HYUN-JEONG LEE* Chungbuk National University

College Students' Housing Values, Expectations and Considerations for Housing in Their 20s - Centered on Chungbuk Province -

The purpose of this study was to investigate Korean college students' housing values and housing expectations as well as considerations for housing in their 20s and to explore influences on housing values and expectations. Items related to four housing functions were developed in conjunction with Maslow's hierarchy of human needs to measure housing values. An on-site questionnaire survey was administered to students of a university-A located in Chungbuk province between May 28, 2012, and June 17, 2012. Among the total 476 responses, 465 responses from Korean students were used for further data analyses. The findings are as follows: (1) Among housing functions, those related to shelter functions were perceived as most important followed by function as a place for self-esteem. (2) More than 70 percent of the respondents expected to rent a housing unit in their 20s and more than half of the respondents expected nontraditional and relatively affordable compact size structure types such as studio, Officetel or Gosiwon. (3) Price, location and transportation were found to be the most important considerations when choosing housing in their 20s. (4) Convenience in use of public transportation and commute time were found to be the most important in location choice, and maintenance conditions and security systems were the most important for building choice. (5) Female respondents tended to consider personal safety, security systems, neighborhood facilities, and distance from family more

Housing value, expectation and preference are the most popular research topics in the field of housing together with housing satisfaction. In general, a residential structure is expected to last 30 to 50 years, sometime more than 100 years. Various households

may move in and out throughout the lifetime of a

structure. In many cases, owners decide to demolish

important than male respondents when choosing housing,

while male respondents considered parking space more

important than females.

a residential structure not because its structural life is over, but because the structure is found not suitable to accommodate new lifestyles.

It is important to understand housing needs and preferences of prospective residents in order for a successful housing design. However, considering the structural life expectancy of a residential building and resident turnover, it is almost impossible to identify all future residents, which in turn make it impossible to explore their housing needs and preferences. Thus it is typical for the housing industry and researchers to predict future residents' expectations and housing needs by understanding the flows in thought, opinions, preferences, and

needs of certain demographic groups through

housing satisfaction studies instead (An, Kang & Jo,

2009). The purpose of this study was to investigate

college students' housing values, expectation and

considerations for housing in their 20s and to explore

influences on their housing values, expectations and

[†]This work was supported by the research grant of the Chungbuk National University in 2011.

^{*}Corresponding Author: Associate Professor, Dept. of Housing & Interior Design, Chungbuk National University, Ph.D. (hlee@cbnu.ac.kr)

Key Words: Housing Values, Housing Expectation, Housing Considerations, College Students

considerations in order to provide information for planning and design of residential properties targeted at young people.

LITERATURE REVIEW

Housing Values and Expectations

In general, values are defined as 'abstract concepts of generalized preferences that are useful in evaluating specific goals over time (Lindamood & Hanna, 1979, p. 90).' Values are considered important determinants of human behavior that motivate and guide certain human actions in desirable and valuable ways (Downer, Smith, & Lynch, 1968) and widely used by researchers in diverse fields to understand and interpret certain patterns of human behaviors and decision making such as consumption patterns.

Housing values are thoughts and opinions on housing and the surrounding environment including housing form, function, and the way to live in it. The term 'housing values' is sometimes used interchangeably with 'housing view' (Jung & An, 2001) or 'housing viewpoint' (An, Jo & Hao, 2009).An individual's housing values are influenced by diverse factors including his/her socioeconomic characteristics such as gender, age, educational attainment, economic status, and lifestyle (Jung & An, 2001) as well as social and cultural backgrounds (An, Jo & Hao, 2009). Housing values have been used as one of the essential concept to explain and predict housing preferences and choices from the early stage of housing studies (Beamish, Goss & Emmel, 2006). In a conceptual framework of influences on housing choice, Beamish, Goss and Emmel (2001) theorized that a household's housing values, household type and social class influence the household's lifestyle; subsequently, the lifestyle formulates housing norms, and the housing norms ultimately guide housing choices.

Based on Morris and Winter (1978), housing expectations can be defined as an assessment of future housing conditions based on the individual or household's reality. In comparison with housing preferences which usually is a subjective thought about future housing, housing expectation is a

thought about future housing conditions based on a realistic consideration of current and future household conditions. For example, a household may prefer to purchase a housing unit to achieve tenure stability. However, a household may expect to rent a housing unit in consideration of household's resources and the possibility of frequent moves due to job changes of the householder. After the household saves money and obtains job stability, they may be able to realize their goal of becoming a homeowner.

Studies on Housing Values and Expectations of College Students

Housing values, housing expectation and/or considerations for housing choices of college students has been a popular topic in Korean housing studies. College students are considered prospective housing consumers and representatives of new generation in housing market who have housing values, preferences, and expectations that are different from older generations.

Most housing value studies on expectations or preferences combined two or more of these concepts together in a study rather than dealing with each concept independently. Regarding study target of the studies, researchers conducted questionnaire survey to college students in diverse areas including Seoul (Bang & Hong, 2012), Daegu (An, Jo & Hao, 2009; An, Kang & Jo, 2009; Jung & An, 2001; Yoon & Shin, 1997), Pusan (Lee & Cho, 2006), and Gwangju and Jeonnam province (Lim, 2005; Kim & Noh, 2008). Bang and Hong (2012) conducted a questionnaire survey to college students in Seoul and explored their housing values and preferences for 'urban-life housing. An, Kang and Jo (2009) performed a time series study to track housing value changes for college students between 1998 and 2008 in Daegu. Lim (2005) investigated college student lifestyles, housing viewpoints and housing preferences based on a survey of college students in the city of Gwangju.

There were studies compared housing values, expectations, preferences and/or considerations for housing choices of college students who were from different cultural backgrounds. Woo, Park, Lee and Lee (2012) and An, Jo and Hao (2009) compared housing values and the housing choice considerations of Korean college students and Chinese students

studying at colleges in Korea, and Jung and An (2001) compared Korean and Japanese college students' housing values in Daegu. The findings of these comparative studies imply the actual influence of cultural background on housing values.

The targets of this study were college students in Chungbuk province. Only the responses from Korean students were used for the data analyses. Based on previous studies, foreign students were assumed to have different housing values than Korean students; subsequently, responses from foreign students were excluded from this study in order to control the cultural influences on housing values and expectations.

It was also considered that college students may have insufficient housing choice experiences to establish specific future lifetime housing preferences and expectations. Thus, this study focused on expectations for housing in their 20s instead of asking about housing preferences or vague future expectations so that the respondents could express their housing expectations based on a realistic assessment of their current and future situation.

METHODOLOGY

Instrument

This quantitative study utilized a questionnaire survey. A survey questionnaire was developed by the researcher based on a literature review. The questionnaire consisted of the following three sections: (A) housing values, (B) housing expectations and considerations for housing to live in 20s, and (C) general information. The questionnaire was pretested on 14 students at a university in Chungbuk province and revised to improve wording problems.

The perceived importance of housing functions were used to measure housing value for the first section of the final questionnaire. Four housing functions were developed in conjunction with Maslow's hierarchy of human needs (Maslow, 1954). Theory of Maslow's hierarchy of human needs has been adopted by researchers from many fields and also used in development of the List of Values (LOV) Scale (Kahle & Kennedy, 1989), which is one of the

early measurement approaches for the relationship of human values and consumption patterns.

After several preliminary discussions with college students on housing functions, four housing functions were derived as a measurement of housing values for this study: function as a shelter, function as a place for socialization, function as a place for self-esteem, and a function as a place for selfactualization. 'Function as a shelter' is related to physiological needs and needs for safety and security in Maslow's hierarchy and 'function as a place for socialization' is related to the human need for a sense of belonging. 'Function as a place for self-esteem' is related to human needs for self-esteem, and 'function as a place for self-actualization' is related to human needs for self-actualization. Five sub-items that described functions were developed for each of the four housing functions (Table 1). Five multiple choice questions that asked to indicate the most important housing function were constructed by combining one sub-item from each housing function. The order of the four items in each housing value question was shuffled to prevent respondents from assuming the housing function hierarchy and prevent a halo effect.

The second section consisted of questions related to expectations and considerations for housing in their 20s including tenure and structural types, housing location and considerations for housing choices. The last section included personal questions on current demographic and housing characteristics.

Data Collection

An on-site questionnaire survey was administered to students of seven undergraduate courses at a university located in Chungbuk province, South Korea, between May 28, 2012, and June 17, 2012. A total of 476 responses were collected and 465 were found useable for this study. Eleven responses that were either incomplete or completed by foreign students were excluded from the final data analysis. Responses from foreign students were excluded because cultural differences might have influenced their housing values.

| Maslow's human needs | Housing function | Sub-item |
|--------------------------------|--------------------------------|---|
| Physiological needs | Shelter | - A place for relaxation of body and mind - A place to escape the heat or the cold |
| Needs for safety and security | | A place to protect inhabitants from crime or disaster A place for basic life such as storage and physiological functions A place to secure belongings |
| Needs for a sense of belonging | A place for socialization | A place for a family harmony A place to learn attitudes and manners A place to learn sociality A place for nurturing and education A place to promote good relationships with friends and neighbors |
| Needs for self-esteem | A place for self-esteem | A place for self-expression A place where memories are built A place to reduce stress A place for identity development A place for privacy protection |
| Needs for self-actualization | A place for self-actualization | Reflection of the socio-economic status of residents Reflection of residents' values A place for hobbies and leisure activities A place to study A place that accommodates work and business |

Table 1. Maslow's Human Needs, Housing Functions and Sub-items of the Study

Data Analysis

The survey responses were analyzed using descriptive statistics, chi-square test of independence, independent sample t-test and one-way analysis of variances (ANOVA) to investigate college students' housing values, expectations and considerations for housing choices in their 20s and to explore influences on the housing values and expectations. A Statistical Package for Social Sciences (SPSS) 19.0 was used for the entire data analyses.

FINDINGS

Overview of Respondents

Among the 465 respondents, 254 were male (54.6%) and 211 were female (45.4%). The average age of the respondents was 21.5 years (minimum 18, maximum 27). Sophomores represented the greatest number of respondents (51.7%) followed by juniors (22.2%). The majority of the respondents were unmarried (98.7%).

One hundred sixty respondents (34.9%) reported that the average monthly income of their parents was 4 million Korean Won (KRW) or more. Parents of 373 respondents (80.4%) were homeowners, and parents of 75 respondents (16.2%) were Jeon-se

renters. Jeon-se is a unique rental system in Korea where the owner of the housing unit receives lump sum money as Jeon-se deposit from the renter. The housing unit owner is able to receive profit from the interest they can generate from the initial deposit. When the lease is terminated, the Jeon-se owner returns the original Jeon-se money back to the renter.

More than three quarters of the respondents reported that the homes of their parents are located in areas other than the Seoul Metropolitan areas, which might reflect that the study areas were not located in the Seoul Metropolitan area. A total of 281 respondents (60.7%) lived apart from their parents in regards to school semester housing. Table 2 shows overview of the respondents and demographic and housing characteristics.

Housing Values

The perceived importance of housing functions were used as a measurement of housing values. Each of the five housing value questions was designed as a multiple choice question with four items that represented four housing functions (shelter, a place for socialization, a place for self-esteem and a place for self-actualization) that were connected to Maslow's human needs.

Respondents were asked to choose one item that

Table 2. Overview of Respondents

| Characteristic | n | Valid % | Characteristic | n | Valid % |
|--------------------------|-----|---------|--|-----|---------|
| Gender | | | Parents' monthly income (KRW) ^A | | |
| Male | 254 | 54.5 | Less than 3,000,000 | 151 | 33.0 |
| Female | 211 | 45.4 | 3,000,000 to 3,999,999 | 147 | 32.1 |
| TOTAL | 465 | 100.0 | 4,000,000 or above | 160 | 34.9 |
| Age (average 21.5 years) | | | TOTAL | 458 | 100.0 |
| Under 20 years | 60 | 13.0 | Parents' tenure type | | |
| 20-21 years | 183 | 39.5 | Own | 373 | 80.4 |
| 22-23 years | 142 | 30.7 | Jeon-se rent | 75 | 16.2 |
| 24 years and over | 78 | 16.8 | Monthly rent | 11 | 2.3 |
| TOTAL | 463 | 100.0 | Other | 5 | 1.1 |
| Academic year | | | TOTAL | 464 | 100.0 |
| Freshman | 46 | 9.9 | Location of parents' residence | | |
| Sophomore | 240 | 51.7 | Seoul | 30 | 6.5 |
| Junior | 103 | 22.2 | Gyeonggi province | 80 | 17.2 |
| Senior | 75 | 16.2 | Other areas in Korea | 354 | 76.3 |
| TOTAL | 464 | 100.0 | TOTAL | 464 | 100.0 |
| Marital status | | | In-semester housing | | |
| Unmarried | 459 | 98.7 | Living with parent(s) | 182 | 39.3 |
| Married | 6 | 1.3 | Living apart from parent(s) | 281 | 60.7 |
| TOTAL | 465 | 100.0 | TOTAL | 463 | 100.0 |

Note. Sum of the valid percentages may not be 100 due to rounding.

A KRW: Korean Won

Table 3. Housing Values: Transformed Housing Function Scores

| Housing function | n | Mean | SD | Minimum | Maximum |
|--------------------------------|-----|------|-------|---------|---------|
| Shelter | 464 | 1.94 | 1.174 | 0 | 5 |
| A place for socialization | 464 | .73 | .877 | 0 | 4 |
| A place for self-esteem | 464 | 1.55 | .991 | 0 | 4 |
| A place for self-actualization | 464 | .78 | .765 | 0 | 4 |

they perceived as most important among the items in each housing value question. Each item was connected to one of the housing function; subsequently, the number of items selected in each function was transformed into the importance score for each respondent. For example, if a respondent choose one items representing housing function as a shelter, three items representing function as a place for socialization and one item from function as a place for self-actualization, the respondent's importance score for function as a shelter is 1, score for

function as a place for socialization is 3, score for function as a place for self-esteem is 0, and score for function as a place for self-actualization is 1. As there were five housing value questions, the sum of the importance scores could not exceed 5 for each respondent. A comparison of the average of the transformed housing function scores showed that respondents valued housing function as shelter the most followed by function as a place for self-esteem (Table 3).

To examine influence of demographic charac-

| | n | Mean | Independent sample t-test | | |
|--------------------------------|-----|------|---------------------------|-----|------|
| Housing function | | | t | df | р |
| A place for self-esteem | | | -3.128 | 462 | .002 |
| Male | 253 | 1.42 | | | |
| Females | 211 | 1.70 | | | |
| A place for self-actualization | | | 2.540 | 462 | .011 |
| Male | 253 | .86 | | | |
| Female | 211 | .68 | | | |

Table 4. Gender and Housing Values: Independent-Sample t-test

Note. Transformed housing function scores were compared and only housing functions with significant gender differences were presented (p < .05).

Table 5. Parents' Income and Perceived Importance of Function as a Place for Self-actualization

| | | | ANG | OVA |
|-------------------------------|-----|------|----------------|------|
| Parents' monthly income (KRW) | n | Mean | \overline{F} | р |
| Less than 3,000,000 | 151 | .60a | 6.620 | .001 |
| 3,000,000 to 3,999,999 | 159 | .88b | | |
| 4,000,000 or more | 147 | .86b | | |

Note. Alphabets next to means indicate homogeneous subsets with Duncan's test (p < .05).

teristics on housing values, transformed housing function scores were compared for gender, age, academic year, parents' income, parents' tenure type, and if living with parents during semesters. Gender differences in the perceived importance of housing functions were examined using independent-sample t-tests. It was found that female students considered function as a place for self-esteem (a place for selfexpression, memories, stress relief, identity development, and privacy protection) more important than male students, and male students considered function as a place for self-actualization (reflection of resident's socio-economic status and values, a place for hobbies, leisure activities, study, and business) more important than female students (Table 4). There was no significant gender difference in the perceived importance of function as a shelter and function as a place for socialization.

The influences of age and academic year on housing values were examined using Pearson's bivariate correlation analyses and there was no significant influence found (p < .05). Age and academic years were grouped into two, three or four groups and their influences on housing values were

examined using a series of one-way ANOVA but no significant influence was found (p < .05).

Influence of parents' income on housing values was examined using one-way ANOVA. It was found that students whose parents' monthly income was less than 3,000,000 KRW perceived housing function as a place for self-actualization significantly less important than those students whose parents had a higher income (Table 5). There was no significant difference in the perceived importance of the other three housing functions based on the parents' income level at p < .05 level. The influence of parents' tenure type (own, rent) and whether or not living together with parents during the semester (yes, no) on housing values were examined using independent-sample t-tests and found no significant influence (p < .05).

Expectation for Housing in Their 20s

More than 70 percent of the respondents expected to rent a housing unit in their 20s after college graduation and a quarter of the respondents expected to purchase a unit (Table 6). Among the 335 respondents expected to be renters, 187 expected

Table 6. Expectation for Housing in their 20s

| Characteristic | n | Valid % |
|-----------------------|-----|---------|
| Tenure type | | |
| Own | 117 | 25.2 |
| Jeon-se rent | 187 | 40.3 |
| Monthly rent | 148 | 31.9 |
| Other | 12 | 2.6 |
| TOTAL | 464 | 100.0 |
| Structure type | | |
| Single-family housing | 44 | 9.5 |
| Multifamily housing | 146 | 31.4 |
| Studio, Officetel | 244 | 52.5 |
| Gositel | 5 | 1.1 |
| Other | 3 | .6 |
| Do not care | 23 | 4.9 |
| TOTAL | 465 | 100.0 |
| Location | | |
| Seoul | 153 | 32.9 |
| Gyeonggi province | 116 | 24.9 |
| Other areas in Korea | 182 | 39.1 |
| Foreign country | 14 | 3.0 |
| TOTAL | 465 | 100.0 |

Jeon-se rental and 148 expected a monthly rental of housing units. Regarding structure type, more than half of the respondents expected to reside in studio or Officetel units and approximately 31 percent of the respondents expected multifamily housing units in their 20s after graduation. Among the structure

type, the term Officetel is a combination of words 'office' and 'motel/hotel' and used interchangeably with one-room unit which is the Korean term for a studio unit or efficiency. A 'Gositel' is a term that combines words 'Gosiwon' and 'motel/hotel.' The original meaning of Gosiwon is a semi-residential unit for people preparing for the higher civil service examination entitled Gosi. However, the Gosiwon became popular for diverse people seeking affordable temporary housing as well as individuals preparing for the Gosi. The Gositel was recently introduced as a semi-residential housing form to provide more amenities than a traditional Gosiwon at an affordable rent.

More than 56 percent of the respondents expected to live in the Seoul Metropolitan area. Table 6 summarizes the respondents' expectations for housing in their 20s after college graduation.

To explore the influence of demographic characteristics by respondents on the housing expectations the relationship between the housing expectations and gender, age, academic year, parents' income and tenure types of respondents were examined using a series of chi-square tests of independence. Respondents were grouped into two age groups (18-20 years, 21 years or older), two academic year groups (1-2, 3-4), and three parent income groups (monthly income less than 3,000,000 KRW, 3,000,000 to 3,999,999 KRW, 4,000,000 KRW or more).

Table 7. Age, Parent Income and Tenure Expectations for 20s Housing

| Chracteristic | Own | Jeon-se rent | Monthly rent | TOTAL |
|--|-------|--------------|--------------|--------|
| Age ^A | | | | |
| 18-20 years | 32.6% | 36.4% | 31.0% | 100.0% |
| 21 years or older | 21.1% | 45.1% | 33.8% | 100.0% |
| TOTAL | 25.8% | 41.6% | 32.7% | 100.0% |
| Parents' monthly income (KRW) ^B | | | | |
| Less than 3,000,000 | 19.7% | 42.2% | 38.1% | 100.0% |
| 3,000,000 to 3,999,999 | 23.8% | 43.4% | 32.9% | 100.0% |
| 4,000,000 or more | 34.2% | 38.7% | 27.1% | 100.0% |
| TOTAL | 26.1% | 41.3% | 32.6% | 100.0% |

Note. The presented percentages are observed percentages within each age or income group.

 $^{^{}A}\chi^{2} = 7.887, df = 2, p = .019$

 $^{^{\}rm B}\chi^2 = 9.712, df = 4, p = .046$

| Structure type | Own | Jeon-se rent | Monthly rent | TOTAL |
|-----------------------|--------|--------------|--------------|--------|
| Single-family housing | 18.8% | 6.8% | 5.1% | 9.4% |
| Multifamily housing | 58.0% | 34.5% | 12.3% | 33.5% |
| Studio, Officetel | 23.2% | 58.8% | 82.6% | 57.1% |
| TOTAL | 100.0% | 100.0% | 100.0% | 100.0% |

Table 8. Relationship between Expectations on Tenure Type and Structure Type for 20s Housing

Note. $\chi^2 = 91.482$, df = 4, p = .000. The presented percentages are observed percentages within each tenure type.

Table 9. Perceived Importance of Housing Function as a Place for Socialization and Expectation for 20s Housing

| | | | ANOVA | |
|-----------------------------|-----|------|----------------|------|
| Chracteristic | n | Mean | \overline{F} | р |
| Tenure type ^A | | | 3.779 | .024 |
| Own | 117 | .92a | | |
| Jeon-se rent | 187 | .68b | | |
| Monthly rent | 147 | .65b | | |
| Location | | | 4.096 | .044 |
| Seoul Metropolitan area | 152 | .82 | | |
| Non-Seoul Metropolitan area | 298 | .76 | | |

^A Alphabets next to means indicate homogeneous subsets with Duncan's test (p < .05).

The tenure expectations, respondents' academic year ($\chi^2 = 7.887$, df = 2, p = .019) and parents' income ($\chi^2 = 9.712$, df = 4, p = .046) indicated a significant influence. Table 7 shows that younger respondents and respondents whose parents' monthly income was 4,000,000 KRW or more expected to purchase a housing unit in their 20s more positively than other respondents. There was no significant influence of demographic characteristics on structure type expectations and location expectations found at p < .05 level.

Relationships among the housing expectations (tenure type, structure type, and location) were examined using chi-square test of independence and only tenure expectation and structure expectation showed a significant relationship at p < .05 level. To see contingency table (Table 8), respondents who expected to be homeowners in their 20s showed a greater expectation for single-family or multifamily housing units while respondents who expected to be Jeon-se or monthly renters showed a greater expectation for non-traditional housing structure types such as a studio or Officetel.

The relationship between housing values and

housing expectation were examined. The transformed importance score for each of the four housing functions were compared across tenure, structure and location expectations using a series of one-way ANOVA. Duncan's post-hoc tests were used when needed. As results, only the perceived importance of housing function as a place for socialization showed a significant difference in tenure and location expectations. Respondents who expected to be homeowners and/or live in the non-Seoul Metropolitan area tended to value housing functions as a place for socialization more important than others (Table 9).

To explore the general considerations for housing choice, respondents were asked to choose three out of ten aspects: Location, price, transportation, natural environment (greenery, park, etc.), facilities (heating, cooling, water, sewage, etc.), furnishings, neighborhood, room arrangement, crime safety, and pollution (noise, odor, etc.). As results, price, location and transportation were indicated as the three most important housing choice considerations and were selected by more than 50 percent of the respondents followed by facilities (heating, cooling, water, sewage, etc.) and crime safety (Table 10). To

| Table 10. Considerations t | or 20s | Housing | Choice |
|----------------------------|--------|---------|--------|
|----------------------------|--------|---------|--------|

| | TO | ΓAL | Male | | Female | |
|--|------|-------|------|-------|--------|-------|
| Feature | Rank | % | Rank | % | Rank | % |
| Price | 1 | 64.6% | 1 | 70.0% | 1 | 58.1% |
| Location | 2 | 62.9% | 2 | 67.7% | 2 | 57.1% |
| Transportation | 3 | 52.2% | 3 | 54.3% | 3 | 49.5% |
| Facility (heating, cooling, water, sewage, etc.) | 4 | 27.9% | 4 | 29.2% | 5 | 26.2% |
| Crime safety | 5 | 21.0% | 9 | 6.7% | 4 | 38.1% |
| Neighborhood | 6 | 20.1% | 6 | 17.8% | 6 | 22.9% |
| Floor plan | 7 | 19.9% | 5 | 19.0% | 7 | 21.0% |
| Environment (noise, odor, etc.) | 8 | 14.5% | 7 | 16.6% | 9 | 11.9% |
| Natural environment (greenery, park, etc.) | 9 | 14.3% | 8 | 13.8% | 8 | 14.8% |
| Furnishings | 10 | 1.9% | 10 | 3.2% | 10 | .5% |

Note. The presented percentages are valid percentages of respondents who selected the feature within each gender. The sums of the percentages exceed 100% as each respondent selected up to three features.

Table 11. Gender, Age and Considerations for 20s Housing Location

| Characteristic | Price | Location | Crime safety |
|-----------------------|--|--|---|
| Gender | | | |
| Chi-square statistics | $\chi^2 = 7.063$, $df = 1$, $p = .009$ | $\chi^2 = 5.509$, $df = 1$, $p = .021$ | $\chi^2 = 68.212$, $df = 1$, $p = .000$ |
| Male | 70.0% | 67.7% | 6.7% |
| Female | 58.1% | 57.1% | 38.1% |
| TOTAL | 64.6% | 62.9% | 21.0% |
| Age | | | |
| Chi-square statistics | $\chi^2 = 6.153$, $df = 1$, $p = .014$ | $\chi^2 = 3.283$, $df = 1$, $p = .079$ | $\chi^2 = 9.926$, $df = 1$, $p = .002$ |
| 18-20 years | 57.9% | - | 27.9% |
| 21 years or older | 69.1% | - | 15.8% |
| TOTAL | 64.5% | _ | 20.8% |

Note. The presented percentages are the observed percentages of respondent who selected the feature within each gender or age group. Only the percentages with significant chi-square are presented.

see the rank order by gender in Table 10, the most prominent difference between male and female respondents was the rank of crime safety. For female respondents, crime safety was the fourth most important consideration for housing choice and was selected by 38.1 percent of the respondents while it was selected by only 6.7 percent of male respondents.

To see the demographic influences on the considerations to select housing in their 20s, the selection (select, not select) of each of top five considerations (price, location, transportation, facility,

and crime safety) were compared for gender, age (18 to 20 years, 21 years and older), academic year (1-2, 3-4) and parents' income levels (monthly income less than 3,000,000 KRW, 3,000,000 to 3,999,999 KRW, 4,000,000 KRW or more) using chi-square tests of independence. Subsequently, gender and age were found to have significant influences on the consideration of price, location and crime safety. Male and older respondents tended to consider price more important than female and younger respondents; in addition, female and younger respondents tended

| | TOTAL | | Male | | Female | |
|--|-------|-------|------|-------|--------|-------|
| Feature | Rank | % | Rank | % | Rank | % |
| Convenient use of public transportation | 1 | 75.7% | 1 | 72.0% | 1 | 80.1% |
| Time distance to work | 2 | 70.8% | 2 | 70.1% | 2 | 71.6% |
| Proximity to cultural and leisure facilities | 3 | 41.1% | 3 | 44.5% | 4 | 37.0% |
| Neighborhood facilities | 4 | 39.6% | 4 | 35.4% | 3 | 44.5% |
| Proximity to downtown | 5 | 24.3% | 5 | 26.4% | 5 | 21.8% |
| Distance from parents and siblings | 6 | 12.0% | 6 | 7.9% | 6 | 17.1% |
| Proximity to medical facilities | 7 | 6.0% | 7 | 4.7% | 7 | 7.6% |
| Neighborhood demographic composition | 8 | 3.2% | 7 | 4.7% | 8 | 1.4% |
| College town | 9 | 1.9% | 9 | 2.4% | 8 | 1.4% |

Table 12. Considerations for Housing Location Choice

Note. The presented percentages are valid percentages of respondents who selected the feature within each gender. The sums of the percentages exceed 100% as each respondent selected up to three features.

to consider crime safety more important than male and older respondents. Male respondents tended to consider location more important than female respondents (Table 11).

To identify the considerations for housing location choice, respondents were asked to select up to three features from the nine features provided: Convenient use of public transportation, time distance to work, proximity to downtown, neighborhood facilities, college town, distance from parents and siblings, proximity to cultural and leisure facilities, proximity to medical facilities, and neighborhood demographic composition. As results, the convenient use of public transportation, time distance to work, proximity to cultural and leisure facilities, neighborhood facilities and proximity to downtown were ranked as the top five important features. There was no noticeable difference in rank order by gender; however, female respondents may consider distance from parents and siblings more important (17.1%) than male respondents did (7.9%) to see the percentage within each gender.

The influence of gender, age, academic year and parents' income on the six most important considerations for housing location choice were statistically examined using chi-square tests of independence. As results, the significant influences of gender, age and parents' income on consideration of public transportation, proximity to cultural and leisure facilities, proximity to neighborhood facilities,

and distance from parents and siblings were found. Younger respondents or respondents with lower parents' income tended to consider public transportation more important when choosing their 20s housing location than male or younger respondents or respondents from higher parents' income. Respondents with parents' income 4,000,000 KRW or more tended to consider proximity to cultural and leisure facilities more important than respondents with lower parent income (Table 13). Female respondents showed a tendency to consider neighborhood facilities such as groceries and distance from parents and siblings more important than males (Table 14).

Respondents were also asked to select up to three features they considered most important in choosing residential buildings for their 20s housing from the seven aspects provided: Curb appeal, building-tobuilding distance, maintenance condition, security systems, brand apartment, floor level of unit, and parking space. The most important feature was the maintenance condition selected by 88% of the respondents followed by security systems, curb appeal, floor level of unit, and parking space (Table 15). Overall, there was no remarkable difference in the rank order between male and female respondents except the rank order of parking space and buildingto-building distance: Male respondents considered parking space more important while female respondents considered building-to-building distance

| Table 13. Age, Parents' Incor | e and Considerations | for 20s Hou. | sing Location Choice |
|-------------------------------|----------------------|--------------|----------------------|
|-------------------------------|----------------------|--------------|----------------------|

| Characteristic | Convenient use of public transportation | Proximity to cultural and leisure facilities | |
|-------------------------------|--|--|--|
| Age | | | |
| Chi-square statistics | $\chi^2 = 6.009$, $df = 1$, $p = .015$ | $\chi^2 = .179$, $df = 1$, $p = .702$ | |
| 18-20 years | 81.7% | _ | |
| 21 years or older | 71.7% | _ | |
| TOTAL | 75.8% | - | |
| Parents' monthly income (KRW) | | | |
| Chi-square statistics | $\chi^2 = 7.707$, $df = 2$, $p = .021$ | $\chi^2 = 12.423$, $df = 2$, $p = .002$ | |
| Less than 3,000,000 | 81.5% | 35.1% | |
| 3,000,000 to 3,999,999 | 76.9% | 34.7% | |
| 4,000,000 or more | 68.1% | 51.9% | |
| TOTAL | 75.3% | 40.8% | |

Note. The presented percentages are the observed percentages of respondent who selected the feature within each age or income group. Only percentages with a significant chi-square are presented.

Table 14. Gender and Considerations for 20s Housing Location Choice

| Characteristic | Neighborhood facilities | Distance from parents and siblings | |
|-----------------------|--|--|--|
| Gender | | | |
| Chi-square statistics | $\chi^2 = 4.006$, $df = 1$, $p = .046$ | $\chi^2 = 9.185$, $df = 1$, $p = .003$ | |
| Male | 35.4% | 7.9% | |
| Female | 44.5% | 17.1% | |
| TOTAL | 39.6% | 12.0% | |

Note. The presented percentages are the observed percentages of respondent who selected the feature within each gender.

Table 15. Considerations for 20s Housing Building Choice

| | TO | TOTAL | | Male | | Female | |
|-------------------------------|------|-------|------|-------|------|--------|--|
| Feature | Rank | % | Rank | % | Rank | % | |
| Maintenance condition | 1 | 88.0% | 1 | 87.4% | 1 | 88.6% | |
| Security systems | 2 | 62.8% | 2 | 50.4% | 2 | 77.7% | |
| Curb appeal | 3 | 38.7% | 3 | 42.1% | 3 | 34.6% | |
| Floor level of unit | 4 | 36.8% | 4 | 39.8% | 4 | 33.2% | |
| Parking space | 5 | 29.2% | 5 | 36.2% | 6 | 20.9% | |
| Building-to-building distance | 6 | 23.0% | 6 | 20.9% | 5 | 25.6% | |
| Brand apartment | 7 | 10.1% | 7 | 10.6% | 7 | 9.5% | |

Note. The presented percentages are the valid percentages of respondents who selected the feature within each gender. The sums of percentages exceed 100% as each respondent selected up to three features.

more important.

Influences of gender, age, academic year and parents' income on considerations of the six most important features in 20s housing building choice were examined using chi-square tests of independence. The results indicated that gender, age and academic year showed significant influences on considerations of maintenance condition, security systems, curb

| Table 16. Gender, Age, Academic Year and Considerations for 20s Housing Building Ch | Academic Year and Considerations for 20s Hou | sing Building Choice |
|---|--|----------------------|
|---|--|----------------------|

| Characteristic | Maintenance condition | Security systems | Curb appeal | Parking space |
|-----------------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| Gender | | | | |
| Chi-square statistics | $\chi^2 = .163$ df = 1, p = .775 | $\chi^2 = 36.852$ df = 1, p = .000 | $\chi^2 = 2.754$ df = 1, p = .105 | $\chi^2 = 13.153$ df = 1, p = .000 |
| Male | - | 50.4% | - | 36.2% |
| Female | - | 77.7% | - | 20.9% |
| TOTAL | - | 62.8% | - | 29.2% |
| Age | | | | |
| Chi-square statistics | $\chi^2 = 4.551$ df = 1, p = .041 | $\chi^2 = .354$ df = 1, p = .559 | $\chi^2 = 1.000$ df = 1, p = .333 | $\chi^2 = .360$ df = 1, p = .604 |
| 18-20 years | 84.3% | - | - | - |
| 21 years or older | 90.8% | _ | - | - |
| TOTAL | 88.1% | - | - | - |
| Academic year | | | | |
| Chi-square statistics | $\chi^2 = .838$ df = 1, p = .380 | $\chi^2 = 6.586$ df = 1, p = .010 | $\chi^2 = 5.237$ df = 1, p = .024 | $\chi^2 = .060$ $df = 1, p = .834$ |
| Freshman, sophomore | - | 58.4% | 42.7% | - |
| Junior, senior | - | 70.2% | 32.0% | - |
| TOTAL | - | 62.9% | 38.6% | - |

Note. The presented percentages are observed percentages of respondent who selected the feature within each gender or age group. Only the percentages with a significant chi-square are presented.

appeal and parking spaces (Table 16). Relatively older respondents whose age 21 year and above tended to consider maintenance condition more important than younger respondents. Female respondents and/or juniors and seniors considered security systems more important than male respondents or respondents with lower academic year. Freshmen and sophomores showed a tendency to consider curb appeal more important than juniors and seniors. Male respondents considered parking space more important than females. There was no significant influence of demographic characteristics on considerations of floor level of unit and building-to-building distance.

CONCLUSIONS

Summary of Findings

The purpose of this study was to investigate college students' housing values, expectation and considerations for housing in their 20s and to explore influences on their housing values, expectation and considerations in order to provide more information for the planning and design of residential properties that target young people.

Housing Values Among the four housing functions developed in connection with Maslow's hierarchy of human needs as a measurement of housing values, respondents perceived the very fundamental shelter function of housing most important followed by a function as a place for self-esteem. This finding was similar to a finding from a time series study by An, Kang and Jo's (2009): College students in 2008 considered housing function as a place for a family's health and relaxation most important. However, respondents in this study considered the housing function as a place for self-esteem which includes function as a place for self-expression, memories, stress relief, identity development and privacy protection second most important while housing function as a place for family harmony which was a part of housing function as a socialization in this study was considered second most important in An, Kang and Jo's study.

Female students considered housing function as a place for self-esteem (a place for self-expression, identity development, and privacy protection) more important than male students; however, male students considered function as a place for self-actualization (reflection of the socio-economic status and values of resident, a place for hobbies, leisure activities, and study) more important than female students.

Housing Expectations In terms of tenure and structure type expectations for housing in their 20s, more than 70 percent of the respondents expected to rent a housing unit in their 20s and more than half of the respondents expected to reside in nontraditional and relatively affordable compact size structure types such as a studio, Officetel or Gosiwon. It was interpreted to be based on the respondents' realistic assessment of their economic condition in their 20s and on housing situation of family, friends and other acquaintances who were in economic condition similar to the respondents. Relatively younger respondents and/or respondents with a higher parent income tended to show more positive expectations toward home purchases in their 20s.

Considerations for Housing Choice When choosing housing in their 20s, price, location and transportation were found to be the most important considerations regardless of demographic characteristics. Convenient use of public transportation and time distance to work were found to be the most important in location choice for 20s housing, and maintenance condition and security systems were most important in building choice. In choosing housing, female respondents tended to consider crime safety, security systems, neighborhood facilities such as grocery and distance from family more important than male respondents and represents a reflection of serious societal concerns on recent deadly crimes against young females.

Implications

Combining the study findings, housing that college students expect for their 20s seemed to be a compact

and affordable rental housing unit with a convenient access to public transportation; however, it is not easy find affordable housing in a favorable location especially in the Seoul Metropolitan area which is the most popular destination for young people seeking career opportunities. For the reason, there are many young people who find residences in campus towns even after graduation from college, which results in college student housing problems because it is difficult for the college students to find housing accommodations around their schools (Bae, 2012).

Young people's housing cost problems could be passed onto their parents. Under the Korean rental housing system which generally requires a significant lump sum payment not only for a Jeon-se deposit but also for a monthly rental contract, it may be inevitable for some young people who do not have enough savings to afford the lump sum deposit to rely on the financial support of their parents or siblings (Lee, 2012). Subsequently, the housing affordability of young people is tightly connected to the financial burden and life quality of their parents. Thus, it is important to extend provisions for compact and affordable housing units that included diverse housing alternatives such as shared housing in connection with public transportation systems and to provide financial support to assist young households to achieve housing stability.

To see the special concern of female respondents towards personal safety and security systems, it will be critical to add reliable security features in residential properties that are developed to target young females. In addition, it will be beneficial to emphasize security features when marketing properties equipped with these features.

Limitations and Suggestions

This study was conducted on students at a university in Chungbuk province; therefore, there is a limitation towards the generalization of the study findings that describe the housing values and the expectations of young people. In addition, it may be hard to say that the student samples at the university represent those of university students in all of Chungbuk province. However, there is an aspect that

distinguishes the study from other related studies. Rather than asking for vague future expectations for housing in the as in most of previous studies, the range of housing in this study was limited to housing in the respondents' 20s which was housing within 10 years from the time of this survey. By doing so, it was expected for the students to respond based on a realistic assessment of their future. Thus, it is suggested for further studies aimed to explore realistic housing expectation of certain population groups to utilize the methodology of this study. Also, it is suggested to conduct similar studies in extended areas to obtain more useful information for future housing development of housing that targets young households.

REFERENCES

- An, O., Jo, O., & Hao, J. (2009). A comparative study on the housing viewpoint between Korean and Chinese university students. *Journal of Korean Hous*ing Association, 20(4), 121-129.
- An, O., Kang, H., & Jo, Y. (2009). Comparison on the time series of housing viewpoint of university student. *Journal of Korean Housing Association*, 20(4), 113-120.
- Bae, K. (2012. 2. 1.). The reason office workers find housing units in campus towns. Asia Economy. http://view.asiae.co.kr/news/view.htm?idxno=2012013 114335082994&nvr=Y
- Bang, S., & Hong, H. (2012). University students' housing value orientation and preferences about urban-life housing, *Proceeding of Spring Annual Con*ference of KHA, 2012, 379-384.
- Beamish, J. O., Goss, R. C., & Emmel, J. (2001). Lifestyle influences on housing preferences. *Housing* and *Society*, 28(1&2), 1-28.
- Beamish, J. O., Goss, R. C., & Emmel, J. (2006). Influences on housing choice and behaviors. In J. L. Merrill, S. R. Crull, K. R. Tremblay, Jr., L. L. Tyler, & A. T. Carswell (Eds.), *Introduction to housing* (pp. 25-53). Upper Saddle River, NJ: Pearson Prentice Hall.

- Downer, D. B., Smith, R. H., & Lynch, M. T. (1968, March). Values and housing – A new dimension. *Journal of Home Economics*, 60, 173-176.
- Jung, M. R., & An, O. H. (2001). A comparative study on the view of housing between Korean and Japanese female university students. *Journal of Korean Housing Association*, 12(4), 162-171.
- Kahle, L. R., & Kennedy, P. (1989). Using the list of values (LOV) to understand consumers. *The Journal of Consumer Marketing*, 6(3), 5-12.
- Kim, J., & Kwark, K. (2007). A study on the life style and housing satisfaction, future-housing environment preferences among the college students. *Korean Journal of Human Ecology*, 16(3), 651-664.
- Kim, M., & Noh, S. (2008). Housing values and satisfaction among university students in Gwangju and the Chonnam area. *Journal of Korean Housing Association*, 19(4), 11-20.
- Lee, E. J., & Cho, S. H. (2006). A study on the meaning of home of the university student. *Proceeding of Autumn Annual Conference of KHA*, 2006, 416-419.
- Lee, H. (2012). Housing cost burden of single- or twoperson households in their 20s and 30s in the United States. *Journal of Korean Housing Association*, 23(2), 69-77.
- Lim, H. (2005). The life style and dwelling preferences of the university students. *Korean Journal of Human Ecology*, 14(6), 1047-1058
- Lindamood, S., & Hanna, S. D. (1979). Housing, society, and consumers: An introduction. St. Paul, MN: West Publishing Company.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper.
- Morris, E. W. & Winter, M. (1978). Housing, family and society. New York: John Wiley & Sons.
- Woo, B., Park, A., Lee, K. H., & Lee, H. (2012). Comparison of housing values and housing consideration of Korean and Chinese college students. Journal of the Korean Society of Plant and Environmental Design, 8(1), 33-39.
- Yoon, B., Choi, H., & Cho, M. E. (1998). A study of housing interior design through housing expectations and housing preferences of future consumers-

college students. Journal of Korean Housing Association, 9(3), 133-144.

Yoon, J. W., & Shin, H. J. (1997). A study the housing value of the university student in Taegu. *Journal of Korean Housing Association*, 8(3), 131-139.

Received March 20, 2013 Revised May 5, 2013 Accepted May 6, 2013