

HOUSEHOLD REMODELING: A STEP TOWARD INTEGRATING INDEPENDENT RESEARCH

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Abstract

This study examines and compares data from two previous studies on the home remodeling process. Previous research on residential adaptations suggests that household and housing characteristics should have significant associations with the home-remodeling process. The two studies used similar theoretical models, were conducted during the same time frame, and asked similar questions, yet one sample consisted of urban residents and the other sample was rural. Results of the comparison show that, despite differences in household and housing characteristics, there are strong similarities between households that remodel in the areas of housing satisfaction, housing aspirations, and the remodeling process. This suggests that home remodeling is a field of housing adjustment that needs additional research to further define the theoretical base. The applicability of this paper should encourage similar efforts to integrate various research studies in order to continue developing a more complete understanding of theory in the field of housing-adjustment behavior.

Introduction

Through the housing-adjustment process, households seek to match their needs, norms, and aspirations to the available supply of housing. Individual households select housing options in order to increase their housing satisfaction. Morris and Winter (1975) suggest that housing adjustment occurs through either a change in housing or a change in the household. Mobility to new housing or alteration of existing structures represents housing change, whereas an alteration in family composition or reassessment of family norms, preferences, and goals represent changes in the household.

The family housing-adjustment process has been a frequent research topic in recent years and such research is critical to the continued development of a theoretical base for the field of housing. Some of the recent research related to the housing-adjustment process has specifically considered residential adaptation or alteration (Bross, 1975; Crull, 1986; Granite, 1978; Harris, 1976; Lodi, 1986; Mendelsohn, 1977; Parrott, 1986; Seek, 1983; Shonrock, 1975; Swartzlander, 1985; Yockey, 1976). Investigations into factors affecting the decision to adapt the home and the implications for housing satisfaction has been a valuable source of research. This research has served to develop a better understanding of the housing-adjustment process of residential adaptation.

Residential Adaptations

There are several key factors that emerge from a review of recent research on residential adaptations. These factors include the role of norms, housing satisfaction, and characteristics of the households and their housing.

Norms. Families tend to evaluate their housing in terms of norms. A norm is a rule or guideline that prescribes appropriate behavior in a given situation (Tremblay and Dillman, 1983). Morris and Winter (1975) suggest that households evaluate their housing in terms of both cultural and family or individual norms. If the housing does not meet

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these norms, a deficit is said to exist. A normative deficit tends to result in dissatisfaction and families dissatisfied with their housing exhibit a propensity to engage in housing-adjustment behavior. This propensity is generally a good predictor of actual behavior.

Four housing norms are found to be consistent across American society: home ownership; a single-family, detached dwelling; private outside space; and conventional construction (Tremblay and Dillman, 1983). Households adapting their homes are likely to have achieved cultural norms for housing; however, these households may not have achieved family norms for housing. Households that have not achieved family norms are likely to be dissatisfied, thus leading to a normative deficit that can motivate residential adaptations (Morris and Winter, 1978).

In addition to meeting norms, housing adjustment and adaptation can be done to meet family-housing aspirations. Housing aspirations are defined as "desires or norms oriented toward the future" (Morris and Winter, 1978, p. 40). Households that have already achieved cultural and family norms for their housing may strive to meet their housing aspirations through the adaptation process.

Housing satisfaction. Housing-satisfaction assessment is a process by which people compare the housing they would like to have with their current housing situation. Hanna and Lindamood (1981) found that with something as complex as a house, it is possible for residents to be dissatisfied with some of the specific features yet be generally satisfied.

The relationship of satisfaction to residential alterations is not clear. Generally, residential alterations are to improve the housing and thus increase satisfaction (Seek, 1983). However, not all studies agree that this goal is accomplished. For example, Bross (1975) found that alterations did not increase satisfaction, and Harris (1976) found a negative relationship between satisfaction and alterations. Parrott (1986) found that the greatest increase in satisfaction after residential alterations was in those households who had already indicated a basic satisfaction with their housing.

Household and housing characteristics. A number of variables have been investigated to determine the relationship of household and housing characteristics to the housing-adjustment process. Significant associations have been found between household characteristics such as family lifecycle stage, education or occupation; housing characteristics such as age and value of the structure; and the housing-adjustment process (Brink and Johnson, 1979; Bross, 1975; Galster and Hesser, 1981; Roistacher, 1975; Speare, 1970).

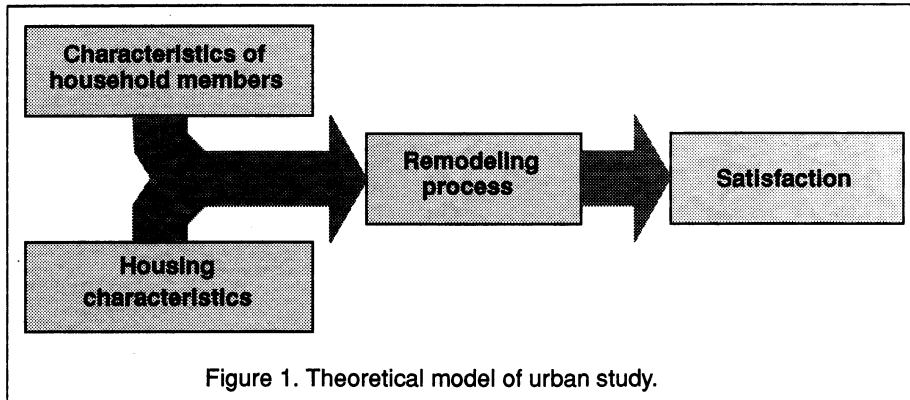
Though past research in this area has helped to identify the household and housing characteristics of those families going through the housing-adjustment process, there is a need to better understand how these two variable groups interact to affect housing satisfaction and thus influence the housing-adjustment process, particularly the process of residential adaptation. The increasing interest in the housing-adjustment process implied by residential alteration, or more specifically, home remodeling, can be further justified due to its economic impact. Dollar investment in home remodeling or home improvements generally exceeds that of new construction (Farnsworth and Bady, 1987).

Objectives

Two studies investigated the housing-adjustment process by specifically investigating home-remodeling practices, outcomes, and satisfaction (Lodl, 1986; Parrott, 1986). The similarities between these two studies merit a further examination. The objective of this paper is to compare the data and conclusions from these two studies. Comparison of these studies makes it possible to work toward a greater integration of knowledge of the housing-adjustment process. Integration is advantageous in that it allows a better focus for future research.

Description of the Studies

Similarities. Both studies were conducted in the midwestern United States during 1985. This similarity allows some control for the effect of regional differences and economic concerns. Similarly, the theoretical foundation and models used in both studies were drawn from the theory of family-housing adjustment (Morris and Winter, 1975) and recent research on housing adjustment and residential alterations. However, Study 1 (the urban study) used the remodeling process as the intervening variable while Study 2 (the rural study) used the housing-adjustment decision--move or remodel--as the intervening variable. These are shown in Figures 1 and 2. Similar characteristics of household members and housing characteristics were used as independent variables with various measures of satisfaction used as the dependent variables.



Remodeling, defined similarly in the studies, was: 1) adding new living space through construction to the existing home; 2) finishing or completing space previously unavailable; 3) changing or adapting the use of existing living space; and 4) adding structural outdoor living space, storage, and/or utility space (Parrott, 1986).

The samples of both studies were composed of households who had actually remodeled. Study 1 used all households in a midwestern urban area who had applied for a building permit to remodel the home during a specified time period. Hence, it is referred to as the Urban Study (N=183). The other sample was drawn from counties in six midwestern states. Because of the rural focus of the study, those counties with large urban areas were eliminated. From the remaining counties, sample segments were randomly selected from rural areas and towns with less than 20,000 population. This study is referred to as the Rural Study. For the purposes of the present study, only data from those respondents who had remodeled in the past five years were used (N=192).

Differences. The samples of the two studies differed in regard to rural and urban residency. This is shown in Table 1. There were also differences in data collection method and response rate.

Table 1. Comparison of study samples.

	Urban	Rural
Location	SMSA in one midwest state	Six midwest states
Data collection method	Mail survey	Personal interview
Sample size (N)	183	506*
Response rate	75%	100%

* Total sample size was 506; those who remodeled, N=192.

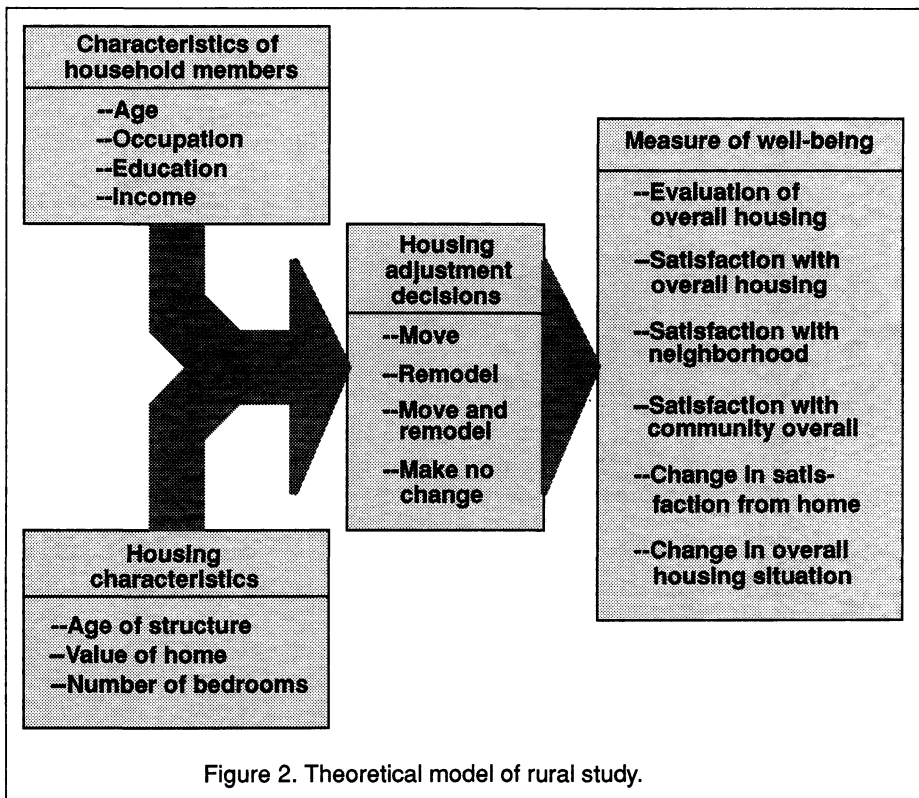


Figure 2. Theoretical model of rural study.

Discussion

The similarities of the two studies allow comparisons of the data. Seven variables will be discussed: two variables measuring the remodeling process, two variables measuring characteristics of household members, and three variables measuring housing characteristics. Satisfaction measures of the two studies will also be compared and discussed.

Remodeling Activities

Both studies identified the purpose of the remodeling project. These are shown in Table 2. The purposes followed the above definition of remodeling with the exception that the Rural Study did not treat adding storage or utility space as a separate category.

Table 2. Purpose of the remodeling projects in percent.

Purpose of project	Urban (N=183)	Rural (N=192)
Add living space	38	11
Convert unfinished space	16	14
Change/update existing space	34	57
Add outdoor living space	32	35

Note: Percentages do not equal 100 as categories are not mutually exclusive.

The major difference in the outcome of the studies was that a larger percentage of the rural households (57 percent) than urban households (34 percent) remodeled existing space. However, a smaller percentage of rural households (11 percent) than urban households (38 percent) added new living space.

It is possible that the rural homes were larger. Residents of large homes may have sufficient existing space but require updating or differing use of the space. Age of structure was found to be greater for the rural homes. This point would support an impression of older and larger rural homes. Further, participants in the rural sample tended to be older and live in smaller households. These two factors also support the contention that the need was not for additional space, but for more functional space in the existing home.

An additional explanation may lie in the economic conditions of the study period, notorious as a period of economic depression in midwestern agricultural areas. Perhaps the rural sample was more directly affected by economic limitations. Remodeling existing space is typically less expensive than adding additional new space. For all of these reasons, rural families may have chosen or been forced to meet housing-adjustment needs in this manner.

Space use. Use of the remodeled spaces was very similar for the two studies. The four most common uses were for hobbies, storage, eating, and entertaining.

Household Characteristics

Age. The two studies measured age in a different manner. The Urban Study used family life-cycle stage, which factored in the age of household heads, marital status, and presence and age of children. The Rural Study used only the age of the respondent, who was an adult head of the household. Table 3 compares the age distribution of the two studies.

The rural sample was older; just over a fourth of the respondents were 65 and over. In comparison with the 1980 census, the urban sample was disproportionately skewed to the "young" or "mature" categories (U.S. Bureau of the Census, 1983). It is a common perception that many of today's young adults are leaving rural areas. Comparison of the two studies illustrates this trend.

Table 3. Household characteristics in percent.

Characteristic	Urban (N=163)	Rural (N=192)
Family stage		
Young (head < 30 and/or children <5)	33	29
Mature (adults 30-44 and/or children 5-14)	35	15
Older (adults 45-64 and/or children >14)	27	29
Elderly (adults 65 and older)	5	27
Occupation		
Farmer	2	19
Laborer/service	10	18
Foreman/supervisor/skilled crafts	27	28
Professional/administrator/manager	55	19
Education		
Less than 9 years	1	12
9 to 12 years	18	60
Some college	33	20
College graduate or higher	47	8

Note: Percentages do not equal 100 due to rounding.

Occupation. Some difference in the studies' measurement of occupation existed. The Urban Study requested the occupation of the household member employed for the greatest number of hours outside the home; the Rural Study asked the occupation of the male head of the household. Standard Census Bureau occupational categories were used in both studies (U.S. Bureau of the Census, 1984) and categories were grouped for analysis. These are shown in see Table 3.

As expected, a greater number of farmers was found in the rural sample. The Urban Study was conducted in an area with a large state university, several smaller colleges, and state government, and revealed higher percentages of participants in professional, administrative, and managerial occupations. This study area compared favorably with the Standard Metropolitan Statistical Area (SMSA) of the U.S. Bureau of the Census (1984).

Education. The urban households that remodeled were more highly educated than the rural remodelers. This is shown in Table 3. This difference was expected given the remodelers' occupational levels and the presence of colleges and the university in the urban community. Additionally, the higher percentage of elderly in the Rural Study may also be linked to differences in educational levels of the two samples.

Housing Characteristics

Age of structure. The rural sample tended to have older houses, especially houses built before 1930. This is shown in Table 4. This may reflect a tendency for rural housing stock to be older, plus the growth rate in recent years in the metropolitan area studied in the urban sample. The age of the rural houses may also be related to the higher percentage of elderly in that sample.

Number of bedrooms. As shown in Table 4, the number of bedrooms was similar in both studies. If the rural homes tend to be larger, as suggested, the additional space was used for other purposes. The similarity of bedroom space in both samples should be compared to the fact that the urban sample was comprised of larger households, mean = 3.1, while the rural households were smaller, mean = 2.7.

The number of bedrooms per household in the Urban Study was compared to the need for bedroom space as culturally defined by family size and lifecycle stage (Morris, 1972). Even before remodeling, two thirds of the households had a positive bedroom deficit: more bedroom space than needed as culturally defined for the composition and age of family members. After remodeling, approximately three fourths of the households had an excess of bedroom space.

Adequate bedroom space can be considered a basic housing need. Still, most households in these studies had excess space. Remodeling was not used to decrease this space or put it to other purposes. This pattern helps support the premise that households engaging in residential alterations have met basic thresholds of housing satisfaction and are moving toward housing aspirations.

Value of home. Both studies asked respondents to indicate how much their home would sell for, if it were for sale. The urban homes tended to be of higher value than the rural homes. This is shown in Table 4. Moreover, the urban homes tended to be of higher value than homes in the SMSA as a whole (Bureau of Census, 1982).

It is generally recognized that home owners are familiar with the concept of market value of a home and can make a reliable estimate of the value of their home (Morris, Winter, Crull, and Dagitz, 1977). However, rural homes are more likely to be part of a farm. Though the market value of the farm may be known, the home owner may not be able to make as reliable an estimate of the separate value of the home. Further, the utility and value of the farm home is likely reduced if separated from the farm. This may account for some of the differences in the value of homes in the two studies. In addition, older homes in rural areas may have decreased market values due to a lower demand.

Table 4. Housing characteristics in percent.

Characteristic	Urban (N=183)	Rural (N=192)
Age of structure		
Less than 10 years	6	1
10 to 19 years	31	21
20 to 29 years	19	18
30 to 39 years	15	10
40 to 49 years	7	5
50 to 59 years	6	5
60 years and over	16	42
Number of bedrooms		
1 or 2	25	30
3	49	46
4 or more	26	25
Value of home		
Less than \$30,000	1	28
\$30,000 to \$49,999	29	34
\$50,000 to \$69,999	38	22
\$70,000 to \$89,999	13	10
\$90,000 and over	17	5

Note: Percentages may not equal 100 due to rounding.

Satisfaction

Self-expressed satisfaction levels with their overall housing were similar for participants in both studies. This is shown in Table 5. Comparisons show that satisfaction levels were clearly very high.

When asked to indicate the measured change in satisfaction they experienced after remodeling, urban respondents had a mean response rate of 3.4 and rural respondents had a 3.5. These are calculated on a 5-point scale where 3 was "no change" and 4 was "more satisfied." Respondents in the Rural Study who had remodeled also indicated a higher level of satisfaction than those who had made no change in their housing (Lodi and Combs, 1989).

Table 5. Overall housing satisfaction in percent.

Satisfaction level	Urban ^a (N= 183)	Rural ^b (N=192)
Extremely dissatisfied	3	--
Quite dissatisfied	9	4
Somewhat dissatisfied	6	3
Neither	1	6
Somewhat satisfied	19	13
Quite satisfied	46	59
Extremely satisfied	14	15

Note: Percentages may not equal 100 due to rounding.

^amean = 5.2; ^bmean = 5.6; 1 = extremely dissatisfied and 7 = extremely satisfied.

Conclusions

The households in these two studies were clearly satisfied with their housing. It appears that no normative deficits existed. Rather, they were remodeling their homes to meet housing aspirations. This statement is supported by several conclusions:

- 1) The households in both studies indicated satisfaction with their housing, yet were engaged in housing adaptations.
- 2) The use of the remodeled space tended to be for activities that would likely result in increased efficiency or enjoyment of the home.
- 3) Using bedroom space as a measure of space need, most of these households had a positive space deficit when compared to both cultural norms and the census average for number of bedrooms (Bureau of Census, 1982). Yet, these households felt the need or desire to expand or improve the home.

By appearance, the conclusion that remodeling was performed to meet housing aspirations can be applied to both studies, even though there were differences in household and housing characteristics between the two samples. The urban sample was younger, had more professionally employed and college educated members, lived in larger households, and in newer, higher valued homes. The rural sample was older, included more elderly, farmers, and people with less education; they lived in smaller, especially one-person households, and with older, especially pre-1930 houses of lower value.

Previous research on residential adaptation suggests that household and housing characteristics have significant associations with the home-remodeling process. Significant associations between these variables and various factors in the process of residential adaptation--and in household satisfaction--were found in the two studies reviewed here. In the final outcome, however, there were similarities between the two samples in the dependent variable of housing satisfaction, in housing aspirations, and in the housing-adjustment process, despite the differences in household and housing characteristics.

The above conclusions are drawn with some cautions. First, this paper compares two studies which used different data-collection techniques. No statistical comparisons were attempted. Interpretations were made based on observed frequencies of the data. These limitations do not invalidate the conclusions but they must be recognized.

The development of a theoretical foundation for the field of housing, as in any multi-disciplinary field, is accomplished only through the integration of research results that substantiate postulated associations. A variety of disparate research studies may result in significant conclusions. However, they are not likely to contribute to a broader base of understanding or a theoretical foundation for the field of housing if the findings cannot be reviewed, compared, and integrated.

This report, which compares independent research results, suggests that integrating research findings can lead to the strengthening of conclusions as well as new insights. It can also suggest further research directions. For example, the trends observed in this study indicate, despite demographic and housing differences, that households who are already satisfied with their housing are using home remodeling to adapt their housing. Among the possibilities suggested is the premise that residential adaptation is a unique form of housing adjustment, governed by different factors, and with different implications. Another example is that households were adding space or finishing off space despite positive space deficits as measured by culturally defined bedroom needs. This suggests that families are perceiving space deficits in different ways. Thus, the need for further research and potential for further theory development is supported.

Implications

This paper illustrates how independent studies can be compared and through the integration of their findings, strengthen the conclusions of both studies and add to knowledge in the field of housing. Hopefully this model will encourage future researchers to reflect on new findings and study how to integrate otherwise independent research results. Four suggestions for the development of future research can be made:

1) Research in housing needs to build on a theoretical base. A logical process of theory building and development allows for the testing of new associations and the application of existing theory to new situations.

2) Use of standardized questionnaires and pretested questions strengthens the conclusions that are made and allows for stronger comparisons between studies.

3) Standardized sampling procedures and clearly defined samples are necessary for valid comparisons between studies. Collection of complete demographic data in a standardized manner can further facilitate comparison and integration of research results.

4) Continued effort must be made to compare specific findings from various research studies, integrating similar results, and seeking explanations for differences in conclusions.

By attempting to integrate the results of two existing research projects, this study raised new issues in the area of housing theory. Further research of this sort needs to be continued in order that housing research can grow, build, and meet the ever changing needs of our society.

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