

HOUSING CHARACTERISTICS AND SATISFACTION
OF THE ELDERLY IN LOW-INCOME
RURAL AREAS

By

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CHAPTER I

INTRODUCTION

In the preamble to the housing act of 1949, Congress set forth a national housing goal of "a decent and a suitable living environment for every American family" (A Place to Live, 1974, p. 1). Although housing conditions have steadily improved over the past 25 years, the nation is still far short of attaining its objective.

While some federal efforts have been successful in encouraging a high volume of residential construction and homeownership through mortgage insurance, loan guarantees, secondary mortgage market activities, and favorable income tax provisions, there remains concern over problems of housing quality. These problems have traditionally been defined in terms of overcrowding, structural deficiencies, inadequate plumbing and heating systems, and safe sufficient water supply.

Substandard housing is a much discussed and researched problem in metropolitan areas where the dilapidated and deteriorating housing is easily recognizable and quite visible. Therefore, the majority of federal assistance programs are designed to serve metropolitan areas. These programs provide rental subsidy for families in existing units, encourage new

construction of low-rent units for relocation of families living in deteriorated units, and make financial assistance more readily available for rehabilitation of owned homes.

Many Americans see these housing problems in the metropolitan areas, but fail to realize that similar problems exist in rural areas. Although less visible, housing problems in rural areas are even more serious than in urban areas. Rural areas contain the highest concentration of substandard housing. In 1966 over one-half of the housing units that were either deteriorating or dilapidated were located in nonmetropolitan areas. And in 1970, the census documented that 90 percent of all the housing units lacking adequate plumbing were in rural areas (A Place to Live, 1974). This problem exists in rural areas for several reasons. Rural families are twice as likely to be poor than are urban families, and over 60 percent of the substandard housing in rural areas is occupied by families with annual incomes under \$4,000. Credit is far less available than in metropolitan areas (A Place to Live, 1974). Instead of savings and loan associations, which specialize in mortgage lending, rural areas tend to be served by commercial banks that are more limited by state and federal regulations as to the amount of their assets which can be devoted to residential financing. The smaller banks are also more reluctant to provide long-term loans, thereby compelling borrowers to make higher monthly payments.

It is evident that the availability of housing in rural areas is limited, and for the low-income families, financial assistance to maintain or improve a home, or build a new one is also very limited. Farmers Home Administration offers financial assistance for home improvements and new homes but families in the lowest income level, who are most in need of assistance, do not qualify. Rental subsidies are available through the Housing and Urban Development Section 8 program but the program has not been very successful in rural areas where few rental units are available. Native Americans can get assistance from their tribal authorities for subsidized housing and home improvements. All of these factors force many low-income families to live in dilapidated or deteriorating housing.

Another serious problem in the rural areas relates to the high concentration of elderly. The elderly, living on fixed incomes such as pensions, are caught in a financial squeeze as the cost of housing increases. Even the elderly homeowners who have paid off their mortgages find the rising cost of property taxes and maintenance and utilities to be greater than they can afford. Their housing alternatives are greatly limited. There are now 20.9 million Americans 65 years of age or older and it is projected that there will be 25.9 million by 1985 (A Place to Live, 1974). This is a growing segment of the population in need of special attention. There is a definite need to examine the physical and

financial limitations of the low-income rural elderly to better understand their real housing situation.

The Purpose of the Study

The purpose of this study was to examine the relationship between the age of household head and the housing environment of families in low-income, rural areas. The study concentrated on the elderly (persons over 62 years of age) by identifying the degree of housing satisfaction, sources of satisfaction, desires for housing improvement, and the constraints which kept housing improvements from occurring.

Objectives

The specific objectives of this study were:

- (1) to describe the socio-demographic characteristics of the elderly and analyze relationships between age and other socio-demographic characteristics for the total sample,
- (2) to describe the housing characteristics of the elderly and to examine the differences in the housing characteristics among the various age groups,
- (3) to examine, among the various age groups, the relationships between housing characteristics, housing satisfaction, and the desire to make some change in the present housing.

Procedure for Data Collection

The data used in this study were a part of a Regional Agricultural Experiment Station Project S-95, involving participants from 10 southern states. Data were collected by means of an interview schedule, administered by trained interviewers. The schedule was pretested and revised as necessary to improve clarity, reduce repetition, and reduce the interview time to 30 to 45 minutes. The final interview schedule included 107 items designed to collect information pertinent to family characteristics, housing characteristics, the residents' satisfaction with their housing situation, housing expectations, and the constraints that prevented families from improving their housing.

Interviews were conducted in Adair and Okfuskee Counties of Oklahoma which met the following criteria:

- (1) the counties were within the lowest one-third of counties in the state based on family income,
- (2) there were no towns in excess of 20,000, and
- (3) the topography of each county was comparable to the topography of at least one county being surveyed in another state in the regional study-- one hilly and one plains.

A two-stage sampling technique was used. A map obtained from the Oklahoma Highway Department was divided into clusters containing approximately 20 dwelling units each. Forty-five clusters were drawn at random. The

interviews began with the first house in the northeast corner of the cluster and working clockwise interviewed at every fourth house until a total of five interviews had been conducted in each cluster. Two hundred families were interviewed in each of the two counties.

The interviews were conducted from June to August, 1975, with the female head of household or the wife of the household head. If there was no wife, or female head of the household, then the male head of the household was interviewed. Interviewers had been trained to ask questions in a way that would avoid leading the respondent or interjecting bias. Most interviews took from 30 to 45 minutes and after their completion the respondents and interviewers felt familiar enough to conclude with friendly "chats." Much of the information obtained in the "chats" was recorded in the margins of the interview schedule and was helpful in gaining valuable insights into the family, housing, and community problems, but could not be coded for use in the computer analysis.

The interviewers were trained to code the interview schedules in the field while the information was still fresh to prevent confusion of interviews. Data were later checked, edited, and punched into IBM cards for computer analysis. A common coding system was used in all the states so that regional analysis could be conducted.

The author of this study was fortunate enough to be employed as an interviewer for the pretest and S-95 project.

The experience of interviewing provided many valuable opportunities to personally observe the respondents and their housing situations. By seeing and experiencing these people and their environment the author better understood and related to their problems. The formal interview data were analyzed statistically and findings were based on that analysis. However, observations and personal conversations with the respondents provided insights which were beneficial in suggesting possible explanations for the significant findings. The researcher's observations concentrated on the open country rural areas more than on small towns and rural villages.

The author's initial interest was the study of housing satisfaction of Native Americans in low-income rural areas of Oklahoma. However, after observing the number of elderly in the rural areas and the deteriorated condition of their homes, the author changed the focus of her research to the housing needs of the elderly in low-income rural areas. Hopefully, through this research the importance and urgency of the present situation will be realized and new financial assistance programs and research will be initiated to help ease the burden of adequate housing for elderly in low-income rural areas.

Analysis of Data

The data were analyzed through frequencies, percentages, and gammas. The gamma coefficient, 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). The strength of the gamma coefficients was discussed according to the following classifications (Sokol, 1970):

<u>Value of Gamma</u>	<u>Appropriate Phrase</u>
<u>+</u> .70 or higher	a very strong association
<u>+</u> .50 to .69	a substantial association
<u>+</u> .30 to .49	a moderate association
<u>+</u> .10 to .29	a low association
<u>+</u> .01 to .09	a negligible association
.00	no association

CHAPTER II

REVIEW OF LITERATURE

The Importance of Housing

Housing, in the most general sense, means "shelter inhabited by man" (Abrams, 1971, p. 137). In the United States housing has come to mean even more. Housing affects certain aspects of the lives of those who occupy it. Robert Gutman (1963) writes:

the social effects of housing are best understood if we keep in mind the distinction between material and nonmaterial culture. Like every other object in the material culture, the house is embedded in a web of nonmaterial culture; houses are possessions, and, as such, they symbolize and express the class position and value systems of the persons who possess them. Housing can affect social action directly because it is an object which can facilitate or thwart social action if the action takes place within the house and if the behavior is housing-specific, that is, requires the properties of the house for its successful completion. Changes in housing are most likely to influence social action indirectly if the possessors or occupants of the house and their neighbors regard the house as a sign of their social position (p. 128).

Another view of housing as a possession was expressed by Rainwater (1966) as he described the role of housing in protecting its occupants:

Housing as an element of material culture has as its prime purpose the provision of shelter, which

is protection from potentially damaging or unpleasant trauma or other stimuli. The most primitive level of evaluation of housing, therefore, has to do with the question of how adequately it shelters the individuals who abide in it from threats in their environment. . . . There is in our culture a long history of the development of the house as a place of safety. . . . The house becomes the place of maximum exercise of individual autonomy, minimum conformity to the formal and complex rules of public demeanor. The house acquires a sacred character from its complex intertwining with the self and from the symbolic character it has as a representation of the family (pp. 23-24).

Housing in Rural Areas

For most Americans the terms "slums," "inadequate substandard housing" and "housing programs" probably call to mind the companion terms "urban ghetto" and "inner city." It is in the so-called "core" areas of the older metropolitan centers where bad housing is most concentrated and, therefore, most visible. However, housing conditions are worse, both quantitatively and relatively, outside the metropolitan areas.

The 1970 Census of Housing showed that the non-metropolitan areas contained almost one and one-half 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 the non-metropolitan as in metropolitan areas (Rural Housing Alliance, 1973).

Contrary to the usual assumption, decent housing was not typically available for low-income families in non-

metropolitan areas. Unoccupied, liveable housing is difficult to find in most rural areas. A report prepared for the President's Committee on Urban Housing found that the "minimum annual income required to assure standard living" was higher in non-metropolitan areas (Rural Housing Alliance, 1973, p. 1). This situation is intensified by the credit-gap that exists.

Mortgage financing is harder to find and, when it is found, tends to be available on more restrictive terms (higher interest rates, shorter maturity, larger down-payment) in rural areas and small towns (Rural Housing Alliance, 1973, p. 1).

A study by McArthur (1977) examined the local financial institutions of Adair and Okfuskee Counties in Oklahoma in order to identify the limitations for housing improvements. It was found that "the high cost of construction, the price of existing dwellings, low family incomes, and limited available funds were considered the major problems of financing rural homes" (McArthur, 1977, p. 43).

Financial Assistance for Rural Areas

Non-metropolitan America does have its own source of housing financial assistance, the Farmers Home Administration (FmHA). While its programs in many ways parallel those of the Federal Housing Administration (FHA), it is worth noting that the Farmers Home Administration is not dependent on local sources of mortgage credit, but instead originates the loans which it insures. Most significant is the fact that neither the Farmers Home Administration

nor the Housing and Urban Development programs are currently operating at program levels adequate to meet the nation's rhetorical commitment to "a decent home and a suitable living environment for every American family," a goal which our nation had hoped to substantially achieve by the 1980's (Rural Housing Alliance, 1973, p. 2).

The Farmers Home Administration is the major conduit of federal housing assistance to non-metropolitan areas of 10,000 or less in population. The agency, created in 1946, is currently involved in various aspects of housing and rural development. Its major housing effort is on 502 loans. These are mostly insured loans used largely for the building of new homes or the purchase of existing ones (Bryce, 1973).

Eligibility for receiving a 502 loan is based on the ability to repay it. Bryce (1973) states:

Almost 50 percent of the borrowers have an adjusted gross income of more than \$6,000 in fiscal year 1970-1971, but only 11 to 12 percent have less than \$3,000. Yet, an estimated two million of the three million substandard houses in rural areas are occupied by families with unadjusted incomes of \$3,000 or less (p. 185).

The Farmers Home Administration makes loans in rural areas to provide rental housing for persons with low and moderate income and for persons who have reached age 62.

A borrower may build, buy, or repair apartment-type housing, usually constructed on the style of a duplex or or similar multi-unit dwelling of four or eight units.

Rental housing loans are available to profit and non-profit applicants such as individuals, trusts, associations, partnerships. . . . Borrowers must be unable to finance the housing or the improvements with personal resources or credit from other sources, and agree to provide rental units or units for cooperative purchase to eligible individuals or families (Neville, 1971, p. 391).

While it is generally agreed that the Farmers Home Administration does reach people of real need, it is also recognized that it fails to reach the very poor and elderly. Most are eliminated by their inability to repay the loans. Shying away from the poor is a means of averting the risk of losses and incurring the wrath of Congress. Losses are less than one percent, due in part to screening and counseling of borrowers (Bryce, 1973).

The number of home construction and improvement loans that can be processed by FmHA is limited by the demand for other programs administered by the FmHA county supervisor. One county person may have the primary or sole responsibility for farm loans, rural community water and sewer loans, and a variety of other programs. Thus, housing loans may suffer serious delays.

The most numerous of the housing programs of Housing and Urban Development are those under Federal Housing Administration. Unlike the FmHA, HUD is not restricted by law to any particular area or size of place. However, its

dependence on local credit institutions sometimes works to limit the availability of its programs in small towns and rural areas (U.S. Dept. of Agri., 1975).

The Section 8 Existing Housing Program, established by the 1974 Housing and Community Development Act, is the Federal Government's major operating program for assisting lower income families to secure decent, safe, and sanitary housing. It provides funds to subsidize the rent for families whose income is 80 percent or less of the median income for families in that area. This program is not very effective in these two counties, Adair and Okfuskee, because the availability of decent, safe, and sanitary rental housing units is very limited. Most "liveable" housing units are occupied.

Housing and the Elderly

Suitable housing environments are especially important to older Americans as life space decreases with age (Williams and Loeb, 1968, Birren, 1969, Clark 1968). Hansen (1971) has estimated that persons over age 65 spend 80 to 90 percent of their lives in the home environment. Therefore, the quality of the housing environment becomes increasingly significant in their lives. The quality of this limited world largely determines the extent to which they will retain their independence; the amount of privacy; how often they will visit friends; their sense of place; and

their ability to exercise a measure of control over the immediate environment. "Housing often is a major variable, physically, socially and psychologically, in the lives of older persons" (Montgomery, 1972, p. 37).

There is growing recognition that on many counts those "65 and over" constitute a wide variety of personalities, life styles, and needs. This "group," representing an age span of more than 35 years, differs in sex, education, health, marital status, income, race, life style, geographic location, aspirations, and "behavioral maps" (Berardo, 1970; Birren, 1964; Rent, 1971; *reference not cited* Montgomery, 1965).

In describing the dwelling units frequently occupied by the aged Montgomery (1972) says they are

frequently old, in a state of disrepair, and lacking in one or more plumbing and heating amenities. Usually older persons do not live under crowded conditions. In fact, in many instances they are 'over-housed' in terms of the number of rooms and square footage. In 1970, 69.5 percent of the aged owned their dwellings compared with 64.0 percent for all household heads (p. 38).

Montgomery (1964), in a study of older persons who lived in a small community in central Pennsylvania, found that the respondents had not recently moved and did not wish to move. Sixty-eight percent of those interviewed were born in or near the community and 81 percent had lived in their present dwelling for ten or more years. Seventy-six percent liked their houses very well. Montgomery says:

In the absence of facts one can do little more than speculate as to why older families, no longer tied to a place of employment, are so relatively immobile. One can hypothesize that anchoring variables include limited incomes, declining health, a strong sense of place, and an unwillingness to face adjustment problems occasioned by moving (p. 39).

Fromm (1963) has written that man has a basic need to feel that he belongs to his environment. Regardless of where older persons live, they seem to have a fundamental need to identify with a place--a dwelling, a neighborhood, a village, a city, or a landscape.

Man also had a need to relate to and interact with other human beings. The location, size, and design of their dwelling affects the extent to which older persons interact with others. In commenting on the behavior of older residents of Victoria Plaza, a public housing facility in San Antonio, Texas, Carp (1966) stated that older residents of the enriched environment seems to respond to their housing by reengaging in social life.

Atchley (1972) writes that

Housing is a key feature in the relationship between the older person and his or her community for several reasons. First of all, where a person lives largely determines opportunities for contact with other people. It also has a bearing on access to various community services. The relationship between housing preferences of older people and the availability of the preferred types of housing in a community are also important factors in an older person's overall evaluation of the desirability of a particular community. Finally, one's home is where a large part of one's life is led, and it can either help or hinder the individual in his attempts to enjoy life (p. 270).

Atchley (1972) found that older people generally prefer to remain in their own homes as long as possible.

Nearly 75 percent of older people live in their own independent households. More than a third of older people living in their own homes have lived there twenty years or longer, compared with 13 percent for all households (p. 271).

Older people tend to live in dwellings that are older than average and have lower values, and that are more often dilapidated. Atchley (1972) writes

Three fourths of these are detached houses . . . a figure which is about average for the country as a whole. Older people tend to have more room in their households than the young do, but many of them wish they had less (p. 272).

Other studies have theorized that "adequate" housing for one family may not be "adequate" housing for another family. The important factor may not be the housing itself but the attitude of the family. If a family desires more housing space or higher quality than its present housing provides, the family may be less than completely satisfied (Lauener, 1977).

Speare (1974) developed a model for residential mobility in which residential satisfaction became an intervening variable between individual and residential variables and residential mobility. Individual and residence characteristics such as age of head, duration of residence, home ownership, and room crowding were shown to affect mobility through their effect on residential satisfaction.

Suitable living accommodations are necessary for the physical and mental well-being of people of all ages.

"However, the suitability of living accommodations becomes even more crucial for older persons because of the greater amount of time they are likely to spend at home" (Woodward, 1974, p. 349). Many elderly persons in rural areas are very limited in their access to transportation and spend much more time in their homes. Their social life has decreased and outside contacts are fewer. The physical aspects of the house should fulfill the expectations of the occupants and often the memories stored in the house are worth more than structural quality of the dwelling.

The most important aspect of housing for senior citizens was that the individuals themselves were comfortable, safe, and most of all, content with their living arrangement. Subjects who were happy in whatever situation they lived experienced significantly less lonely feelings than those who were unhappy (Woodward, 1974).

Perhaps one of the most interesting but unexpected findings of Woodward's study was the large number of elderly persons who indicated they were content with their personal living arrangement (Woodward, 1974). Many times housing improvements were out of the question financially and physically for the elderly, therefore they accepted their housing situation as it was no matter what the situation.

A study by Dodson (1960) provides strong evidence that

the chief cause of the inferior housing of minority groups is their poverty. It follows that any large-scale improvement in their housing conditions involves either a rise in the level of income of the minority groups or more extensive subsidized housing (p. 108).

Harris (1976) did a study to analyze the influence of housing quality on housing satisfaction.

The regression results can be interpreted as meaning that for any given level of quality; the older the household head, the more satisfied the respondent was with housing quality. It can also be concluded that satisfaction increased with income and education of the head when quality is held constant. Marital status, sex of head, and race have no significant effect (p. 11).

Burgess (1954) summarized the elderly situation by stating:

In short, older persons, as represented by household heads, are more likely than the average household head to live in one-person and two-person households, to be less overcrowded, to live in dilapidated dwellings, to own their own homes, to own a higher proportion of homes of low value, to have lower incomes, and to pay less rent (p. 55).

Summary

Previous studies reveal some of the many problems faced by the elderly in low-income rural areas. Their financial limitations are pointed out and the need to improve housing assistance programs in these areas is evident. The elderly need and value good quality housing but often settle for less because of their physical and financial

limitations. Previous studies reinforce the belief that more specific information should be obtained and studied to provide the background for more effective housing programs for the elderly as well as other very low-income families in non-metropolitan areas.

CHAPTER III

RESULTS AND DISCUSSION

Description of the Socio-Demographic Characteristics of the Elderly

This section describes a sub-sample of 170 households where the head was 62 years of age or older. The sample was drawn from two low-income, rural counties of Oklahoma.

The age of the household head was determined by the age on his or her last birthday. The ages ranged from 62 through 91 years. Twenty-four percent of the household heads were between the ages of 62 and 65 years, 20 percent between 66 and 69 years, 24 percent between 70 and 75 years, 18 percent between 76 and 80 years, and 14 percent were between 81 and 91 years of age. Out of the total of 170 elderly respondents, approximately two-thirds were between the ages of 62 and 74, and one-third was 75 years or over (Table I).

Household size was measured by the number of persons living within the household on a permanent basis. In most cases, the elderly lived in small households. Eighty-five percent of the households included only two persons or

TABLE I
SOCIO-DEMOGRAPHIC CHARACTERISTICS
OF THE ELDERLY

	Number Reporting	Percent
<u>Age of Household Head</u>		
62 years through 65	40	24
66 through 69 years	33	20
70 through 75 years	41	24
76 through 80 years	29	18
81 through 91 years	24	14
	<u>167</u>	<u>100</u>
<u>Education of Household Head</u>		
No schooling	5	3
Two grades completed	5	3
Three grades completed	12	7
Four grades completed	14	9
Five grades completed	14	9
Six grades completed	13	8
Seven grades completed	8	5
Eight grades completed	49	30
Nine grades completed	7	4
Ten grades completed	6	4
Twelve grades completed	17	10
Thirteen grades completed	3	2
Fifteen grades completed	1	1
Sixteen grades completed	2	1
Eighteen grades completed	2	1
Twenty grades completed	4	3
	<u>161</u>	<u>100</u>
<u>Household Size</u>		
One person	48	28
Two persons	96	57
Three persons	13	8
Four persons	5	3
Five persons	4	2
Six persons	2	2
	<u>168</u>	<u>100</u>
<u>Race</u>		
White	118	70
Native American	19	11
Black	32	19
	<u>170</u>	<u>100</u>

TABLE I (Continued)

	Number Reporting	Percent
<u>Sex of Household Head</u>		
Male	112	66
Female	58	34
	<u>170</u>	<u>100</u>
<u>Monthly Per Capita Income</u>		
0 - \$75	14	10
\$76 - \$97	12	8
\$98 - \$125	20	14
\$125 - \$150	31	22
\$151 - \$173	25	18
\$174 - \$200	11	8
\$201 - \$241	13	9
\$242 - \$300	8	6
\$301 - \$350	4	3
\$351 - \$600	3	2
	<u>141</u>	<u>100</u>

less. The largest number reported within any elderly household was six persons.

Education of the household head was determined by the grade last completed by the head. The educational attainment level of the elderly respondents was relatively low. The range was from 0 to 20 years of education. Seventy-five percent of the elderly respondents had an eighth grade education or less. This is approximately the same as the national median of grades completed. The median grade level of males and females 25 years and over for Adair and Okfuskee Counties was ninth grade. Nearly 10 percent earned a

high school diploma, and only a very few had any more than a high school education. The mode for the elderly respondents was eighth grade. It must be remembered that the importance of an education was not stressed urgently during this earlier era and that the educational system was not as sophisticated as it is today (U.S. Bureau of Census, 1970).

Approximately 70 percent of the 170 elderly respondents were white, 11 percent were Native American, and 19 percent were Black. This compares with 72 percent white, 27 percent Native American, one percent Black for Adair County; and 70 percent white, 12 percent Native American, and 18 percent Black for Okfuskee County (U.S. Bureau of Census, 1970). The large percentages of Native Americans and Blacks in eastern Oklahoma can be explained by the fact that so many Indian tribes were forceably removed to Oklahoma (Indian Territory) in the early 1800's and a large percentage of them were slave owners. These Five Civilized Tribes were settled in eastern Oklahoma among Plains Tribes already present in the area. Here they set up their homes, businesses and plantations, and prospered until the white man moved into the state in the land runs just before the turn of the century.

The respondent identified the person who was considered to be the household head. Two-thirds of the household heads were male while only one-third were female.

Household income was measured as the sum of all sources of income such as: take home pay, social security, welfare, relatives' contributions, retirement, unemployment, disability, food stamps, etc., for all persons in the household. Per capita income, household income divided by household size, ranged from 0 to \$600 per month with only one respondent on each outer limit. Almost 50 percent of the respondents reported less than \$146 per month per person, nearly 75 percent had less than \$180 and 90 percent had less than \$241 per month.

In 1970 the state of Oklahoma ranked 12th in the nation in incidence of poverty. The mean per capita income for Oklahoma was \$3,802 (\$316 per capita income monthly) as compared with a mean of \$4,478 (\$376 per capita income monthly) nationally during 1972 (Poverty in Oklahoma, 1973, p. 16). Over 90 percent of the elderly in the present study had less than \$241 per month.

In 1970 the state of Oklahoma ranked 12th in the nation in incidence of poverty. The mean per capita income for Oklahoma was \$3,802 (\$316 per capita income monthly) as compared with a mean of \$4,478 (\$376 per capita income monthly) nationally during 1972 (Poverty in Oklahoma, 1973, p. 16). Over 90 percent of the elderly in the present study had per capita incomes which fell below the state and national means of 1972.

Relationships Among Socio-Demographic
Characteristics

The relationships between age and other socio-demographic characteristics were analyzed by cross-tabulations using a gamma to identify the strength of the relationships. The entire sample of 400 respondents was used for this analysis so that the impact of age could be examined.

Age was substantially associated with income as shown by a gamma of $-.56$ (Table II). The age groups between 18 and 61 years of age showed a marked difference from the two age groups between ages 62 and 91.

TABLE II
RELATIONSHIP BETWEEN AGE OF THE
HOUSEHOLD HEAD AND MONTHLY
HOUSEHOLD INCOME

Age	Income of Household Head					Total
	Low- \$199	\$200- \$299	\$300- \$399	\$400- \$599	\$600- \$3000	
18-30	.05	.10	.10	.27	.48	1.00
31-44	.02	.08	.13	.32	.45	1.00
45-61	.13	.11	.20	.29	.27	1.00
62-74	.24	.40	.14	.15	.07	1.00
75-91	.38	.36	.19	.05	.02	1.00

Gamma $-.56$

Seventy-four percent of the household heads age 75 or older had monthly incomes of less than \$300, while only 15 percent of the youngest age group had incomes that low. Nearly half of those under 45 years of age had household incomes of \$600 per month or more. Less than 10 percent of those age 62 to 74, and only two percent of those 75 years and over had incomes that high. There was not as great a difference between monthly income levels of respondents 62 years and older, and those under 62 years of age as might have been expected. This could have been due to the nature of the area itself. Elderly persons employed in urban areas were more likely to be retired at age 62; while in rural areas, where a greater percentage of the respondents were self-employed, the elderly stayed on their jobs longer and retired at an older age. In rural areas the age at which retirement occurred was more likely to be a personal choice than the employers rule. Therefore, between the ages of 62 and 74 years, the gradual tapering off of income occurs as the decision to retire is made. The decline in income was shown (between those under age 62 and those 62 and over) in Table II, but it was not as vivid a difference as would be expected in an urban area.

No significant association was identified between age of household head and race. The same conclusion was reached by Jones (1977) in a study on the impact of race on housing in previous research on the S-95 Regional Project.

Age was found to be associated with household size, education and sex of household head. Age and education were substantially associated as indicated by a gamma of $-.55$. The older the respondent the less education he or she was likely to have. Seventy-five percent of those respondents age 62 years and over had earned an eighth grade education or less. Table III shows that a much higher percentage of the younger persons earned a high school diploma and some had additional college or trade school education. The sex of the household head was moderately associated with age as indicated by the gamma of $.40$. The percentage of female household heads increased as age increased (Table IV). Household size and age of household head had a gamma of $-.60$. Twenty-eight percent of the respondents age 62 and over had only one person living in the household and 85 percent of the elderly had two persons or less, compared with 31 percent of the younger who had two persons or less in the household (Table V). The relationships identified in this rural sample were much like those for the nation as a whole.

Description of the Housing Characteristics of the Elderly

This section describes the housing characteristics of the subsample of 170 households whose head was 62 years of age or older. House type was determined by the interviewer

TABLE III
RELATIONSHIP BETWEEN AGE AND EDUCATION OF HOUSEHOLD HEAD

Age	Education of Household Head			Total
	0-8	9-12	Some College	
18-30	.05	.73	.22	1.00
31-44	.26	.46	.27	1.00
45-61	.51	.40	.09	1.00
62-74	.74	.20	.06	1.00
75-91	.75	.14	.11	1.00

Gamma $-.55$

TABLE IV
RELATIONSHIP BETWEEN AGE AND SEX OF HOUSEHOLD HEAD

Sex	Age of Household Head				
	18-30	31-44	45-61	62-74	75-91
Male	.89	.87	.80	.70	.57
Female	.11	.13	.20	.30	.43
Totals	1.00	1.00	1.00	1.00	1.00

Gamma $.40$

TABLE V
 RELATIONSHIP BETWEEN AGE OF HOUSE-
 HOLD HEAD AND HOUSEHOLD SIZE

Age	Household Size				Total
	1	2	4	5-High	
18-30	.02	.24	.56	.18	1.00
31-44	.03	.02	.32	.63	1.00
45-61	.09	.41	.24	.26	1.00
62-74	.22	.59	.13	.06	1.00
75-91	.38	.53	.07	.02	1.00

Gamma $-.60$

as: (1) single family, (2) duplex-apartment, (3) mobile home, or (4) other. Ninety-six percent of the elderly lived in single family homes while the remaining four percent lived in apartments, duplexes, mobile homes, or others. Table VI shows that approximately 43 percent of the elderly respondents lived in open country non-farm areas of the two counties and another eight percent lived in open country farm areas (total 51 percent). The remaining 49 percent of the elderly respondents lived in or around rural villages or small towns with less than 3,000 population. More than three-fourths of the elderly respondents (77 percent) owned their homes while only 23 percent were renters. Many of their homes were rather old,

TABLE VI
HOUSING CHARACTERISTICS AMONG
THE ELDERLY

	Number Reporting	Percent
<u>House Type</u>		
Single family	164	96
Duplex-apartment	4	2
Mobile home	1	1
Other	1	1
	170	100
<u>Location</u>		
Small town	57	34
Rural village	26	15
Open country non-farm	73	43
Open country farm	14	8
	170	100
<u>Tenure</u>		
Own-paid for	116	68
Still paying	15	9
Not an owner	38	23
	169	100
<u>Structural Quality</u>		
1. No structural defects	60	35
2.	47	28
3.	40	23
4. Major structural defects	23	14
	170	100
<u>Persons Per Room</u>		
.13 to .25 persons	43	25
.26 to .50 persons	96	57
.51 to .99 persons	21	13
1.00 to 1.6 persons	9	5
	100	100

the range was from one year to 86 years old, with 60 percent over 25 years of age, and more than 25 percent were over 50 years old. The majority of the elderly respondents (nearly 75 percent) moved to their present home from somewhere within the same county anywhere from one to 71 years earlier. Thirty-nine elderly respondents (23 percent) had lived in their present homes over 25 years, and nine respondents had lived there over 50 years. This helps explain the attachment many of the respondents feel for their homes. Another reason for a feeling of attachment and security was that the home was paid for. Sixty-eight percent of the elderly owned homes with no mortgage against them.

Most elderly respondents had sufficient--if not excess--space in their homes with 82 percent having .5 persons-per-room or less. Ninety-five percent had less than one person-per-room. The mean was .43 persons-per-room.

Structural quality was measured by the respondents' answers to the question, "Are any of the following conditions present in your home"? If yes, are they major or minor"? (1) leaks in roof, (2) cracks (other than hairline) in walls or ceilings, (3) sags or bulges in walls or ceilings, (4) peeling paint on inside walls, (5) peeling paint on outside walls, (6) decay of door and window frames, (7) decay of porch and outside steps, (8) uneven floors, (9) holes or badly worn places in floor coverings, (10) broken or missing window panes, (11) broken or missing materials

on exterior walls or foundation, and (12) rodent or insect damage. An index was formed by summing the values for the 12 items. The index scores were divided into four groups with a value of one, indicating no structural defects and four, indicating major structural defects. The structural quality of the respondent's house was often observed by the interviewer to be worse than what the respondent reported, but the interviewer was instructed to record only what the respondent reported. However, some personal notes were written in the margins of the interview schedule for additional interpretive information but not for computer analysis. Thirty-five percent of the elderly respondents reported no structural defects, another 28 percent reported only a few minor problems. Only 14 percent reported major structural defects.

Differences in Housing Characteristics Among the Various Age Groups

The entire sample of 400 respondents was used for the analysis described in this section so that the differences between age groups could be identified.

Age of the household head was found to be substantially associated with house type, tenure, and persons-per-room. Table VII shows a gamma of $-.48$ for the association between house type and age of household head. Ninety-six percent of the elderly (persons 62 years and over) lived in

single family homes while 75 percent of the families with heads under 30 lived in single family homes. The single-family home was often the only source of shelter available in open-country areas and finding a livable unoccupied unit was rare. One elderly man lived in a converted church. Apartments, duplexes, and mobile homes were generally found in or around the small towns. The younger families were more likely to live in mobile homes than were the elderly.

TABLE VII

GAMMA COEFFICIENTS FOR THE RELATION-
SHIPS BETWEEN HOUSING CHARACTER-
ISTICS AND THE AGE OF THE
HOUSEHOLD HEAD

	Age of Household Head Gamma Coefficient
House type	-.48
Tenure	.41
Persons-per-room	-.64
Location	-.20
Structural quality	.08

Tenure designates the ownership status. Respondents were categorized as follows: (1) the home was already paid for, (2) they were still paying on a mortgage, or

(3) they were renting. Tenure was associated with age of household head as indicated by a gamma of .41 (Table VII). As age increased, the percentage of home owners increased. Seventy percent of the elderly respondents were living in homes which were completely paid for, while only 35 percent of the younger persons had their homes paid for. Forty-two percent of the youngest families were renters while 22 percent of the elderly rented.

The number of persons-per-room was associated with age of household head as indicated by a gamma of $-.64$ (Table VII). As age increased the number of persons-per-room decreased. Eighty-two percent of the 170 elderly families had less than .5 persons-per-room compared with 32 percent of the younger families. Twenty percent of the families with heads under age 45 had more than one person-per-room and only one percent of those over 65 had the same ratio.

Table VII indicates only a low association (gamma of $-.20$) between age of household head and location of the dwelling. However, there was a slight decrease in the percentage of respondents over age 74 who lived in open country areas. When asked the question, "As far as the comfort and satisfaction of you and your family are concerned, what are the three things that you like best about living here"? over 34 percent of the elderly respondents (62 and older) gave as their first answer, "I like the country, the location, the rural area." This indicated satisfaction with the type of location, but there were other reasons, such as failing

health, which prompted the elderly to move into town. If their physical or mental health deteriorated to the point where they were no longer capable of caring for their own needs, then it was necessary for them to move to a facility which offered assistance, and these facilities were located in small towns.

There was no significant association between age of household head and structural quality. Interviewers observed that elderly respondents were less likely to report structural defects and less likely to report a low quality home because they realized their financial and physical limitations in improving the structural quality of their homes or moving to a higher quality home. The elderly had a tendency to overlook or minimize structural defects.

Housing Characteristics and Housing Satisfaction for Various Age Groups

This analysis was conducted to see if the relationships between housing characteristics and housing satisfaction were different for younger families than for the elderly. Cross-tabulations were done for each housing characteristic with the related satisfaction measure while controlling for age. Gamma coefficients were used to identify the strength of the relationships.

Housing satisfaction was composed of four measures relating to different aspects of housing: (1) satisfaction with space and arrangement was a summed measure of the respondent's satisfaction with present room arrangement, size of home, number of rooms, and arrangement for food preparation, (2) satisfaction with type, quality, and appearance was the sum of four housing characteristics measuring the respondent's satisfaction with the present appearance of the home's interior, house type (single family, apartment, duplex, other), structural quality (soundness) of the home and appearance of the home's exterior, (3) satisfaction with cost and quality of services was the sum of five housing characteristics measuring the respondent's satisfaction with present utility costs, housing costs, water supply, sewage disposal, and the conditions of the streets or roads that leads to the home, (4) satisfaction with location was the sum of five housing characteristics measuring the respondent's satisfaction with the present location in relation to shopping, medical services, church and other social activities, available fire protection and available police protection.

Table VIII shows that the relationship between structural quality and satisfaction with type, quality, and appearance was strong for all age groups. The relationship was strongest with the oldest age group and almost as strong for the middle age group.

TABLE VIII
 GAMMA COEFFICIENTS FOR THE ASSOCIATION
 BETWEEN STRUCTURAL QUALITY AND
 HOUSING SATISFACTION, CON-
 TROLLING FOR AGE OF
 HOUSEHOLD HEAD

Age of Head	Housing Satisfaction	
	Type/Quality and Appearance	Cost/Services
18-30	.64	NS
31-44	.69	NS
45-61	.77	.40
62-74	.73	.14
75-91	.80	.52

NS = Not Significant

It was felt that structural quality would be related to satisfaction with cost and quality of services. It no doubt costs more to heat and cool homes of poor structural quality. Many respondents expressed concern over the rising cost of propane and butane. The analysis revealed that structural quality was not significantly related to satisfaction with cost and quality of services for the two younger age groups but was moderately related for age group 45 through 61, and substantially related for the age group 75 and over (Table VIII).

The association between tenure and satisfaction with space/arrangement was moderate (gamma .36) for the age group 45 through 61 (Table IX) but low for the other age groups.

Forty-five percent of the owners aged 45 through 61 years were satisfied compared with only eight percent of the renters.

TABLE IX

GAMMA COEFFICIENTS FOR THE ASSOCIATION
BETWEEN TENURE AND HOUSING SATIS-
FACTION, CONTROLLING FOR AGE
OF HOUSEHOLD HEAD

Age	Housing Satisfaction		
	Space/Arrangement	Type/Quality	Cost/Services
18-30	.12	.19	-.51
31-44	.16	.33	-.10
45-61	.36	.20	.07
62-74	.16	.21	.15
75-91	.23	.32	.65

The relationship between tenure and satisfaction with the type and quality of the house was low for the youngest age group. However, once the family size expanded and the income potential increased, the relationship increased to moderate strength (age group 31-44). Those who had attained ownership status were more satisfied. The relationship increased again for those 75 years and over generally due to the fact that they relied so heavily on ownership of their home for security and independence, as well as the memories it held.

Tenure had a substantial association with satisfaction with housing cost and quality of services for the youngest and oldest age groups (Table IX). The negative sign ($-.51$ gamma) indicated that within the youngest age group renters were more satisfied than owners. In the oldest age group, 64 percent of the home owners were very satisfied compared with 17 percent of the renters.

Table X shows only a negligible association between persons-per-room and satisfaction with space and arrangement for the youngest age group. Children in these younger families were not yet old enough to make excessive demands on available space. The association increased as the age of the household head increased. For the age group 45 through 61 years there was a substantial association. This was the age group with nearly grown children who made the most demands on household space. The oldest age group had much less association because they generally had ample space in their homes due to the decreased size of the families.

Location had a substantial association with satisfaction with the location and fire and police protection for the first four age groups (18 through 74 years) and a very strong association for those respondents over age 74 (Table XI). For all age groups, the very satisfied respondents were those who lived in small towns where these services were located. The respondents (all age groups) living in rural villages were generally satisfied, and those in open country areas were neutral to dissatisfied. Many respondents

TABLE X

GAMMA COEFFICIENTS FOR THE ASSOCIATION
BETWEEN PERSONS-PER-ROOM AND HOUSING
SATISFACTION, CONTROLLING FOR AGE
OF HOUSEHOLD HEAD

Age	Satisfaction with Space and Arrangement
18-30	-.08
31-44	-.23
45-61	-.56
62-74	-.61
75-91	-.24

TABLE XI

GAMMA COEFFICIENTS FOR THE ASSOCIATION
BETWEEN LOCATION AND HOUSING SAT-
ISFACTION, CONTROLLING FOR AGE
OF HOUSEHOLD HEAD

Age	Satisfaction with Loca- tion/Fire and Police
18-30	-.58
31-44	-.57
45-61	-.58
62-74	-.58
75-91	-.84

in open country areas were concerned about the amount of time it took for fire or police service to reach their homes, while some were not sure such protection was even offered to them.

Elderly homeowners felt the need for fire and police services and their satisfaction was strongly related to the availability of such services. The elderly placed great value on their homes as a possession, and a source of security, so they were more satisfied with location, fire, and police protection when they lived in small towns or rural villages. The closer the shopping facilities, medical services, church and social activities the more satisfied they were.

Since 96 percent of the elderly respondents lived in single family homes, it was not possible to analyze the relationship between house type and housing satisfaction.

Description of the Variable Desire to Change Housing

The desire to make some change in the present housing situation was determined by the respondent's answer to the question, "Does your present home meet your family's needs as it is or would you like to make some change"? If the respondent desired to make some change, then they were asked, "Would you like to make some alteration in your present home or would you like to move to a different home"?

The desire to make a change was found to be associated with age of household head, income, and housing satisfaction. The association between age and the desire to change housing was moderate as shown by a gamma of $-.35$ (Table XII). The younger age groups (18 through 61 years) were more likely to desire to make alterations in their present housing or move, while those respondents over age 61 were more likely to report that their housing was okay. Thirty-eight percent of the respondents between the ages of 18 and 30 reported their housing was okay, 33 percent wanted to alter, and 29 percent wanted to move. As age increased the desire to make changes or move decreased. For the oldest age group, 73 percent reported their housing as okay, 22 percent desired to make alterations, and only five percent wanted to move.

TABLE XII
RELATIONSHIP BETWEEN DESIRE TO CHANGE
CHANGE HOUSING AND AGE OF
HOUSEHOLD HEAD

Age of Household Head	Desire to Make Change or Move			Total
	<u>Okay</u>	<u>Alter</u>	<u>Move</u>	
18-30	.38	.33	.29	1.00
31-44	.35	.40	.25	1.00
45-61	.46	.38	.16	1.00
62-74	.64	.24	.12	1.00
75-91	.73	.22	.05	1.00

Gamma $-.35$

It was felt that income might be associated with the desire to move, so this relationship was examined (Table XIII). It was found that nearly 50 percent of the low-income (0-\$299) group reported their housing as being okay and only 25 percent wanted to move. This indicates that the higher the income, the more likely the respondent was to desire to move. When this association was controlled for age of household head, it was found that those respondents who were the most likely to desire to move were between the ages of 31 and 61 years, those who were in their peak earning years. Age and income worked together to influence the desire to make a change. Sixty-eight percent of the elderly were in the lowest income group. Thus, they were constrained, both by age and income, from making needed improvements in their housing environment.

TABLE XIII
RELATIONSHIP BETWEEN DESIRE TO
CHANGE HOUSING AND MONTHLY
INCOME

Desire to Change	Income			Total
	Low-\$299	\$300-\$499	\$500-1600	
Okay	.49	.27	.24	1.00
Alter	.31	.30	.39	1.00
Move	.25	.29	.46	1.00

Gamma .31

The association between the desire to change housing and the housing satisfaction variables was greatest for (1) satisfaction with space and arrangement and (2) satisfaction with type, quality, and appearance (Table XIV). The first two age groups (18-30 and 31-44) had a substantial association between desire to alter and satisfaction with space/arrangement. The next two age groups (45-61 and 62-74) had a moderate association. The respondents over age 74 had only a negligible (insignificant) association. Available space was more critical as children grew and became more demanding. An increasing need for space was felt until the children started leaving home. The elderly (over 74 years of age) generally were two person households (or less) and had ample space. When asked what the most likeable characteristics of their dwelling were, the elderly (62-91 years) most often mentioned number of rooms, size of rooms, and comfort. Table XV shows that nearly three-fourths of the respondents (75 through 91 years of age) reported their housing situation as okay no matter whether they were neutral (to dissatisfied), satisfied, or very satisfied. Very few of the elderly wanted to move no matter what their satisfaction with space and arrangement.

The association between the desire to change housing and satisfaction with the type, quality, and appearance of the home was moderate to substantial for the age groups between 18 and 74 years. There was only a low association

TABLE XIV
 GAMMA COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN HOUSING SATISFACTIONS AND THE DESIRE TO CHANGE HOUSING

Desire to Alter or Move by Age	Housing Satisfaction			
	Space/ Arrange- ment	Type- Quality & Appear- ance	Cost/ Services	Location
18-30	-.54	-.49	-.27	-.29
31-44	-.58	-.57	-.20	-.03
45-61	-.48	-.49	-.24	.07
62-74	-.47	-.67	.02	-.11
75-91	-.07	-.21	-.01	.15

TABLE XV
 RELATIONSHIP BETWEEN DESIRE TO CHANGE HOUSING AND SATISFACTION WITH SPACE AND ARRANGEMENT FOR AGE GROUP 75-91

Satisfaction with Space/Arrangement	Desire to Change Housing			
	Okay	Alter	Move	Total
Neutral	.69	.23	.08	1.00
Satisfied	.77	.17	.06	1.00
Very Satisfied	.75	.21	.04	1.00

Gamma -.07

for the respondents over the age of 74. The respondents in the oldest age group were more likely to report their housing situation as being okay no matter if they were neutral (to dissatisfied), satisfied, or very satisfied with the type, quality, and appearance. The younger four age groups were not as limited physically or financially to improve their housing situation; therefore, were more likely to report their desire to make improvements or move.

Table XIV shows the relationship between the desire to make changes or move and satisfaction with the cost and quality of services. The association between the youngest three age groups was low and the two oldest age groups was barely negligible. The respondents 62 through 74 years of age were more likely to report that their housing was okay than the younger age groups. Of those over age 74, three-fourths of the respondents reported their housing as being okay no matter what their level of satisfaction with cost and quality of services.

The association between the desire to change housing and satisfaction with location in relation to fire and police protection was not significant enough to be influential to this study (Table XIV).

Further information about the home was analyzed by frequency counts. This information provided more insight into their housing situations. The question was asked, "Which of the following describes the way that you got this home"? Fifty-eight percent reported they bought it

used and 36 percent built it. Then the question was asked, "How did you finance this home"? Two-thirds of the respondents reported paying cash, nine percent got a personal loan, and one respondent used the Farmers Home Administration.

Other questions asked about structural quality, the desire to change present housing, and the respondent's use of available financial assistance. For the analysis in the previous part of Chapter III, structural quality was determined by the number of structural defects. There are other ways to examine structural quality, such as: "Which of the following describes the material of which your house is built"? Ninety percent reported a wood frame home. "What means of waste disposal do you use"? Fifty-one percent had a private system and 41 percent used a public system. Fourteen respondents reported they had no flush toilet. "Is your home fully insulated"? Fifty percent reported having no insulation at all, 19 percent had partial insulation, and 30 percent had full insulation. Fifty-five percent of the elderly respondents said they had made repairs which cost \$200 or more in the last two years, while 45 percent had not tried.

To examine the respondent's preference for location and house type, the following question was asked, "Let's suppose for a moment that your family was going to move to a new home. If you could have your choice, which of the following would you choose"? Two-thirds answered that they

would prefer "to live in an open country rural area in a single family house." Nearly 25 percent wanted "to live in a single family house, if the cost of housing would be 10 percent less than choice 1." Only four percent wanted "to live in a small rural community (less than 300 families) in a multi-family home, if the cost of housing would be 20 percent less than choice 1." These responses came from persons 62 years of age and older. Their preference of location is clear, and house type is evident.

The elderly respondents were asked if they would like to make some alteration in their present home or move. Two-thirds of the respondents said that their present home met their needs as it was, 24 percent wanted to make some changes, 17 respondents (10 percent) wanted to move. Of those elderly respondents who wanted to move, 64 percent thought they would make the change in the next two years. When asked, "Which of the following would you like to do"? 29 percent (of those who wanted to move) wanted to buy an existing home, 41 percent wanted to buy or build a new home, and 29 percent wanted to rent. However, 91 percent of the elderly respondents would not consider trying to get a loan in order to make the change.

Of the 41 elderly respondents who wanted to make changes in their present home, two-thirds thought they would make these changes in the next two years. Often the respondent reported that the changes needed first were in the bathroom and kitchen areas, then on structural problems. Some of the

older homes had no indoor bathroom and an addition was desired. However, 87 percent would not consider trying to get a loan to make these changes. The only other type of financial assistance mentioned by the respondent as a source he or she might use was a cash grant. Ninety-five percent of the elderly respondents reported in the past five years they had not tried to get a loan of \$500 or more to make some home improvement. Almost three-fourths of them thought they could get such a loan. Of those who tried, only 38% (3 respondents) got the loan they needed.

The majority of the elderly respondents preferred to live in open country rural areas and maintain their own single family homes. Many (two-thirds at least) spent time in their gardens. It should be realized that such independent living patterns were practiced by able bodied elderly respondents, no handicapped persons were observed in the open country areas.

Many of the elderly respondents' homes were in need of repair but limitations to their use of financial assistance programs prevented any improvements. Also, the majority of the elderly lacked the physical strength and/or ability to do the work themselves. Therefore, their homes continued to deteriorate. This problem should be recognized and further study is recommended to organize necessary programs to assist the elderly in making housing improvements and alleviate most of their housing problems.

CHAPTER IV

SUMMARY, OBSERVATIONS, RECOMMENDATIONS

Summary

Housing in low-income, rural areas has been ignored by government programs too long. The majority of the housing assistance programs are directed toward metropolitan areas. The visibility of substandard housing in metropolitan areas and the concentration of federal assistance programs in those areas contributes to the lack of understanding and discrimination against the residents of the rural, low-income areas where the majority of the dilapidated and deteriorating housing exists.

Financial assistance programs in rural areas consist of: (1) Farmers Home Administration who does not reach the lower income and elderly residents who need the assistance the most, (2) local banks whose loans are generally limited to good risk customers, short term, higher interest, and those who have the ability to repay, (3) and in some areas Housing and Urban Development has Section 8 housing rental subsidies which is limited in the study area by the fact that unoccupied, acceptable rental units were scarce. Therefore, the elderly found it very difficult to acquire financial

assistance to improve their present housing situation or move to a better quality dwelling.

Previous studies indicated the need for increased housing assistance programs for the elderly and a broader understanding of the value the elderly place on their housing. The elderly increasingly depend on their housing as a source of independence, a place of freedom to exercise, an expression of "self," and a source of financial and physical security. They are very reluctant to jeopardize this security to make housing improvements.

The purpose of this study was to examine the relationships between the age of household head and the living environment of families in low-income rural areas. The study concentrated on the elderly households (household head was 62 years of age or older) by identifying characteristics of housing, degree of satisfaction, sources of satisfaction, desires for housing improvement, and constraints which keep housing improvements from occurring. The data used in this study were from the S-95 Southern Regional Research Project funded by the Oklahoma Agricultural Experiment Station. The regional project focused on quality environment for low-income families in rural areas.

The interview schedule was designed to collect data on the socio-demographic characteristics of the family, characteristics of present housing, structural quality, desired housing, and housing satisfaction. Trained interviewers

collected the information from 400 families in two low-income rural counties of Oklahoma. In most cases, the respondent was either the wife of the male head of the household, or the female household head.

The socio-demographic characteristics of the families were analyzed by frequency counts and relationships among them were analyzed by crosstabulations using a gamma coefficient to identify the strength of the relationships of the variables.

The first objective was to describe the socio-demographic characteristics of the elderly and analyze relationships between age and other socio-demographic characteristics for the total sample. Approximately two-thirds of the elderly respondents were between the ages of 62 and 75 years, and one-third were over age 75. A distinctive difference of opinion on many subjects was found for these two age groups. The educational attainment level for the elderly was rather low, with three-fourths completing the eighth grade or less. Most households (85 percent) had two-persons or less living within the house. There were more Native American and Black respondents in the elderly sample than would be found across the state, due to the history of the area. The percentage of female household heads (34 percent) was larger than expected. Monthly per capita income was smaller than expected, with 72 percent having \$173 or less per month.

The relationships between age of household head and the socio-demographic characteristics indicated that age of the household head was associated with income, household size, education, and sex of household head. The older the respondent the less education he, or she, was likely to have. The percentage of female household heads increased as age increased. The elderly were more likely to have two-person (or less) households due to the fact that their matured children had already moved away from home.

Housing characteristics (objective two) of the subsample of 170 elderly respondents were house type, location, tenure, persons-per-room, and structural quality. The elderly respondents (age 62 and older) were more likely to own and live in a lower quality, single family dwelling with .5 persons-per-room or less, in an open country area or rural village. When asked where, and what type of house they would move to if they had the opportunity, the majority preferred a single family dwelling in an open country rural area. There seemed to be no significant relationship between age and structural quality. The interviewer felt that this was because the elderly were less likely to report structural defects and less likely to report a low-quality home.

Objective three was to examine, among the various age groups, the relationships between housing characteristics, housing satisfaction, and the desire to make some change in

the present housing situation. The desire to make some change in the present housing situation was determined by the respondent's answer to the question, "Does your present home meet your family's needs as it is or would you like to make some change"? The younger age groups (18 through 61 years) were more likely to desire to make alterations in their present housing or move, while those respondents over age 61 were more likely to report that their housing was okay. It was felt that income might be associated with the desire to move, so this relationship was examined. It was found that the higher the income the more likely the respondent was to desire to move. However, when the association was controlled for age of household head it was found that age and income worked together to influence the desire to make a change.

The association between the desire to change housing and the housing satisfaction variables was greatest for (1) satisfaction with space and arrangement and (2) satisfaction with type, quality, and appearance. When asked what the most likeable characteristics of their dwelling were, the elderly most often mentioned number of rooms, size of rooms, and comfort. Nearly three-fourths of the respondents over age 75 reported their housing situation as "okay" no matter what their level of satisfaction. The association between the desire to change housing and satisfaction with type, quality, and appearance indicated that the younger age groups (under age 62) were more likely to

report their housing as "okay" no matter what their level of satisfaction.

A large percentage of the elderly had lived in their present homes over twenty-five years and the home was most often purchased used. Ninety percent reported their homes were constructed of wood and half had no insulation. The majority utilized a private sewage system and fourteen elderly respondents had no flush toilets.

Two-thirds of the elderly respondents preferred to "live in an open country rural area in a single family house." Two-thirds replied that their present home met their needs as it was.

The elderly were not likely to jeopardize their home, the security it provided and their sense of belonging to an area, by obtaining a mortgage on their home to make repairs and improvements. Ninety-one percent of the elderly respondents would not consider trying to get a loan in order to make the change.

The elderly respondents in low-income rural areas were generally limited by their own physical strength and lack of skills when it came to home maintenance and repairs. They were also limited by the lack of availability of financial assistance because of their advanced ages and their fixed, low incomes. These constraints kept them from making necessary home improvements while their homes deteriorated around them.

The desire to make changes in their present housing situation was overshadowed by their physical and financial limitations; therefore, the elderly were compelled to be satisfied with what they had, as compared with having nothing.

It should be recognized that there were housing problems in low-income rural areas and, justifiably, something should be done to alleviate these problems. The federal government should allocate financial assistance according to the need, not according to the visibility of the need. Since the largest percentage of the dilapidated and deteriorated was in non-metropolitan areas, the largest proportion of financial assistance should be allocated to non-metropolitan areas.

Observations

As an interviewer, the author had the opportunity to observe and experience personally the elderly respondents and their housing situations. From personal contact with these people it was found that it was generally easy to get into their homes to talk to them because they enjoyed having company. (They seemed quite vulnerable to "sincere looking" salesmen, which is a hazard.) Questioning them was rather simple; they often revealed more information than was necessary. After the interview schedule was complete, many respondents engaged in friendly conversation

with the interviewer which provided the interviewer with more insight in interpreting the information on the interview schedule. It was often revealed that their children wanted their elderly parents to move closer to them so they could take care of them, but the elderly were not ready to give up their independence and make the move.

There was a great sense of attachment to the dwelling and the area in which the respondents lived. The accumulation of memories increased their desire to remain in their present dwelling.

The interview schedule asked questions about the structural quality of the elderly respondents' homes and the data obtained reflected few structural problems. However, it was obvious to this interviewer that many of the problems, such as decaying window and door frames, peeling paint, and sagging floors were present but minimized or not reported by the respondents. Evidently the respondents realized that their physical and financial limitations prevented them from making repairs and improvements, therefore they ignored the problems, or managed to structure their lives to accommodate the inconvenience.

For the elderly respondents, the important factor in satisfaction with housing is the sense of security, independence, and self worth it tends to provide. No other possession seems to compare in importance, and they seem to be satisfied with their housing no matter what condition it is in structurally.

Recommendations

The author suggests the following recommendations to be studied further in the area of housing for the elderly in low-income rural areas:

- (1) The financial assistance programs in non-metropolitan areas should include a program for low-income elderly residents which would make funds available for home improvements and repairs without jeopardizing the security of their home ownership.
- (2) That information on housing assistance programs, health programs, and educational opportunities should be distributed regularly through the mail so the elderly will have a better idea what programs are available to them.
- (3) A plan for public transportation, such as a minibus, to pass by the elderly's homes at least twice a week to take them to town for shopping and social activities and then return them home.
- (4) That a more detailed and conclusive study be conducted to determine and better understand the underlying satisfactions, desires, and expectations the elderly have for their housing.

- (5) A study should be done to determine how the federal government should equalize the amount of money it puts into housing improvements in metropolitan areas, and reduce discrimination against non-metropolitan areas where the percentage of substandard housing exists.

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