

REPRESENTATIVE HOUSING OF THREE ETHNIC GROUPS IN TEXAS

Alice C. Stubbs
Flowayne Drew

In the Texas portion of a Southern Region Study, "Physical, Social and Economic Aspects of Functional Housing for Low-Income Families", 813 lower income families in a rural county, an urban community and a rural county with principally Mexican-American population were interviewed. A high percentage of Mexican- and Afro-Americans had deteriorated or dilapidated houses. Factors contributing to these conditions were sagging or broken foundations, lack of plumbing, and poor exterior walls, roof, porches, and steps as well as broken or absence of screens on windows and doors.

Most of the families lived in four to six room houses which they owned. Mexican-Americans with younger and larger families lived in the smaller houses while Euro-Americans with older and smaller families lived in the larger houses.

Ethnic group rather than location was found to contribute to chi square significance in exterior construction, size and condition of the house of drinking water and type heating system.

An awareness of the deficient housing condition of many families has prompted a stepped-up effort to find ways of alleviating this problem. Before constructive efforts can be made, an understanding of the existing situation must be

Dr. Stubbs is a professor and head of the Consumer Research Center Texas Agricultural Experiment Station, Texas A&M University. Mrs. Drew is a research associate at the Consumer Research Center.

reviewed. An investigation which was made of representative housing of low-income people from three ethnic groups and three locations provides information about the kinds of housing people occupy in Texas.

¹This article is the first of a two-part sequel. It reports on present housing situations of low-income people, indicating relative amounts of dilapidation, deterioration and other inadequacies in their houses. Data is from Southern Region Project S-66, "Physical, Social and Economic Aspects of Functional Housing for Low Income Families."

The needs and problems involved in providing better residential housing for low-income families are shown by the data in this report. Housing data collected in rural and urban samples of low-income families in Texas indicated that minority groups had the poorest housing conditions. Many Euro-American² houses were more than 20 years old, but were rated in better condition than newer houses of the minority groups.

Upgrading the overall residential housing in both rural and urban areas can be accomplished by remodeling, repairing and installing basic conveniences in the present structures, or by constructing new units to meet the needs for satisfactory housing livability. Because of factors extraneous to the house, building of new structures is not always the best solution for improving poor housing conditions.

Introduction and Methodology

A procedure for random sampling was followed in the selection of respondents (Stubbs, 1975). Eligible families had to have two or more members.

Locations sampled were in three different areas of the state. The first was from rural East Texas, in which 60 percent or more of the population had low incomes³, and from low-income areas of an urban community in which 50 percent of the population had low incomes. The second area sampled was Waco, a city of approximately 100,000. Waco was selected because of its similarity to cities in other states in the Southern Region.

The rural Rio Grande Valley county (Willacy) was randomly selected as the third area for study, in order to obtain a representative sample of Mexican-Americans⁴. Using a serpentine manner and beginning at the upper right hand

corner, a county map was divided into numbered sections with 20 residences in each. Sample sections were drawn by random number. Experience indicated that ten completed schedules might be secured from each section. In rural counties many houses shown on county maps are vacant, not inhabitable, or are used as barns. Thirty original and ten alternate numbered sections were drawn to give a sample size of 300.

In the urban community each block in the low-income area was numbered consecutively on a city map. Five completed schedules were expected from a block. Every seventeenth numbered block was needed to obtain the desired 300 completed schedules. A random number between one and seventeen was drawn for the first block, then every seventeenth block was drawn. Interviewers were instructed to interview at every third residence beginning at the northwest corner of a block. The first house was selected by random number from one to three. From the first house interviewing continued in a clockwise manner around the block. No more than ten interviews were taken from any one block. Apartment units were numbered in the same manner as single-family residences. The primary family in a household was used for the sample. The second house in each group of three was used for an alternate if five schedules were not obtained from the first canvas of a block.

Interviewers were local people selected for their experience, personal qualifications and ability to establish rapport with respondents, who were usually the female heads. Pre- and in-service training was given and careful supervision was provided during data collection. Bilingual interviewers worked in Willacy County.

Description of the Sample

As a whole, the Euro-American families were in older age groups, had smaller families, were in latter stages of the family life cycle and had higher educational levels than the other two groups. Their occupations were most often those which commanded a higher pay scale and, even

²Americans of European descent.

³Low income based on Social Security estimates in July 1968 *Index of Sales Management* used to determine counties with high percentages of low-income families.

⁴Americans with Spanish surnames.

Table 1a
Household Head* Demographic Data by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	331	161	208	700
	Percent			
Age of Male Head				
18 to 35	17	14	30	20
36 to 65	58	62	59	60
65 and older	25	22	11	20
Education of Male Head				
2 years or less	10	27	42	24
3 to 8 years	30	35	42	35
9 to 12 years	40	26	12	29
above high school	15	3	2	9
Occupation of Male Head				
Prof./manager	7	4	2	4
Clerical and service	5	1	2	1
Skilled	18	9	12	9
Nonskilled/related	25	16	9	18
Farmer	14	2	3	8
Employment of Female Head*				
Employed	25	33	8	22
Homemaker	69	62	92	74
Retired and other	5	5	0	4
N =	349	201	230	780

*In this article, both male and female are considered head(s) of the family on an equal basis.

in retirement, their per capita incomes were higher than the other respondents. Table 1a shows some characteristics of the male and the female heads of the households for the three ethnic groups. Table 1b shows some characteristics of the families in the three ethnic groups.

⁵Americans of Negroid descent.

Table 1b
Family Demographic Data by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Family Cycle				
Young married	10	5	14	10
Stable	34	42	64	45
Contracting	52	42	16	6
Miscellaneous	4	10	7	39
Number in Family				
One to two	49	41	13	37
Three to six	46	44	42	46
Seven to fourteen	4	16	36	16
Number of children				
None	45	39	11	34
One to four	49	44	53	49
Five to seven	5	10	23	12
Eight to fourteen	0	5	13	5
Per Capita Income				
499 or less	3	21	29	15
\$500 - 1,499	16	34	50	29
\$1,500 - 2,999	49	34	19	37
\$3,000 or more	33	11	2	19

The Afro-Americans⁵ were similar to the Euro-Americans in age and stage of life cycle, but their educational and occupational levels were lower. Also, their families were larger and their per capita incomes were lower. The Mexican-Americans had younger family heads, larger families, lower educational levels and, although their occupations were similar to the Afro-Americans, their per capita incomes were smaller.

Findings

The survey was designed to elicit positive or negative responses to questions such as "Do you have hot running water?" or "How many rooms

do you have, omitting the bathrooms and halls?" The respondent's "perception about his present housing condition was the basis of rating.

Katona (1964) pointed out in a 1962 study that although the rate of home ownership rises with income, many families with incomes of \$2,000 to \$5,000 were home owners. This study reaffirms findings related to the frequency of home ownership for low-income families, as 70 percent of the respondents were home owners. Mexican-American respondents had the lowest per capita income and the highest ownership of the three ethnic groups. Table 2 shows various characteristics of the dwellings of the ethnic groups.

Table 2
Tenure, Type, Age and Construction of Dwellings
by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Owner occupied	73	54	77	70
Single family	89	92	97	92
More than 20 years	63	70	35	57
Construction:				
Brick veneer, stone	13	1	1	6
Wood frame, painted, asbestos siding	68	67	65	68
Wood frame, unpainted, asphalt siding,	4	20	22	21

A majority of families sampled purchased houses that were ready-built. Most of the Mexican-American families who did not own their houses received them as part of their income for services rendered. Of the other two ethnic groups, there were more renters among

the Afro-Americans; more than half of both groups were home owners.

Houses in the sample were usually single-family, painted wood frame or asbestos siding, and 20 or more years old. There was some variation in the characteristics of the house occupied by the different ethnic groups. Afro- and Euro-Americans more often lived in larger older houses, while Mexican-Americans lived in smaller houses that were less than 20 years old. Two extremes in construction were shown by 13 percent of the Euro-American families living in houses with brick exterior walls and 4 percent Afro- and 7 percent Mexican-American families living in houses made of scrap wood and/or metal. Five Euro-American families and one Afro-American family lived in mobile homes.

Condition of House

To rate the condition of the house, the terms "sound," "deteriorating," and "dilapidated" were used as guides in a scale for exterior walls, foundation, and roof. These terms were defined for each of the three features of the house:

Exterior wall:

1) Sound: no broken boards or steps, windows tight, good appearing condition, 2) deteriorating: some loose siding, few broken porch boards or steps, windows loose, 3) Dilapidated: siding and/or porches and steps sagging, warped or broken, broken windows

Roof:

1) Sound: no sag in roof line, no obvious defect, 2) Deteriorating: slightly sagging roof line, few buckled shingles, 3) Dilapidated: sagging roof line, broken or curled shingles, worn seams and evidence of leaks

Foundation:

1) Sound: continuous and in good repair, no breaks, 2) Deteriorating: good stone or brick piers permitting sinking or uneven level of house, 3) Dilapidated: sagging wooden piers or defective (broken) continuous foundation

Some of the interviewer ratings are shown in Table 3.

Table 3
Condition of House by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Sound				
Exterior	77	42	12	49
Foundation	74	30	12	44
Roof	83	45	15	53
Deteriorating				
Exterior	16	37	68	37
Foundation	18	41	66	38
Roof	12	34	67	34
Dilapidated				
Exterior	5	20	20	13
Foundation	8	27	22	17
Roof	4	20	18	13

Within each ethnic group, ratings were similar for each factor. A majority of the Euro-American houses were rated "Sound" in all three housing features.

In the Afro-American group, almost an equal number were "sound" or "deteriorating" and a slightly lower percentage was rated "dilapidated".

A majority of the Mexican-American houses were rated deteriorating and fewer were dilapidated compared to those of the Afro-Americans. An influencing factor in the differences between the two groups could be that the Mexican-American houses were not as old as those of the Afro-Americans.

The large number of dilapidated houses in the Afro-American group was partially related to the absence of screens on doors and windows in one-third of the houses.

Interior of House

Table 4 shows room related characteristics of

Table 4
Number and Type of Rooms by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Families having				
Number of Rooms				
One or two	1	•	6	2
Three	4	6	14	7
Four	15	24	29	21
Five	27	30	27	28
Six	27	24	16	23
Seven or more	24	14	4	16
Families having:				
Type of Rooms				
Separate living room	89	80	71	82
Family room	32	14	16	22
Separate dining room	50	37	21	38
Separate kitchen	98	99	58	86
Bedrooms:				
One	7	5	15	9
Two	40	49	48	45
Three	46	40	28	39
Four	6	5	6	6

*Less than one percent

the ethnic groups.

The most common house size was five rooms. Approximately 50 percent of the Mexican-Americans had less than five rooms and 50 percent of the Euro-Americans had more than five rooms. The Afro-Americans were in the middle where 30 percent had three- and four-room houses, 30 percent had five-room houses, and 34 percent had six and seven-room houses.

Most of the Euro-American houses had adequate living areas while there was a deficiency of living space in many of the Afro- and Mexican-American houses.

A lack of food preparation and service space was found in many houses, especially those of Mexican-American families.

Personal space was found to be inadequate for many Mexican- and Afro-American families since 63 percent of the Mexican-Americans (with the largest family size) and 54 percent of the Afro-Americans had one or two bedrooms. The data indicate that only a few Euro-American families had inadequate personal space.

Crowding in low-income residences is reflected by the number of persons who occupy one bed at the same time as is shown in Table 5.

TABLE 5
Person-per-bed Ratio

Persons/bed	Number	Percent
3 or more	59	7
2.1 - 2.9	45	6
2.0	194	24
1.3 - 1.9	183	22
1.1 - 1.2	106	13
1	226	28

“One of the factors determining the condition of a house is the presence of a water supply, toilet facilities and bathing facilities.” (Focus 1966) Almost all Euro-Americans had cold piped water in the house and 90 percent had hot water. However, the other two groups dropped considerably below the Euro-Americans in regard to these conveniences. Table 6 shows some plumbing characteristics of the groups.

Euro-American families had bathing and toilet facilities with proper sewage disposal in more than 90 percent of the cases. Of the other two groups, about one-half of the Mexican-American families and three-fifths of the Afro-American families had these facilities. Outside toilet facilities were most often of the open privy type, but 26 percent of the Mexican-American families had a sanitary pit.

The predominant heating system used in the houses of all three ethnic groups was space

Table 6
Plumbing Facilities by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Source of Drinking Water				
Faucet in house	96	65	71	81
Faucet in yard	1	8	26	10
Well in yard/rain barrel	2	11	2	5
No source on premises	•	15	1	4
Hot Water				
Yes	90	55	42	67
No or no answer	10	45	58	38
Number of Bathrooms				
None	5	37	35	22
Half	2	2	7	4
One	71	57	42	59
One and half	7	1	•	3
Two	13	2	3	7
Number of Tubs				
None	30	62	67	49
One	68	37	18	45
Two	2	1	•	1
Number of Showers				
None	87	99	68	84
One	13	1	17	11
Number of Comb. Units (tub with shower)				
None	75	75	70	73
One	23	25	15	21
Two	2	•	0	1
Toilet				
Indoor, flush	94	60	49	72
Outside pit	1	15	26	12
Open privy	5	25	23	15
Sewage Disposal				
None	6	41	45	26
Sewer	50	39	23	39
Septic tank	42	18	25	31
Cesspool	1	2	5	3

•Less than one percent.

heaters, which Mexican-American families used almost exclusively.

The principal heating fuel used by the families was natural gas in urban areas and bottled gas in rural areas.

Seven types of cooling systems were used. The types used most often were portable fans, window compression units, water coolers, and open windows. Frequency of use of the different types varied extensively among the groups. Table 7 shows characteristics of heating and cooling systems for the groups.

Table 7
Heating and Cooling Systems by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
Heating*				
Central heat	12	2	0	7
Floor or wall heaters	19	13	4	12
Space heaters	70	82	88	78
Cooling				
Refrigerated air	53	13	18	33
Fans	45	64	63	55
Open windows	4	21	19	13

*No regular heating system, 1 percent; no answer, 2 percent.

General Features of House

The majority of Euro- and Mexican-American houses had finished hardwood floors, but over half of the hardwood floors in the Afro-American houses were unfinished. Second in importance for floor construction was unfinished softwood, especially in the Euro- and Afro-American houses. Other types of floor construction were finished or painted softwood and concrete. A number of Afro- and Mexican-American houses had wooden floors with cracks, and nine

Mexican-American families had earthen floors.

There was a wide range in the percent of families having various types of floor coverings. Euro-American families had carpets or scatter rugs, Mexican-American families had linoleum floor coverings, and Afro-American families had linoleum or hard sheet/tile floor coverings in living areas.

Most kitchen floors had some type of hard covering. For the Euro-American group, this was usually a sheet or tile composition material, while the Afro- and Mexican-American groups had linoleum-type floor covering. Many kitchen floors of the Afro- and Mexican-American families had no covering.

Built-in closet space and type of door closures between rooms and on closets were considered as features that could be used as an index of housing adequacy. These are very general assumptions which must be related to the individual structure and the family in order to determine real adequacy.

There is no information on number and size of closets present which could have been used to estimate adequacy on the basis of minimum recommended areas from previous research (Pardee, 1959; Philson, 1963; McCullough, 1956). Only the presence or lack of closet space in the

Table 8
General Housing Features by Ethnic Group

	Ethnic Group			Total Sample
	Euro-Amer.	Afro-Amer.	Mex.-Amer.	
N =	364	205	236	805
	Percent			
With closet	98	78	87	90
Permanent closet doors	93	56	51	71
Permanent doors between rooms	98	91	57	84

houses is revealed by these data. Afro-American families most often had no closets, with those of Mexican-American families second and Euro-American families third. Table 8 shows closet characteristics of closets and doors for the three groups.

The kind of door closures used between rooms and on closets reveals something about provisions for privacy in houses and the adequacy of storage areas. In low-cost housing, construction costs are often held down by the elimination of doors that are not absolutely essential. This was the situation in many of the houses.

Statistical Tests

To establish significant relationships of housing variables to socioeconomic variables, chi square tests were made. All of the socioeconomic variables, with the exception of employment of female head, were significantly related to almost all of the housing variables usually above the 99 percent level of confidence.

Since the Mexican-American ethnic group and the Willacy County location are essentially the same variable, it cannot be determined whether ethnic group or location is the influencing factor in the Willacy County data. To find the significant relationship of ethnic group-location variables to housing variables, an examination of rural-urban and Euro-/Afro-American variables in Waco and Grimes County was made. Ethnic group rather than location was found to be the contributing socioeconomic variable at the 99 percent level of confidence with the following housing characteristics: exterior construction, size of the house, condition of the house, source of drinking water, and type heating system. Compared to the Euro-Americans, the Afro-Americans had more houses which were in poorer condition, were more crowded, and more often did not have piped water, a bathroom or hot water.

Examination of the other socioeconomic variables indicated that income had a direct relationship to all factors involving costs such as brick exterior, plumbing and age of the house.

Tenure categories included renters and two groups of owners—one group who purchased the house ready built and the second group who built all or part of it. Renters were found to be dominant in all cases of significant relationships. Their houses were smaller and of poorer quality than those of the home owners. It was of little significance whether the owner participated in the building of his house or purchased it ready built. A notable exception was the lack of plumbing features in owner built houses.

Summary

The search for improved housing of low-income people requires an understanding of specific information about their present housing conditions. The random sample study of low-income families from rural and urban areas in Texas showed the following predominating conditions:

Respondents were home owners whose houses were most often purchased ready-built.

The houses were single-family units, painted wood frame or asbestos siding, and 20 or more years old.

The condition of the house was directly related to ethnic group. Euro-American houses were usually in sound condition. A majority of Mexican-American houses were deteriorating, and most of the Afro-American houses were either deteriorating or dilapidated.

The most common house size was five rooms. Variation was again related to ethnic group—Euro-American houses were largest and Mexican-American houses were smallest.

Living space, food preparation and service space, and personal space were often inadequate, especially in Mexican-American homes.

An in-door water supply was absent in 35 and 29 percents, respectively, of the Afro- and Mexican-American houses and approximately half of these houses did not have hot water. Most Euro-American houses had piped and hot water facilities.

Euro-American families had bathing and toilet facilities with proper sewage disposal in more

than 90 percent of the cases while about 50 and 60 percents, respectively, of the Mexican- and Afro-American families had these facilities.

The space heater was the predominant heating system and natural gas was the principal heating fuel for all three ethnic groups.

The significant relationship of ethnic group to housing conditions was established by statistical tests.

Although the data presented here applies only to Texas, they are representative of large areas of the state. This report has been prepared to give those working with low-income families a better understanding of lower income housing conditions. It may also be suggestive of additional studies that would provide useful techniques for improving housing conditions.

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