

HOUSING LOW-INCOME
RURAL FAMILIES

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PREFACE

This study is the result of the pre-test of the S-95 Regional Research Project concerning quality housing environment for low-income families. Concentration for the study deals with living conditions in the northern two-thirds of Seminole County, Oklahoma. It is hoped that better living conditions for families living in rural areas will result because of this study and related studies in the rural research project. Anticipations are that Congress will expand existing government programs such as the Farmers Home Administration and Housing and Urban Development and that new ones will emerge to fill the gaps not covered by existing rural programs.

I wish to express my deepest gratitude and appreciation to the following people without whom I could not have pursued or completed this study or other areas of study related to graduate work in Housing and Interior Design.

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CHAPTER I

INTRODUCTION

Statement of the Problem

When such terms as housing crisis, housing rehabilitation and deteriorated housing are brought to mind, a natural association is made with the city, ghettos, slums and urban renewal. The logic of this association is due partially to the concentration and density of poor housing in cities, situations which result in obvious eyesores. In addition, these urban areas are more readily available to social scientists for research purposes. The more extensive research and distribution of findings through various media have increased the public awareness of urban housing problems. As serious a problem as poor housing is within cities, the problems of poor housing within rural communities are worse.

The 1970 Census of Housing showed that the non-metropolitan areas contained almost $1\frac{1}{2}$ times as many households living in substandard housing as the metropolitan areas, and that the percentage of occupied housing rated as substandard was almost twice as high in non-metropolitan areas as in metropolitan ones (U. S. Department of Agriculture, Rural Housing Alliance, Self Help Housing . . . One Choice, 1970, p. 1).

These conditions exist in rural areas mainly because: (1) incomes are lower, (2) decent housing is not available, and (3) financing is scarce. The incomes for families in rural areas are "three-fourths that of comparative metropolitan families" (Source, 1972, p. 210).

This low economic level contributes to the unavailability of housing. Low-income families cannot afford to build new homes nor can low-income home owners, particularly the elderly, afford expensive repairs, improvements, and upkeep costs on existing structures. Such circumstances contribute largely to the high percentage of substandard housing in the rural areas. The scarcity of financing is another factor responsible for rural housing problems. Farmers Home Administration is about the only source of federal funds for housing assistance in rural areas, and even then the programs do not reach the real need. "In 1970 Farmers Home Administration backlogged more than 70,000 home loan applicants and they awarded only 5% of the millions of rural families making under \$3,500. per year" (Source, 1972, p. 210).

Although Farmers Home Administration was

originally set up to handle the needs of the rural poor, it has spent most of its time and energy in handling the applications of those who need the least assistance: the group above those in lowest income (Cochran, 1971, p. 1).

Another problem is that the Federal Housing Administration does not reach towns of less than 25,000, and towns of more than 10,000 cannot obtain funds from Farmers Home Administration. "Nearly a million Americans in bad housing are left out by the gap between those two agencies" (Cochran, 1971, p. 1).

Problems in rural areas are vividly described by the Rural Housing Alliance:

Across our wealthy nation poor rural families pay more for less housing. They pay more for tin shacks, board shacks, mud hovels, two rooms in a crumbling tenement. They pay 20%, 30%, 35% of poverty wages. And they pay more. They pay in physical health: they pay in mental health: they pay with defeat already set in the eyes of their ten-year olds. They pay more than the middle-income family pays for shelter, more than the wealthy. Usually they have no other choice (Rural

Housing Alliance, Studies in Bad Housing in America - Abuse of Power, 1971, p. 1).

The need for improvement of housing in low-income rural areas is undeniable. However, the best approach for meeting the need is not so clear. Many attempts have been made by government agencies to rehouse low-income families in urban areas but these efforts have met with only partial success. Considerably fewer governmental programs have attempted to improve the housing for low-income rural families, and there is little information available regarding the kind of housing that would be best for rural families. If we are to accomplish improved housing for low-income rural families in Oklahoma, more information is needed about present housing conditions, the importance of housing to the families, and input from the families about their needs.

The numerous failures of public housing projects have caused many concerned individuals to question the investment of funds. The literature on housing is filled with stories of housing projects with high crime rates and vandalism. The public is quick to lay the blame for these failures on the belief that low-income families do not value housing so much as they value other things, such as cars and television sets, and thus do not take care of the housing which has been provided for them. On the other hand, there are those who believe that low-income families do value housing but are constrained by lack of personal and financial resources from achieving the housing that they want and need. More research is needed regarding the value that low-income rural families attach to housing.

The ineffectiveness of many previous governmental housing programs is sufficient evidence of the need for more information about the

importance of various aspects of housing and neighborhood for the families whom the programs are designed to serve.

Purpose of the Study

The general purpose of this study is to examine existing housing conditions and the value attached to housing by families in low-income rural areas of Oklahoma.

The specific purposes of this study are:

1. to examine the value that low-income families in rural areas attach to housing in relation to the other things that the families value, such as clothing, food, education, transportation, medical care and recreation.
2. to describe the present housing condition with regard to space, quality, housing services, tenure, and neighborhood characteristics.
3. to examine the relationship between the value attached to housing and: (a) present socioeconomic characteristics of the family, (b) present housing conditions, (c) desired housing conditions.

Hypotheses

The following null hypotheses will be examined in this study:

1. There will be no relationship between the value attached to housing and the socioeconomic characteristics of the family.
2. There will be no relationship between the value attached to housing and the present housing condition (i.e., space, quality and tenure).

3. Controlling for present housing and income, families who attach higher value to housing will be no more likely to desire to alter present housing conditions than will families who attach lower value to housing.

Procedure

Description of the Sample

Seminole County, Oklahoma was selected as the site for pretest because its demographic, geographic and economic characteristics closely approximate the criteria developed by the S-95 Regional Project Committee: a dominately rural county, with a racially mixed population, and a low per capita income. The total population of Seminole County is 25,144, with 11,982 or 48 percent of those inhabitants living in rural areas. The median annual income for Seminole County is \$5,563 or \$1,939 a year per capita. Over 4,000 of the county residents receive public assistance and 24.2 percent of the family incomes in the county are below poverty level. The census indicates sparse population with only 39.9 persons per square mile. Just over 9 percent of the population are black, 10.5 percent are Indian, and 79.9 percent are white, making Seminole a racially mixed county (U. S. Department of Commerce, Bureau of the Census, General Housing Characteristics of Oklahoma, 1970, pp. 38-57).

The need for improved housing in Seminole County is evident. Of the 9,889 year-round living units, 1,272 or 12.8 percent lack some or all plumbing facilities and therefore are considered substandard by census criteria. The percentage of substandard units in Seminole

County is higher than the state average of 7.8 percent substandard units. Preliminary observations in Seminole County cited by Kay Stewart, regional research director for Oklahoma, emphasized the need for improved housing. Other evidence of the need for better housing for rural families was provided through interviews with Warren Jones, Seminole County Extension Agent, and Bat Shunantona, director of the Bureau of Indian Affairs Home Improvement Program.

A sample of sixty to seventy households from the northern two-thirds of Seminole County was desired. Only the northern two-thirds of the county was used in order to reduce data collection time and travel costs. The sampling was done in two stages: (a) a simple random sample of one-mile sections, and (b) a systematic sampling of every second household within the section, not to exceed five households from any section.

In order to be included in the sample, a section had to meet three qualifications: it must be (a) located within the northern two-thirds of Seminole County, (b) located outside any incorporated town of more than 2,500 people, and (c) contain at least three occupied dwelling units. The qualification of at least three dwelling units per section was established so as to permit two interviewers to work simultaneously in any section.

The sample was drawn from a Seminole County map that was prepared by the Oklahoma Department of Highways, Planning Division. The map is divided into one-mile sections and shows the locations and identities of all structures in the sections as of January, 1974. A total of 210 sections met the qualifications for inclusion in the sample. Twenty sections were drawn at random into the sample, since it was estimated

that each section would yield from three to four interviews. An additional five sections were randomly drawn and added to the sample in order to obtain the desired number of household interviews.

Description of the Instrument

The instrument for this study is the outgrowth of the pretest for Project S-95, a southern regional research project dealing with quality housing environment for low-income families in rural areas. An interview schedule was developed during a series of meetings, with input from research directors in the eight southern states involved in the project. Questions for the regional project instrument were designed to collect specific data related to present and desired housing, housing expenditures, sociodemographic characteristics of the families, housing quality, and housing satisfaction. The research team in each state could add specific questions for their own use. Questions regarding housing values and the importance of various aspects of housing were added to the basic instrument to be used in the Oklahoma study.

Personal interview was chosen as the method of data collection. Trained interviewers administered the interviews to the female household head. Direct individual responses were recorded by each interviewer at the time of the interview.

A combination of question types was included. Some open-ended questions were used in the pretest interview schedule in order to obtain volunteer responses. Closed-type or structured questions were administered in the form of yes and no questions, ranking order

questions, importance-unimportance scales (ranging from one to nine and one to ninety-nine), and questions with fixed alternatives.

Analysis of Data

Statistical Tests To Be Used

Purposes one and three will be examined through specific hypotheses. Purpose two will be examined through frequencies and percentages. Data analysis will include frequency counts, percentages, Pearson product-moment correlations, chi-square, and gammas. Gamma coefficients, a nonparametric measure, measures the degree to which an individual's relative position on one ordinal scale is predictable from his rank in another (Freeman, 1965, pp. 78-79). The strength of the gamma coefficients were discussed according to the following classifications (Sokol, 1970, p. 33):

Value of Gamma	Appropriate Phrase
$\pm .70$ or higher	a very strong association
$\pm .50$ to $.69$	a substantial association
$\pm .30$ to $.49$	a moderate association
$\pm .10$ to $.29$	a low association
$\pm .01$ to $.09$	a negligible association
$.00$	no association

CHAPTER II

REVIEW OF LITERATURE

The Importance of "Adequate" Housing

The Housing Acts of 1937, 1949, 1968 and 1974 stressed as their goal "a decent home for every American family." The very nature of this pledge emphasizes the importance attached to housing quality and the need for "adequate" housing for every individual. Although we are still uncertain as to exactly how housing influences individuals and families, we do have evidence to support the fact that housing does have serious effects on health. As used here, health is defined as "a state of complete physical, mental, and social well being" (U. S. Congress, Select Committee of Nutrition and Human Needs Hearing, Part 5, 1972, p. 1578). Congress has noted the "interdependency of decent health and decent housing" (U. S. Congress, Senate, Select Committee on Nutrition and Human Needs, Promises to Keep: Housing Need and Federal Failure in Rural America, 1972, p. 37).

Witnesses spoke to a Congressional committee about case after case involving the link between poor housing and poor health.

It was clear that: A person living in a collapsing, dilapidated or substandard house has a far greater possibility of becoming infected by mosquitoes or flies. A person living in a shack with broken windows, holes in the roof, walls and floor is much likelier to freeze, to die of pneumonia, or be burned out. A family living five to a bed and 10 to a room is much more vulnerable to every infection, including tuberculosis. (U. S. Congress, Senate, Select Committee on

Nutrition and Human Needs, Promises to Keep: Housing Need and Federal Failure in Rural America, 1972, p. 37).

Other studies have found similar relationships between housing and health. A study sponsored jointly by the American Public Health Association and the National Association of Housing Officials in 1954-1958 attempted to find some relationship between housing environment, health, social behavior, and school performances of children (Wilner, Walkely, Pinkerton and Tayback, 1972). This four-year study found that in all areas of illness there were greater percentages of illness among those families whose housing was considered inadequate than among the families who had moved to adequate housing.

Allen Pond (1967) of the U. S. Department of Health, Education, and Welfare noted the relationship between poor housing and poor health, both of which are linked with low income, poor nutrition, crowding, and lack of education. He noted such examples as the link between unsafe water supply or improper sewage disposal and disease, between dwelling units containing mosquitoes and malaria, between heating facilities and accidents, between both tuberculosis and mortality and the quality of housing and between pneumonia cases and crowded households. He also discussed Chapin's view that "there are physical factors in housing that condition emotional and mental responses, and that it is desirable to create physical conditions which promote mental health" (Pond, 1957, p. 155).

Although it is difficult to measure psychological effects of housing upon individuals, Schorr discusses some of the factors relating housing inadequacies to psychological effects. Those factors or inadequacies of housing which affect personality by causing stress include:

(1) crowding, (2) dilapidation, (3) high noise levels, (4) social isolation, and (5) inadequate space. Inadequacies in housing are also related to other forms of behavior which vary from normal behavior. Such behaviors include pessimistic attitudes, lack of motivation, inability for self-evaluation, lack of individuality, poor illusions about other persons, deviant sexual behavior, fatigue, and family incompatibility (Schorr, 1966, pp. 324-326).

It has been shown that poor housing contributes to poor health. Evidence that improved housing has had a positive effect upon health is even more important. For example, it was reported that at the "Rosebud Indian Reservation in South Dakota, hospital admissions dropped 30 percent and daily patient census was down almost 40 percent after 375 families moved into new homes" (U. S. Congress, Senate, Select Committee on Nutrition and Human Needs, Promises to Keep: Housing Need and Federal Failure in Rural America, 1972, p. 37). In England it was observed that "there is a significant drop in the mortality rate of infants born into families who have moved from slums to satisfactory housing" (Pond, 1957, p. 155). Housing literature supports the idea that adequate housing is important to the well-being of families. Yet, there is considerable disagreement as to what constitutes adequate housing.

The Components of Adequate Housing

"The National Commission on Urban Problems called the usual measure of housing quality hopelessly inadequate and pointed out that it leads to a gross understatement of housing needs" (U. S. Congress, Senate, Select Committee on Nutrition and Human Needs, Promises to

Keep: Housing Need and Federal Failure in Rural America, 1972, p. 7).

Previous definitions for adequate housing have referred basically to the plumbing inside and the physical state of the structure. Current literature on adequate housing insists upon an expansion of the definition of housing quality to include much more than the physical structure. The term "livability," referred to by Byer (1965), Stewart (1973), and others in the housing field, reflects a broadening of definition. For example, adequate housing should include the cost of housing in relation to family income. A reasonable basis for determining adequacy of cost would be that the cost not exceed a reasonable amount of the family's income, for example, not over 25 percent of the family's take-home pay.

Charles Abrams stresses a broadening of adequate housing quality to include what he refers to as "intangible" (non-physical qualities). These include "location of the site (convenience or attractiveness), acquaintanceships or kinships in the neighborhood, accessibility of shopping facilities and services" (Taper, 1967, p. 17). This list should be expanded to include adequacy of school and educational facilities, trash and garbage services, utility services, fire and safety protection, medical facilities, sanitary facilities, yard conditions, and structural conditions in the neighborhood. Other factors, services and facilities that are considered extensions of livability in the community should also be considered. Along with facilities and services, we must include the sociological factors of the neighborhood and community. Herb Gans (1962) and others who have studied satisfaction with neighborhoods stress neighborhood satisfaction as being of great importance when judging adequate housing.

The consideration of adequacy related to quality of physical features of the house could be more inclusive than has been defined by the standards of the Bureau of Census in 1970. Two methods of measuring housing quality as cited by Stewart (1973, p. 67) include

a comprehensive measure of housing quality based on minimum health standards, developed by the American Public Health Association, and the Housing Quality Index, used to measure overall quality as well as subindexes for structure, service-facility and caretaking.

The Housing Quality Index, being the most valuable of the two, is composed of twenty-six items and was developed by Morris, Woods and Jacobson, in 1972 (Stewart, 1973). The Bureau of Census recognized the need for a better measure of housing quality and developed a more comprehensive measure for use in the 1980 Census.

One area of particular importance related to physical features is the utilization, arrangement and amount of space. Adequate space as concluded by Stewart (1973, p. 65) should include, in addition to total square feet, "sufficient space for the family members to do things together, have individual privacy and have space for entertainment." It was also suggested by Stewart that size of family, sex and age of family members and activities involving the family should be considered in determining adequacy of housing. In addition to those items, family differences in interest and utilization of space should be considered in determining adequacy of housing. Because each family has different needs, the definition of adequate housing should remain somewhat flexible. It is important that individuals be given the opportunity to say what is important to them in housing their particular families.

Rural Housing Problems

By almost any definition there is a substantial number of rural families who are inadequately housed. There is no doubt that the low income level in rural areas contributes to the fact that almost "60 percent of Americans inadequately housed, live in rural areas" (U. S. Congress, Senate, Select Committee on Nutrition and Human Needs, Promises to Keep: Housing Need and Federal Failure in Rural America, 1972, p. 7). Studies indicate that approximately "20 percent of all the housing in rural areas is substandard" (U. S. Department of Agriculture, Economic Research Service, Rural Housing: Trends and Prospects, 1970, p. iv).

Financial help for improving housing conditions in rural areas in the form of credit or governmental assistance is severely limited. Cochran discusses at length Congress's neglect in appropriating funds for rural housing. "The areas that contain 50 percent of the nation's poor and 60 percent of its worst housing receive less than 30 percent of the nation's public housing" (U. S. Congress, Senate, Select Committee on Nutrition and Human Needs, Promises to Keep: Housing Need and Federal Failure in Rural America, 1972, p. 7).

The credit gap that exists for rural families is a major problem (Rural Housing Alliance, Low-Income Housing Programs for Rural America, 1973, p. 1). Availability of mortgage credit is scarce and when found is not easily accessible to low-income families due to: (1) higher interest rates, (2) shorter maturity periods, (3) larger downpayments and (4) discrimination because of the risk factor involved with low-income groups.

Farmers Home Administration was originally designed to fill the credit gap and take care of special problems of rural families. There are several reasons why the agency is not meeting the needs for which it was originally created: (1) it is in operation in areas not exceeding 10,000 (the limit has recently been changed to 20,000) in population; (2) it is limited to borrowers who cannot get credit elsewhere; (3) it is limited to borrowers who are financially able to be considered good credit risk; (4) it is sometimes subject to local prejudice of administrators and approval committees; and (5) it has been blamed in some instances for making its own criteria for loan qualifications (Rural Housing Alliance, 1973, p. 2). A backlog of applicants await funds through Farmers Home Administration due to the inadequacy of such funds.

For the year 1971, Farmers Home Administration requested \$146 million in administrative funds; the budget was cut to \$85 million. A needed \$11 billion in community housing and facilities were met by only \$100 million (Cochran, 1971, p. 54).

Another reason for housing problems in rural areas is the lack of alternatives available. Multi-family units have been built in urban areas to lower housing costs, eliminate scarcity, and expand alternatives for low-income families. Because of the low density in rural farm areas, multi-family dwellings are generally impractical and seldom available. Programs for rental and cooperative housing, such as Farmers Home Administration's program and the program of the Office of Economic Opportunity, have attempted to provide incentive for building such housing. Forest Upshaw found that the major inadequacy of such programs was "that those who are interested lack money, and those who are moneyed lack interest" (Page, 1972, p. 88). These programs make

available subsidies and low interest credit to nonprofit organizations and builders. Some housing is being built under these programs, but more programs are needed to increase alternatives.

Single family dwellings are more in demand in rural areas than are other types of housing because of low density. The short supply of standard quality single family dwellings both for rent and for purchase is apparent. Housing that is available for rent or purchase in the rural market is generally poor in quality. The shortage of housing economically affects the rural housing market by making the cost of housing rise. Increasing costs continue to enlarge the gap between the cost of housing and the rural family's ability to pay. Families who do own housing, housing that is frequently substandard, may not have enough money to make necessary repairs or improvements. Therefore they have little choice but to watch their housing situation worsen.

The Value of Housing Among Low-Income Families

In low-income areas, whether rural or urban, housing is most often inadequate by any measure. Many of the public housing programs in urban areas have rapidly declined in physical quality once the families have moved in. Some people are quick to explain these observed facts by stating that low-income families have a set of values that are different from the values of the middle class. If low-income families do not value housing, it will not do any good to put money into housing programs for their benefit. The literature includes those who support this idea and those who refute it.

Walter Miller and Oscar Lewis suggest that there is a distinct culture of poverty that can not be altered by changing the external environment. They suggest that there is

. . . a subculture of the poor that is not only sustained by external circumstances--poverty--but also by internal systems of values and preferences and interim personal relationships that have a validity and life of their own and that are capable of persisting well after the external circumstances have been modified or changed altogether (Moynihan, 1969, p. 23).

Herb Gans studied Boston's West End, a working-class neighborhood. He found that the people were not seekers of middle-class values, but had created a value system of their own.

The study of the value attached to housing among low-income groups is important in that values "emerge as important determinants of human behavior, motivating and guiding action in relation to those objects which are desired or valuable" (Downer et al., 1968, p. 173). Robert Gutman (1969) suggests that low-income families do not value housing as much as they value other possessions and that it is wasteful to spend federal money on housing programs for them.

The tenants of public housing today are drawn from levels of the class structure which are less likely to regard the house as a significant possession . . . because their life history leads them to invest . . . in objects which are more easily movable, such as automobiles . . . Yet the sad fact is that housing policy for too long has been aimed to meet the needs of that segment of the American population which is least likely to recognize the symbolic value of housing (Gutman, 1969, pp. 127, 131).

In another study of a low-income group, Lee Rainwater (1966) found that, through the removal of economic barriers, values similar to those of the American middle class became evident. Although the low-income families possessed an alternate hierarchy of values, when their prosperity increased, they showed purchasing behavior similar to middle-class America. This behavior included the purchasing of homes--an

indication of the value of home ownership--and similar interests in the purchase of popular interior design trends. This study indicated that the values which are similar to those of the middle class were present among low-income families but could not be acted upon until financial constraints were removed. Moynihan and Rodman support this idea by concluding that while the poor do not abandon the generally accepted values of society, they must develop an alternative set of values because of financial and social barriers that are created by their poverty.

The value attached to housing is surely not the only variable that could influence the family to want to make changes in their living environment. Morris and Gladhart (1972) theorized that those families who perceive some gap between their present living conditions and their desired (or what they perceive as their needed) housing will become dissatisfied and engage in some action to adjust their housing situation. Earl Morris, Peter Rossi, Peter Gladhart, and others have found some strength in predicting housing behavior from (1) space, (2) quality, (3) tenure, and (4) neighborhood quality. Rossi (1955, p. 9) found that most respondents indicated that space was the most important aspect in the selection of their present home. Montgomery and McCabe (1973) found that among southern Appalachian families "persons who lived in the least adequate housing, as judged by foundations, roofs and exteriors, evidenced a greater desire for improved housing than did the sample as a whole" (p. 8).

Summary

Adequate housing for all Americans has been one expressed goal of

our nation since the first housing acts of the 1930's. Although quality housing has been acknowledged verbally as a priority, many American families are still faced with no choice but to live in severely substandard environments. Poor living conditions are especially prevalent in rural areas.

Some governmental housing programs for low-income families have been only partially successful, while others have been proving grounds for better programs. Some writers feel that part of the failure of the governmental programs occurs because families do not value housing and thus do not seek to improve their housing environments or take care of the improved housing that is provided by the programs. Others feel that it is poverty that keeps low-income families from seeking improved housing environments and that housing programs sometimes fail because no consideration has been given to the real housing needs of the low-income occupants. If we are to design programs that will effectively meet the housing needs of low-income rural families, we must have considerably more information about the families' housing needs.

CHAPTER III

ANALYSIS OF THE DATA

Description of the Sample

Data for this study were collected in the fall of 1974 from a sample of sixty-four households living in the northern two-thirds of Seminole County, Oklahoma.

Seventy-eight percent of the respondents lived in open country rural nonfarm dwellings and 9 percent lived in open country rural farm dwellings. Thirteen percent of the respondents lived in or near rural towns of 200 to 5,500 population (Table I).

Families varied in size from one to eleven persons, the mean being four persons per household. Thirty-one percent of the sample consisted of only two person households. Eighty-one percent of the families had male household heads and 19 percent female household heads. Race of the families in the sample included 55 percent white, 22 percent black, and 23 percent Indian or Indian and white combinations.

The age of household heads ranged from 20 to 80 years with a mean age of 50 years. Approximately 25 percent of the household heads were 65 years of age or above. The education level ranged from no education to four years of college. Mean education for the household head was nine years compared to the national average education level of 12.3 years for those persons 25 years and older (U.S. Department of Commerce,

TABLE I
GENERAL CHARACTERISTICS OF THE POPULATION

Household Characteristics	Number Reporting	Percent
Age of the Household Head		
20 years to 34	15	23
35 through 49 years	15	23
50 through 64 years	18	29
65 through 80 years	<u>16</u>	<u>25</u>
Total	64	100
Education of the Household Head		
No schooling	4	6
Three grades completed	1	2
Four grades completed	5	8
Five grades completed	1	2
Six grades completed	3	5
Seven grades completed	2	3
Eight grades completed	10	16
Nine grades completed	2	3
Ten grades completed	7	11
Eleven grades completed	3	4
Twelve grades completed	21	33
High school plus two years college	3	4
High school plus three years college	1	2
College graduate	<u>1</u>	<u>2</u>
Total	64	100
Household Size		
One person	4	6
Two persons	20	31
Three persons	11	17
Four persons	10	16
Five persons	4	6
Six persons	5	8
Seven persons	3	5
Eight persons	4	6
Ten persons	2	3
Eleven persons	<u>1</u>	<u>2</u>
Total	64	100
Tenure		
Own	54	84
Rent	<u>10</u>	<u>16</u>
Total	64	100

TABLE I (Continued)

Household Characteristics	Number Reporting	Percent
Monthly Family Income		
\$110-\$345	26	41
\$346-\$600	16	25
\$601-\$1,537	<u>22</u>	<u>54</u>
Total	64	100
Race of Population		
White	35	55
Black	14	22
Indian	11	17
Mexican American	0	0
Indian head/white spouse	1	1
White head/Indian spouse	<u>3</u>	<u>5</u>
Total	64	100
Employment Status		
Full time employment	29	45
Part time employment	4	6
Unemployed	5	8
Homemaker	5	8
Retired	16	25
Student	--	--
Disabled	<u>5</u>	<u>8</u>
Total	64	100
Sex of Household Head		
Male	52	81
Female	<u>12</u>	<u>19</u>
Location of Housing		
Suburban	3	5
Open country rural - farm	6	9
Open country rural - nonfarm	50	78
Rural hamlet	<u>5</u>	<u>8</u>
Total	64	100

Current Population Reports, 1973, p. 116). Forty-one percent of the household heads had a high school education or more.

According to the Current Population Reports based on data released in March 1973, the national average poverty income level for a nonfarm family of four members, with a male household head, was \$356 per month. The same size family classified as a farm family had a monthly income of \$329 or 85 percent that of the nonfarm family. Families with female household heads and elderly families had an ever lower monthly average income. The income range for this sample was from \$110 per month to \$1,537 per month with a mean monthly income per household of only \$414. This figure substantiates the fact that Seminole County has many families in the low-income category. Full time employment of household heads was found in 45 percent of the families. Retired household heads accounted for 25 percent of the sample. Five of the household heads were unemployed, resulting in an unemployment rate of 8 percent-- somewhat higher than the national average of 5.2 in January 1974 (U. S. Department of Labor, Employment and Earnings, 1974, p. 55).

The Relationships Among the Socioeconomic Variables

The socioeconomic characteristics of the sample families were analyzed by crosstabulation using a gamma to identify the strength of the relationships among these various socioeconomic measures.

Age was substantially associated with income (Table II) as shown by the gamma of $-.55$. The families with a household head under age 50 had higher incomes than did families with a household head over age 50. Fifty-three percent of the household heads of families with monthly

incomes over \$600 were 35 to 49 years of age. The lowest income occurred where the household head was 62 years of age or older. Seventy-nine percent of those household heads 62 years of age and over had incomes of \$345 or less. For this sample there was a definite relationship between being elderly and having a low income. Kreps reported to Congress that "about half the families with an aged household head had annual incomes below \$1,500" (McCamman et al., March, 1969, p. 1). The findings of this study further supported numerous findings of the "income gap that separates the old from the young ..." (Kreps, 1969, p. 71).

TABLE II
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS FOR
THE ASSOCIATION BETWEEN SELECTED
SOCIOECONOMIC CHARACTERISTICS OF
THE HOUSEHOLD HEADS

	Monthly Income		Significance
	Gamma	Chi-Square	
Age	-.55	19.7	.0031
Race	-.50	18.3	.0011
Education	.75	24.6	.0000
Sex	-.78	11.2	.0037

A moderate association was found between race and income as shown by the gamma of $-.50$. Forty-six percent of white families had incomes of over \$600 per month while only 33 percent of Indian families and only 7 percent of black families fell into the over \$600 group. Eighty-six percent of the black families had incomes of \$345 a month or less. Phillip Carey reported that "the average income of Blacks and other minority families has been lower than that of white families throughout American history" (Carey, 1974, p. 7). In 1969 such minority incomes were only 63 percent of what the white incomes were (U. S. Department of Labor, Black Americans A Chart Book, 1971, p. 38).

Fifty-three percent of those household heads with a high school education had incomes of \$600 or over. Over 65 percent of those household heads with incomes of \$345 or less had less than a high school education. The gamma of $.75$ (Table II) was strongly supportive of the theory that an increase in education was associated with greater income.

Sex of household head and income level have a very strong association. (Table II) A greater percentage of families with male household heads had incomes over \$600 than did families with female household heads (40 percent of males compared to 8 percent of females). Eighty-three percent of families with female household heads had incomes of \$345 or less. These differences were statistically significant and followed the expected pattern.

Education level was associated with age as shown by the gamma of $-.67$ in Table III. About 95 percent of household heads age 62 and over had less than a high school education while only 33 percent of household heads under age 35 had less than a high school education. The relationship between age and education followed the expected pattern

and paralleled educational trends. Education has become increasingly important within the last fifty or more years, and is necessary in order to compete in today's society. Families today place more emphasis upon education and most families encourage the children to obtain more education than did their parents. Our governmental system requiring persons to attend school until they reach a certain age has also been a contributing factor in the rising level of educational attainment.

TABLE III
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS
FOR THE ASSOCIATION BETWEEN THE
SOCIOECONOMIC CHARACTERISTICS
OF AGE AND THE EDUCATION
OF HOUSEHOLD HEADS

	Age		Significance
	Gamma	Chi-Square	
Education	-0.67	16.4	.0009

The Relationship Between Socioeconomic Characteristics and the Value Attached to Housing

As pointed out in Chapter II, there are those who feel that one reason why low-income families are poorly housed is that these families do not value housing and thus do not work toward improving their

housing conditions (Gutman, 1969). On the other hand, there are those who believe that low-income families do value housing but are economically constrained from improving their housing. The first hypothesis for this study was: There will be no relationship between the value attached to housing and the socioeconomic characteristics of the family.

The Measurement of Value Attached to Housing

In order to identify the value attached to seven basic family expenditure items, the respondents in this study were asked to answer the questions about how their families spend their income. The following introductory statement was read to each respondent:

With the price of things today it is hard to have enough money to buy all of the things your family needs. Not all families agree on what are the most important things to buy. Your family might think that it is more important to spend your money on one thing while another family may feel that it is more important to spend their money for something else. There are no right and wrong answers to these questions. We are just interested in what you think are the important things for your family. Take a minute to look over the items on this card and think about how important or unimportant these things are to your family as you are deciding how to spend your income.

The value which the families attached to the items was measured in two stages. The respondent was first asked to indicate the importance of the seven items on a scale of 1 (very unimportant) to 9 (very important).

The following question was used for this measure.

Now, considering all of the things that your family needs and the amount of money that you have to spend, how important or unimportant are these items?

- a. Clothing for your family
- b. Entertainment and recreation at home or away from home
- c. An automobile or some other form of transportation
- d. Housing for your family
- e. Education for your family

- f. Provisions for your family's medical needs
- g. Food for your family

The variable "Importance of Housing" was measured by the response to (d) Housing for your family. This was considered to be a general measure of the degree of importance that the family attached to housing since a respondent could assign the highest value (very important) to each of the seven items.

The process of thinking about the items and evaluating each one separately was followed by a forced choice ranking question designed to identify the value attached to housing in relation to the other items. Respondents were asked to rank the seven items in order of importance from first to seventh.

If you were ranking these seven items from the one that is most important to the one that is least important to your family, how would you rank them?

The variable "Housing Rank" was measured by the rank assigned to (d) Housing for your family. This forced choice question was considered to be a more precise measure of the value attached to housing in relation to the other family expenditure items. It is believed that the combination of the two measures strengthened the validity of the ranking measure.

Table IV shows that housing was considered to be "very important" (given the highest ranking of 9) by 43 percent of the sample. Ninety-one percent of the respondents gave housing a value of seven or above. It was clear that housing was an important item to nearly all of the families in this study.

In Table V, by combining the top three rankings of importance, it can be seen that 69 percent of the respondents ranked housing as first,

TABLE IV
IMPORTANCE OF HOUSING FOR TOTAL SAMPLE

Level of Importance		Number	Percent
Very important	9	28	43
	8	18	28
	7	13	20
	6	2	3
Undecided	5	1	2
	4	1	2
	3	1	2
	2	0	0
Very unimportant	1	<u>0</u>	<u>0</u>
Total		64	100

TABLE V
HOUSING RANK FOR TOTAL SAMPLE

Rank	Number	Percent
First	7	11
Second	18	28
Third	19	30
Fourth	13	20
Fifth	7	11
Sixth	0	0
Seventh	<u>0</u>	<u>0</u>
Total	64	100

second or third choice when they were asked to rank the seven family expenditure items. A third order ranking was most frequently assigned to housing. Table VI shows the rankings that were most frequently assigned to each of the seven family expenditure items. An automobile or some form of transportation, is ranked just below housing in level of importance. Rural families are quite isolated unless they have some form of transportation; therefore, it was expected that transportation would be assigned a rather high ranking. In spite of the rural family's need for some form of transportation, the sample as a whole ranking housing higher than they ranked transportation.

TABLE VI
THE RANKING MOST FREQUENTLY ASSIGNED TO
SEVEN FAMILY EXPENDITURE ITEMS

Rank	Item
First	Food for your family
Second	Provisions for your family's medical needs
Third	Housing for your family
Fourth	An automobile or some other form of transportation
Fifth	Clothing for your family
Sixth	Education for your family
Seventh	Entertainment and recreation at home or away from home

Test of Hypothesis One

It was hypothesized that there would be no relationship between the value attached to housing and the socioeconomic characteristics of the family. Gamma coefficients and chi-square tests were used to analyze this hypothesis. For this analysis, the variables were coded as follows:

Age

- 1 = 20-34 years
- 2 = 35-49 years
- 3 = 50-61 years
- 4 = 62 years and over

Education

- 1 = Less than high school
- 2 = High school and above

Sex

- 1 = Male
- 2 = Female

Employment status

- 1 = Unemployed
- 2 = Employed part time
- 3 = Employed full time

Family size

- 1 = 1 to 2 persons
- 2 = 3 to 4 persons
- 3 = 5 to 6 persons
- 4 = 7 persons or more

Income

1 = less than \$600 a month

2 = \$600 a month or more

Table VII shows the gamma coefficients and the chi-square values for the relationship between the importance of housing and selected socioeconomic characteristics of the family. The gammas for age, sex and employment status of the household head showed a moderate association with importance of housing. The household heads who placed strong importance on housing were more likely to be younger, female and full time employed.

TABLE VII
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS FOR
THE ASSOCIATION BETWEEN IMPORTANCE OF
HOUSING AND SELECTED SOCIOECONOMIC CHARACTERISTICS

	<u>Importance of Housing</u>		
	Gamma	Chi-Square	Significance
Age of household head	-0.32	11.24	.2598
Education of household head	0.14	2.85	.4151
Sex of household head	0.32	3.93	.2689
Employment status of household head	0.39	9.55	.1451
Family size	0.26	14.29	.1122
Family income	0.23	8.98	.1749

The gamma of $-.32$ for the importance of housing related to age shows that as age increased the importance of housing decreased. Sixty-seven percent of those household heads age 20-34 ranked housing as 9 or very important. Fifty-three percent of those household heads age 35-49, 40 percent of those households heads age 50-61 and only 21 percent of those household heads age 62 and over ranked housing 9 or very important. An overall look at the crosstabulation table showed that housing was considered important for all age groups but there was a tendency for lower age groups to place higher importance on housing.

A moderate positive association with a gamma of $.32$ was found between sex of household head and importance of housing. Sixty-seven percent of the families with female household heads ranked housing 9 or very important while only 38 percent of those with male household heads expressed the same ranking. Ninety-one percent of the families ranked housing a 7 or above, showing that nearly all families considered housing important.

Of those household heads employed full or part time 75 percent felt housing was important in that they ranked it 8 or 9. Sixty-one percent of the unemployed ranked housing either 8 or 9. The gamma of $.39$ showed that there was a tendency for housing to be identified as more important for families whose household head was employed full or part time.

No other gammas were strong enough to indicate any association with the importance of housing. The chi-square test showed no significant difference for any of the socioeconomic variables in relation to the importance of housing. Housing rank was not associated with any of

the socioeconomic variables as shown by both gamma coefficients and the chi-square values in Table VIII.

TABLE VIII
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS FOR
THE ASSOCIATION BETWEEN HOUSING RANK AND
SELECTED SOCIOECONOMIC CHARACTERISTICS

	<u>Housing Rank</u>		Significance
	Gamma	Chi-Square	
Age of household head	0.12	9.26	.6798
Education of household head	-0.07	5.96	.2023
Sex of household head	-0.05	0.85	.9309
Employment status of household head	-0.09	6.54	.5861
Family size	-0.18	7.44	.8271
Family income	0.08	13.46	.0363

It has been suggested by some social scientist that low-income groups place little value on housing. This study supports those who are inclined to believe that the opposite is true, that is, socioeconomic characteristics do not necessarily dictate values related to housing. Indications were that no matter what the age, education level, sex, or employment status of household head, size of the family or income level of the family housing was important.

The null hypothesis that there will be no relationship between the value ranking attached to housing and the socioeconomic characteristics of the family was accepted.

The Relationship Between the Value Attached to Housing and Present Housing Conditions

A second hypothesis for this study was: There will be no relationship between the value attached to housing and the present housing conditions. Before this hypothesis could be tested it was necessary to develop scales for present housing conditions including structural quality, quantity of equipment and facilities and quality of plumbing and electrical wiring. These scales were developed by grouping selected items. Pearson's correlation coefficients were used to determine the strength of association among the items included in each scale (Edwards, 1957, p. 155). For example, if five items were thought to be measures of a single variable, the values for the five items were first summed. Next, a correlation coefficient was obtained for item 1 with each of the other 4 items and with the sum of all 5 items. The same correlating process was carried out for each of the 5 items. Items were eliminated from the scale if their correlation with another individual item was less than .20 or if their correlation with the sum was less than .50. As long as correlations were above these levels it was assumed that the items were sufficiently similar and were summed into a single scale.

Scale of Structural Quality

Nine items were used to form a measure of structural quality.

Those items used in the structural quality index were:

Var125: Is your home structurally sound - that is, the structure itself in a good state of repair?

Var152: Does the roof of this building leak?

Var153: Does this house (apartment) have open cracks in the interior walls or ceilings? (do not include hairline cracks)

Var154: Does this house have holes in the floor?

Var155: Is there any broken plaster or peeling paint on the ceiling or inside walls?

Var156: Is the area of broken plaster or peeling paint larger than this paper?

Var157: Does this house (apartment) have any holes, open cracks, rotted, loose or missing materials on the outside walls?

Var158: Does this house (apartment) have any holes, open cracks, rotted, loose or missing materials on the foundation?

Var159: Does this house have any rotten or loose window frames?

Table IX shows the correlation coefficients for the items in the structural quality scale.

Scale of Quantity of Equipment and Facilities

Items used as a measure of facilities and equipment available included:

Var080: Do you have complete kitchen facilities in this house (apartment): that is, a kitchen sink with piped water, a refrigerator and a range or cookstove?

TABLE IX
CORRELATION MATRIX FOR ITEMS IN THE
SCALE OF STRUCTURAL QUALITY

	Var152	Var153	Var154	Var155	Var156	Var157	Var158	Var159	Total
Var125	.46	.69	.22	.52	.38	.44	.56	.50	.70
Var152		.46	.30	.55	.46	.54	.20	.44	.64
Var153			.47	.73	.55	.69	.58	.52	.85
Var154				.45	.49	.48	.53	.41	.63
Var155					.69	.76	.65	.50	.86
Var156						.57	.52	.45	.72
Var157							.59	.62	.86
Var158								.62	.78
Var159									.74

Var089: Do you have complete plumbing facilities in this house (apartment): that is hot and cold piped water, a flush toilet and bathtub or shower?

Var146: Is all the wiring in this house (apartment) concealed in the walls or in metal coverings? Do not count appliances cords, extension cords, or chandelier cords.

Table X shows Pearson's correlation coefficients for each variable in the scale of quantity of equipment and facilities available.

TABLE X
CORRELATION MATRIX FOR ITEMS IN
THE SCALE OF QUANTITY OF
EQUIPMENT AND FACILITIES

	Var089	Var146	Total
Var080	.59	.29	.73
Var089		.45	.96
Var146			.62

Scale of Quality of Plumbing
and Electrical Wiring

Those questions dealing with the measurement of electrical wiring and plumbing quality included:

Var084: At any time in the last 90 days were you completely without running water?

Var092: At any time in the last 90 days was there a breakdown in your flush toilet: that is was it completely unuseable?

Var144: Have any electric fuses or breaker switches blown in your house (apartment) in the last 90 days?) or in the time you have lived here if less than 90 days)

Table XI shows Pearson's correlation coefficients for each variable in the scale for quality of plumbing and wiring. It is noted that the correlation of .18 in Table XI deviates from the .20 cutoff level. The decision for this correlation to remain in the table was based upon: (1) .18 is relatively close to the .20 level, (2) Var084 correlates with Var144 at .28 level and (3) the presence of a relatively high correlation with the total of .69.

TABLE XI
CORRELATION MATRIX FOR ITEMS IN THE
SCALE OF QUALITY OF PLUMBING
AND ELECTRICAL WIRING

	Var092	Var144	Total
Var084	.18	.28	.69
Var092		.33	.66
Var144			.79

Measures of Available Space

Persons-per-room. Persons-per-room was obtained by dividing the total number of persons in the household by the total number of rooms in the home (excluding porch, bathroom, balconies, foyers, halls or half-rooms).

Persons-per-bedroom. The number of persons-per-bedroom was obtained by dividing the total number of persons in the household by the total number of bedrooms (i.e. rooms used mainly for sleeping even if they were used for other purposes).

Measure of Tenure

Tenure was identified by the following question:

Var184: Think about your present house and tell us which of these statements describes your situation:

1. owns house or mobile home and land
2. owns house or mobile home and rents land
3. rents house or mobile home and land
4. rents apartment
5. lives rent free - house and lot
6. lives rent free - apartment
7. rent paid by employer

Categories 1 and 2 were considered as owners. Categories 3 and 4 were considered as renters. The one family in category 5 was grouped with the renters. No families in the sample were identified in categories 6 or 7.

Test of Hypothesis Two

The hypothesis that there will be no relationship between the value attached to housing and the present housing condition was analyzed by the use of gamma coefficients and chi-square tests. Six selected measures of present housing conditions included: (1) structural quality, (2) quantity of equipment and facilities available, (3) quality of plumbing and electrical wiring services, (4) persons-per-bedroom, (5) persons-per-room and (6) tenure.

Importance of Housing and Present Housing Conditions. Table XII shows gamma coefficients and chi-square values for the association between the importance of housing and the 6 selected measures of present housing conditions. Gammas for persons-per-room of .33 and persons-per-bedroom of .32 show a moderate association with the importance of housing.

TABLE XII
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS FOR
THE ASSOCIATION BETWEEN SELECTED PRESENT
HOUSING CONDITIONS AND THE
IMPORTANCE OF HOUSING

	<u>Importance of Housing</u>		
	Gamma	Chi-Square	Significance
Structural quality	0.05	10.13	.3403
Quantity of equipment and facilities	0.13	.84	.8391
Quality of plumbing and wiring	-0.00	8.95	.1765
Persons-per-room	.33	3.93	.2689
Persons-per-bedroom	.32	2.92	.4045
Tenure	-0.07	.13	.9885

Sixty-seven percent of those families with more than two persons-per-bedroom considered housing a "9" or most important. However, only 40 percent of those families with two or fewer persons-per-bedroom gave a value of "9" for the importance of housing. A similar trend was found with persons-per-room in that 67 percent of those families with more than one person-per-room considered housing a "9" or most important compared to 38 percent of those families having one or fewer persons-per-room. This finding indicated that families who lived in crowded conditions tended to attach high importance to housing. The finding may be linked to a study by Peter Rossi done in 1955. Rossi found that of all the things important about housing "space in the dwelling ranked number one" (Rossi, 1955, p. 9). Space has been found to be associated with housing satisfaction. Lack of space was high on the list of factors which encouraged families to make changes in housing (Morris and Gladhart, 1972).

In this study families in crowded housing considered housing more important than did families who had greater housing space (Swend, 1951). Reimer suggests that certain needs may be very important at one point in time. However, once the need is adequately met, the importance attached to that need lessens. This idea may explain why the families in crowded housing attached more importance to housing than did families who had greater house space. Perhaps the families who had already attained adequate house space no longer attached high importance to housing but set about to satisfy other needs.

No other gammas were strong enough to indicate the existence of any significant relationships between the importance of housing and present housing conditions.

Housing Rank and Present Housing Conditions. Table XIII shows gamma coefficient and chi-square values for the association between housing rank and selected measures of present housing conditions. The gamma of .29 shows a low association between structural quality and housing rank. Fifty percent of those families who ranked housing highest lived in the housing of better structural quality, while only 15 percent of the families with the lower quality housing ranked housing highest. This finding can be interpreted to mean that the largest percent of families who placed housing highest in value have proven they value housing by acquiring such housing and/or by keeping their housing in good structural repair.

TABLE XIII
CHI-SQUARE VALUES AND GAMMA COEFFICIENTS FOR
THE ASSOCIATION BETWEEN SELECTED PRESENT
HOUSING CONDITIONS AND HOUSING RANK

	<u>Housing Rank</u>		
	Gamma	Chi-Square	Significance
Structural quality	0.29	7.19	.6173
Quantity of equipment and facilities available	-0.17	.68	.8784
Quality of plumbing and electrical wiring services	0.19	7.60	.2686
Persons-per-room	0.17	4.14	.2463
Persons-per-sleeping room	0.10	2.29	.5137
Tenure	.19	2.99	.3935

Summary for Hypothesis Two

Space was shown to be related to importance of housing in that those families living in crowded conditions placed more importance on housing than did families who lived in less crowded conditions. Structural quality was found to be related to housing rank in that a greater percent of families who lived in the highest quality housing ranked housing highest. No relationship to either importance of housing or housing rank was found for:

- (a) quantity of equipment and facilities
- (b) quality of plumbing and wiring
- (c) tenure.

It appeared that tight housing space had a tendency to influence the importance of housing. Also, persons who ranked housing high had a tendency to live in houses of better structural quality. However, since these association were only moderate--and since the other three measures of present housing condition showed no relationship with either importance of housing or housing rank, hypothesis two was accepted. That is, there was no relationship between the value attached to housing and present housing conditions.

The Relationship Between the Value Attached to Housing and the Desire To Make Changes in Present Housing

In the analysis of hypothesis one it was found that the largest percent of families in the sample attached high value to housing. Most families placed housing six or higher on the importance scale and

fourth or above in rank. Hypothesis three analyzed the relationship between the value of housing and the family's desire to make changes in the present housing situation. It was felt that a family's desire to change their present housing situation would be influenced not only by the value which the family attached to housing but also by the family income and present housing space and quality. Therefore, family income, housing space and housing quality were used as control factors in the analysis of hypothesis three.

The desire to make changes in the present housing was measured by the following question:

"Do you feel that your present home meets your family's needs as it is now, or would you like to make some changes?"

The families who indicated a desire to make changes were then asked whether they wanted to move to a different home or to make changes in their present home.

Tables XIV and XV show that 67 percent of the families wanted to make some changes in their present housing situation, regardless of the value attached to housing. This finding was expected in that the sample was drawn from a low-income rural county where housing conditions were known to be poor. It was hypothesized that even though housing conditions were poor, those families which attached higher value to housing would be more likely to want to make housing changes than would families which attached less value to housing. To test this hypothesis, the value attached to housing was measured by "importance of housing" and "housing rank."

The gamma of .24 in Table XIV indicated only a slight association between the importance of housing and the desire to change housing.

TABLE XIV
IMPORTANCE OF HOUSING AND DESIRE
TO CHANGE HOUSING

Desire to Change Housing	Importance of Housing			Total
	Medium Importance 6 and 7	8	High Importance 9	
Present home meets needs	33.3	50.	21.4	32.8
Would like to make change	66.7	50.	78.6	67.2
Gamma .24	Chi-square 4.06			N.S.

TABLE XV
HOUSING RANK AND DESIRE TO
CHANGE HOUSING

Desire to Change Housing	Housing Rank			Total
	Low Rank	Medium Rank	High Rank	
Present home meets needs	25.0	47.4	28.0	32.8
Would like to make change	75.0	52.6	72.0	67.2
Gamma -.01	Chi-square 2.64			N.S.

Families which felt that housing was very important were somewhat more likely to want to make housing changes. There was no relationship between housing rank and the desire to change housing as shown by the gamma of $-.02$ in Table XV.

The value attached to housing was surely not the only variable that could have been influencing the desire to make changes in present housing. In order to determine whether the relationship between housing value and the desire to change housing was being suppressed by the action of other variables, selected control variables were used in the analysis. It was felt that the amount of housing space, housing quality and family income could be important control factors. Even if housing was valued highly by a family, it could have been that their present housing space was adequate and the quality high; thus, the family might not have desired to change their housing. It could also have been that a family which valued housing highly would have a low income and thus not wanted to incur (or have been able to incur) debts sufficient to make changes in their housing situation.

Controlling for Housing Space

Persons-per-room. Table XVI shows the relationship between importance of housing and the desire to change housing when the number of persons-per-room was controlled. Where persons-per-room was one or less, there was little or no relationship between the variables (gamma $.16$). However, where the house space was tighter (over one person-per-room) a gamma of $.56$ was found, indicating a strong relationship. This shows that for families who lived in more crowded situations, the higher the importance of housing the more likely they were to want to

TABLE XVI
IMPORTANCE OF HOUSING AND DESIRE TO
CHANGE HOUSING CONTROLLING FOR
PERSONS-PER-ROOM RATIO

A

Persons-Per-Room Ratio = One or Less				
Desire to Change Housing	Importance of Housing			Total
	Medium Importance 6 and 7	8	High Importance 9	
Present home meets needs	33.3	47.1	25.0	34.6
Would like to make change	66.7	62.9	75.0	65.4
Gamma .16	Chi-square 1.99		N.S.	

B

Persons-Per-Room Ratio = Greater Than One				
Desire to Change Housing	Importance of Housing			Total
	Medium Importance 6 and 7	8	High Importance 9	
Present home meets needs	33.3	100.0	12.5	25.
Would like to make change	66.7	0	87.5	75.
Gamma .56	Chi-square 3.78		N.S.	

change their housing situation.

Table XVII shows the same analysis using housing rank as the measure of the value attached to housing. Here again, the relationship between housing rank and the desire to change housing was stronger for families who had less space in their present home (gamma .22).

Persons-per-bedroom. The amount of bedroom space has been found to be an important measure of the adequacy of housing space (Gladhart, 1972). Thus, persons-per-bedroom was used as an additional control factor for present housing space and the results are shown in Tables XVIII and XIX. Only weak associations were found between the value attached to housing (as measured by importance of housing in Table XVIII and housing rank in Table XIX) and the desire to make changes for families who had a persons-per-bedroom ratio of 2 or less. This can be interpreted to mean that for families which had adequate bedroom space in their present home, the value attached to housing was not so likely to influence the desire to change present housing.

However, where bedroom space was limited (persons-per-bedroom ratio of greater than 2) the value of housing did influence desired action. Tables XVIII B and XIX B show that for families having a persons-per-bedroom ratio of greater than 2, the desire to change present housing was strongly associated with both the importance of housing (gamma .85) and housing rank (gamma .64). By controlling for bedroom space in the present house, a strong association was found between the value attached to housing and the desire to take some action to change housing for families whose present bedroom space was less than adequate.

TABLE XVII
HOUSING RANK AND DESIRE TO CHANGE HOUSING
CONTROLLING FOR PERSONS-PER-ROOM RATIO

A

Persons-Per-Room Ratio = One or Less				
Desire to Change Housing	Housing Rank			Row Total
	Third	Second	First	
Present home meets needs	23.5	47.1	31.6	34.6
Would like to make change	76.5	52.9	68.4	65.4
Gamma .012 Chi-square 2.10 N.S.				

B

Persons-Per-Room Ratio = Greater Than One				
Desire to Change Housing	Housing Rank			Row Total
	Third	Second	First	
Present home meets needs	25.0	50.	16.7	25.
Would like to make change	75.0	50.	83.3	75.
Gamma .22 Chi-square .89 N.S.				

TABLE XVIII
IMPORTANCE OF HOUSING AND DESIRE TO
CHANGE HOUSING CONTROLLING FOR
PERSONS-PER-BEDROOM RATIO

A

Persons-Per-Bedroom Ratio = Two or Less				
Desire to Change Housing	Importance of Housing			Total
	Medium Importance 6 and 7	8	High Importance 9	
Present home meets needs	31.3	47.1	27.3	34.5
Would like to make change	68.8	52.9	72.7	65.5
Gamma .10	Chi-square 1.77		N.S.	

B

Persons-Per-Bedroom Ratio = More than Two				
Desire to Change Housing	Importance of Housing			Total
	Medium Importance 6 and 7	8	High Importance 9	
Present home meets needs	50.	100.	0.	22.2
Would like to make change	50.	0.	100.	77.8
Gamma .85	Chi-square 6.1		N.S.	

TABLE XIX

HOUSING RANK AND DESIRE TO CHANGE HOUSING
CONTROLLING FOR PERSONS-PER-BEDROOM RATIO

A

Persons-Per-Bedroom Ratio = Two or Less				
Desire to Change Housing	Housing Rank			Total
	Third	Second	First	
Present home meets needs	23.5	47.1	33.3	34.5
Would like to make change	76.5	52.9	66.7	65.5
Gamma -0.12	Chi-square 2.10		N.S.	

B

Persons-Per-Bedroom Ratio = More Than Two				
Desire to Change Housing	Housing Rank			Total
	Third	Second	First	
Present home meets needs	33.3	50.0	0.0	22.2
Would like to make change	66.7	50.0	100.0	77.8
Gamma .64	Chi-square 2.25		N.S.	

Controlling for Present Structural Quality

Table XX shows the relationship between present structural quality and the family's desire to alter present housing. The gamma of $-.74$ indicates a strong relationship. The lower the housing quality, the more likely the family was to desire to make some changes. Over 85 percent of the families in lower quality housing desired to make some changes while only 47 percent of the families in higher quality housing wanted to make changes.

TABLE XX
STRUCTURAL QUALITY OF HOUSING INDEX
AND DESIRE TO CHANGE HOUSING

Desire to Change Housing	<u>Structural Quality of Present Housing</u>		Row Total
	Low 1	High 2	
Present home meets needs	14.7	53.3	32.8
Would like to make change	85.3	46.7	67.2
Gamma $-.74$	Chi-square 9.11	Sig. .003	

Controls were applied to hold structural quality constant while examining the relationship between the value attached to housing and the desire to make changes. The results of this analysis are shown in

Tables XXI and XXII. A low strength relationship was found between the importance of housing and the desire to make changes for both the low quality and the high quality groups (see Table XXI).

The analysis of the influence of housing rank is shown in Table XXII. For families living in housing of good structural quality, only a negligible association was found between the way they ranked housing and their desire to make a change in their present housing while for families occupying housing of poor structural quality a substantial association was found between the same two variables. Table XXII A shows that where quality was low, 100 percent of the families who ranked housing first wanted to make changes in their housing while only 79 percent of those who ranked housing third wanted to make changes.

Controlling for Income

Another factor which could influence the desire to change housing is income since income influences the families' ability to obtain the kind of housing they desire. It was felt that income might simultaneously control for housing space and quality. Those families with low incomes are financially limited as to the housing type, quality and space which they can obtain. Families with greater income have the freedom to choose to use their purchasing power to buy, build, repair or renovate their homes. In most cases, therefore, the higher income families may not feel the pressure of poor quality and limited space so they may not be so likely to desire to make changes in their housing.

Table XXIII shows that there was only a low negative association (gamma -0.22) between income and the desire to make changes in housing.

TABLE XXI

THE IMPORTANCE OF HOUSING AND DESIRE TO CHANGE
HOUSING CONTROLLING FOR STRUCTURAL QUALITY

A

Low Structural Quality				
Desire to Change Housing	The Importance of Housing			Total
	Low Importance 6 and 7	8	High Importance 9	
Present home meets needs	9.1	50.0	0.0	14.7
Desire to make change	90.9	50.0	100.0	85.3
Gamma .33 Chi-square 10.80 Sig. .004				

B

High Structural Quality				
Desire to Change Housing	The Importance of Housing			Total
	Low Importance 6 and 7	8	High Importance 9	
Present home meets needs	71.4	50.0	46.2	53.3
Desire to make change	28.6	50.0	53.8	46.7
Gamma .29 Chi-square 1.23 N.S.				

TABLE XXII
HOUSING RANK AND DESIRE TO CHANGE HOUSING
CONTROLLING FOR STRUCTURAL QUALITY

A

Low Structural Quality				
Desire to Change Housing	Housing Rank			Row Total
	Third	Second	First	
Present home meets needs	21.4	20.0	0	14.7
Desire to make change	78.6	80.0	100.0	85.3
<hr/>				
Gamma .54	Chi-square 2.45		N.S.	

B

High Structural Quality				
Desire to Change Housing	Housing Rank			Row Total
	Third	Second	First	
Present home meets needs	33.3	77.8	46.7	53.3
Desire to make change	66.7	22.2	53.3	46.7
<hr/>				
Gamma .04	Chi-square 3.39		N.S.	

Families with lower incomes were only somewhat more likely to want to make changes than were families with higher incomes. As income increased there was a slight decrease in the percent of families who desired to change housing. It could have been that some families with low incomes saw little possibility of actually making changes so they suppressed the desire to alter their present housing. This was especially true of the elderly persons in the sample. Income did not appear to simultaneously control for housing space and quality. The gamma for the relationship between income and the desire to make changes was considerably weaker than for the relationship between quality and the desire to make changes in housing, meaning that quality influenced desired action more than did income.

TABLE XXIII

THE RELATIONSHIP BETWEEN INCOME AND
THE DESIRE TO CHANGE HOUSING

Desire to Change Housing	Lowest Income (\$345 a month or less)	Medium Income (\$346 a month to \$600)	Highest Income (\$600 a month or more)	Total
Present home meets needs	26.9	31.3	40.9	32.8
Would like to make change	73.1	68.8	59.1	67.2
Gamma -0.22	Chi-square 1.08		N.S.	

Tables XXIV and XXV show the relationship between the value attached to housing (as measured by importance of housing and housing rank) and the desire to make changes, controlling for income. Where income was low or medium, there was little relationship between the value attached to housing and the desire to make changes. These families in general lived in less adequate housing and a large percentage of the two groups (73 percent and 69 percent) wanted to make changes regardless of the value attached to housing. However, where income was high, a different picture emerged. Housing was probably more adequate for the high-income group in general. It was within this group that the value attached to housing seemed to influence the desire to make changes. The gamma of .54 in Table XXIV C indicates that within the high-income group, the families which said housing was very important were more likely to want to make changes. Table XXV C shows that families which ranked housing high relative to other household expenditures were somewhat more likely to want to change housing. It could be, of course, that families who valued housing highly had already taken action to attain the kind of housing they wanted, otherwise the strength of the association would probably have been greater.

Summary for Hypothesis Three

The analysis revealed that inadequacies of housing in the form of crowded conditions and poor structural quality were influential in producing the desire to alter living conditions. This finding was similar to the finding in the study of aspirations of southern Appalachian families. The families in that study who had the poorest housing had the greatest desire to make housing improvements.

TABLE XXIV

THE IMPORTANCE OF HOUSING AND DESIRE TO CHANGE
HOUSING CONTROLLING FOR INCOME

A

Lowest Income Group (\$345 a month or less)				
Desire to Change Housing	The Importance of Housing			Total
	Low Importance	High Importance		
	7	8	9	
Present home meets needs	22.2	57.1	10.0	26.9
Would like to make change	77.8	42.9	90.0	73.1
Gamma .22	Chi-square 4.81		N.S.	

B

Medium Income Group (\$346 a month to \$600)				
Desire to Change Housing	The Importance of Housing			Total
	Low Importance	High Importance		
	7	8	9	
Present home meets needs	25.0	37.5	25.0	31.3
Would like to make change	75.0	62.5	75.0	68.8
Gamma 0.0	Chi-square .29		N.S.	

C

Highest Income Group (\$600 a month or more)				
Desire to Change Housing	The Importance of Housing			Total
	Low Importance	High Importance		
	7	8	9	
Present home meets needs	60.0	66.7	28.6	40.9
Would like to make change	40.0	33.3	71.4	59.1
Gamma .54	Chi-square 2.46		N.S.	

TABLE XXV
HOUSING RANK AND DESIRE TO CHANGE HOUSING
CONTROLLING FOR INCOME

A

Lowest Income Group (\$345 a month or less)				
Desire to Change Housing	Housing Rank			Total
	Third	Second	First	
Present home meets needs	12.5	44.4	22.2	26.9
Would like to make change	87.5	55.6	77.8	73.1
Gamma -.13	Chi-square 2.35		N.S.	

B

Medium Income Group (\$346 a month to \$600)				
Desire to Change Housing	Housing Rank			Total
	Third	Second	First	
Present home meets needs	25.0	100.0	28.6	31.3
Would like to make change	75.0	0.0	71.4	68.8
Gamma -0.09	Chi-square 2.37		N.S.	

C

Highest Income Group (\$600 a month or more)				
Desire to Change Housing	Housing Rank			Total
	Third	Second	First	
Present home meets needs	50.0	44.4	33.3	40.9
Would like to make change	50.0	55.6	66.7	59.1
Gamma .23	Chi-square .40		N.S.	

When controls were applied for space and structural quality of the present housing in this study, it was found that families who had adequate space and quality were no more likely to desire to change their housing if they attached high value to housing than if they attached low value. Where space and quality were less than adequate, the families who valued housing were more likely to desire to make changes in their housing situation.

When controls were applied for income, families which had low or medium income were no more likely to desire to change their housing if they attached high value to housing than if they attached low value. The majority of the families in these two income groups wanted to make changes in housing, regardless of the housing value. In the high income group, families to whom housing was more important were more likely to want to make changes.

The relationships were not statistically significant as measured by chi-square tests so the null hypothesis could not be rejected. Additional analysis revealed that when income, present housing space and present housing quality were controlled, the value attached to housing tended to influence the desire to change housing. Gamma coefficients were sufficiently substantial to verify the presence of a relationship between housing value and the desire to make changes in housing when space was crowded and quality was low.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary and Conclusions

Low-income rural housing has been a major area of neglect by governmental housing programs. Lack of information about existing housing conditions in rural areas has contributed to this neglect.

From past experiences with urban housing programs we have learned that in order to improve housing it is most important that we know more about the families who need to be housed. Han Harms (1972, p. 177) sums the problem when he states, "the present housing system in the context of bureaucratically regulated federal programs treats low-income dwellers as depersonalized and manipulated objects rather than as self actualizing subjects." Alternatives to the present process of housing people are needed. These alternatives could come about through an improved subsidy system, an involvement of families in the total housing process and an awareness of present housing conditions and needs.

The worst housing conditions exist in rural areas of our nation. Research in rural housing problems must be geared to finding out what and where the human needs are. Housing programs can then be designed to reach these specific needs.

The main purpose of this study was to examine existing housing conditions and the value attached to housing for families in low-income

rural areas of Oklahoma. The data used in this study came from a pilot project developed by the S-95 Southern Regional Research project. The regional project focused on quality housing environment for low-income families in rural areas.

An interview schedule was developed by research directors from the southern states who were involved in the pretest for this S-95 project. Interview questions were designed to collect data on present housing conditions, desired housing, housing quality, housing expenditures, socio-demographic characteristics of the family and satisfaction with housing. Questions related to housing values and the importance of housing were added by the author and the project director of the Oklahoma study. Questions included open-end and closed-structured questions. The structured questions were in the form of yes and no responses, rank order questions, importance-unimportance scales and fixed alternative questions.

Trained interviewers collected the data through personal interviews with 64 families. In most cases the respondent was the female household head or the wife of a male head of the household. These families were selected from the northern two-thirds of Seminole County, Oklahoma. A random sample of twenty, one mile square sections was drawn (excluding sections in towns of more than 2,500 people). Three to four interviews were obtained from each of the selected sections.

The socioeconomic characteristics of the families were analyzed by crosstabulations using a gamma to identify strength in the relationship of the variables, age, income, race, education and sex of household head.

It was found that age was substantially associated with income. The highest income occurred in families where the household head was under fifty years of age. The lowest incomes were found in families where the household heads were over 62 years of age. A definite relationship was shown between being elderly and having a low income. Income was also found to be associated with race, education and sex of household head. A smaller percentage of minority families (black and Indian) had incomes of \$600 or more per month than did white families. Education was related to income in that the more education the household head had acquired, the higher the income level. Families with male household heads had higher incomes. Education was also associated with age. The younger household heads had more education. Therefore, families with a white male household head, who was 50 years of age or younger, and who had a high school education or better were found to have had higher incomes than did families whose heads were female, elderly, black or Indian, or had less than a high school education.

The value attached to housing was measured in two stages. An introductory statement identifying seven family expenditure items was first read to the respondent. The respondent was then asked to indicate the importance to her family of each of the seven items on a scale of 1 (very unimportant) to 9 (very important). Second, the respondent was asked to rank these seven items in order of importance, 1 being most important to 7 being least important.

Hypothesis one was that there will be no relationship between the value attached to housing and the socioeconomic characteristics of the family. The socioeconomic characteristics of sex and employment status

of the household head showed only a moderate association with importance of housing. A negative gamma for the importance of housing related to age showed that as age increased the importance of housing had a tendency to decrease. This may be partially explained by the fact that a large portion of the sample were elderly and the elderly had a tendency to place lower value upon housing. There were no other strong gamma associations between the socioeconomic characteristics and either importance of housing or housing rank, nor were there any significant relationships as measured by the chi-square test. Therefore, the null hypothesis was accepted indicating that age, education level, sex, employment status, size of family and income level do not have significant influence on the value attached to housing.

Hypothesis two was that there will be no relationship between the value attached to housing and the present housing conditions. Measures of present housing conditions included space, structural quality, quantity of equipment and facilities available, quality of plumbing and electrical wiring and tenure. The hypothesis was analyzed by the use of gamma coefficients and chi-square tests. There was a tendency for families living in crowded housing to consider housing as more important than did families who had greater amounts of space. Neither structural quality nor tenure were strongly associated with the importance of housing. A low association was indicated between structural quality and housing rank. The other selected measures of present housing conditions (quantity of equipment and facilities available, quality of plumbing and wiring and tenure) revealed no significant relationship with the value attached to housing. The null hypothesis was accepted but some trends toward a relationship were recognized.

Hypothesis three was that controlling for present housing conditions, families attaching higher value to housing will be no more likely to desire to alter present housing conditions than will families who attach lower value to housing. Value of housing was measured by importance of housing and housing rank. Desire to make changes was measured by asking the respondents if their family's home met their needs as it was or if they would like to make some change(s). Gamma coefficients were used for the analysis of hypothesis three.

It was found that there was only a minimal association between the value attached to housing and the desire to make change in present housing. The relationship between structural quality and the family's desire to alter present housing might have been even stronger had the sample not included a number of elderly households. Interviewers observed that the majority of the housing occupied by the elderly was poor in structural quality and yet most of these families had no strong desire to change their present housing nor were they interested in moving to a different location. One husband-wife couple near 80 in years were convinced they would not live much longer and saw no reason for altering their housing. Another elderly widowed lady indicated that she had lived in that same house for 30 years and did not want to leave even though she had difficulty keeping warm in the winter and had trouble with the water pipes freezing. She mentioned that she was eligible for new subsidized housing in a nearby town. She had considered moving but decided to stay where she was since she had no desire to live in town. Several elderly persons said that they did not want to change their housing because they owned their present home and they did not want to give it up to rent something better.

Further analysis using three control factors, family income, housing space and housing quality, revealed that inadequacy of housing in the form of crowded conditions (more than one person-per-room or more than two persons-per-bedroom) or poor structural quality were the two control factors most influential in a family's desiring to alter their living conditions. The analysis also revealed that when income was \$600 a month or above the value attached to housing had a substantial association with desire to change present housing. Those respondents in the higher income group who placed higher value on housing had a greater desire to change their housing.

Hypothesis three could not be rejected by the chi-square test. However gamma coefficients showed that families who lived in cramped space and poor quality were more likely to desire to alter their present housing, if they placed high value on housing. Families in the high income group were more likely to want to change their housing if they valued housing highly.

In general the findings of this study refute the idea, presented by Gutman and others, that families in the lower socioeconomic class do not value housing. In this study, socioeconomic characteristics of the family did not seem to influence the value attached to housing. Families in the lower socioeconomic class were just as likely to place high value on housing as were families in the higher socioeconomic classes. The value attached to housing was found to be moderately related to housing behavior in certain situations. Where the available house space was limited and/or where structural quality was poor, families who valued housing more highly were more likely to desire to make some improvements in their present housing.

Recommendations

It is recommended by the author that the studies being conducted in other southern states be compared to this and other preliminary studies to see if similar relationships exist. One specific area which should be further tested is hypothesis two of this study, there will be no relationship between the value attached to housing and the present housing conditions. There were some trends evident in the association between value, present housing conditions and the control factors of space, quality and tenure. These relationships were not strong enough to be significant. Further testing is believed to be a very important contributing factor in the process of solving low-income housing needs.

Specific indepth analysis of the data collected in the final studies should be done in relation to the importance attached to the various aspects of housing, examination of existing housing conditions of low-income rural families and the effectiveness of rural housing assistance programs.

Based on the analysis of this pre-test data, recommendations were made regarding the structure of some items in the interview schedule. These recommendations were incorporated in the interview schedule that will be used in the subsequent collection of data for the regional project.

It was found in this study that the majority of all respondents placed high value on housing, no matter what their age, educational level, sex, employment status, size of family or income level. The value of housing had little influence upon the families' desire to alter their housing when set apart from the control factors. However,

when the control factors of crowding and poor structural quality were introduced, the value attached to housing did influence desire to change housing. Both of these factors were closely related to income or lack of income. Problems of lack of funds to improve housing and community services were evident throughout the sample. This lack of funds is an area which the author feels needs in-depth study and attention.

One of the major concerns of the author was the effectiveness or in some cases the ineffectiveness of housing assistance programs for rural areas. The most obviously successful rural housing program was the one co-sponsored by the Bureau of Indian Affairs and the Department of Housing and Urban Development. Most of the families receiving assistance from the BIA seemed well housed through the program. However, some problems existed in this seemingly successful program. Several families housed by this program emphasized that once the BIA completed a structure, the family could not get repairs made or mistakes corrected. One family said "the BIA only guarantees the house for one year and in some cases the guarantee ran out before the mistakes were corrected." Another problem stressed by the families was that once the structure had been completed and the guarantee had ended no funds were available for upkeep. This is a problem faced by other housing programs as well. Families on limited incomes have little or no funds for expensive maintenance and upkeep in housing. The other side of the story revealed by some of those who worked in the program indicated that some of the families did not care for the housing properly. (The question is, should they be provided some method of learning skills to make repairs themselves or is it a fact that they do not

really care enough to take care of the property.) Although the reviewers heard both reasons this study has shown that most of the families did value housing but lack of knowledge and lack of additional funds contribute heavily to poor structural maintenance.

This study collected information from the households in the county, but not from lending agencies or administrators of housing programs. Therefore, it was possible to evaluate the effectiveness of housing programs from only the viewpoint of the families. It is recommended that in the final phase of the regional project, data be collected from both families and agencies regarding the effectiveness of programs. Analysis of such data could shed considerable light on new and possibly more effective approaches to meeting the housing needs of low-income rural families.

It was also found that families encountered difficulties when applying for loans. Families commented that both the BIA and FmHA were slow in processing loan papers. Some families complained of a gap in programs in that they were told they earned too much to qualify for HUD money or BIA funds and not enough for FmHA or a private loan. Several respondents said they "got the run around from FmHA." One respondent stated that the Federal Land Bank said she and her husband were too young, therefore, unreliable and FmHA said they would not help unless the land bank did.

On the positive side, one respondent was faced with serious water and plumbing problems. When the well went dry she applied to FmHA and as a result got a new well and pump, a complete kitchen and bathroom facilities. She said, "FmHA was a life saver for me and my family!"

A recurring problem in this study was the lack of available, reliable and qualified persons to do repairs including: electricians, plumbers, household repairmen and builders. This is an area which might serve as an opportunity for a vocational training program and result in lowering the unemployment rate.

It was also revealed through this study that community services need improvement. A study on better methods of disposal of garbage and trash, improvement in road conditions and efficiency in fire and police protection is recommended. The most recurring problem was that of trash and garbage disposal. Most families explained that they dumped their trash in ditches or some place on their own property.

The lack of available rental housing was another problem encountered. In many areas families have bought mobile homes as an alternative. There is still the need for research into rural rental problems.

It was mentioned earlier that elderly have problems qualifying for loans. Other problems experienced by the rural elderly in this study included lack of income, deteriorating housing conditions, health and transportation problems. Other studies have revealed that our rural elderly have been overlooked, neglected and discriminated against by government assistance programs. True, there are governmental housing units available to them, located mostly in small towns. Many of the elderly do not want to be uprooted and dislike leaving their homes even though the homes may be in dire need of repair. Our present programs somehow overlook these sociological needs. It is suggested that we consider this as we deal with housing, especially housing for the elderly. Some elderly would be more content if only their present housing were made more comfortable and livable.

The author feels that in many cases the channeling of governmental housing funds has "missed the boat" so to speak, in making adequately assisting low-income rural families in meeting their human housing needs. This study has revealed information which says that despite their socioeconomic level, most families value housing and therefore desire the best possible housing for their families. Each family, however, has differing needs and resource constraints. Is it asking too much to let the family make their own decisions as to what their needs are and provide them with the financial assistance which would best solve these housing needs?

In conclusion, the author believes this study, and more importantly those studies which follow, can do a great deal to eliminate the rural housing problems and avoid rural housing failures--"if", and only if, the studies take into consideration housing which meets individual needs of the occupants including sociological, physical and psychological needs.

SELECTED BIBLIOGRAPHY

- Beyer, Glen. Housing and Society. New York: The MacMillan Company, 1965.
- Carey, Phillip. "Social and Professional Responsibilities of Engineering Education to the Black Community." (Unpublished paper prepared for Oklahoma State University, Department of Sociology, Stillwater, Oklahoma, 1974, pp. 1-10.)
- Cochran, Clay L. "The Scandal of Rural Housing." The Architectural Forum, Vol. 134 (1971), pp. 52-55.
- Downer, Donna Beth, Ruth H. Smith, and Mildred T. Lynch. "Values and Housing - A New Dimension." Journal of Home Economics, Vol. 60, No. 3 (March, 1968), pp. 173-176.
- Edwards, Allan L. Techniques of Attitude Scale Construction. New York: Appleton-Century Crofts, Inc., 1957, p. 155.
- Freeman, Linton C. Elementary Applied Statistics. New York: John Wiley and Sons, 1965.
- Gans, H. J. The Urban Villagers. New York: Free Press, 1962.
- Gladhart, Peter Michael. "Family Housing Adjustment and the Theory of Residential Mobility: A Temporal Analysis of Family Residential Histories." (Unpublished doctoral dissertation, Cornell University, 1973.)
- Gutman, Robert. "A Sociologist Looks at Housing." Toward A National Urban Policy. Ed. Daniel P. Moynihan. New York: Basic Books, Inc., 1969, pp. 119-132.
- Harms, Hans H. "The Housing Problem for Low-Income People." Freedom to Build. Eds. John F. Turner and Robert Sichter. New York: MacMillan Company, 1972, pp. 75, and 173-198.
- Kreps, Juanita M. "Economics of Retirement." Behavior and Adaptation in Later Life. Eds. Ewald W. Busse, M.D. and Eric Pfeiffer, M.D. Boston: Little, Brown and Co., 1969, p. 71.
- McCamman, Dorothy, Juanita M. Kreps, James H. Schulz, Agnes W. Brewster, and Harold L. Sheppard (Task Force). Economics of Aging: Toward a Full Share in Abundance. Washington, D. C.: The Special Committee on Aging, U. S. Senate: 91st Congress, 1st Session, March 1969, p. 1.

- Montgomery, James E., and Gracia S. McCabe. "Housing Aspirations of Southern Appalachian Families." Home Economics Research Journal, Vol. 2, No. 1 (Sept. 1973), pp. 2-11.
- Morris, Earl W., and Peter M. Gladhart. "The Theory of Family Housing Adjustment." Working Paper, No. 10. Ithaca: Cornell University, 1972.
- Moynihan, David P. On Understanding Poverty. New York: Basic Books, Inc., 1969, pp. 23, 439.
- Page, Clinton A. "The Other Side of the Housing Problem." Progressive Architecture, Vol. 5 (1972), pp. 88-91.
- Pond, M. Allen. "The Influence of Housing on Health." Journal of Marriage and Family Living, Vol. 5 (1967), pp. 154-159.
- Rainwater, Lee. "Fear and the House as Haven in the Lower Class." Journal of the American Institute of Planners, Vol. 32 (1966), pp. 23-31.
- Rierner, Swend. "Architecture for Family Living." Journal of Social Issues, Vol. 7 (1951), pp. 141-151.
- Rodman, Hyman. "The Lower-Class Value Stretch." Social Forces, Vol. 43, No. 2 (Dec., 1963), pp. 204-215.
- Rossi, Peter H. Why Families Move. Glencoe, Illinois: Free Press, 1955.
- Rural Housing Alliance. Low-Income Housing Programs for Rural America, 4th ed. Washington, D. C.: January, 1973, pp. 1-2.
- Schorr, Alvin L. "Slums and Social Insecurity." Research Report No. 1. Washington, D. C.: U. S. Department of Health, Education and Welfare, Social Security Administration, Division of Research and Statistics, 1966, pp. 7-31, 323-326.
- Sokol, Robert. Laboratory Manual for Introductory Sociology. New York: Harper and Row, 1970, p. 33.
- Source - Catalog Communities/Housing. Chicago: The Swallow Press, Inc., 1972, pp. 210-211.
- Stewart, Karen K. "The Discrepancy Between Desired and Actual Housing and the Decision to Move Into a Specific Subsidized Housing Project." (Unpub. doctoral dissertation, Cornell University, 1973.)
- Taber, Bernard. "Profiles, A Lover of Cities - Charles Abrams." The New Yorker Magazine, Vol. 2, No. 4 (1974), p. 17.

- U. S. Congress. Select Committee on Nutrition and Human Needs Hearing. Part 5. Washington, D. C., 1972, p. 1578.
- U. S. Congress. Senate. Select Committee on Nutrition and Human Needs. Promises to Keep: Housing Need and Federal Failure in Rural America, George McGovern, Chairman. Washington, D. C.: U. S. Government Printing Office, 1972, pp. 7, 37.
- U. S. Department of Agriculture. Economic Research Service. Rural Housing, Trends and Prospects, by Robert E. Freeman. Agricultural Economic Report No. 193. Washington, D. C.: U. S. Government Printing Office, 1970, pp. iv, 21-22.
- U. S. Department of Agriculture. Rural Housing Alliance. Self-Help Housing . . . One Choice. Washington, D. C.: U. S. Government Printing Office, 1970.
- U. S. Department of Commerce. Bureau of Census. Current Population Reports, P-60. Washington, D. C., 1973, p. 116.
- U. S. Department of Commerce. Bureau of the Census. Social and Economical Statistics, by William Lerner. Washington, D. C., 1973, p. 390.
- U. S. Department of Commerce. Bureau of the Census. United States Census of the Population: 1973. Vol. I. Washington, D. C., 1973, pp. 112-113.
- U. S. Department of Commerce. Bureau of the Census. General Housing Characteristics of Oklahoma. Washington, D. C., 1970, pp. 38-57.
- U. S. Department of Labor. Black Americans A Chart Book. Washington, D. C.: U. S. Government Printing Office, 1971, p. 38.
- U. S. Department of Labor. Bureau of Labor Statistics. Employment and Earnings. Ed. Josep M. Finerly. Vol. 20, No. 8 (Feb., 1974), p. 55.
- Wilner, Daniel, R. Walkley, T. Pinkerton, and M. Tayback. The Housing Environment and Family Life. Baltimore, Maryland: The Johns Hopkins Press, 1962.

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