lee5).

Due to the inconvenience of organizing shoes in the main entrance, shoe shelves

( $n = 4$ , 15%) were used frequently and fixed showerheads were replaced with movable ones by two respondents.

### ***Enduring inconvenience***

Newcomers with short-term sojourning plan (Case 1) distinctively showed their willingness to endure inconvenience in their current apartments without buying anything or changing any housing attributes. Although they could afford to buy things conducive to their convenience, they would rather tolerate inconvenience, considering their temporary stay for short-term sojourning. Suh mentioned:

I've considered putting vinyl floorings instead of the carpet because I hated the carpet so much. But then, my place had 3 bedrooms so it was too big and costly to install vinyl flooring everywhere. Plus, the quality of flooring wasn't very good. Since I'm here only for 1 year, I decided to put up with the carpet. If someone asks for an advice when moving to the U.S., I would recommend bring the vinyl flooring from Korea (Suh).

Frequently-mentioned housing attributes respondents desired but did not buy, were floormats, movable showerheads, and movable storage units. In addition, washers, hard floors, and extra fluorescent lighting fixtures were mentioned.

### ***Moving***

As Table 32 presents, moving was shown only in cases of long-term plan sojourners (Cases 3 and 4). Because of living in rental apartment units, long-term sojourners showed high mobility. Numbers of times moved and reasons for moving were described in the housing choice section. Respondents expressed willingness to move if they found more spacious, new, clean, and well-furnished apartments in good neighborhoods for a monthly payment similar to what they were paying at the time.



### ***Overall adjustment patterns***

Overall, short-term planned sojourners tended to change their behaviors and to modify housing attributes twice as often as long-term planned sojourners did. As Table 32 presents, short-term planned sojourners (Cases 1 and 2) reported about one behavioral change per person (a total of 15 mentions by 15 respondents) on average, while long-term sojourners reported about one behavioral change per two people (a total of 5 mentions by 12 respondents). Similarly, in modifying housing attributes, short-term sojourners reported about two modification per person on average (a total of 27 mentions by 15 respondents), while long-term sojourners reported about one modification per person (a total of 13 mentions by 12 respondents).

In addition, short-term planned sojourners tended to endure inconveniences in their current apartments when they considered housing adjustments to be complicated or expensive. Since short-term planned sojourners expected to return home in one or two years at most, no households in Cases 1 or 2 considered moving to another apartment. Considering the complexities process of relocation, they tended to endure any situations in their current apartments. In contrast, long-term sojourners in Cases 3 and 4 tended not to repress their dissatisfactions with their housing conditions; they moved when they found better housing which could resolve their dissatisfactions.

As Table 32 indicates, newcomers (Case 1) showed overwhelmingly higher numbers of behavioral changes and housing modifications in relation to number of respondents that made them comparable to respondents in Cases 2, 3 and 4.

### ***Adaptability to housing attributes***

Depending on respondents' length of residence in the U.S., respondents showed

some differences and similarities in their housing adjustments. Overwhelmingly, the majority of sojourners in Case 1, whose length of residence in the U.S. was six months or less, were dissatisfied with two cultural attributes: carpeted floors (82%) and dim interior lighting (91%). Sojourners in Cases 2 and 3, whose length of residence in the U.S. was between one and two years, reported the same two cultural attributes of carpeted floors (38%) and dim interior lighting (38%) as unsatisfactory attributes, but mentioned them much less frequently. On the other hand, the highest numbers of respondents in Cases 2 and 3 were dissatisfied with outdated structures. Sojourners in Case 4, whose length of residence in the U.S. was over 4 years, reported carpeted floors (38%) and outdated structures (38%) more frequently than dim interior lighting (25%), and noises (25%) as unsatisfactory features in their current apartments.

As Table 33 indicates, interior lighting conditions and noise were considered unsatisfactory features by 91% of respondents in Case 1, while only about 25% of the respondents in Case 4 mentioned interior lighting and noise as unsatisfactory features. Respondents' complaints about interior lighting and noise dropped considerably from 91% in Case 1 to 25% in Case 4.

Respondents' complaints about carpeted floors dropped less drastically than did the two above, namely from 82% in Case 1 to 38% in Case 4. The type of heating system was cited as an unsatisfactory feature by 45% of the respondents in Case 1, while it was not cited as an unsatisfactory feature by respondents in Case 4. A bathroom with no floor drain system (64%) and entrances (55%) were complained of frequently by respondents in Case 1, while there was no mention of these two features as unsatisfactory attributes in Case 4. On the other hand, complaints about outdated structures increased from 18% in

Case 1 to 50% in Cases 2 and 3 combined, and 38% in Case 4.

Table 33. *Adaptability to Unsatisfactory Housing Attributes*

Unsatisfactory features	Number of mentions (% of respondents)		
	Case 1 6 months and less <i>n</i> =11	Case 2 and 3 7 months to 2 years <i>n</i> =8	Case 4 Over four years <i>n</i> =8
Carpeted floors	9 (82%)	3(38%)	3(38%)
Interior lighting	10(91%)	3(38%)	2(25%)
Noise	10(91%)	3(38%)	2(25%)
Outdated structures	2(18%)	4(50%)	3(38%)
Bathroom floors*	7(64%)	2(25%)	0
Entrances	6(55%)	2(25%)	0

\* Bathroom with no floor drain system

In sum, based on the number of mentions by respondents from each representative Case, carpeted floors were found to be more difficult and time-consuming to be adapted to by respondents, than interior lighting conditions or noise problems. Carpeted floors seem one of the most uncomfortable attributes for Korean sojourners in the U.S. through all cases of sojourning. A bathroom with no floor drain system, and the main entrance, were complained of frequently by newcomers, but respondents soon were likely to adapt to existing conditions. Outdated structures seemed not a serious problem for newcomers, but the longer sojourners lived in the U.S., the more they tended to be dissatisfied with them.

## **CHAPTER VI**

### **DISCUSSION AND CONCLUSION**

This chapter begins with a discussion of findings from the survey and the case study, along with research questions outlined in Chapter 2. Then, conclusions and some implications from the findings are presented. In the last section, limitations of the present study and recommendations for future housing studies of cross-cultural sojourners are presented.

#### **Discussion**

This section provides discussion of findings regarding factors influencing the housing satisfaction and housing adjustment processes of sojourners.

##### ***Factors influencing housing satisfaction of sojourners***

One of the main purposes of this study was to identify determinants of the housing satisfaction of sojourners. A conceptual framework was developed from the actual-aspirational gap theory of housing satisfaction (Campbell et al., 1976; Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Weidemann & Anderson, 1985) and Morris' & Winter's (1978) housing adjustment model. This study, specifically, focused on relationships between (1) sojourner characteristics, (2) housing deficits, and (3) perceptions of various housing attributes on housing satisfaction.

Sojourner characteristics which were exogenous variables in the conceptual model consist of nine variables: household size, respondent's age, respondent's gender, household income, length of residence in the U.S., time until return, past sojourning

experience, housing condition, and time at current home. Focus was on the effects of two intervening factors: (1) housing deficits and (2) housing perceptions of four housing attributes: perceptions of physical attributes, perceptions of neighborhoods, perceptions of cultural attributes, and attachment. Based on regression analyses and path analyses, major findings about determinants of the housing satisfaction of sojourners are summarized, along with the research questions, as follows:

*RQ 1. How do sojourner characteristics influence housing deficits?*

Among nine variables of sojourner characteristics, time until return was found to significantly influence housing deficits, while demographic or housing characteristics had no effects on housing deficits. Results suggest that sojourners with longer times remaining until they return home are likely to have more housing deficits while sojourners whose return is approaching tend to have the least number of housing deficits.

Morris and Winter (1978) suggested that families with normative housing deficits tend to exhibit adjustment behaviors to reduce their housing deficits. It seems that those whose return is approaching have fewer housing deficits because they have reduced such deficits already through housing adjustment behaviors during their sojourning. On the other hand, long-term sojourners in the early part of their sojourning may have the greatest number of housing deficits because they have not yet engaged well in housing adjustment.

Through case study interviews, possible reasons for this result were provided as well. Interviews revealed that newcomers have a greater number of housing deficits because the sojourners' housing norms were not reflected effectively in choosing their first housing, due to various constraints (e.g., lack of information, limited choices).

However, long-term sojourners in the later part of their sojourn showed fewer housing deficits by solving their housing deficits through mobility.

*RQ 2. How do sojourner characteristics influence housing perceptions?*

All four housing perception variables were significantly related to sojourner characteristics. Among nine variables of sojourner characteristics, the housing condition showed the strongest effects on three variables of housing perceptions: (1) perceptions of physical attributes, (2) perceptions of neighborhood, and (3) attachment. In terms of strength of effects, housing condition on perceptions of physical attributes showed the highest effect size among all hypothesized relationships in the proposed theoretical framework. Results were not surprising because it was suggested in the actual-aspirational gap theory of residential satisfaction that people's perceptions of a particular attribute are dependent on the objective environmental attributes (Campbell et al., 1976; Francescato et al., 1974; Marans & Rodgers, 1975; Marans & Spreckelmeyer, 1981; Morris & Winter, 1978; Weidemann & Anderson, 1985).

One interesting result was that length of residence in the U.S. or time at the current home had no effect on sojourners' attachments to their current housing, while housing condition was the most influential determinant of sojourners' attachments to their housing. Generally, the length of association is an important variable affecting place attachment (Kaltenborn, 1991; Moore & Graefe, 1994; Patterson & Williams, 1991), but the results of this study showed that sojourners living in better housing had higher attachment to their housing, regardless of length of association with their current housing or area. Considering that homeownership is a key positive indicator of attachment (Mesch & Manor, 1998), renter status of sojourners seemed related to this result. Since

most long-term planned sojourners tended to reduce their housing dissatisfaction through mobility, the length of residence of both short-term and long-term sojourners at their current housing was generally about a year or two at most. Therefore, housing condition seemed a more powerful determinant of attachment to their housing rather than did length of association. Those dissatisfied with their housing condition are likely to be less attached to their housing because they plan to move to better housing. On the other hand, those satisfied with their housing conditions are likely to be more attached to their housing because they do not plan to move. Studies about the elderly also showed that housing condition positively correlates with the place attachment of the elderly (Eshelman & Evas, 1998; Kweon et al., 1998).

Both respondents' ages and household size significantly influenced sojourners' attachment to their housing. Results showed negative relationships between respondent's ages and their attachment to their current housing. Reasons why younger sojourners tended to be more attached to their current housing seem related to their purpose of visit and planned total time of sojourning. In this study, older sojourners were likelier to be short-term sojourners, such as visiting scholars, while younger sojourners were long-term sojourning undergraduates or graduate students. Since those older sojourners in this study have their own homes in Korea and consider their current housing as temporary during their sojourning, they seemed to have lower attachments to their current housing in the U.S.

Results showed household income significantly influenced sojourners' perceptions of neighborhood. Sojourner households with higher income showed more positive perceptions about their neighborhood. This result was unsurprising because

income level is the prime determinant of differences in achieved housing (Michelson, 1967). Previous studies also showed that level of household income is one of the strongest factors for neighborhood satisfaction (Fried, 1982; Morris, et. al., 1976) and is associated with perceived neighborhood pleasantness (Boslaugh et al., 2004).

Household size had significant indirect effects on sojourners' attachments to their housing through perceptions of cultural attributes. Household size showed negative relationship with perceptions of cultural attributes. Reasons for the negative relationship between household size and perceptions of cultural attributes seemed due to the high correlation between respondents' ages and household sizes. Generally, younger respondents were unmarried single students, who constituted the smallest household size, that is, one. As acculturation theory suggests that those who relocated to the U.S. at early ages are more acculturated (Tran, 1989; Gim et al, 1990; Ly, 2001), younger sojourners appeared to be more acculturated to housing attributes of the host country.

*RQ 3. How do sojourner characteristics, housing deficits, and housing perceptions influence housing satisfaction?*

Among nine variables of sojourner characteristics, housing condition was the most influential determinant of housing satisfaction of sojourners, not only directly but also indirectly through perceptions of physical attributes and attachment. Results support the conceptual model of Marans and Spreckelmeyer (1981) suggesting direct and indirect links between objective environmental attributes, people's subjective responses to these attributes, and overall environmental satisfaction.

Past sojourning experience also influenced housing satisfaction both directly and indirectly through perceptions of neighborhood. Results suggest that those with previous sojourning experiences were likelier to be adapted effectively and to be satisfied with



their housing and neighborhood. Previous acculturation studies supported how prior sojourning experience is an important factor influencing cross-cultural adjustment, and that significant differences exist in cultural adaptation between first-time sojourners and experienced sojourners (Mendenhall & Oddou, 1991; Selvarajah, 2003). Also, during the case study interviews, several respondents mentioned they could anticipate possible cultural differences and have appropriate preparations for their sojourning life in advance because they had had previous sojourning experiences.

Housing deficits significantly detracted from housing satisfaction. The negative relationship suggests that sojourners with fewer housing deficits showed higher housing satisfaction. This result was consistent with the housing adjustment model of Morris and Winter (1976, 1978); however, results showed little support for housing deficits as a mediator between sojourner characteristics and housing satisfaction.

Results showed that all four housing perception variables, (1) perceptions of physical attributes, (2) perceptions of neighborhood, (3) perceptions of cultural attributes, and (4) attachment, had significant effects on housing satisfaction directly or indirectly. Three housing perception variables, (1) perceptions of physical attributes, (2) perceptions of neighborhood, and (3) attachment, excluding perceptions of cultural attributes, directly influenced housing satisfaction. Among those three variables, attachment was the most influential determinant of the housing satisfaction of sojourners, which was no surprise, as Altman and Low (1992) identified place attachment as an important variable in predicting housing satisfaction.

An interesting result was that perceptions of cultural attributes had no significant direct effects on housing satisfaction, but had significant indirect effects on housing

satisfaction through all the other three perception variables: perceptions of physical attributes, perceptions of neighborhood, and attachment. Effects of perceptions of cultural attributes were mediated significantly by these three perception variables. The results showed how cultural aspects of housing environment are important to housing perceptions as well as housing satisfaction of sojourners. It was demonstrated that sojourners feel differently about their physical housing attributes, neighborhoods, and attachment, depending on how comfortable or uncomfortable they feel about cultural differences in their current housing.

Results indicated that housing perceptions were important intervening variables between sojourner characteristics and housing satisfaction, while the housing deficits variable did not show any significant mediating effects on housing satisfaction. Among housing perception variables, attachment was the most significant mediator between sojourner characteristics and housing satisfaction. Morris' and Winter's (1978) model suggested that each family evaluates their housing conditions in terms of their housing norms and that, if their current housing conditions do not meet their norms, a deficit is generated. These normative deficits reduce housing satisfaction. On the other hand, Maran and Spreckelmeyer's model (1981) suggested housing satisfaction is affected by subjective perceptions and assessments of the objective environmental attributes. The findings of this study showed that the housing satisfaction of sojourners is predicted better by Maran and Spreckelmeyer's model (1981) than by Morris' and Winter's model (1978).

### ***Housing adjustment processes of sojourners***

To describe housing adjustment processes of sojourners, a conceptual

framework of housing choice, housing perceptions and evaluation, and housing adjustment was developed, based on Morris' and Winter's model of housing adjustment (1978). Findings of the case study are presented in this section, along with research questions.

*RQ 4. What are the main constraints in the housing adjustment processes of Korean sojourners?*

Results showed that sojourners' planned total time of sojourning and length of residence in the U.S. were the main constraints throughout the whole processes of housing choices, housing perceptions, and housing adjustment behaviors. Based on sojourners' planned total time of sojourning and length of residence, four representative cases of sojourners were identified to describe the patterns of housing adjustment.

Short-term sojourners were categorized into Case 1 and Case 2, where Case 1 represented newcomers and Case 2 exemplified short-term sojourners midway or further in their sojourning. Most short-term sojourners in Cases 1 and 2 were visiting scholars. Long-term sojourners were categorized into Case 3 and Case 4, where Case 3 represented long-term sojourners in the beginning of their sojourn and Case 4 typified long-term sojourners whose return was approaching. Long-term sojourners were mostly doctoral students.

*RQ 5. How do Korean sojourners choose their first and/or current housing in the U.S., and what housing features are perceived to be important when they choose their housing in the U.S.?*

The case study revealed that housing norms of sojourner families were not reflected effectively in the choice of their first housing due to various constraints (e.g., lack of information, limited choices). For short-term sojourners, since others search for their apartments, two specific apartment complexes were found to be chosen by most

short-term planned Korean sojourners every year.

Important attributes for short-term sojourners in choosing their housing were related mostly to children. Especially, since children's education plays a significant role in housing choice, school district and nearness to schools were top priorities. Importance of children in choice of housing and neighborhoods were consistent in the studies of housing adjustment of Korean immigrants (Lee, 1998; Song, 1990).

Long-term sojourners who chose university student housing as their first housing usually moved out to off-campus apartment units within their first year or two, due to poor housing conditions and not having washers provided. Unlike the cases of short-term sojourners, long-term sojourners considered nearness to other Koreans and better physical quality of housing (i.e., clean new structures, spaciousness) as important features when they moved to their current housing.

Overall, in the sojourners' choice of housing, the life cycles of families seemed an important factor. Different housing norms are shown in sojourners with and without children of school age. Those with children of school age were most concerned with the school district, while those without children of school age were most concerned with better living quality and nearness to Korean friends.

*RQ 6. How do Korean sojourners feel about their current housing, and what features of housing are Korean sojourners satisfied or dissatisfied with?*

Two attributes, the surrounding natural environment and built-in storage spaces (i.e., number and size of closets), were considered satisfactory features by most sojourners in all four cases. Next to these two attributes, an open kitchen to the living room and exterior appearance were mentioned frequently as satisfactory housing features

also.

As an unsatisfactory housing feature, carpeted floors were the most frequently mentioned across all cases of sojourners, from newcomers to the most settled. Based on Confucian ethics, barefooted living and sitting on the floor rather than on a chair are the most distinguishable behavioral characteristics of Koreans. Due to these two housing behaviors, a hard floor with radiant floor heating - *On-dol* - is common in Korean housing. Thus, cultural unfamiliarity with a carpeted floor, and the notion of an unhygienic floor condition due to inconvenience of maintenance, seems to result in sojourners' aversion to carpeted floors. Lee's (1998) findings also indicated that the most wanted cultural amenity of Korean immigrants in Houston was wooden-floored rooms. A traditional floor-heating system - *On-dol* - was most desired by Korean families in the Washington D.C. area (Lee, 1982). In addition, sojourners' dislike of carpeting seems to increased by the poor quality of floor carpet in many rental apartments.

Next to the carpeted floor, interior lighting and noise were considered unsatisfactory housing features in their current housing. On the other hand, results of the survey showed the perception about interior lighting was the most negatively rated by participants, closely followed by bathrooms absent floor drain systems. Different results between the survey and case study may result from differences in characteristics of respondents. Considering that all participants in the case study were housewives of Korean sojourner households, particularly Korean housewives seem to have an extreme dislike for carpeted floors.

Results suggest newcomers of Case 1 were more dissatisfied with the lack of cultural amenities in their housing than were others in Cases 2, 3, and 4. Generally,

short-term sojourners complained more about lack of cultural attributes in their current housing, while long-term sojourners were more concerned with physical attributes such as outdated building structures and furnishings. Results suggest that sojourners' attitudes about cultural attributes tend to change from cultural translocation to cultural transformation along with sojourners' lengths of residence in the U.S., as Noussia (2003) suggested. Similarly, it can be explained that cultural needs are stronger in newcomers while adhesive needs are more significant in long-term sojourners, as Hurh and Kim (1984) suggested. This finding is also supported by studies of Korean immigrants (Lee, 1982; Song, 1990; Lee, 1998), showing higher cultural amenity needs in recently-immigrated Koreans.

Results revealed newcomers with short-term sojourning plans (i.e., Case 1) presented the greatest numbers of favorable features as well as the greatest numbers of complaints about their housing among the four Cases of sojourners, while sojourners in Case 4 cited the least number of complaints about their housing. This result suggests that housing adaptation process of Korean sojourners can be explained by Oberg's (1960) four phases of cultural adjustment to some degree. Newcomers in Case 1 seem to represent a mixture of "the honeymoon stage" and "the crisis stage," considering that newcomers presented the highest numbers of complaints as well as favorable features about their housing. Newcomers showed responses of the "honeymoon stage," being excited about some satisfactory housing attributes (e.g., natural environment, school districts). At the same time, newcomers showed responses of "the crisis stage," being frustrated about unsatisfactory housing (e.g., lack of cultural amenities). On the other hand, sojourners who had stayed in the U.S. about one to two years (Cases 2 and 3)

seemed to show responses of “the recovery stage,” gradually discovering how to work better with the new housing environment. Furthermore, sojourners who had stayed in the U.S. for over four years (Case 4) seemed to show responses of “the adjustment stage,” feeling comfortable in their current housing environments, presenting the least numbers of complaints about their housing.

Since newcomers showed the mixture of responses of the honeymoon stage and the crisis stage, the U-curve pattern was not clear.

*RQ 7. What adjustments (i.e., alterations, improvements, or repairs) have been made to adapt to the current housing and what cultural attributes do Korean sojourners feel are easier or more difficult to adapt to?*

In dealing with unsatisfactory features (i.e., carpeting, indoor lighting, noise, outdated structures, bathroom absent floor drain system, and main entrance), the case study results presented four patterns of housing adjustments of Korean sojourners: 1) changing behaviors to fit to existing housing attributes, 2) modifying existing housing attributes to fit to their lifestyles, 3) enduring inconveniences, and 4) moving out. To cope with floor carpeting and interior lighting conditions, sojourners responded in two ways: (1) changing their behaviors and (2) modifying existing conditions. Noise made sojourners change their behaviors in their current housing, while bathrooms and main entrances caused sojourners to modify existing conditions. Enduring inconvenience occurred only for short-term sojourners, while only long-term sojourners tended to move out when they were dissatisfied with their housing.

Morris and Winter (1978) suggested four types of housing adjustments: (1) residential mobility, (2) residential alteration, (3) structural family adaptation, and (4) normative family adaptation. Among these four housing adjustments, Korean sojourners

showed three adjustment behaviors: residential mobility, residential alteration, and normative family adaptation, excluding structural family adaptation. The housing adjustment of short-term planned sojourners related mainly to residential alterations (i.e., modifying housing attributes) and normative family adaptations (i.e., changing behaviors and enduring inconveniences). On the other hand, housing adjustments of long-term planned sojourners related more to residential mobility and residential alteration.

Sojourners tended to adapt to most of the unsatisfactory attributes over time through various types of adjustment behaviors. Overall, housing attributes related to Korean culture (e.g., carpeted floor, interior lighting) took longer for Korean sojourners to adapt to than functional housing attributes (e.g., noise). Carpeted floors appeared to be harder and more time-consuming to be adapted to for sojourners than did other attributes. Interior lighting and noise problems also take time to be adapted to, but they seem to be easier to adjust to than carpeted floor. Bathrooms absent floor drain system, and entrances, were indicated to be unsatisfactory attributes by newcomers, but soon sojourners were likely to adapt to them.

Outdated structures seemed not a serious problem for newcomers, but outdated structures made long-term sojourners move out of their previous housing. Lee's (1998) findings indicated that immigrants' attitudes about cultural amenities were related to their length of residence in the U.S. Recently-immigrated Koreans showed higher cultural amenity needs, but lower functional space needs. Findings of this study are consistent with Lee's (1998) findings.

Results revealed some routine processes of housing adjustments for long-term and short-term sojourners, as Song (1990) and Lee (1998) indicated about the usual



processes of housing adjustment of Korean immigrants. According to Song (1990), Korean immigrants in Detroit began in their relatives' homes first, subsequently settled into rental units near relatives, then bought their own dwellings. Similarly, Lee (1990) described how Korean immigrants in the Houston area start living in rental units in a specific Korean business area, then move to low-cost housing around the city. Likewise, routine processes of housing adjustment for short-term and long-term sojourners emerged from this case study.

For short-term sojourners, although their apartments do not reflect their housing norms effectively, they usually live in their first apartment until they return to Korea. No matter how fit or unfit their apartment conditions are for their family circumstances, short-term planned sojourners do not plan to move. To adjust to their housing conditions, short-term sojourners engage in minor corrections of housing attributes, behavioral changes, and lowering their housing norms.

On the other hand, long-term sojourners tend to begin their lives in student housing units, in which their housing norms are not met. Due to poor housing conditions and not having washers provided, they usually move off-campus to apartment units within their first year or two, then tend to move every year or two to the next apartment which better fits their housing norms.

## **Conclusion**

### ***Factors influencing housing satisfaction of sojourners***

Several conclusions were drawn from the analysis of the survey questionnaire. One, findings of this study support a conceptual model that incorporates sojourner

characteristics, housing deficits, and housing perceptions as determinants of housing satisfaction. Hypothesized relationships specified by the conceptual path model of the housing satisfaction of sojourners are supported. In addition, a modified path model based on path analysis provides a better overall model fit and clarifies direct and indirect relationships.

Two, among nine variables of sojourner characteristics, only time remaining until returning home had significant effects on housing deficits. On the other hand, housing perceptions were influenced significantly by seven variables of sojourner characteristics except length of residence in the U.S. and time until return. Housing condition and past sojourning experience significantly influenced housing satisfaction of sojourners both directly and indirectly through housing perceptions.

Three, sojourners' perceptions of housing attributes are much stronger predictors of housing satisfaction than are housing deficits. Findings of this study showed that housing satisfaction of sojourners is better predicted by Maran and Spreckelmeyer's model (1981) than by Morris' and Winter's model (1978).

Four, this study has fruitful findings about how cultural aspects of housing influence housing satisfaction of sojourners. Findings demonstrate that sojourners' perceptions of cultural attributes significantly influence housing satisfaction indirectly through sojourners' perceptions of physical attributes, neighborhood, and attachment. This study finds that sojourners' attitudes about cultural attributes, or levels of acculturation on their housing in the host country, significantly influence sojourners' perceptions of various other housing attributes which, in turn, significantly influence housing satisfaction. Previous studies on the housing satisfaction of Korean immigrants

(Lee, 1982; Song, 1990; Lee 1998; Hwang, 2006) indicated that socio-cultural attributes are important factors in creating satisfactory housing environments. Findings of this study confirm those of previous studies by identifying and locating significant indirect effects of cultural aspects of housing on housing satisfaction.

Five, unlike previous studies (Morris & Winter, 1978; Foot et al., 1960; Galster & Hesser, 1981; Lu, 1999; Tognoli, 1987), the housing satisfaction of sojourners was not directly related to demographics and the socioeconomic characteristics of household. Among all factors, housing condition had the highest total effect - combining direct and indirect effects - on housing satisfaction, while attachment showed the highest direct effects on housing satisfaction.

### ***Housing adjustment processes of sojourners***

Several conclusions were drawn from an analysis of the case study. One, the main constraints of housing adjustment of sojourners were their planned total time of sojourning and length of residence in the U.S. Four representative cases of sojourner groups emerged based on these two main constraints of sojourners.

Two, in choosing their initial housing units, housing norms of both short-term and long-term sojourners were not reflected effectively due to lack of information and limited choices. For short-term planned sojourners, needs of children and especially the school district were the most essential factors in their choice of housing in the U.S. while better physical housing conditions and nearness to other Koreans were considered as important to long-term planned sojourners.

Three, surrounding natural environment and built-in storage were perceived as satisfactory features in their current housing by most sojourners across all four cases of

sojourners. Carpeted floor, interior lighting, and noise were perceived as unsatisfactory by most short-term planned sojourners, while carpeted floor and outdated structure were considered unsatisfactory by long-term planned sojourners. Overall, newcomers showed more cultural needs while long-term sojourners showed more need for better physical quality of housing.

Four, four patterns of housing adjustment of sojourners were identified: (1) change behaviors, (2) modify housing attributes, (3) endure inconveniences, and (4) move out. Among four patterns of adjustment behaviors in the model of Morris and Winter (1978): (1) residential mobility, (2) residential alteration, (3) structural family adaptation, and (4) normative family adaptation, the last-mentioned was the main adjustment pattern for short-term sojourners, involving changing their housing norms and behaviors or enduring their housing problems. On the other hand, long-term sojourners resolved unsatisfactory housing attributes by mobility, consistent with the case of immigrants (Lee, 1998).

Five, generally, unsatisfactory features related to cultural aspects of Korean housing were found more difficult to be adapted to by sojourners. Among cultural attributes mentioned by Korean sojourners, carpeted floors were found the most difficult to be adapted to by sojourners across all four cases.

Six, considering that newcomers provided the greatest number of complaints as well as the greatest number of favorable features, housing adjustments of Korean sojourners were explained by Oberg's (1960) four phases of cultural adjustment to some degree, although the U-curve was not clear.

Last, through overall sequential processes of housing adjustment of sojourners,

routine patterns emerged in terms of short-term and long-term sojourners. Initial housing units of short-term and long-term sojourners generally do not reflect their housing norm effectively. Short-term sojourners generally chose one apartment from limited choices and lived in their initial apartment until their return to Korea, lowering their housing norms. On the other hand, long-term sojourners tend to begin their lives in student housing units which do not meet their housing norms. Due to poor housing conditions and not having washers, they usually move to off-campus apartment units within their first year or two, then tend to move every year or two to the next apartment which better fits their housing norms.

### **Implications**

The results of this study have several implications. Suggestions are presented for both researchers and practitioners.

#### ***Theoretical Implications***

The present study has several theoretical implications to housing adjustment research. One, by investigating the housing satisfaction of sojourners and their adjustments, the present study is expected to facilitate housing studies in relation to cross-cultural sojourner populations. Researchers have studied housing satisfaction among different social groups, (Baillie and Peart, 1992; Cook et al., 1994; Crull, 1994; Friedman and Cammalleri, 1993; Johnson et al., 1993) such as the elderly (Lawton, 1975; Carstens, 1985), disabled (Anderson, Anthony, Weidman, Bain & Allen, 1988; Bendar, 1977), children (Weinstein & David, 1986), and those of low income (Cooper, 1975), addressing the housing needs for the target group and identifying factors that affect housing

satisfaction; however, although cross-cultural sojourner populations are one of the fastest growing cultural subgroups in the U.S., they have not yet received the attention of housing researchers. The present study awakens researchers' interests in housing studies of cross-cultural sojourner groups.

Two, this study conceptualizes the framework of sojourner's housing satisfaction by incorporating both concepts of housing deficits (Morris & Winter, 1978) as well as housing perceptions (Marans & Rodgers, 1975, Marans & Spreckelmeyer, 1981). Previous studies respectively tested the effects of housing deficits on housing satisfaction based on Morris and Winter's model (1976) or the effects of housing perception on housing satisfaction based on actual-aspirational gap theory. The present study incorporates both housing deficits and housing perception in the sojourner's housing satisfaction model as a whole, to test relative effects of each factor on housing satisfaction. The present study shows that housing perception is a more powerful mediator than housing deficits on sojourner housing satisfaction, and sojourners' attachment to their housing is the strongest mediator.

Three, this study contributes to housing adjustment research by investigating the effects of cultural variables in the model of sojourner's housing satisfaction. This study shows that perception of cultural attributes influences housing satisfaction through other perceptions, such as the perception of physical attributes, neighborhoods, and attachment. The importance of cultural factors in housing satisfaction is demonstrated quantitatively, while previous studies have investigated cultural factors from a more qualitative approach.

Four, this study confirms direct and indirect effects of these variables on housing

satisfaction by analyzing them using both hierarchical regression and path analysis using Mplus 4. Most regression results are confirmed through path analyses, and accurate indirect path and strengths are identified, while previous housing adjustment studies analyzed via only regression analysis.

### ***Practical Implications***

Since sojourner populations are growing quickly in the United States, housing demands for cross-cultural sojourners also are likely to increase. By researching housing adjustment of a specific culture group, this study discovered a greater knowledge of cultural differences in the housing environment, which eventually are possible to be converted into practical and operational use.

When sojourners from various cultures move into any housing units of the host culture, some housing attributes can be uncomfortable and difficult to adapt to. Once architects, interior designers, facility managers and marketers understand housing adjustment of sojourners, it is expected that they better can predict their potential customers' housing behaviors and provide more comfortable, adaptable housing environments to their customers including sojourner populations of different cultural backgrounds.

Based on findings obtained through the case study and the survey questionnaire, this study provides several practical implications for housing practitioners and policy makers. These implications can be used as possible guidelines for designing, building, or remodeling rental apartments because the majority of sojourners generally settled in rented apartments rather than purchased a single family house, due to their status of temporary residency. The U.S. government's housing policy aims at eliminating socio-

cultural variability in housing through architectural determinism (Rapoport, 1989); however, it is important to have more variability in housing to satisfy varying degrees of cultural needs for different groups within our society (Rapoport, 1989). McDowell (1989) also argued that following the same community planning for different groups, ignoring lifestyles and needs, has led to culturally inappropriate housing. When planning rental apartments, knowing diverse cultural backgrounds of the target renters seems necessary.

The findings of this study present several suggestions for designing rental apartments as follows:

***Variability of floor finishing material.*** The findings of this study imply that floor carpeting is the most uncomfortable attribute for Korean sojourners in all four cases of sojourner types, from newcomers to those who were more settled. Hard floors (e.g., wood or vinyl flooring) are preferred by Korean sojourners for better hygiene, easier maintenance, and greater comfort. Therefore, various floor finishing materials should be considered, effectively to accommodate various customers with different cultural backgrounds.

***Effective layout of general lighting.*** Korean sojourners perceive overall illumination levels of interior spaces in their apartments to be very dark. The main reason for this is a lack of general lighting in living rooms and bedrooms. This was one of the main sources of culture shock in their housing environments, and it took time for Korean sojourners to adapt to the feelings of darkness in their interior spaces. Understanding various needs of people with different cultural background needs is a necessary prerequisite in planning interior lighting to provide appropriate illumination levels. The implication is that providing more effective layouts of general lighting in each space,



installing dimmers to provide more control, and offering a greater variety of lamp types (e.g., fluorescent) is necessary.

***Careful consideration of building orientation.*** Because of their daylight-oriented lifestyle and traditional beliefs about good fortune related to daylight, south-facing houses (with the living room's orientation to the south) with big windows on the south wall were preferred by Korean sojourners. This implies that building orientation should be carefully considered when planning sites and building layouts for energy efficiency and sustainability issues.

***Proper acoustics.*** The problems of neighbor noise and conversational privacy between units should be considered carefully when planning apartment units. The importance of soundproofing between units should be recognized in designing and building apartment complexes.

***Cross ventilation.*** Because of poor ventilation in their current housing units, Korean sojourners showed changes in their eating habits. That implies that interior layouts should be carefully considered to provide effective cross ventilation with windows in kitchens.

***Service facilities.*** Korean sojourner households with young children perceived inconveniences when they have no playground in their apartment complexes, because most apartment complexes in Korea have playgrounds. Appropriate service facilities such as playgrounds should be considered in planning apartment complexes.

***Number of bedrooms.*** Consideration should be given to the number of bedrooms in apartment units. Korean sojourner families indicated the scarcity of three-bedroom (or more bedroom) apartments. Households with more than two older children complained

about how hard it was to find readily available, decent, three-bedroom apartments. Housing professionals should understand sojourners' demands for three-bedroom (or more bedroom) apartments and should provide apartments relevant to potential customers' needs.

***Quality of school.*** Although it is not what architects or planners have control over, the significance of school quality in sojourners' housing choices cannot be overstated. The importance of the quality of schools should also be recognized in planning apartment complexes.

### **Study Limitations**

Notwithstanding the contribution of this study to cross-cultural housing adjustment to housing scholarships and practices, there are several limitations.

#### ***Limited generalization of findings***

In relation to sampling, this study used a convenience sampling method because a random sampling was not efficient for Korean sojourners in the Lansing area, due to difficulties in identifying sojourner populations. Therefore, samples are not necessarily representative of overall sojourner populations. Care should be taken when applying the conclusions of this study to other ethnic groups or individuals, because the survey results are applicable to Korean sojourners in the Lansing area. In addition, since the majority of the sample in this study is engaged in the educational community including undergraduate or graduate students, visiting scholars, and accompanying families, the findings of this study may not apply to Korean sojourners in other types of community with different purposes for sojourning in the U.S.

### ***The low construct validity of some variables***

The construct validities of some of the variables in this study were relatively low. The variable of perception of cultural attributes may not serve perfectly as a measurement tool. These items were primarily drawn from previous studies and focus group interviews from a pilot study; however, previous studies have not measured these items using a quantitative approach akin to that of this study. It seems there still is much to be done to enhance cultural variable measures.

### ***Limitations in statistical analysis***

Another limitation is that the statistical analyses do not test causal relationships since data is cross-sectional. All information was collected at the same time, and there is no direct evidence of one set of variations in one variable. Thus, the language of “directs,” “influences,” and “affects” is customary for regression analysis.

### ***Limitations in questionnaire interpretation***

Despite an attempt to make the questionnaire understood in one way only, respondents might have interpreted the questionnaire in different ways. Thus, there is the possibility of different responses in ways affecting the findings of this study. Since this study relied on self-reported data, conclusions are based on sojourners’ reports on their housing adjustments and housing satisfaction. There may have been some biases in their responses.

## **Future Research**

Future research into cross-cultural housing adjustments will benefit further by pursuing the following endeavors: First, another approach that needs to be taken in

immediate future research into housing adjustments of Korean sojourners is a further analysis of this study's proposed model. Since this study measured housing deficits and housing perceptions using a summated scale by assembling items, relative effects of each observed variable were not explored in this study but are worthy of further exploration. By analyzing the effects of each observed variable for latent variables using Structural Equation Modeling (SEM), more elaborate complex relationships among the observed variables can be explored. Exploring such relationships among variables will add another level of sophistication to the housing adjustment model.

Second, housing adjustment research would benefit from making a more comprehensive sequential investigation of cross-cultural sojourners using a longitudinal study. Investigating the whole sojourning process, from the earliest part of the sojourn through returning home, will provide a more accurate and vivid description of housing adjustment processes. The results of this study can be further confirmed using more diverse instruments, not only through interviews but also through observations and the time activity log method, with a small number of Korean sojourner households. It would be also relevant to examine how they readapt to their homes in Korea when they return and how their cultural attitudes toward housing environments change through their sojourning experiences.

Third, to strengthen external validity of the study, it would be necessary to expand it to other ethnic groups in the United States such as other Asian cultural groups (e.g., Chinese, Japanese, or Indian), Hispanic, and European. Also it would be desirable to study Korean sojourners in other areas in the United States.

Fourth, it would be desirable for future research about Korean immigrants'

housing adjustments and satisfaction to compare to the case of Korean sojourners using the same measurement. Song (1990) studied the settlement process of Korean immigrants in the Detroit area, but her study did not test the housing adjustment model with a quantitative approach. It would be meaningful to compare differences and similarities in housing adjustment processes and levels of satisfaction between sojourners and immigrants. In addition, exploring differences in housing adjustment process between renters and home owners is suggested.

Fifth, since previous studies suggests housing satisfaction is an important predictor of quality of life (Andrews & Withey, 1976; Campbell & Converse, 1972; Cutter, 1982; Galster & Hesser, 1981; Marans & Rodgers, 1975; Weidemann & Anderson, 1982), the relationship between the housing satisfaction of sojourners and quality of life in the host country would be also a desirable topic to study.

## **APPENDICES**

## APPENDIX A: Questionnaires in English

### How do you like your home in America?

Dear Sir/Madam:

I am a doctoral student in Michigan State University's Interior Design program. The purpose of my study is to investigate how Korean sojourners adapt to their housing environment in the United States. My related survey will provide the empirical basis for my dissertation.

Your participation in this survey will take approximately 15 minutes. This study is for research purposes only. Your responses will not be associated with you in any way and will remain strictly **confidential**. Your identity will not be linked to the data you provide. There are no anticipated risks associated with participation. You consent to voluntarily participate in this study by completing this survey, and you may choose not to participate at all, or you may refuse to answer certain questions. Please answer all the survey questions. There are no right or wrong answers.

Please direct any questions about this study to Eunsil Lee at [leeeunsi@msu.edu](mailto:leeeunsi@msu.edu), phone (517) 432-3249, fax (517) 432-3772. If you have any questions or concerns regarding your rights as a study participant, or are dissatisfied with any aspect of this study, you may contact – anonymously, if you wish: Peter Vasilenko, Ph.D., Michigan State University's Director of Human Research Protection Program (HRPP) by phone: (517) 355-2180 ext 239, fax: (517) 432-4503, e-mail: [irb@ores.msu.edu](mailto:irb@ores.msu.edu), or regular mail: 202 Olds Hall, East Lansing, MI 48824.

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MICHIGAN STATE  
UNIVERSITY

**This first section of the questions asks about your current housing situation in the United States.**

1. Which one of the following best describes your present home? *(Please check one)*

- |   |  |
|---|--|
| <input type="checkbox"/> Single-family detached house | <input type="checkbox"/> Condominium, duplex, etc. |
| <input type="checkbox"/> Apartment building           | <input type="checkbox"/> Mobile home               |
| <input type="checkbox"/> Other (please specify) _____ |  |

2. Do you own or rent the home in which you now live? *(Please check one)*

- ☐ Rent home → move to question 2A  
☐ Own home → move to question 3

*If you are a renter*

2A) What is your apartment complex's name?

---

3. Whether you pay a mortgage (including taxes) or rent, how much does your household spend per month for your residence (excluding utility and other maintenance costs)?  
(Please check one)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Less than \$500 | <input type="checkbox"/> \$900 – \$1099  | <input type="checkbox"/> \$1500 – \$1699  |
| <input type="checkbox"/> \$500 – \$699   | <input type="checkbox"/> \$1100 – \$1299 | <input type="checkbox"/> \$1700 – or more |
| <input type="checkbox"/> \$700 - \$899   | <input type="checkbox"/> \$1300 – \$1499 |   |

4. How many bedrooms do you have in your home? \_\_\_\_\_ bedrooms

5. What is the approximate square footage of your current home? About \_\_\_\_\_ sq. ft

6. Which one of the following best describes the condition of your home?  
(Please check one)

- ☐ Very poor condition, needs to be torn down
- ☐ Poor condition, needs major repairs
- ☐ Adequate condition, needs many repairs but mostly minor ones
- ☐ Good condition, needs some minor repairs
- ☐ Excellent condition

7. Please check all the attributes that you have in your current home.  
(Please check all that apply)

- ☐ Separated zoning for public living area and private bedroom areas
- ☐ Kitchen open to the living room
- ☐ Walk-in closet(s)
- ☐ Outside view of nature
- ☐ A south-facing window wall
- ☐ A ceiling mounted lighting fixture in the living room
- ☐ Ceiling mounted lighting fixtures in the bedrooms
- ☐ Floor to ceiling windows connected to an outside balcony or deck
- ☐ Window(s) in the kitchen
- ☐ A bathroom with a floor drain

8. How many storage areas, including closet(s), do you have in your current house?

---



9. What are the floor finishing materials for each room in your current home? *(Please check one for each room)*

Living room	Bedroom	Kitchen	Bathroom
<input type="checkbox"/> Carpet	<input type="checkbox"/> Carpet	<input type="checkbox"/> Carpet	<input type="checkbox"/> Carpet
<input type="checkbox"/> Wood flooring	<input type="checkbox"/> Wood flooring	<input type="checkbox"/> Wood flooring	<input type="checkbox"/> Wood flooring
<input type="checkbox"/> Vinyl flooring	<input type="checkbox"/> Vinyl flooring	<input type="checkbox"/> Vinyl flooring	<input type="checkbox"/> Vinyl flooring
<input type="checkbox"/> Ceramic tile	<input type="checkbox"/> Ceramic tile	<input type="checkbox"/> Ceramic tile	<input type="checkbox"/> Ceramic tile
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

**This second section asks about your family housing norms in the United States.**

10. What do you think would be the best for your family in the United States right now?  
*(Please check one)*

☐ Own home      ☐ Rent home      ☐ Other \_\_\_\_\_

11. What do you think would be the best kind of housing structure for your family in the United States right now? *(Please check one)*

☐ Single-family detached house      ☐ Condominium, duplex, etc.  
☐ Apartment building      ☐ Mobile home  
☐ Other (please specify) \_\_\_\_\_

12. How many bedrooms do you feel your family needs right now? \_\_\_\_\_ bedrooms

13. What do you think is the most suitable amount to pay per month for your current home? *(Please check one)*

<input type="checkbox"/> Less than \$500	<input type="checkbox"/> \$900 – \$1099	<input type="checkbox"/> \$1500 – \$1699
<input type="checkbox"/> \$500 – \$699	<input type="checkbox"/> \$1100 – \$1299	<input type="checkbox"/> \$1700 – or more
<input type="checkbox"/> \$700 – \$899	<input type="checkbox"/> \$1300 – \$1499	

**This third section of the questions asks about your previous housing adjustments.**

14. Have you moved since coming to the United States?

☐ Yes (move to question 14A)      ☐ No ( move to question 15)

14A. How many times have you moved? \_\_\_\_\_ times

14B. What was (were) your main reason(s) for moving (*Please describe*)

---

---

15. Do you expect to move from your current home to another house?

- ☐ Yes (move to 15A) ☐ No ( move to 16)

15A. When do you expect to move to another house?

- ☐ Within 6 months ☐ 1 - 2 years ☐ After 3 years  
☐ 6 months - 1 years ☐ 2 - 3 years

15B. What is(are) the main reason(s) for your plans to move in the future?

---

---

16. Which of the following have you done in your present home? (*Please check all that apply*)

- ☐ Used electric blankets in the winter
- ☐ Laid bamboo mats or cotton blankets on the floor
- ☐ Laid vinyl over the existing floor
- ☐ Replaced the whole floor material
- ☐ Put shoe shelves in the entrance hall or hallway
- ☐ Designated an area for taking off shoes
- ☐ Replaced incandescent light bulbs with fluorescent
- ☐ Added movable floor lamps with higher wattage bulbs (i.e., above 60 watts)
- ☐ Installed additional fluorescent lighting fixtures
- ☐ Hung washing inside the home
- ☐ Hung washing outside the home
- ☐ Hand-washed laundry
- ☐ Replaced fixed showerheads with movable

**This fourth section of the questions asks about your housing perception of your current home.**

17. Overall, compared to where you lived in your home country, is your current home:

- ☐ Better ☐ Worse ☐ The Same

18. Is there anything about your current housing environment you especially like?

(Please describe)

1. \_\_\_\_\_

2. \_\_\_\_\_

19. Is there anything about your current housing environment you especially dislike?

(Please describe)

1. \_\_\_\_\_

2. \_\_\_\_\_

20. Please express your feeling about your current home. (Please circle only one number for each set of opposite adjectives to indicate how you feel)

	Very			Neither			Very		
Comfortable	1	2	3	4	5	6	7	Uncomfortable	
Attractive	1	2	3	4	5	6	7	Unattractive	
Pleasant	1	2	3	4	5	6	7	Unpleasant	
Convenient	1	2	3	4	5	6	7	Inconvenient	
Stimulating	1	2	3	4	5	6	7	Unstimulating	
Sanitary	1	2	3	4	5	6	7	Unsanitary	
Healthy	1	2	3	4	5	6	7	Unhealthy	
Sustainable	1	2	3	4	5	6	7	Unsustainable	
Dark	1	2	3	4	5	6	7	Bright	

21. Please rate your home's interior attributes regarding each of these characteristics. (Please circle only one number for each statement)

	Poor			Fair			Excellent
Overall space layout	1	2	3	4	5	6	7
Quality of finishing material	1	2	3	4	5	6	7
Quality of furnishings	1	2	3	4	5	6	7
Quality of soundproofing	1	2	3	4	5	6	7
Quality of structure	1	2	3	4	5	6	7
Indoor air quality	1	2	3	4	5	6	7
Outside view	1	2	3	4	5	6	7
Amount of Storage space	1	2	3	4	5	6	7

22. Please rate how much you like or dislike each housing attributes in your current home.

(Please circle only one number for each statement)

	Strongly dislike			Neutral			Strongly like	
Floor finishing material	1	2	3	4	5	6	7	
Bathroom without floor drain	1	2	3	4	5	6	7	
Heating system	1	2	3	4	5	6	7	
Brightness of interior	1	2	3	4	5	6	7	
Wearing shoes inside home	1	2	3	4	5	6	7	

23. Please express your feeling about each attributes of your neighborhood. (Please circle only one number for each set of opposite adjectives to indicate how you feel)

		Very			Neutral			Very		
Privacy	Public	1	2	3	4	5	6	7		Private
Noise from other residence	Noisy	1	2	3	4	5	6	7		Quiet
Greenery	Insufficient	1	2	3	4	5	6	7		Sufficient
Physical appearance	Unattractive	1	2	3	4	5	6	7		Attractive
Neighbors	Unfriendly	1	2	3	4	5	6	7		Friendly
Safety	Unsafe	1	2	3	4	5	6	7		Safe
Quality of school district	Poor	1	2	3	4	5	6	7		Excellent
Nearness to work	Far	1	2	3	4	5	6	7		Close
Nearness to Korean friends	Far	1	2	3	4	5	6	7		Close
Nearness to shopping	Far	1	2	3	4	5	6	7		Close
Public transportation	Inconvenient	1	2	3	4	5	6	7		Convenient

**The fifth section asks about your overall satisfaction with your housing and neighborhood.**

24. Please rate your level of satisfaction regarding the following questions. (Please circle only one number for each question.)

	Extremely Dissatisfied			Neutral			Extremely satisfied	
In general, how satisfied or dissatisfied are you with your current housing?	1	2	3	4	5	6	7	
In general, how satisfied or dissatisfied are you with your current neighborhood?	1	2	3	4	5	6	7	

25. Please rate your level of agreement or disagreement regarding the following

statements. *(Please circle only one number for each statement.)*

	Strongly Disagree			Neither agree Nor Disagree			Strongly Agree
If I were to move again, I would like to live in my current house	1	2	3	4	5	6	7
I feel my current house I am living in is really "my home"	1	2	3	4	5	6	7
I feel my current neighborhood is really "my neighborhood"	1	2	3	4	5	6	7

**This final section asks about general demographics.**

*(These data will be kept in the strictest confidence and used for statistical purposes only.)*

- Please list all persons who currently live in your home in the United States, starting with yourself, in the following table.

	Age	Gender (Male/ female)	Occupation	Education (Highest level of education completed)
Yourself				
Spouse				

- How long have you lived in your current home? \_\_\_\_\_ years \_\_\_\_\_ months
- How long have you lived in the United States? \_\_\_\_\_ years \_\_\_\_\_ months
- How long have you lived in the Lansing area \_\_\_\_\_ years \_\_\_\_\_ months
- What school district is your house in? \_\_\_\_\_ school district
- Approximately how much longer will you stay in the United States? \_\_\_\_\_ years \_\_\_\_\_ months
- What was your initial plan of total time for staying in the United States?

\_\_\_\_years\_\_\_\_months

8. What is the purpose of your visit to the United States? *(Please specify)*

---

9. Have you ever lived in a foreign country before? *(Please check one)*

☐ Yes (move to 9A)

☐ No ( move to 10)

9A. Where and for how long? *(Please specify)*

---

10. Which of the following categories best describes your total 2006 household income (from all sources and before taxes)? *(Please check one)*

☐ Less than \$ 8,999

☐ \$ 60,000 – \$ 79,999

☐ \$ 9,000 – \$19,999

☐ \$ 80,000 - \$ 99,999

☐ \$ 20,000- \$ 39,999

☐ \$ 100,000 – \$ 119,000

☐ \$ 40,000 – \$ 59,999

☐ \$ 120,000 – or more

**Thank you for your participation!**

## **APPENDIX B: Questionnaires in Korean**

## 미국의 주거환경 어떻게 생각하십니까?

미시간지역 방문중인 한국인의 주거환경에 관한 설문조사

본 설문지는 이곳 미시간 지역에 방문 거주하시는 한국인들의 주거환경을 연구하여 좀더 나은 주거환경을 모색하는데 그 목적이 있습니다. 본 설문지 작성에는 약 15 분이 소요됩니다. 귀하께서 모든 질문에 빠짐없이 응답해주시면 본 연구목적에 유익하게 쓰여질 것입니다.

본 설문지는 연구목적으로만 사용되며 귀하의 의견은 대외비로서 귀하의 사적정보 함께 최대한 보호될 것입니다. 귀하는 이 연구에 자유롭게 자발적으로 참여하실 수 있고 어떤 불이익없이 특정 질문에 대해서 응답을 거부하거나 설문 응답을 중단할 수 있습니다.

본 연구에 관하여 질문이 있으시면 이은실(박사과정) Interior Design Program, Human Environment; Design and Management, Michigan State University, 전화번호 (517) 432-3249 (O), 팩스 (517) 432-3773, 혹은 이메일 [lcccunsi@msu.edu](mailto:lcccunsi@msu.edu) 로 문의 바랍니다. 본 연구와 관련한 여러분의 권리사항에 대한 우려나 궁금한점, 혹은 불만사항은 Michigan Sate University 의 Director of Human Research Protection Program (HRPP)인 Peter Vasilenko, Ph.D. 에게 전화번호 (517) 355-2180 ext 239, 팩스: (517) 432-4503, 이메일: [irb@ores.msu.edu](mailto:irb@ores.msu.edu), 또는 우편주소: 202 Olds Hall, East Lansing, MI 48824. 로 문의바랍니다.

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**문 1. 다음 문항들은 현재 귀하의 주거지 상황과 시설에 관한 질문입니다.**

1. 현재 귀하의 주거형태는? (해당항목에 체크 √ 해주세요)

- ☐ 단독주택 Single-family detached house
- ☐ 아파트 Apartment building
- ☐ 콘도, 듀플렉스, 타운하우스 (Condominium, duplex, townhouse, etc.)
- ☐ 모빌홈 Mobile home
- ☐ 기타 (기입해주세요)\_\_\_\_\_

2. 현재 귀하의 주거소유 상황은? (해당항목에 체크 √ 해주세요)

- ☐ 임대자 (Renter) → 다음은 2A 로 가세요
- ☐ 소유자 (Home owner) → 다음은 2C 로 가세요

귀하가 임대자일 경우

2A) 임대하신 아파트, 콘도, 혹은 타운하우스 이름은? \_\_\_\_\_

3. 귀하께서는 현 거주지에 대하여 임대료 또는 Mortgage 로 매월 얼마를 지불하십니까?

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Less than \$ 500 | <input type="checkbox"/> \$ 900 – \$1099  | <input type="checkbox"/> \$ 1500 – \$1699  |
| <input type="checkbox"/> \$ 500 – \$ 699  | <input type="checkbox"/> \$ 1100 - \$1299 | <input type="checkbox"/> \$ 1700 – or more |
| <input type="checkbox"/> \$ 700 - \$ 899  | <input type="checkbox"/> \$ 1300 – \$1499 |  |

4. 현 주거지의 베드룸 (bedroom)은 몇 개입니까? \_\_\_\_\_ 개

5. 현 주거지의 대략 크기는? 약 \_\_\_\_\_ 스퀘어 피트 (sq. ft)

6. 현재 거주하시는 집의 건물상태는? (해당 ☐에 체크 ☒ 해주세요)

- ☐ 매우 불량한 상태 (철거해야 할 정도로 불량한 상태)
- ☐ 불량한 상태 (심각한 수리가 요구되는 상태)
- ☐ 대체로 양호 (심각하지 않지만 대체로 많은 수리가 요구되는 상태)
- ☐ 양호한 상태 (대체로 양호하나 약간의 경미한 수리가 요구되는 상태)
- ☐ 매우 양호한 상태 (손볼 곳이 없는 훌륭한 상태)

7. 다음 제시된 항목 중 귀하의 현 주거지에 해당되는 모든 항목에 체크 ☒ 해 주세요.

- ☐ 침실 부분(private bedrooms)이 거실부분(living room)과 구분되어 나뉘어져 있다
- ☐ 주방 카운터가 거실에 오픈 되어있다
- ☐ 워크인 클로젯(Walk-in closet) 이 있다
- ☐ 거실에서 바깥의 자연경치(Outside view of nature)를 볼 수 있다
- ☐ 침실에서 바깥의 자연경치(Outside view of nature)를 볼 수 있다
- ☐ 거실이 남향이며 자연광이 들어오는 창문이 있다
- ☐ 거실에 천정등이 있다
- ☐ 각 침실에 천정등이 있다
- ☐ 거실이나 침실에 발코니 또는 데크로 연결된 천정높이의 창문이 있다
- ☐ 주방에 창문이 있다
- ☐ 욕실 바닥에 물을 사용할 수 있도록 배수구가 있다

8. 현 거주지에 모두 몇개의 불박이장 수납공간 (storage)이 있습니까? (워크인 클로젯 (Walk-in closet)을 포함하여 밑줄에 기입해 주세요) \_\_\_\_\_ 개

9. 다음 각실의 바닥 마감재는 무엇입니까? (각실별로 해당 ☐에 체크 ☒ 를 해주세요)

거실	침실	주방	욕실
<input type="checkbox"/> 카펫	<input type="checkbox"/> 카펫	<input type="checkbox"/> 카펫	<input type="checkbox"/> 카펫
<input type="checkbox"/> 우드 플로어	<input type="checkbox"/> 우드 플로어	<input type="checkbox"/> 우드 플로어	<input type="checkbox"/> 우드 플로어
<input type="checkbox"/> 플라스틱타일	<input type="checkbox"/> 플라스틱타일	<input type="checkbox"/> 플라스틱타일	<input type="checkbox"/> 플라스틱타일
<input type="checkbox"/> 타일	<input type="checkbox"/> 타일	<input type="checkbox"/> 타일	<input type="checkbox"/> 타일
<input type="checkbox"/> 기타 _____	<input type="checkbox"/> 기타 _____	<input type="checkbox"/> 기타 _____	<input type="checkbox"/> 기타 _____



**문 2. 다음 문항들은 현재 주거지에 관한 귀하의 기준을 묻는 질문입니다.**

10. 현재 상황에서 귀하의 가정에 어떤 주거소유 유형이 가장 적합하다고 생각하십니까?  
(해당항목에 체크 √ 해주세요)

☐ 소유(Own home)    ☐ 임대( )    ☐ 기타 \_\_\_\_\_

11. 현재 상황에서 어느 타입의 주거형태가 귀하의 가정에 가장 적합하다고  
생각하십니까? (해당항목에 체크 √ 해주세요)

- ☐ 단독주택(Single-family detached house)  
☐ 아파트(Apartment building)  
☐ 콘도, 듀플렉스, 타운하우스 (Condominium, duplex, townhouse, etc.)  
☐ 모빌홈 Mobile home  
☐ 기타 (기입해주세요) \_\_\_\_\_

12. 현재 귀하의 가정에 몇개의 베드룸(bedroom)이 적합하다고 생각하십니까?  
\_\_\_\_\_ 개

13. 귀하의 현 주거지에 얼마 정도를 지불하는 것이 적합하다고 생각하십니까?  
(해당항목에 체크√ 해주세요)

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Less than \$ 500 | <input type="checkbox"/> \$ 900 - \$1099  | <input type="checkbox"/> \$ 1500 - \$1699  |
| <input type="checkbox"/> \$ 500 - \$ 699  | <input type="checkbox"/> \$ 1100 - \$1299 | <input type="checkbox"/> \$ 1700 - or more |
| <input type="checkbox"/> \$ 700 - \$ 899  | <input type="checkbox"/> \$ 1300 - \$1499 |  |

**문 3. 다음 문항들은 현재 주거지에 대한 귀하의 직용 상태에 관한 질문입니다**

14. 미국에 오신 후 미국내에서 이사를 한 적이 있습니까? (해당항목에 체크 √ 해주세요)  
☐ 있다 (다음은 15 번으로)    ☐ 없다 ( 다음은 17 번으로)

14A. 몇 번 이사했습니까? \_\_\_\_\_ 번

14B. 이사를 하게된 주요 원인은 무엇이었습니까? (밑줄에 기입해주세요)

15. 앞으로 현거주지에서 다른곳으로 이사할 계획이 있습니까? (해당항목에 체크 √ 해주세요)

☐ 있다 (다음은 15A 로)    ☐ 없다 ( 다음은 16 번으로)

15A. 언제쯤 이사할 계획입니까? (해당항목에 체크 √ 해주세요)

- |                                     |                                       |                                     |
|-------------------------------------|---------------------------------------|-------------------------------------|
| <input type="checkbox"/> 6 개월 이내로   | <input type="checkbox"/> 6 개월 -1 년 사이 | <input type="checkbox"/> 1 년-2 년 사이 |
| <input type="checkbox"/> 2 년-3 년 사이 | <input type="checkbox"/> 3 년 - 4 년 사이 | <input type="checkbox"/> 4 년 이후     |

15B. 이사를 계획하고 있는 주 원인은 무엇입니까? (밑줄에 기입해주세요)

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16. 다음 제시된 항목들은 한인들이 미국 주거지에서 적응할 때 주로 하는 주거행동입니다. 다음 항목 중 귀하의 가정에 해당되는 모든 항목에 체크 √ 해주세요.

- ☐ 전기장판을 사용한다(했다)
- ☐ 돛자리나 먼패드를 바닥에 깔았다
- ☐ 비닐 장판을 사서 바닥에 깔았다
- ☐ 기존 바닥재를 다른 것으로 교체했다
- ☐ 현관이나 복도에 신발장을 놓았다
- ☐ 현관에 신발을 놓도록 비닐이나 러그(rug)를 깔았다.
- ☐ 백열등을 형광등으로 바꾸었다
- ☐ 100 와트 이상의 밝은 전구를 사용했다(한다)
- ☐ 거실에 2 개 이상의 플로어스탠드를 사용한다
- ☐ 형광등 기구를 구입하여 벽이나 천정에 설치하였다
- ☐ 집안에 빨래를 널고 건조시켰다
- ☐ 집밖에 빨래를 널고 건조시켰다
- ☐ 손빨래를 한다
- ☐ 샤워기 헤드를 movable 로 바꿨다

**문 4. 다음 문항들은 현 거주지에 대한 귀하의 인식과 평가에 관한 질문입니다.**

17. 대체적으로 한국에 있는 귀하의 집과 비교했을 때 현재의 집의 수준은?  
(해당항목에 체크 √ 해주세요)

- ☐ 매우 높다    ☐ 높다    ☐ 비슷하다    ☐ 낮다    ☐ 매우 낮다

18. 현 거주지에서 특별히 귀하의 마음에 드는 것은 무엇입니까? (밑줄에 기입해주세요)

1. \_\_\_\_\_
2. \_\_\_\_\_

19. 현 거주지에서 특별히 귀하에게 불만스러운 것은 무엇입니까? (밑줄에 기입해주세요)

1. \_\_\_\_\_
2. \_\_\_\_\_

20. 현 거주지의 실내환경에 대한 귀하의 느낌에 관한 질문입니다. 아래 각 항목에 대해 가장 적합하다고 생각하시는 번호에 동그라미 해주세요.

	매우			보통			매우		
편안하다	1	2	3	4	5	6	7	편안하지 않다	
아름답다	1	2	3	4	5	6	7	아름답지 않다	
즐겁다	1	2	3	4	5	6	7	불쾌하다	
불편하다	1	2	3	4	5	6	7	편리하다	
활력을 준다	1	2	3	4	5	6	7	활력적이지 않다	
비위생적이다	1	2	3	4	5	6	7	위생적이다	
건강하다	1	2	3	4	5	6	7	건강에 해롭다	
친환경적이다	1	2	3	4	5	6	7	친환경적이지 않다	
답답하다	1	2	3	4	5	6	7	탁 트였다	
어둡다	1	2	3	4	5	6	7	밝다	

21. 현 거주지의 실내환경에 대한 항목별 평가입니다. 가장 적합한 번호에 동그라미 해주세요.

	매우 형편없다			보통이다		매우 훌륭하다	
전반적인 실내공간 구조	1	2	3	4	5	6	7
마감재(바닥, 벽, 천정)의 상태와 질	1	2	3	4	5	6	7
가구 및 비품의 상태와 질	1	2	3	4	5	6	7
방음상태	1	2	3	4	5	6	7
건물 시공 상태	1	2	3	4	5	6	7
실내 공기 및 환기	1	2	3	4	5	6	7
바깥 전망(view)	1	2	3	4	5	6	7
수납공간	1	2	3	4	5	6	7

22. 다음 항목들은 한국의 주거 요소와 다르다고 여겨지는 미국의 주거요소들입니다. 현 주거지에서 다음의 항목들에 대한 귀하의 느낌에 적합한 번호에 동그라미 해주세요.

	매우 마음에 안든다			보통이다	매우 마음에 든다		
바닥 마감재 (ex: carpet)	1	2	3	4	5	6	7
배수구 없는 욕실바닥	1	2	3	4	5	6	7
난방(heating) 방식	1	2	3	4	5	6	7
실내 조명	1	2	3	4	5	6	7
실내에서 신발신는 것	1	2	3	4	5	6	7

23. 현 거주지의 위치와 주변환경에 관한 질문입니다. 다음 항목들에 대해 어떻게 느끼는지 적합한 번호에 동그라미 해주세요.

		매우			보통			매우		
프라이버시	존중된다	1	2	3	4	5	6	7	침해 받는다	
소음	조용하다	1	2	3	4	5	6	7	시끄럽다	
주변 자연녹지	충분하다	1	2	3	4	5	6	7	부족하다	
건물 형태	아름답다	1	2	3	4	5	6	7	아름답지 않다	
이웃사람들	친절하다	1	2	3	4	5	6	7	불친절하다	
안전성	안전하다	1	2	3	4	5	6	7	안전하지 않다	
학군	우수하다	1	2	3	4	5	6	7	형편없다	
직장과의 거리	가깝다	1	2	3	4	5	6	7	멀다	
다른 한국인들	가깝다	1	2	3	4	5	6	7	멀다	
쇼핑시설	가깝다	1	2	3	4	5	6	7	멀다	
대중교통	편리하다	1	2	3	4	5	6	7	불편하다	

문 5. 다음은 현 거주지에 대한 귀하의 만족도에 관한 질문입니다.

24. 현 거주지에 대한 귀하의 만족도에 가장 적합한 번호에 동그라미 해주세요.

	매우불만족			보통			매우만족		
귀하는 현재 살고 계신 집 또는 아파트에 만족하십니까?	1	2	3	4	5	6	7		
귀하는 현 거주지의 위치와 주변 환경에 만족하십니까?	1	2	3	4	5	6	7		

25. 다음에 제시된 항목들에 대하여 귀하의 견해에 적합한 번호에 동그라미 해주세요

	전혀 아니다			보통이다			매우 그렇다		
다음에 다시 오더라도 현재 살고 있는 집으로 다시 오기를 원한다	1	2	3	4	5	6	7		
지금 살고있는 집이 정말 “내집”처럼 느껴진다	1	2	3	4	5	6	7		
지금 살고있는 곳의 이웃이 정말 “내이웃”같이 느껴진다.	1	2	3	4	5	6	7		

**마지막으로 몇 가지 개인적인 사항에 대한 질문입니다**

모든 자료는 철저히 대외비이며 통계목적으로만 사용됩니다

1. 현재 귀하의 집에 함께 거주하고 있는 가족 및 동거인을 모두 각 빈칸에 기입하여 주십시오.

관계	나이	성별(남여)	직업	최종학력
본인				

2. 현 거주지에 얼마동안 거주하셨습니다? 약 \_\_\_\_\_ 년 \_\_\_\_\_ 개월
3. 미국에 얼마동안 거주하셨습니다? 약 \_\_\_\_\_ 년 \_\_\_\_\_ 개월
4. 랜싱지역에서는 얼마동안 거주하셨습니다? 약 \_\_\_\_\_ 년 \_\_\_\_\_ 개월
5. 앞으로 얼마동안 미국에 더 거주하실 계획입니까? 약 \_\_\_\_\_ 년 \_\_\_\_\_ 개월
6. 원래 얼마동안 미국에 거주할 계획으로 오셨습니까? \_\_\_\_\_ 년 \_\_\_\_\_ 개월
7. 미국을 방문하게된 목적은 무엇입니까? (해당항목에 모두 체크 √ 해주세요)
- |  |                                   |                                       |
|--|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> Visiting scholar (VIPP) | <input type="checkbox"/> Business | <input type="checkbox"/> 본인 또는 배우자 학업 |
| <input type="checkbox"/> Visiting scholar (교수)   | <input type="checkbox"/> 자녀 학업    | <input type="checkbox"/> 회사 파견        |
| <input type="checkbox"/> 여행                      | <input type="checkbox"/> 기타 _____ |                                       |
8. 이전에 외국에 1 개월이상 거주하신 경험이 있습니까? (해당항목에 체크 √ 해주세요)
- ☐ 예 (다음은 9 번으로)                      ☐ 아니요 (다음은 10 번으로)
9. 어디에서 얼마동안 거주하셨습니다? \_\_\_\_\_
10. 귀하 가정의 지난해 (2006 년) 연간 총수입은? (해당항목에 체크 √ 해주세요)
- |  |  |
|--|--|
| <input type="checkbox"/> \$ 8,999 이하           | <input type="checkbox"/> \$ 60,000 – \$ 79,999   |
| <input type="checkbox"/> \$ 9,000 – \$19,999   | <input type="checkbox"/> \$ 80,000- \$ 99,999    |
| <input type="checkbox"/> \$ 20,000- \$ 39,999  | <input type="checkbox"/> \$ 100,000 – \$ 119,000 |
| <input type="checkbox"/> \$ 40,000 – \$ 59,999 | <input type="checkbox"/> \$ 120,000 이상           |

본 연구에 참여하여 주셔서 대단해 감사합니다. 수고하셨습니다.

## **APPENDIX C: Consent Form**

### **The Housing Adaptation of Cross-Cultural sojourner: The Case of Korean Sojourners in the United States**

The purpose of this research is an exploratory study to investigate how Korean temporary visitors adapt to a new housing environment in the United States. Your input is very important to this study. It will help the investigators to gain more insight into the design of homes to create an environment supportive of multi cultural ethnic groups. The interview will take place in your home at your convenience and if permission is granted will be tape recorded for accuracy. The length of the interview will vary depending on your preference, but should be approximately an hour. We would appreciate it if you would take the time to answer each question as honestly as you can.

There is no potential risk involved in the study. Your privacy will be protected to the maximum extent allowable by law. Your answers will be kept confidential. Individual names will not be revealed in the report. The results of the study will be presented in the professional conferences and can be published in the research journals. We only need your honest opinion. You may choose not to participate at all, may refuse to participate in certain procedures or answer certain questions, or may discontinue the interview at any time without penalty.

If you have any questions regarding the study, or wish to make comments and suggestions to us, please contact researchers:

1) Nam-Kyu Park, Assistant Professor, by mail 204 Human Ecology, East Lansing, MI 48824, phone: 517) 353-4454, or e-mail: parkn@msu.edu

2) Eunsil Lee, Doctoral Student, by mail: 203B Human Ecology, East Lansing, MI 48824, phone: (517) 432-3249, or e-mail: leeeunsi@msu.edu

If you have any questions or concerns regarding your rights as a study participant, or are dissatisfied with any aspect of this study, you may contact – anonymously, if you wish: Peter Vasilenko, Ph.D., Michigan State University's Director of Human Research Protection Program (HRPP) by phone: (517) 355-2180 ext 239, fax: (517) 432-4503, e-mail: [irb@ores.msu.edu](mailto:irb@ores.msu.edu), or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Your signature indicates your voluntary agreement to participate in this study.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_

Your signature indicates your agreement to allow the use of a tape recorder.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_

Thank you!

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## REFERENCES

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