

Satisfaction with Housing, Community, and Living Environment

- Comparison among Urban, Rural, and Fishing Village Residents -

지역별 주거만족도와 생활환경 만족도

- 도시, 농촌, 어촌지역 주민을 중심으로 -

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Abstract

본 연구에서는 도시, 농촌, 어촌지역 주민들의 주거만족도와 지역사회 및 생활환경 만족도를 비교 측정하고자 하였다. 이 연구의 특성은 지역을 하나의 통제변인으로 분석에 포함시켜 제변인들의 영향력의 방향과 정도를 파악하고자 하였다는 점이다.

자료는 1993년 6월 부터 1994년 6월동안 488명의 주부를 대상으로 수집하였으며, 대구에 거주하는 주부 254명과, 경북권내의 영천과 청도 등의 농촌지역에 거주하는 주부 124명, 그리고 한산도 섬내에 거주하는 주부 110명을 대상으로 각 가정을 방문하여 면접법을 실행하였다. 회귀분석을 실행한 결과, 주거만족도에 영향을 미치는 변인은 주거비와 주거소유형태였으며, 거주하고 있는 지역사회와 생활환경에 대한 만족도가 증가할수록 주거만족도도 증가하는 것으로 나타났다. 지역을 고려할 때, 도시거주자의 주거만족도가 농촌이나 어촌거주자의 주거만족도 보다 높은 반면 지역사회에 대한 만족도와 생활환경 만족도는 농촌거주자와 어촌거주자가 도시거주자보다 더 높은 것으로 나타났다. 본 연구의 결과는 지역을 고려한 주거정책 관련 프로그램 개발을 위한 기초자료로 이용될 수 있으리라 사료된다.

I. Introduction

There are at least three basic necessities for human survival, namely, food, clothing, and housing. Housing as shelter is only one of many important aspects to individuals, that is, the primary base of a family from which all human activities start, including

social, cultural, and recreational activities.

The home is not only a dwelling, it is the place in which the most intimate and close human experiences occur, and a decent home with a suitable living environment is one of the most important social and economic goals (Morris & Winter, 1978; Campbell, 1981; Hafstrom & Chung, 1989).

All these factors are closely related to life satisfaction and thereby quality of life.

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Both housing quality and the right kind of shelter influence way people evaluate their dwelling units and how satisfied they are with them. In addition to housing quality, housing norms may consist of housing tenure as well as community and environmental attributes, and these norms undoubtedly influence the sense of well-being of whole community (Morris & Winter, 1975; Metzen, Williams, Shull, & Keefe 1980; Campbell, 1981; Shin, Ahn, Kim, & Lee 1983; Lee & Weber 1984). In other words, housing is evaluated not simply as a physical dwelling unit but as a totality of the dwelling unit and its community and other environmental characteristics.

People live in a region of the country, a community, and a dwelling unit, and the physical surroundings differ so profoundly from one region to another. Korea can be divided naturally into three regions, differing in climate, life style, culture and value, i.e., typical urban cities, rural agricultural area, and fishing village.

There has been a trend toward increasing homogeneity among urban, rural, and fishing village over the years, but, these regions still maintain much of the economic, social, and cultural differences. If the people who live different regions are asked to evaluate their housing and living environment, the pattern may be quite different.

Main elements of living environment include attributes of dwelling unit, community, and natural environment.

These elements may be related to the aspects of family functioning. Satisfaction provided by a dwelling unit is subjective reaction to the aesthetic quality of interior,

space, convenience, and ownership, and these factors are influenced by conditions of the physical surroundings and the way those factors satisfy one's basic needs (Stoekeler & Larntz, 1986). It also is related to living environmental characteristics, such as social, cultural, and political aspects of the community because housing characteristics interact with every aspect of the living environment, and the these living environment is different from one region to another.

The relationship between satisfaction with housing as well as living environment and demographic factors associated with the taste and preferences of the household has been studied, and found a housing unit and its environmental conditions significantly related to socio-economic and demographic variables, such as, income, family size, age, education, and housing tenure (Kim, 1985; Chi & Lee, 1986; Yoon & Paik, 1991; Park, 1994). However, previous studies have not included region as a variable, and have never been empirically verified the influence of regional differences of residential evaluation on satisfaction with housing and living environment. Ignoring such differences among regions may produce biased statistical results, because people living in different areas may have different ideas about their housing and living environment.

The purpose of this study is to measure the effect of residents' evaluation of housing, community, and environment to find if any differences exist in satisfaction level among residents living in urban, rural, and fishing village. This analysis should be useful in establishing benchmark

data for the housing domain of quality of life.

Public policymakers seek to recognize people's perceptions or feelings toward their living environments in order to identify ways of improving well-being of the people through making changes in housing and living conditions. To accomplish this, government agencies need information on people's evaluations, taking satisfactions into consideration, in order to develop appropriate policies. This study should help to fulfill this need.

II. Method

1. Source of Data

The data for this study were collected from 488 housewives between June 1993 and June 1994 by personal interview. These 488 housewives were drawn from three regions, representing as possible of the general population in each region, i.e., 254 housewives in Taegu city which is the third largest city in Korea, 124 housewives in rural agricultural area, and 110 housewives in Hansan Island, one of the typical fishing villages. Sampled wives were chosen through a random selection with trained interviewers, and they were asked questions concerning their perception of housing and living environmental attributes.

2. Variables

To try to accomplish the purpose of this study, three models in which the dependent variables were satisfaction with housing, community, and environmental attributes

were constructed. These variables were measured by a 5-point scale with the high value representing extreme satisfaction. One aspect of this analysis utilizes these satisfaction variables individually while another utilizes them as an index.

Housing satisfaction was measured by a three-item index. The three items are assumed to reflect some underlying construct which deal with physical and nonmaterial aspect of housing, i.e. aesthetic quality of interior, kitchen system, and convenience. The alpha reliability coefficient for the three-item index of housing satisfaction was 0.85, indicating the criterion for determining reliable measures.

For satisfaction with community and environment, single-item measure was used. Satisfaction with community was measured by asking the questions, "How satisfied or dissatisfied are you with safety and friendliness in your community?" and "How satisfied or dissatisfied are you with natural environment, such as, pollution, noisy, crowd, and traffic problem in your region?"

Independent variables were family income, family size, wife's age and education, housing expenditures, housing tenure, and region. Region and housing tenure were represented by dummy variables with urban housewives renters as the reference groups.

3. Analysis

Multiple regression analysis was used to explain variance in satisfaction with housing, community, and environmental attribute. All variables, except housing tenure (renter=0) and region (urban=0), were measured on interval scales and their

relationships were linear. In this study, the following utility function was specified:

$$u_i = f(X_1, X_2, X_3, X_4, \dots, X_n, e)$$

where u_i = satisfaction with housing
 u_2 = satisfaction with community
 u_3 = satisfaction with environment
 $X_1 \dots X_n$ = the determinants of satisfaction variables.

Due to the fact that housing satisfaction is interrelated with environment and community satisfaction, these two variables were included as independent variables in analyzing housing satisfaction to hold those two variables constant along with other independent variables.

Satisfaction with community and environment were also regressed on socio-economic and demographic variables to find the determinants.

The multiple regression equation can be stated as follows:

$$Y_i = a + bX_1 + cX_2 + dX_3 + \dots + yX_n + e$$

where Y represents dependent satisfaction variables, a is the intercept, b, c, d, y are coefficients, and e is an error term.

If the region coefficient is significant, housing satisfaction does depend on region, if not, then housing satisfaction does not depend on region, but on other factors.

The F-value was used to determine the significance of the R^2 .

In order to test multicollinearity problems, each independent variable was regressed on the other independent variables. The correlations between pairs of variables were low (i.e., below 0.4), indicating no

multicollinearity problem.

Beta (standardized) coefficients were used to indicate the relative importance of independent variables with F statistics used to test their significance. When the sign is ignored, each coefficient represents the relative contribution of its associated variable. The t-statistic was used to test the significance of independent variables. Because b (unstandardized) coefficients are not sample-specific they are useful for comparative purposes; therefore, b coefficients were used for satisfaction variables.

III. Empirical Results and Discussions

1. Sample Characteristics

The mean income of rural and fishing village households was almost the same but that of urban households was nearly double (Table 1). All three samples had a relatively equal family size, about four persons per household. Compared with housewives in urban and rural area, housewives in fishing village had a higher mean age. The mean age was 42 years for urban housewives and rural and fishing village housewives on average were 7-8 years older.

Rural and especially fishing village housewives were less well educated. While 2.8% of urban housewives had no formal education, 42.7% of fishing village housewives did not attend school. About 41% of urban housewives attended high school, while 18.5% of rural housewives and 9.1% of fishing village housewives attended high school. In urban area, 22.8% of housewives

〈Table 1〉 Description of Sample for 488 Households

Independent variables	Urban (N=254)	Rural (N=124)	Fishing village (N=110)
Family income	1,016,770	644,600	639,910
Family size	4.3	4.1	3.6
Mean age	41.7	49.7	47.9
Education(%) :			
never attended school	2.8	19.4	42.7
elementary school	5.1	34.7	32.7
junior high school	21.7	26.6	15.5
high school	40.9	18.5	9.1
2-year-college	6.7	0.8	0.0
4-year-college or more	22.8	0.0	0.0
Housing tenure (%) :			
homeowner	72.0	86.3	86.4
renter	28.0	13.7	13.6

had a 4-year college degree, but none of the housewives in rural and fishing village had college degree. There was a substantially higher percentage of owners than renters in all three regions, but the percentage of renters was relatively higher in urban area than rural and fishing village.

2. Results of the Analysis

Satisfaction with housing was positively related to housing expenditures (Table 2). Also, the coefficients for satisfaction with community and environment were positive, indicating that housewives describing themselves as satisfied with their community and environment were more likely to express high satisfaction with their housing unit. Home owners were more satisfied with their housing than renters. Dummy variables for rural and fishing village had negative signs, suggesting that rural and fishing village housewives were more likely to express low satisfaction with their

〈Table 2〉 Regression of Housing Satisfaction

Independent variables	b	B
Income	0.986 (1.51)	0.071
Housing expenditures	0.163** (5.97)	0.273
Family size	-0.003 (-0.13)	-0.006
Age	0.002 (0.48)	0.028
Education	0.062 (1.52)	0.107
Housing tenure: homeowner	0.437** (4.21)	0.203
Region: rural	-0.349** (-3.33)	-0.173
fishing village	-0.359* (-2.65)	-0.171
Satisfaction with community	0.089* (2.09)	0.110
Satisfaction with environment	0.194** (4.91)	0.223
R ²	0.21	
F	12.66**	

*p <0.05

**p <0.01

housing than urban housewives. In terms of relative importance, housing expenditure was one of the important variable, followed by satisfaction with environment, housing tenure, region, and satisfaction with community. Income, family size, and wife's age and education were not significant.

In examining satisfaction with community, only housing tenure and region were significant, and among the variables region was the most important (Table 3).

Other variables were not significantly related. As expected, homeowners were more satisfied with their community than renters. Coefficients for rural and fishing village variables were positive, indicating that compared with urban housewives, rural and fishing village housewives were more satisfied with their community. Close to one-third of the variance (33%) in community satisfaction was explained by the set of seven variables.

Satisfaction with environment increased as wife's age and housing expenditure increased (Table 4). Considering regional difference, fishing village housewives were more likely to be satisfied with their environmental attributes than urban housewives. But, there was no difference between urban and rural housewives.

Housing tenure, income, wife's education had no significant effects. In explaining satisfaction with natural environment, region was the most important variable.

IV. Summary and Implications

The findings of this research indicate that region is one of the important determinants of satisfaction with housing.

<Table 3> Regression of community Satisfaction

Independent variables	b	B
Income	0.904 (1.22)	0.052
Housing expenditures	-0.189 (-0.62)	-0.026
Family size	-0.021 (-0.68)	-0.028
Age	0.008 (1.54)	0.084
Education	-0.015 (-0.32)	-0.021
Housing tenure: homeowner	0.257* (2.18)	0.096
Region:		
rural	0.637** (5.49)	0.253
fishing village	1.413** (10.06)	0.541
R ²	0.33	
F	29.66**	

*p <0.05

**p <0.01

<Table 4> Regression of Environmental Satisfaction

Independent variables	b	B
Income	0.226 (0.29)	0.014
Housing expenditures	0.748* (2.27)	0.110
Family size	-0.032 (-1.05)	-0.050
Age	0.011* (1.98)	0.125
Education	0.074 (1.48)	0.111
Housing tenure: homeowner	-0.109 (-0.87)	0.044
Region:		
rural	0.146 (1.18)	0.063
fishing village	0.671** (4.66)	0.291
R ²	0.10	
F	6.81**	

*p <0.05

**p <0.01

community, and environment. The taste or lifestyle of families may be the reason for the differences among regions, and such taste or preference may be influenced by both cultural and demographic factors that may vary by region. For housing satisfaction, findings clearly indicate that subjective variables measured by satisfaction with community and environment, were as important as objective variables, such as housing tenure and region.

Urban housewives were more satisfied with their housing attributes i.e., the aesthetic quality of interior, kitchen system, convenience of housing, than rural housewives. It indicates that the aesthetic concept of interior of dwelling as perceptual affect and privacy provided by dwelling space appears to be more important for urban housewives than rural and fishing village housewives. Also, the kitchen system in urban dwelling unit tends to be more modernized than that of rural and fishing village, and hence urban wives are more likely to be satisfied.

The convenience of housing location in urban area is one of the prime determinants of family satisfaction with the dwelling. Location and area may affect family activities and satisfactions by the degree to which they provide convenient access to shopping centers, transportation facilities, health care and police services, water and electric facilities, and schools. Thus, the convenience of housing, which is nonmaterial aspect of housing, affects the desirability of dwelling unit and one's feeling about the dwelling.

While rural and fishing village housewives were less satisfied with their housing unit than urban housewives, they were more

satisfied with their community. Rural and fishing village communities are more sociable than urban cities. In other words, housewives in urban area do not visit their neighbors, while rural and fishing village housewives visit with their neighbors more often. It is also clear that because urban cities are more dangerous than rural and fishing village, urban housewives feel it is not safe to walk around their neighborhood at night, and they lock the doors even at daytime. Rural and fishing village housewives felt that they were much freer of fear of crime and had a greater sense of safety, suggesting they seem to appreciate these qualities of their surrounding communities clearly more than urban housewives. It should be noted that urban cities appear to have lost something of the quality of human community while rural and fishing village have retained.

With regard to environmental attributes, i.e., pollution, noisy, crowd, and traffic problem, residents in fishing village were more likely to express high satisfaction than urban residents. But, there was no difference in urban and rural residents who evaluated their environment itself in positive or negative terms. Fishing village housewives interviewed for this study said that "their village is very good place to live." They are far less concerned with air and water pollution, noisy, crowd, and traffic problems in their village. It does not mean residents in fishing village live in a paradise, but they do live in a situation which is closer to the natural environment than others.

Housing tenure is another variable that is significant for satisfaction with housing

and community. Higher housing and community satisfaction of homeowners than renters appears to reflect achievement of the societal norm of home ownership, speculated to be the most important of the housing norms for Koreans. Homeowners also may invest more resources than renters in the care and space of the housing in order to increase the utility of their dwelling.

Housing expenditure, not family income, affected satisfaction with housing. Perhaps it is reasonable that, all things being equal, housing expenditure would be more important than family income because some families may not invest in their housing although they have enough income.

In summary, findings confirm that the dwelling attributes analyzed in this study are a major housing domains to be considered in people's life assessment, and feelings about the dwelling unit and its environmental attributes are closely related to regional difference.

Policy makers need knowledge and corresponding empirical data as to how people's feeling is related to socio-demographic factors in order to establish appropriate housing programs and policies to promote the well-being of the public.

This study provides empirical data showing the relationship between satisfaction of housing domains and regional differences. It indicates that satisfaction with housing and living environment varies by region.

It is recommended that research should be conducted using more detailed housing and environmental classifications in order to find additional determinants of housing satisfaction. Based on the findings of this study, the importance of aesthetics and subjective assessment to housing

satisfaction and thus to the quality of life should have more research attention than accorded to it in the past. Furthermore, the attributes, standards, and values of residents in urban, rural, and fishing village should be considered in housing programs designed to fulfill their needs.

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