

*HOUSING SATISFACTION AND TYPE OF RESIDENCE*

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*ABSTRACT*

*A major objective of housing research continues to be the assessment of housing satisfaction. In the present study, housing satisfaction as a multidimensional construct is examined using data from a sample of rural residents of conventional homes (N=105), mobile homes (N=90), and apartments (N=110). Through factor analysis of a set of 61 housing satisfaction items, six satisfaction factors are identified. Comparison of factor scores by housing type (via analysis of variance) indicates that there are differences in housing satisfaction. The differences emphasize the need to consider specific measures of housing satisfaction which can provide a better understanding of why residents are satisfied or dissatisfied with their housing situation.*

*INTRODUCTION*

Measuring residents' satisfaction with their homes is not a new endeavor. Over the years, housing researchers have identified various aspects of an individual's housing environment and collected subjective evaluations as to whether satisfaction with those aspects reflect a sense of contentment with the housing situation (Hanna & Lindamood, 1979; Gray, Shelton, & Gruber, 1980; Harris, 1976; Morris, Crull, & Winter, 1976; Onikbokun, 1976). Included in those efforts are assessments of selected aspects of the physical structure (i.e., size, number and arrangement of rooms, condition of plumbing, structural repairs needed), the housing site (i.e., size of the yard, view from the home, quality of the landscape), the immediate neighborhood (e.g., proximity of neighbors, relations with neighbors, appearance of the neighborhood), and the local community (i.e., proximity to schools, churches, shopping areas, and accessibility to public services).

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The general conclusion suggested by those studies is that most households are reasonably satisfied with their housing but tend to be dissatisfied with specific aspects of their housing (Campbell, Converse, & Rodgers, 1976). When asked a general question concerning satisfaction with their housing, individuals tend to respond positively, but when asked specific questions about particular components of their housing situation, varying degrees of dissatisfaction are reported. The tendency of individuals to be generally content, but dissatisfied with the specific aspects of their housing, suggests that the measurement of housing satisfaction is likely to yield a more comprehensive picture if a multidimensional assessment including both specific and general aspects is used.

One implication is that if the measurement of housing satisfaction is limited to one aspect or even several aspects of the housing environment, the assessment may not accurately measure residents' total housing perspective. Despite the fact that most low-to-moderate income Americans prefer to live in conventionally-built single-family housing (Dillman, Dillman, & Tremblay, 1976), there is growing evidence to indicate that residing in nonconventional alternatives, such as mobile homes and apartments, are quite acceptable and satisfying to their occupants (Gray, Shelton, & Gruber, 1980; Lindamood & Hanna, 1979; Shelton, Gruber, & Godwin, 1983; Snider, 1979).

The relative comparability between conventional and nonconventional housing alternatives appears to be due to the fact that what the latter forms of housing lack structurally in comparison with conventionally built homes, they make up in other ways (such as lower housing costs) and providing for attachment to location and/or area. This suggests that housing type alone is probably not a sufficient predictor of housing satisfaction. Instead, specific and general aspects of a resident's housing situation must be taken into consideration to establish a more accurate picture of the relationship between housing type and housing satisfaction.

#### *PROCEDURES*

##### *Data Source*

The data were collected from residents of three types of housing--conventional homes, mobile homes, and apartments. The set of housing satisfaction questions tap a wide variety of characteristics of housing units, neighborhoods, and residential communities. The data analyzed in this study were obtained from 305 residents of moderate- to low-priced housing from 11 counties representing the Piedmont region of North Carolina. The sample was drawn from townships located in the counties that:

1. have fewer than 20,000 residents (rural)
2. have at least an 8 percent non-white resident population (racially heterogenous), and
3. have at least 5 percent of all housing units that are mobile homes.

Most respondents were randomly selected from tax records from within the selected townships. However, because of the relatively fewer mobile homes and apartments compared with the number of conventional homes located in the selected townships, a supplemental sampling system also was employed. This supplemental system involved obtaining additional mobile home and apartment listings from the telephone directories and real estate listings. In some cases these listings were located outside the selected townships, but in all cases they were located within the targeted counties. The final sample consists of respondents from 105 conventional homes, 90 mobile homes, and 110 apartment households. (For a more complete description of the sampling methodology and a complete description of the interview schedule and data collection procedures, see Shelton, et al., 1983).

### *Analyses*

For the purpose of testing for the hypothesized importance of measuring both specific and general aspects of the three groups' satisfaction with their housing, respondents' housing satisfaction data were analyzed:

1. to examine the interrelationships among various specific characteristics of residents' satisfaction with their housing situations, and
2. to compare residents' satisfaction with specific aspects of their housing situations with more general indicators of housing satisfaction.

### *RESULTS*

Because of the diversity and number of housing satisfaction questions, a factor analysis (a principle factor technique with varimax rotation) was conducted for the purpose of organizing and reducing the original set of 61 housing characteristics to a more manageable number. Only factors with eigen values greater than or equal to 1.0 were retained in the analysis. The analysis produced six factors accounting for 51.4 percent of the variance represented in respondents' ratings of their satisfaction with each item of the set of housing characteristics. The components of each factor were identified as all of the housing characteristics that loaded 0.40 or greater on a given factor. Names were given to each factor based on the content of the items that loaded highly (Rummel, 1970). (The details of the factor analysis, including factor loadings and differences among the three dwellings types are available upon request from the senior author.)

#### *General Housing Satisfaction Factors*

The six factors in the order of their explanatory power (percent of variance accounted for) are: Near Environment, Physical Structure of the Home, Community Amenities, Church and School, Public Services, and Housing Costs. The first factor, Near Environment, is comprised largely of characteristics pertaining to the location and setting of the home. The second factor, Physical Structure of the Home, represents the physical features of the home.

The third factor, Community Amenities, represents the respondents' satisfaction with the proximity of their homes to places such as work and shopping. The fourth factor, Church and School, pertains to the proximity of the home to schools and place of religious worship. The fifth factor, Public Services, is representative of satisfaction with the availability of public services such as police and fire protection. The sixth and last factor, Housing Costs, is an economic factor concerned with respondents' satisfaction with costs of the home and utilities.

*Comparison of General Housing Factor Characteristics*

To examine more closely the makeup of each of the factors and the relationship of residence in the three housing types to differences in satisfaction level, the results of the analysis of variance tests and post hoc comparisons for each housing characteristic were examined. (Differences that exceeded the .05 level were identified as significant). Comparisons of mean ratings indicate that both residents of conventional homes and residents of mobile homes are significantly more satisfied with the neighborhood, setting, and location of their homes than are residents of apartments.

For 15 of 18 Near Environment characteristics, residents of conventional homes are significantly more satisfied than are residents of apartments, whereas, for 12 of the characteristics, residents of mobile homes are significantly more satisfied than are residents of apartments. Only one characteristic yielded a significant difference in the satisfaction of residents of conventional homes compared with residents of mobile homes. Residents of conventional homes report greater satisfaction with the amount of open space around the home.

The results of univariate comparisons of characteristics comprising the second factor, Physical Structure, indicate, that, of the 11 characteristics represented, for only one, satisfaction with overall comfort of the home, are there significant differences by type of residence. Residents of conventional homes and residents of mobile homes are significantly more satisfied with the overall comfort of the home than are residents of apartments.

For factor three, the pattern indicates that residents of mobile homes and residents of apartments are more satisfied than are residents of conventional homes. However, only mobile home residents are significantly more satisfied than are residents of conventional homes on three characteristics--the nearness to medical services, nearness to place of work, and quality of nearby shopping areas. Residents of mobile homes are significantly more satisfied with the nearness of recreation facilities than are residents of apartments.

Comparison of the three characteristics comprising the fourth factor, Church and School, reveals only one significant difference. Residents of mobile homes are significantly more satisfied with the nearness of the home to the place of worship than are apartment residents.

For factor five, Public Services, only one characteristic of three yields significant differences in satisfaction level. Apartment residents are significantly more satisfied with the quality of paved

roads and streets around their homes than are residents of conventional homes.

Finally, for Housing Costs, the sixth factor, satisfaction with the cost of the home yields significant differences in satisfaction level among residents of the three housing types. Residents of conventional homes and residents of mobile homes are significantly more satisfied with the costs of the home than are residents of apartments.

#### *Comparison of General Housing Factors*

In addition to the individual comparison of the characteristics comprising each factor, factor scores are computed and compared for significant differences by housing type. A summary of the factors producing significant differences by housing type along with their mean factor scores is shown in Figure 1. The results indicate that for the Near Environment factor, both residents of mobile homes and of conventional homes are significantly more satisfied than are residents of apartments.

On the Community Amenities factor, residents of mobile homes report significantly greater satisfaction than do residents of conventional homes. For the Church and School factor, residents of mobile homes are found to be significantly more satisfied than are apartment residents. Residents of mobile homes are significantly more satisfied on the Public Services factor than are residents of conventional homes. Finally, both residents of conventional homes and residents of mobile homes report significantly greater satisfaction with housing costs than do residents of apartments. No significant differences are found for the Physical Structure of Home factor.

#### *General Indicators of Housing Satisfaction*

Presented in Table 1 are the mean ratings of respondents' satisfaction with the home and the neighborhood (two single items among general questions regarding the respondents' housing satisfaction) by housing type. Comparison of those satisfaction ratings indicates that residents of mobile homes and residents of conventional homes have significantly higher levels of general satisfaction with their homes than do residents of apartments. Residents of conventional homes are significantly more satisfied with the neighborhood than are residents of apartments. The satisfaction level of mobile home residents is not significantly different from the satisfaction levels indicated by residents of the other two housing types.

#### *General Satisfaction with Home*

Factor scores were computed for each of the six housing factors. The scores were correlated with the two general satisfaction measures for the three housing groups (Table 2). The strongest correlations involve the Near Environment, Physical Structure, and Housing Cost factors. For residents of conventional homes and residents of apartments, general satisfaction with the home is positive and most highly correlated with the Near Environment ( $r=0.44$  and  $0.48$ ) and Physical Structure ( $r=0.43$  and  $0.50$ ) factors. For residents of mobile

homes, although the two relationships are significant, the magnitudes of the correlations are lower ( $r=0.18$  and  $0.23$ ) for the Near Environment and Physical Structure factors. By contrast, the Housing Costs factor is the strongest related factor with home satisfaction among mobile home residents ( $r=0.38$ ), while among residents of apartments and of conventional homes, the correlations are moderate ( $r=0.25$ ) and very low ( $r=0.12$ ).

#### *General Satisfaction with Neighborhood*

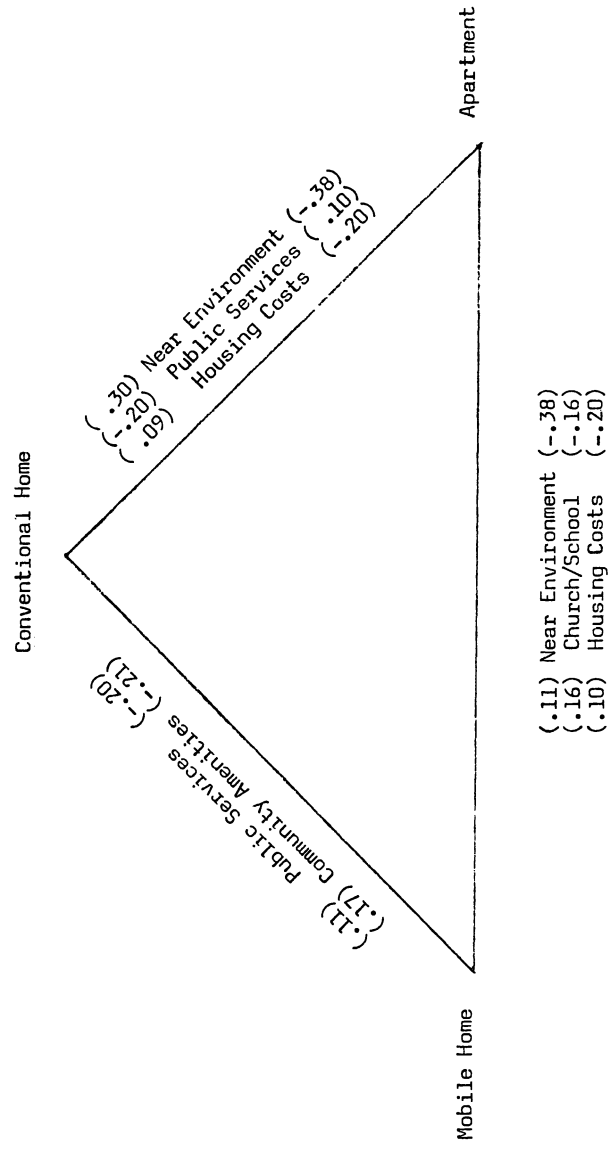
The strongest correlations between the factors and general satisfaction with the neighborhood involved the Near Environment and Physical Structure factors. For the Near Environment factor, the correlations are positive and quite strong for residents of apartments ( $r=0.52$ ) and mobile homes ( $r=0.57$ ) and very strong ( $r=0.71$ ) for residents of conventional homes. In regard to the Physical Structure factor, the correlations are positive and moderately strong for apartment residents ( $r=0.39$ ) and residents of conventional homes ( $r=0.35$ ), but relatively lower for residents of mobile homes ( $r=0.16$ ).

#### *DISCUSSION*

The factor analysis reveals that residents' satisfaction with their housing environment is a multidimensional construct comprised of at least six dimensions along which varying degrees of satisfaction are reported by the residents of the three housing types. The most powerful dimensions in terms of explaining overall resident satisfaction appear to be the characteristics of the Near Environment and the Physical Structure of the home. Four additional factors, Community Amenities, Church and School, Public Services, and Housing Costs were extracted, but retain relatively little of the variability represented in the set of specific housing satisfaction measures.

The generally high satisfaction rating reported by most respondents in each of the three housing groups indicates that the majority of the residents are moderately to very satisfied with the specific housing environment indicators considered in this study. Comparatively speaking, however, residents of conventional homes and mobile homes are more satisfied with their housing situation than are residents of apartments, particularly on the items that loaded highly on the Near Environment factor. The results in Table 1 show that most of the differences in satisfaction level found between residents of conventional homes and residents of apartments and mobile homes involve characteristics comprising the Near Environment factor. Greater levels of satisfaction reported by residents of conventional homes and mobile home residents suggest that they are more satisfied with aspects of the location and setting of their homes than are residents of apartments. It is likely that the differences found in characteristics comprising the Near Environment factor relate to the fact that conventional and mobile homes are forms of detached housing.

FIGURE 1  
COMPARISON OF HOUSING FACTORS BY HOUSING TYPE



Note: Only factors for which analysis of variance tests yielded significant differences between housing types are shown. On either side of the factor label are mean factor scores for each housing type. Higher positive means indicate greater satisfaction on the factor.

Table 1. Mean general satisfaction by residence type.

	Conventional	Mobile	Apartment
Housing satisfaction	4.22(a)	4.31(b)	3.88(a,b)
Number responding	(104)	(89)	(109)
Neighborhood satisfaction	4.29(a)	4.13	3.79(a)
Number responding	(103)	(87)	(109)

Means with the same letter in parentheses are significantly different ( $p < 0.05$ ).

Table 2. Correlations between satisfaction and the factor scores.

Factors	General Housing Satisfaction		
	Conventional Home	Mobile Home	Apartment
Near environment	0.44*	0.18*	0.48*
Physical structure	0.43*	0.23*	0.50*
Amenities	0.13	0.22*	0.06
Church and school	0.29*	0.22*	0.21*
Public services	0.18*	0.06	-0.03
Housing costs	0.12	0.38*	0.25*

Factors	General Neighborhood Satisfaction		
	Conventional Home	Mobile Home	Apartment
Near environment	0.71*	0.57*	0.52*
Physical structure	0.35*	0.16*	0.39*
Amenities	0.14	-0.10	0.15
Church and school	0.30*	0.09	0.07
Public services	0.20*	0.18*	0.01
Housing costs	0.07	0.09	-0.01

\*significant,  $p < 0.05$ . (the number of respondents in each group vary: for conventional 100-101, for mobile homes 84-87, and for apartments 100-102)

The differences in the Public Services factor between residents of conventional homes and residents of mobile homes and between residents of conventional homes and residents of apartments, and on the Community Amenities factor between residents of conventional homes and residents of mobile homes may be related to differences in proximity to more developed areas within the community. The greater satisfaction with the convenience and availability of community services that apartment and mobile home residents report in comparison to the residents of conventional homes may be related to the fact that more of the mobile home and apartment sample are located closer to urbanized areas of the counties. Finally, despite

the fact that the apartment residents are, on the average, located nearer to churches and schools, they report significantly less satisfaction with these factors than do residents of mobile homes. This finding also relates to the greater satisfaction of residents of mobile homes with the location and setting of their homes--reflecting more satisfaction with the quality of schools and place of worship in their neighborhoods.

The differences on the Housing Costs factor seem to reflect some of the advantages of single-site housing; in particular, the opportunity for home ownership (condominium and cooperative housing has not yet become common in rural areas of North Carolina). Most residents of conventional homes and mobile homes report owning or buying their homes and, therefore, benefit from the economic advantages (i.e., tax breaks, equity building and greater control over the maintenance cost) that typically are associated with home ownership. Virtually all of the apartment residents are renting their homes and, therefore, are not receiving tax benefits and may have less control over the factors affecting the costs of their homes (i.e., rent structure, mandatory maintenance costs, utility costs, and energy-efficiency renovations).

The results presented in Table 2 indicate an interesting relationship between level of satisfaction with the six housing factors and the single-item general housing satisfaction measures. Despite the close similarity in satisfaction level between residents of conventional homes and residents of mobile homes on many of the specific housing characteristics measured, the correlational patterns shown in Table 2 suggest that residents of conventional homes and mobile home residents differ measurably in terms of the sources of their housing satisfaction. Based on the similarity of the satisfaction ratings, this finding is surprising. It suggests that, although the residences may have many features in common and may satisfy occupants to a similar degree, apparently the main essence of what the two types of residents find satisfying about their homes is different. This finding is further accentuated when considered along with the unexpected finding that residents of conventional homes and residents of apartments are more similar to each other in terms of the bases of their housing satisfaction than either group is to the mobile home sample.

Those patterns suggest that a general measure of satisfaction level alone may be misleading as an indicator of housing satisfaction. Findings of significantly different general housing satisfactions between groups should not automatically be presumed to imply there are measurable differences in all aspects of housing environment. This observation parallels the suggestion made by Campbell, et al. (1976) that different conclusions are reached when measuring overall housing satisfaction versus specific aspects of housing satisfaction.

Examination of specific characteristics of housing should be done to promote a better understanding housing satisfaction. Because the components of housing satisfaction for residents of one type of housing may be different from those of another housing type (as the data in this report indicate), it is important to be cautious when interpreting results showing differences on general measures of housing satisfaction. As the results of the present study show,

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greater general satisfaction does not necessarily imply greater satisfaction for all aspects of one's housing environment. Future assessments of the quality of housing will be more productive if a multidimensional measurement approach is adopted.

#### REFERENCES

- Campbell, A., Converse, P. E. and Rodgers, W. L. *The Quality of American Life*, New York: Russell Sage Foundation, 1976.
- Dillman, D. A., Tremblay, K. R. and Dillman, J. J. Influence of housing norms and personal characteristics of stated housing preferences, *Housing and Society*, 1979, 6, 2-19.
- Gray, G. E., Shelton, G. G. and Gruber, K. J. *The Relevance of Manufactured Housing to the Needs of Low-Income Families*, Greensboro, N. C.: The Research Bulletin Series, N. C. Agricultural and Technical State University, 1980.
- Hanna, S. and Lindamood, S. Components of housing satisfaction among lower income rural families, *Housing and Society*, 1979, 6, 61-64.
- Harris, C. M. The measurement of quality in housing and its relationship to housing satisfaction, *Housing Educators Journal*, 1976, 3, 7-13.
- Morris, E. W., Crull, S. R. and Winter, M. M. Housing norms, housing satisfaction and the propensity to move, *Journal of Marriage and The Family*, 1976, 38, 309-321.
- Onibokun, A. G. Social system correlates of residential satisfaction *Environment and Behavior*, 1976, 8, 323-344.
- Rummel, R. J. *Applied Factor Analysis*, Evanston, IL: Northwestern Press, 1970.
- Shelton, G. G., Gruber, K. J. and Godwin, D. D. The effect of housing type on the quality of living: A comparison of residents of conventional homes, mobile homes, and apartments in rural North Carolina. *The Research Bulletin Series*, Greensboro, NC: N. C. Agricultural and Technical State University, 1983.
- Snider, E. L. Some indicators for multiple family housing, *Social Indicators Research*, 1980, 8, 157-173.