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CARLL, MARY ALLISON. Values of Low-Income Homemakers as They Relate to the Physical Design of the House. (1973) Directed by: Dr. Jane H. Crow. Pp. 90.

The purpose of this study was (1) to determine the housing values of low-income families as they relate to the physical design of the house, and (2) to compare housing values of black and white subjects. The values were further compared to determine if significant differences in housing values do exist in different geographic locations.

Data were secured by a pretested value scale adapted by the investigator from existing scales. Those values tested were convenience, leisure, health, safety, family centrism, equality, privacy, personal freedom, aesthetics, social prestige, and economy. The value scale was administered to fifty-two low-income homemakers living in government-subsidized housing. One-half of the sample was drawn from housing authorities in the state of Delaware, while the other one-half was taken from a housing authority in North Carolina. The sample was further sub-divided by race, with one-half of each region being black and the other one-half being white.

Results of the study revealed that the values of economy, personal freedom, social prestige as related to the neighborhood, and privacy from the neighbors, were most important to the low-income homemakers. Of least importance were family centrism, leisure, and health. Further study is needed to determine the importance of the value of safety.

Findings significant at the .01 level, either by race or area, were these: the black subjects were more concerned with a place for

their children's possessions than were the white subjects; the white subjects believed that the neighborhood where a house is located is more important than did the black respondents; and the North Carolina homemakers were more desirous of a beautiful house than the Delaware subjects.

As a whole, the homemakers expressed satisfaction with the dwelling units in which they were presently living. The North Carolina white subjects were the least satisfied with their housing, while the Delaware white respondents expressed the most satisfaction. Economy and ease of maintenance were cited as two of the best-liked features of the dwelling units. The greatest sources of dissatisfaction were the neighborhood and lack of space and privacy. The most desired change was a yard or place for children to play.

VALUES OF LOW-INCOME HOMEMAKERS AS THEY
RELATE TO THE PHYSICAL DESIGN

OF THE HOUSE

by

Mary Allison Carll

A Thesis Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
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of the Requirements for the Degree
Master of Science

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1973

Approved by

Jane H. Crow
Thesis Adviser

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I wish to express my sincere gratitude to all the people who have contributed toward making this study a reality.

APPROVAL SHEET

This thesis has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

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I wish to express my sincere gratitude to all the people who have contributed toward making this study a reality.

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TABLE OF CONTENTS

| Chapter | Page |
|--|------|
| I. INTRODUCTION | 1 |
| Purpose | 2 |
| Limitations of the Study. | 3 |
| Definition of Terms | 3 |
| Assumptions | 4 |
| II. REVIEW OF LITERATURE | 5 |
| Low-Income Life Styles. | 5 |
| Value Studies | 10 |
| The Design Concept. | 14 |
| III. PROCEDURE. | 21 |
| Selection of Sample | 21 |
| Development of the Instrument | 22 |
| Collection of Data. | 23 |
| Analysis of Data. | 24 |
| IV. FINDINGS | 26 |
| Description of the Respondents. | 26 |
| Description of the Public Housing | 33 |
| Housing Likes and Dislikes. | 36 |
| Analyses of the Value Statements. | 38 |
| Economy. | 39 |
| Personal Freedom | 40 |
| Privacy | 41 |
| Convenience. | 43 |
| Leisure | 45 |
| Social Prestige. | 46 |
| Aesthetics | 47 |
| Family Centricism. | 48 |
| Equality | 49 |
| Health | 49 |
| Safety | 52 |
| Other Factors Related to Satisfactions | 52 |
| Satisfaction with Present Housing | 55 |
| Interpretations of Findings | 56 |

| Chapter | LIST OF TABLES | Page |
|------------|---|------|
| V. | SUMMARY AND RECOMMENDATIONS | 58 |
| | Summary | 58 |
| | Recommendations | 66 |
| | BIBLIOGRAPHY | 69 |
| APPENDIX A | Questionnaire and Data Sheet | 75 |
| APPENDIX B | Table 17. Percent of Strong Agreement and Mean for the Value Statements | 82 |
| APPENDIX C | Table 18. Analyses of Variance for Non-Significant Value Statements | 85 |
| | 1. Personal Freedom: Grand Mean and Percent of Strong agreement of Scores by Item | 89 |
| | 2. Privacy: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 91 |
| | 3. Convenience: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 93 |
| | 4. Culture: Grand Mean and Percent of Strong Agreement of Scores by Item | 95 |
| | 10. Social Prestige: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 97 |
| | 11. Aesthetics: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 99 |
| | 12. Family Contact: Grand Mean and Percent of Strong Agreement of Scores by Item | 101 |
| | 13. Equality: Grand Mean and Percent of Strong Agreement of Scores by Item | 103 |
| | 14. Health: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 105 |
| | 15. Safety: Grand Mean and Percent of Strong Agreement of Scores by Item | 107 |
| | 16. Other Factors Related to Dissatisfaction: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 109 |

LIST OF TABLES

| Table | Page |
|---|------|
| 1. Description of the Sample (N=52) | 27 |
| 2. Best-Liked Features in Public Housing Dwellings (N=52) . . . | 36 |
| 3. Least-Liked Features in Public Housing Dwellings (N=52). . . | 37 |
| 4. Suggestions of Public Housing Residents for Improvement of Dwelling Units (N=52). | 38 |
| 5. Economy: Grand Mean and Percent of Strong Agreement of Scores by Item (N=52) | 40 |
| 6. Personal Freedom: Grand Mean and Percent of Strong Agreement of Scores by Item | 40 |
| 7. Privacy: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item. . . . | 42 |
| 8. Convenience: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item. . . . | 44 |
| 9. Leisure: Grand Mean and Percent of Strong Agreement of Scores by Item | 45 |
| 10. Social Prestige: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item. . | 47 |
| 11. Aesthetics: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item. . . . | 48 |
| 12. Family Centrism: Grand Mean and Percent of Strong Agreement of Scores by Item | 49 |
| 13. Equality: Grand Mean and Percent of Strong Agreement of Scores by Item | 50 |
| 14. Health: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item. . . . | 51 |
| 15. Safety: Grand Mean and Percent of Strong Agreement of Scores by Item | 52 |
| 16. Other Factors Related to Satisfactions: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item | 53 |

| Table | Page |
|--|------|
| 17. Percent of Strong Agreement and Mean for the Value Statements | 82 |
| 18. Analyses of Variance for Non-Significant Value Statements . . | 85 |

LIST OF FIGURES

| Figure | Page |
|---|------|
| 1. Visual Device Designed to Aid Homemaker in Response to Questions | 24 |

Winston Churchill once stated that we shape our buildings and then they shape us. Most people have learned from experience the truth of that statement. Once a family moves into a house, its members must adjust themselves to the physical design. It has been found in several studies cited by Schorr (39:8-9) that housing not only influences behavior and attitudes, but also controls the way in which an individual or family perceives his- or itself. Housing choice is most often affected by values, stage in the family life cycle, and income. Of these three, a family's values will tend to remain the most constant and determine the degree of satisfaction which it obtains from its home (41:176-177).

Since low-income families usually have little or no choice about the type of dwelling in which they live, it is important to understand and consider the values of these low-income families. Under Operation Breakthrough, based on the Housing and Urban Development Act of 1968, 25,000 government-subsidized units are to be built throughout the country over a period of five years (42:77). Many of these units will house low-income families. Of the twenty-two private firms receiving research and development grants, only one has indicated that they propose to involve the community in the design and decision-making processes to meet their needs. Overlooking the impact of housing on

CHAPTER I

INTRODUCTION

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people, developers may believe that they are meeting needs through advanced technology; but this is often not so.

Are the values, wants, and needs of low-income families being considered in building government-subsidized housing? Taggart claimed that one of the chief weaknesses of public housing is a "comparative neglect of the importance of design and beauty which are elements in the good life along with space, light, and shelter" (42:33). In his book about a low-income, high-rise, federal housing project called "Blackmoor" located in "Midwest City," U.S.A., William Moore, Jr. stated:

There is little doubt that the physical structure of housing projects is better and is more in keeping with the minimum standards of decency and is more functional; however, the physical structure was the only change. The standards, values, attitudes, and behaviors of the tentative inhabitants apparently were not considered in the planning . . . (28:87).

When designing and building a home for any family, it is important that the physical design of the house be related to the residents' values. Therefore, it is necessary that the values of low-income groups be identified, so that their housing can meet their expressed wants and needs.

Purpose

This study was undertaken (1) to determine housing values of low-income families as they relate to the physical design of the house, and (2) to compare housing values of black and white subjects.

It is hoped that these findings will provide a basis for further study and that the instrument developed can be used by designers, developers, and builders in future projects.

Limitations of the Study

This study was limited to two areas of the country--Delaware and North Carolina. One-half of the sample was drawn from housing authorities in Newark and Dover, Delaware, while the other one-half was taken from the housing authority in High Point, North Carolina. All residents were classified as "low-income" according to government standards and were living in subsidized housing. The study was further limited to fifty-two women who were married or were acting as head of their household, and one-half of these women were black.

Definition of Terms

Low-Income. An income of \$3,000 or below for a family of one and up to \$8,000 for a family of ten people, as defined for eligibility for subsidized housing under the Housing and Urban Development Act of 1968.

Human Values. "The totality of a number of factors, such as an individual's ideals, motives, attitudes, and tastes, which are determined by his cultural background, education, habits, and experiences" (4:343).

Housing Authority. "An agency set up under state-enabling legislation to construct and manage public housing" (4:343).

Public Housing. Housing provided by the government for those families whose incomes are not sufficient to pay and economic rent. The difference in rent paid by occupants and housing costs is provided through a government subsidy.

Assumptions

The basic assumptions for the study are:

1. The housing values held by low-income groups can be identified by the value scale adapted by the researcher.
2. The adapted instrument will elicit honest answers from the respondents.

...the value, nature, and need of low-income families being ...
 ...in building government-subsidized housing ...
 ...the literature indicates that little research has been done in this ...
 ...the literature has indeed been limited to ...
 ...by low-income groups ...
 ...the low-income life styles (1) existing value attitudes ...
 ...the topic; and (2) the ...
 ...series of experts in the field believe it necessary to include ...
 ...in housing, although the family itself may not be aware of these needs.

Low-Income Life Styles

According to the 1970 census, 6.3 percent of all occupied housing ...
 ...lacked some or all plumbing facilities. By definition, almost any ...
 ...unit is considered as substandard housing ...
 ...Eight percent of these occupied units ...
 ...with more than one person per room (1971-2). Education, health, and ...
 ...social-developmental ...
 ...participate in ...
 ...health but ...
 ...a challenge to one's individuality (1971-2). ...
 ...stated, "It seems clear that families who have improved their housing

CHAPTER II

REVIEW OF LITERATURE

Are the values, wants, and needs of low-income families being considered in building government-subsidized housing? A review of the literature indicates that little research has been done in this specific area. In determining the type of housing needed and desired by low-income families, it is necessary to study three distinct areas: (1) the low-income life style; (2) existing value studies relating to the topic; and (3) the expressed needs of low-income families and a review of what experts in the field believe is necessary to include in housing, although the family itself may not be aware of these needs.

Low-Income Life Styles

According to the 1970 census, 6.9 percent of all occupied homes lacked some or all plumbing facilities. By definition, almost any watertight building with indoor plumbing is considered to be "standard." Eight percent of these occupied homes could be considered overcrowded, with more than one person per room (44:1-9). Education, health, and social development suffer in these poor environments, and this in turn perceptibly influences behavior and attitudes. Crowding not only affects health but has certain psychological consequences as well, such as stress and a challenge to one's sense of individuality (39:16-18). Schorr stated, "It seems clear that families who have improved their housing

feel they have improved their situation and status" (39:11). No change in aspirations was noted, however.

According to Riemer and Demerath (35:232-33), the variables in home life to be considered in planning a house are: (1) social position, (2) daily home activities, (3) everyday life and special occasions, (4) weekly home activities, (5) seasonal fluctuations, (6) social change, (7) personality traits, and (8) the family life cycle. Foote et al. (15) reported that at different stages in the family life cycle, certain values may become more important than others. The average family goes through five distinct stages in the family cycle and may require a different housing design with each stage. On the other hand, most low-income families do not follow this mean pattern, and if they cannot afford to move, adjustment to the life cycle must take place within one dwelling. Therefore, it is particularly important that low-income housing meet the family's needs and wants. It has been hypothesized that certain characteristics such as age, income level, family type, and ethnic background, may lead to similar values in housing, although this area needs to be studied in greater depth.

Although lower class people may not adhere in action to many middle class values about neatness, cleanliness, order, and proper decorum, it is apparent that they are often aware of their deviance, wishing that their world could be a nicer place, physically and socially (31:29).

In accordance with this statement, Michelson (25:130) has cited that different socioeconomic classes have different conceptions of housing adequacy. In most housing design, the mother's role is much more adequately provided for than the father's (46). Most designers

and planners will give some thought to the kitchen layout and adequate storage space. On the other hand, little provision is made for the adult male to do anything in public housing except to care for his basic needs. In most cases, he cannot paint the walls or make repairs, he cannot garden, there is no space provided for a workshop, and there is not even a place to play ball (48). With limited economic means, both the designer and the family are forced to compromise among privacy versus space, distance versus proximity, and equipment versus total space (34:272). Indeed, in building mass housing, livability must take on a more restricted meaning due to cost limitations, and this in turn will tend to prohibit detailed attention to individual preferences and to force design standardization (36:128).

Michelson (25:115) reported that "different levels of the environment are emphasized by people on different levels of the social class hierarchy." Safety and security are the chief requirements of the lower class according to Rainwater (31). Non-human sources of danger in many low-income homes include poisons, fire and burns, poor plumbing and electrical wiring, and insufficiently protected heights (31:27). Good design can do away with these non-human housing threats and add to the family's sense of safety and security.

Not all government-subsidized housing has alleviated these non-human threats, however. In his study of the federal housing project "Blackmoor," William Moore (28) found that little had been done for the occupants' comfort and convenience. The electrical wiring was inadequate, heat pipes were without insulation, the plumbing was poor,

the noise was excessive, and there was great overcrowding. The kitchen, living, and dining areas occupied only one room, and there was one bathroom regardless of family size. Many of the more human elements were eliminated to conserve money.

Pruitt-Igoe, high-rise public housing built for approximately 2,800 families in St. Louis, Missouri, had a vacancy rate of over 20 percent as long ago as the mid-sixties (32). In a questionnaire issued to a representative sample of the tenants to determine what were the problems in this housing complex, it was found that a majority of the respondents felt that there was too much trash and broken glass outside, the elevators were dangerous and children often fell into the shafts, and many occupants had been burned on the exposed steam pipes. Many of the problems, however, resulted from the behavior of other tenants. Women felt unsafe in the halls and stairways, children playing in the halls had caused a great deal of damage, and people had been injured by objects thrown from the windows. And yet, Pruitt-Igoe exists "as one kind of Federal Government response to the problems of poverty" (32:117). In March, 1972, a controlled explosion destroyed part of this complex (29:32). Only 600 of the 2,800 units were occupied at that time. The rehabilitation plan for Pruitt-Igoe is expected to exceed by \$3-million the 1954 construction costs of \$36-million. The project is to be transformed into a "balanced community," including many of the human elements previously considered unnecessary by the government. Two parks are to be constructed--one as a play area for children and the other for the elderly, and an undetermined number of existing eleven-story buildings are to be reduced to three to five stories. Pleas were

rejected by the Department of Housing and Urban Development, however, to destroy the entire complex and rebuild another of more contemporary design. According to The New York Times (29), housing officials believe that one of the biggest problems of Pruitt-Igoe was that the units, with primarily one or two bedrooms, were too small for families with many children.

A study made in Rockford, Illinois, attempted to determine ways in which public housing could be more responsive to the needs of its residents (9). The actual activities and behavior of the residents were studied and an attempt was made to relate these factors to specific elements in the designed environment. The major adult leisure activities observed were sitting or standing near a doorway, watching children play, or talking to other residents. Observers also noted a desire to establish personal territory, since many people in the project desired a fence. As for the dwelling units, the greatest dissatisfaction was with the quality of the materials and workmanship. Although most were pleased with the size and arrangement of rooms, 80 percent of the respondents desired a family or playroom and 60 percent wanted a second bathroom. Storage was inadequate in many places, and a special need was noted for outdoor storage.

McNeil (22) studied fifty-low-income families, one-half of which lived in public housing, the others in private housing. Although housing conditions were found to be better in public housing than in the private dwellings, almost one-half of the total sample was dissatisfied with their present housing. Family-centrism, taking care

of the children, and dining together as a family were rated high in importance in the use of a house, as were relaxing, watching television, reading and studying, working on hobbies, and entertaining friends and relatives. Very little importance was placed on social prestige. The most desired aspects were doors on the closets, privacy and quiet, tubs and showers, and flowers in the front yard. Therefore, it could be said that the values of health, safety, comfort, convenience, privacy, beauty, and family centrism were important to these low-income families, as were cleanliness, protection, quietness, and leisure-time activities.

Value Studies

What is a value? Williams (47:400) defined values as the criteria by which goals of action are chosen. A value, then, is an internalized standard which will influence one's course of action when confronted with a situation calling for a decision between alternatives. According to Montgomery (26), the need to fulfill values is one of seven basic human needs related to housing. An understanding of low-income values will hopefully lead to more appropriate housing design, which in turn could lead to a greater satisfaction with life in general.

In 1947, Cutler (10) conducted one of the first value studies related to housing. Her sample included families from the upper-, middle-, and lower-classes. The values tested were beauty, comfort, convenience, location, health, personal interests, privacy, safety, friendship activities, and economy. It was found that lower-class families placed the highest value on health and safety. Economy and friendship activities were more important to lower-class women, while

their husbands tended to place greater value on personal interests. The children in these families ranked beauty high on their list of values. A large proportion of the lower-class families interviewed felt that the homes in which they were living were inconvenient and lacked privacy.

In a study cited by Dean (11:138), the values found to be most important were the efficient operation of household tasks, the norm of decorum or how the house appears to others, moral standards about family living (such as privacy), and spontaneous personal reactions and activities. Dean goes on to hypothesize that the way in which the design of the house relates to the interaction of family members among themselves and with significant others in a social environment is crucial to family life (11:132).

Beyer, Mackesey, and Montgomery (7) attempted to identify the fundamental human values reflected in patterns of living. Approximately 1,000 families were interviewed, and their median income was \$5,320. On the basis of findings, the subjects were divided into four value groups. The "economy" value group emphasized the economic uses of goods and services, while the "family" value group felt the health and well-being of the family to be most important. Personal enjoyment, aesthetics, and self-expression were desired by the "personal" value group, whereas the "prestige" group viewed their house in terms of its effect on the family's social standing (7:3-6).

Based on research at Cornell University, nine socio-psychological value orientations were found to be relevant to housing

design: economy, family centrism, physical health, aesthetics, leisure, equality, freedom, mental health, and social prestige (4:174). In a sample consisting of both rural and urban homemakers, two natural groupings were found. The first group highly valued family centrism, equality, economy, and physical health. For the second group, freedom, mental health, aesthetics, prestige, and leisure were most important (5:16-17). In measuring values with the forced answer technique, family centrism and equality were the dominant values, with physical health and economy ranking next in importance (5:18).

In a study by Teitzel (43) with homemakers whose houses were in the \$13,000 to \$20,000 price range, it was found that a relationship does exist between expressed satisfaction and house design. Dissatisfaction occurred most often with kitchen storage, noise, and privacy. The homemakers with smaller families expressed more housing satisfaction than those with larger families. The most satisfaction was expressed by those homemakers without children or with children over eighteen years of age. The women over forty years of age tended to be more satisfied with their homes than others, as were the homemakers who were not high school graduates (43:42). In Teitzel's study of values, economy, equality, physical health, and aesthetics ranked in the top four positions. A large percentage (62%) ranked social prestige as the least important value (43:33).

The economic value was ranked highest by 50 percent of the respondents in a study of middle socioeconomic class families (23:12). Of the five values studied--economic, social, aesthetic, prestige, and personal--homemakers listed prestige as least important. However, one

conclusion of the study was that ". . . the values the homemakers gave as important in an explicit ranking were apparently not the same values they expressed in planning the selection of their living environment" (23:13).

Owsiany (30) compared two groups of Negro homeowners to determine if they had the same housing values. The first group lived in an urban renewal project for low-income families, while the second group of homeowners lived in a residential area occupied by both white and Negro families. The tested values in the study were: beauty, comfort, economy, family centrism, privacy, prestige, convenience, health, and safety. For both groups, safety, family centrism, comfort, and health were found to have priority over the other values. Also important were beauty, economy, and privacy. The largest group of homemakers ranked safety as most important, while the least importance was attached to the value of prestige. With the exception of convenience, the urban renewal homemakers were found to possess the same housing values as the other group of Negro homeowners.

Perhaps one of the most important studies related to low-income housing values was conducted by Grady in 1965. The sample included ninety-three Negro homemakers and seven white homemakers, all living in four categories of housing: public low-cost apartments, private low-cost apartments, urban single-family dwellings in a highly populated area, and rural single-family dwellings. All units were located in the same state. Attitudes and value orientations were found to be similar for the four groups in each of the four categories of

housing (18:20). The values of economy and convenience ranked foremost, while health and safety were found to be least important. Other values included in the study were family centeredness, privacy, personal freedom, and aesthetics. Only 36 percent of the sample was satisfied with both the amount and arrangement of space in their dwellings. Additional bedrooms were the most desired feature (18:13). The homemakers in public housing were least satisfied with the space arrangement. Here, additional storage facilities and central hallways were the most frequently desired changes (18:14). Grady concluded her study by stating that "the degree of satisfaction with housing showed no significant relation to type of housing, to housing costs, or type of family" (18:21).

The Design Concept

To decide what should be included in a given house, it is important to consider first, those housing wants expressed by the family as things they seek; secondly, those taste preferences that would please the family; and thirdly, those needs which experts in the field believe are essential, but of which the family itself might be quite unaware (11:130).

The main objective in a study by Sanoff and Sawhney was to measure the degree of satisfaction that low-income families had with their present dwelling and neighborhood and to determine the expectations associated with the ideal dwelling and the ideal neighborhood (38:14). A high degree of satisfaction with the dwelling was found to accompany a high degree of satisfaction with the neighborhood. Those dwelling

attributes considered "very important" were: size of rooms, a comfortable temperature, outside appearance of the house, a back and front yard, a front porch, privacy for each member of the family, a large kitchen with an eating area, the layout of the rooms, and freedom from street noises. On the other hand, those housing attributes considered least important were: cross-ventilation, separation of parents' and children's areas, outside storage, an inside children's play area, morning sunlight, a carport, and a separate dining room (38:20). The three most "unsatisfactory" items in the subjects' present dwellings were discovered to be the three "very important" attributes of their ideal dwelling--appearance, size, and comfort (38:22). Satisfaction with the present dwelling was also an important determinant of the desire to relocate.

In Why Families Move, Rossi found that the characteristics of the dwelling unit itself were more important as a cause of dissatisfaction than the neighborhood surroundings (37:82). Forty-five percent of the families cited space as the primary factor in their decision to move (37:140). A majority of respondents complained of too little closet space. Dissatisfaction was also expressed with street noises, open space in the house, lack of air and sunlight, and too little privacy.

Lack of space was reported as the dominant reason for moving in a study cited by Smith, Kivlin, and Sinden (40:18). The following were considered important to 75 percent or more of the families: a large living room, a kitchen with a dining area, adequate storage,

bedrooms away from the living area, sufficient electrical outlets and adequate wiring, and a pleasant view (40:49).

A study was made by the Federal Public Housing Authority (13) to determine the defects of the present dwellings and to ascertain the residents' unmet needs. A majority of the families wanted enclosed, individual back yards and porches. The desire for more privacy was repeatedly expressed, and the study revealed great overcrowding. The kitchen was found to be the most unsatisfactory room in the house, as it was poorly lighted, lacked storage space, and had an insufficient work area.

According to Koppe (20), families with a monthly income of less than \$400 most frequently desired the following changes in their housing: (1) more bedrooms, (2) more play space for children, (3) special activity rooms--sewing, utility, hobby, and (4) a study or den. These findings differ from those cited by Meyerson, Terrett, and Wheaton (24). They reported that space for leisure was most important to the overcrowded family. Cooking space ranked second in importance, eating was third, and sleeping space was cited fourth (24:86). Koppe, however, did concur with the findings of Smith, Kivlin, and Sinden (40) in that income, family size, profession, or amount of education did not influence the number of housing desires. Smith et al. reported that families with lower incomes did not place high values on dishwashers, separate entry ways, studies, two-car garages, or the like (40:49).

According to Svend Riemer,

As some desires are satisfied, the concern of the family turns to other items of need. Size and number of rooms may not be high on the scale of preferences as long as the family does not have a bathtub. Once tolerable occupancy standards have been

achieved, the housewife will begin to consider the adequacy of storage facilities. Where lower-middle-class standards are fairly well satisfied, the family will begin to feel the need for a second bathroom. Needs appear, are satisfied, and fade out, only to make place for new needs. A lack of desire for storage facilities may mean that present facilities are adequate, but it may also mean that other needs are so much more urgent that not much thought is given to the need for storage space (33:148).

Although there seems to be little agreement among low-income families as a whole as to what they desire in their housing, authorities in the field seem to readily concur as to what are their basic needs.

Fitch (14:78) reported that "psychic satisfaction with a given situation is thus directly related to physiologic well-being, just as dissatisfaction must be related to discomfort."

Gottlieb (16:194) listed the requirements for a comfortable dwelling as follows: shelter and privacy, temperature control, light control, seating, space for reclining, necessary horizontal surfaces, and storage space. The six criteria set forth by the American Public Health Association (3:7) are: a dwelling unit for each family, provision for household activities, suitable conditions of temperature and light, provision for sanitation and health, provision for protection against accidents, and privacy and personal satisfaction.

Spreiregen (41) and Wood (48) have both cited considerations for the exterior of the dwelling. Function, vista, sunlight, open space, circulation, appearance, and topography assume equal importance with interior criteria. Other needs mentioned by Wood are the need for active exercise, the need to "get out," the need for social interaction, and the need to do some household chores which cannot be performed indoors (i.e., washing the car, or hanging out the laundry

since clothes dryers are often not allowed by housing authorities).

Indeed, most experts in the field concur that inadequate space, both interior and exterior, is the primary cause of discontent (19,1). This lack of space may account for the high value placed on privacy by many low-income families. Gough (17:236) stated that the concept of a truly functional house must include space for living. Every dwelling must provide effective space for such basic human needs as sleeping and dressing, personal hygiene, food preparation and dining, recreation, socialization, care of the sick, and circulation between various areas of the house (3:3). According to Foote et al. (15:217), a true measure of space should go beyond these basic needs. It should take into account not only the total floor space, a room count, and the number of bedrooms; but also the total number of occupants, and the age, sex, and relationship of each to the other. Moreover, they speculate that the most pressing need for low-income families is a lack of bedrooms and that residents would best be served by a large kitchen, a living room, and no dining room (15:249). Foote et al. concluded that "as the condition of the dwelling improves, space dissatisfactions assume primary importance; as space requirements are met, discontent with equipment and the layout of rooms supersedes space dissatisfaction" (15:229).

Not only physical needs but also fundamental psychological needs must be considered in planning a home for the family. There are seven basic psychological needs which must be fulfilled, according to the American Public Health Association (2:16-23). The first is the need

for adequate privacy for each individual. There must be opportunities for a normal family and community life. Residents should be able to perform household tasks without undue physical and mental fatigue. Facilities must be provided to maintain cleanliness of the dwelling and its residents, and there must be the possibility for aesthetic satisfaction in both the home and its surroundings. Finally, there is the psychological need for "concordance with the prevailing social standards of the local community."

Montgomery (27) also listed seven psychological needs relevant to ways in which housing patterns affect husband-wife relationships. His cited needs include: privacy, a positive self-concept, replenishment, psychological stimulation, a sense of place, relatedness, and the need for creativity. Each of these needs must be satisfied before the resident will find complete satisfaction with his dwelling.

When the values, wants, and needs of low-income families are taken into account, greater satisfaction can occur.

Housing in Victoria Plaza in San Antonio, Texas, was planned to meet the expressed physical and social needs of the residents (8). In building this high-rise structure for the elderly, planners considered both safety and convenience. This careful planning has led to increased satisfaction among the residents with their residential situation, more favorable attitudes toward oneself and others, and improved mental and physical health. A sense of security, however, was found to be the most outstanding contribution of this new housing.

The Rosebud Indian Reservation in South Dakota provides another example of how housing has led to increased satisfaction when it is

built with the expressed needs and wants of the family in mind (45). The basic purpose of the study was to "devise, test, and evaluate a system to provide adequate housing for very poor families in a rural area" (45:1). Two of the goals, among many, were to provide housing that would be accepted by the recipients and to have the program become a focus for community action and involvement. The houses built provided more adequate space, privacy, and a healthful environment. As a result, the residents are beginning to show a greater interest in education, maintaining cleanliness and order, and improving living conditions. After living in their homes for nine months, the families were again interviewed to determine if their needs were being met, and several design changes were made on the basis of this interview. One important conclusion of the study was that "the program suggests that a vital ingredient in providing homes that these poor people can afford-- and will try to pay for--is to design and build houses that satisfy their actual needs rather than their assumed needs" (45:3).

CHAPTER III

PROCEDURE

The study was undertaken to determine housing values of low-income families as they relate to the physical design of the house and to compare housing values of black and white subjects. The investigator also felt it was important to compare the housing values of subjects in the two locations to determine if significant differences in housing values do exist on a regional basis.

Selection of Sample

The sample consisted of fifty-two women living in public housing who were classified as "low-income" according to government standards. All subjects were either married or acting as head of their household. The homemaker was thought to be more conscious of the physical design of the house and, in most cases, spends more time there than other family members. One-half of the fifty-two women were black.

One-half of the total sample was drawn from two housing authorities in the state of Delaware. The researcher had previously worked at the Newark Housing Authority and had therefore gained some degree of familiarity with both the community and the residents. Because there were not enough white subjects residing in the Newark Authority at the time of the study, the investigator was forced to complete the sample of white subjects at the Dover Housing Authority

in Delaware. The second half of the sample was drawn from the Clara Cox project of the High Point Housing Authority in North Carolina. Thus, the sample was divided into four groups of thirteen respondents each, two groups of white homemakers and two of black.

Development of the Instrument

The twenty-two private firms who had received grants under Operation Breakthrough were contacted to determine if they had conducted any research in the area of housing needs and values. If so, a copy of the instrument was requested, along with permission for further use. Of the twenty-two firms contacted, ten responses were received. None of the ten had conducted any research in the area of housing values and needs, and most indicated that they were concerned primarily with building systems. Only two firms out of the ten which responded expressed an interest in receiving a copy of the findings of the proposed study.

A precoded value scale was adapted by the researcher on the basis of existing scales by Glenn H. Beyer and Ethyl R. Grady. Questions were adapted from both scales, and additional questions were devised. The vocabulary of the adapted questions was revised so that it could be understood by the low-income subjects. The respondent's task was to answer each item giving one of five possible answers. A numerical score was assigned to each response. Persons in the area of housing were consulted in the adaptation of the instrument. Values tested were convenience, leisure, health, safety, family centrism, equality, privacy, personal freedom, aesthetics, social prestige, and economy. A pilot study was then run to test the adaptation of the instrument,

make any necessary revisions in the procedure, and improve validity and reliability of the instrument. The scale was administered to five low-income homemakers in High Point who were not included in the sample. On the basis of this pretest, additional changes were made in the vocabulary and the procedure. A card containing the possible choices, "Strongly Agree," "Agree," "Doesn't Matter," "Disagree," and "Strongly Disagree," along with a graphic illustration, was devised to aid the subject in her responses (Figure 1). A second pretest was then run on five additional homemakers from the High Point Housing Authority. A copy of the questionnaire and data sheet can be found in Appendix A.

Collection of Data

It was intended that the researcher would collect the data from all white subjects, and black interviewers would be employed in each area to interview the black homemakers. However, due to difficulty in obtaining black interviewers, the investigator conducted all fifty-two interviews. A good rapport was thought to be established with both black and white subjects, although the white homemakers as a whole seemed less eager to respond to the questions.

A list of families living in the authority who met the qualifications of the study was obtained from the various housing authority offices. The subjects were divided into black and white groups, and a sample was randomly drawn from a list of all those that were eligible. The interviewer knocked on doors to elicit participation. If any of the chosen families refused to participate or were not at home, names were randomly selected from the list until the required

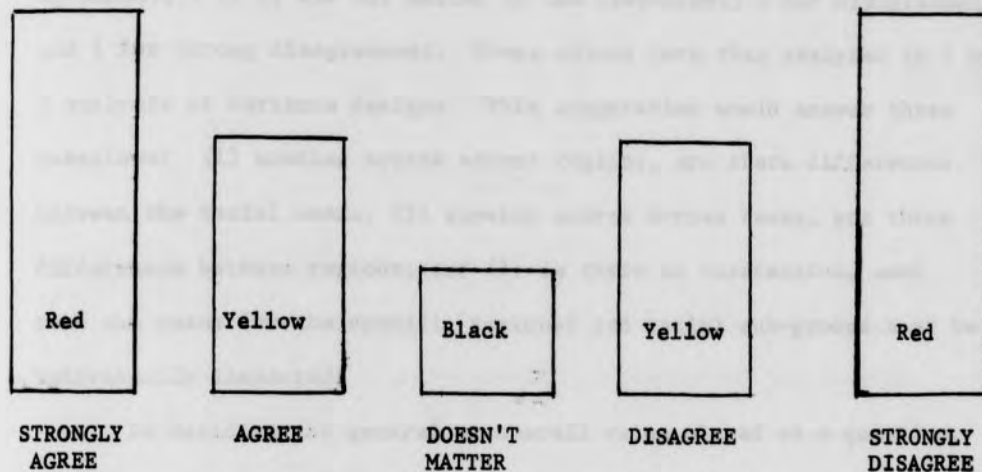


Figure 1

Visual Device Designed to Aid Homemaker
in Response to Questions

number of subjects had been interviewed. In the case of the Dover Housing Authority, only white subjects were considered. All interviews took place in the home and were conducted in a consistent manner. The interviewer asked all questions and recorded the responses on a coded answer sheet. Information regarding the site and layout of the houses was obtained from the director of each housing authority. Data were collected over a six-week period.

Analysis of Data

To assess whether the values placed on the questions differed in relation to race, geographic region, or between specific sub-groups, analysis of variance were performed for each question. Each question was first scored on a five-point scale: 5 for strong agreement, 4 for

agreement, 3 if it did not matter to the respondent, 2 for disagreement, and 1 for strong disagreement. These values were then analyzed in 2 by 2 analysis of variance designs. This computation would answer three questions: (1) summing scores across regions, are there differences between the racial means; (2) summing scores across races, are there differences between regions; and (3) is there an interaction, such that the means for the specific regional and racial sub-groups must be individually inspected?

In deciding the general or overall value placed on a question, both the means derived from the numerical values of the answers and the percent of strong agreement with the question were studied. Strong agreement, rather than any agreement was chosen because the respondents, perhaps due to the nature of the questions, and possibly also to please the interviewer, generally at least tended to agree with the questions. Of the 31 value questions, 22 showed at least 75 percent of the respondents giving some degree of agreement.

It might be noted that the rather strong tendency towards agreement produced non-normal distributions of scores in some cases. Analysis of variance was chosen as the statistical procedure, despite this, because (1) it is well known that analysis of variance is "robust" and is not strongly affected by lack of normality in the form of skewed distributions, and (2) it was believed that the interaction term, pertaining to specific sub-groups, might be important. Non-parametric techniques would not yield such a term.

CHAPTER IV

FINDINGS

Description of the Respondents

The sample consisted of fifty-two women living in public housing. One-half of the total sample was drawn from two housing authorities in the state of Delaware, while the remainder was selected from a housing authority in North Carolina. The sample was further divided into four groups of thirteen respondents each, two groups of white homemakers and two of black.

Most of the Delaware residents (88.5%) lived in duplex units, while a majority (65.4%) of the North Carolina families lived in dwellings containing three or more units. One white Delaware family, which was comprised of eleven members, occupied a single-family dwelling (Table 1).

Almost 77 percent of the North Carolina blacks had lived in their present dwelling two years or less. All of the white families from that location had lived in the housing authority for at least three years, and 61 percent of these whites had been living in their houses for more than five years. Sixty-nine percent of the Delaware blacks had resided in their present dwellings for three to five years, while only 38 percent of the whites had occupied their units for that length of time. Almost 54 percent of the Delaware whites had been in their houses for less than two years. The longest length of occupancy

Table 1

Description of the Sample (N=52)

| ITEM | NORTH CAROLINA | | | DELAWARE | | |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | BLACK | WHITE | TOTAL | BLACK | WHITE | TOTAL |
| | (N=13) No. % | (N=13) No. % | (N=26) No. % | (N=13) No. % | (N=13) No. % | (N=26) No. % |
| Type of dwelling: | | | | | | |
| Single-family | | | | | | |
| Duplex | 6 46.2 | 3 23.1 | 9 34.6 | 13 100. | 1 7.7 | 1 3.8 |
| Three or more units | 7 53.8 | 10 76.9 | 17 65.4 | | 10 76.9 | 23 88.5 |
| | | | | | 2 15.4 | 2 7.7 |
| Years in present dwelling: | | | | | | |
| 2 yrs. and under | 10 76.9 | | 10 38.5 | 2 15.4 | 7 53.8 | 9 34.6 |
| 3-5 years | 2 15.4 | 5 38.5 | 7 26.9 | 9 69.2 | 5 38.5 | 14 53.8 |
| Over 5 years | 1 7.7 | 8 61.5 | 9 34.6 | 2 15.4 | 1 7.7 | 3 11.5 |
| Age of male head of household: | | | | | | |
| Under 35 years | 2 15.4 | | 2 7.7 | 3 23.1 | 1 7.7 | 4 15.4 |
| 35-59 years | | 1 7.7 | 1 3.8 | 2 15.4 | 3 23.1 | 5 19.2 |
| 60 years and over | | 1 7.7 | 1 3.8 | 1 7.7 | 2 15.4 | 3 11.5 |
| No male head of household | 11 84.6 | 11 84.6 | 22 84.6 | 7 53.8 | 7 53.8 | 14 53.8 |
| Age of homemaker: | | | | | | |
| Under 35 years | 9 69.2 | 1 7.7 | 10 38.5 | 8 61.5 | 2 15.4 | 10 38.5 |
| 35-59 years | 4 30.8 | 4 30.8 | 8 30.8 | 5 38.5 | 6 46.2 | 11 42.3 |
| 60 years and over | | 7 53.8 | 7 26.9 | | 5 38.5 | 5 19.2 |
| No response | | 1 7.7 | 1 3.8 | | | |

Table 1 (continued)

| ITEM | NORTH CAROLINA | | | DELAWARE | | |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | BLACK | WHITE | TOTAL | BLACK | WHITE | TOTAL |
| | (N=13) No. % | (N=13) No. % | (N=26) No. % | (N=13) No. % | (N=13) No. % | (N=26) No. % |
| Size of family: | | | | | | |
| One member | | 5 38.5 | 5 19.2 | | 4 30.8 | 4 15.4 |
| Two to five members | 9 69.2 | 8 61.5 | 17 65.4 | 10 76.9 | 6 46.2 | 16 61.5 |
| Six or more members | 4 30.8 | | 4 15.4 | 3 23.1 | 3 23.1 | 6 23.1 |
| Ages of children: | | | | | | |
| No children | | 6 46.2 | 6 23.1 | 1 7.7 | 5 38.5 | 6 23.1 |
| All pre-school | 2 15.4 | | 2 7.7 | 2 15.4 | 1 7.7 | 3 11.5 |
| Pre-school to elementary | 5 38.5 | 2 15.4 | 7 26.9 | 6 46.2 | 2 15.4 | 8 30.8 |
| Pre-school to 18 yrs. | 6 46.2 | 4 30.8 | 10 38.5 | 2 15.4 | 3 23.1 | 5 19.2 |
| Pre-school to over 18 yrs. | | 1 7.7 | 1 3.8 | 2 15.4 | 2 15.4 | 4 15.4 |
| Others in family: | | | | | | |
| None | 11 84.6 | 12 92.3 | 23 88.5 | 11 84.6 | 11 84.6 | 22 84.6 |
| One | 2 15.4 | 1 7.7 | 3 11.5 | 2 15.4 | | 2 7.7 |
| Two | | | | | 2 15.4 | 2 7.7 |
| Age of others in family: | | | | | | |
| 25 yrs. and under | 2 | 1 | 3 | 2 | 3 | 5 |
| Over 25 yrs. | | | | | 1 | 1 |

Table 1 (continued)

| ITEM | NORTH CAROLINA | | | DELAWARE | | |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | BLACK | WHITE | TOTAL | BLACK | WHITE | TOTAL |
| | (N=13) No. % | (N=13) No. % | (N=26) No. % | (N=13) No. % | (N=13) No. % | (N=26) No. % |
| Occupation-Male head of household: | | | | | | |
| Semiskilled | 2 15.4 | | 2 7.7 | | 2 15.4 | 2 7.7 |
| Unskilled | | | | 2 15.4 | 1 7.7 | 3 11.5 |
| Service occupation | | | | 2 15.4 | | 2 7.7 |
| Sales occupation | | 1 7.7 | 1 3.8 | | | |
| Non-employed | | 1 7.7 | 1 3.8 | 2 15.4 | 3 23.1 | 5 19.2 |
| Not applicable | 11 84.6 | 11 84.6 | 22 84.6 | 7 53.8 | 7 53.8 | 14 53.8 |
| Occupation-Homemaker: | | | | | | |
| Semiskilled | 3 23.1 | 1 7.7 | 4 15.4 | | | |
| Service occupations | | | | 7 53.8 | 2 15.4 | 9 34.6 |
| Non-employed | 10 76.9 | 12 92.3 | 22 84.6 | 6 46.2 | 11 84.6 | 17 65.4 |
| Highest schooling-Male head: | | | | | | |
| No response or not applicable | 11 84.6 | 11 84.6 | 22 84.6 | 8 61.5 | 7 53.8 | 15 57.8 |
| No schooling | 1 7.7 | 1 7.7 | 2 7.7 | | 1 7.7 | 1 3.8 |
| Grades 1 - 6 | | | | 1 7.7 | | 1 3.8 |
| Grades 7 - 9 | | 1 7.7 | 1 3.8 | | 3 23.1 | 3 11.5 |
| Grades 10 - 12 | 1 7.7 | | 1 3.8 | 3 23.1 | 2 15.4 | 5 19.2 |
| Some college | | | | 1 7.7 | | 1 3.8 |

Table 1 (continued)

| ITEM | NORTH CAROLINA | | | DELAWARE | | |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | BLACK | WHITE | TOTAL | BLACK | WHITE | TOTAL |
| | (N=13) No. % | (N=13) No. % | (N=26) No. % | (N=13) No. % | (N=13) No. % | (N=26) No. % |
| Highest schooling-Homemaker: | | | | | | |
| No schooling | 1 7.7 | 3 23.1 | 4 15.4 | | | |
| Grades 1 - 6 | 2 15.4 | 4 30.8 | 6 23.1 | | 1 7.7 | 1 3.8 |
| Grades 7 - 9 | 6 46.2 | 6 46.2 | 12 46.2 | 4 30.8 | 4 30.8 | 8 30.8 |
| Grades 10 - 12 | 4 30.8 | | 4 15.4 | 9 69.2 | 8 61.5 | 17 65.4 |

by any family was seventeen years; the shortest, five months. Once a family is admitted to public housing, it appears that they are likely to remain there for an extended period of time.

In North Carolina, 84 percent of both black and white families had no male head of the household, and 53 percent of Delaware whites and blacks had no male head. The oldest male head was eighty years old; the youngest, twenty-four.

As a whole, the homemakers in both regions were under sixty years of age. Those homemakers who were sixty years old or over were white in both geographic areas. Seven North Carolina respondents and five from Delaware fit into this sixty years and over category. Sixty-nine percent of the North Carolina homemakers were under thirty-five years old, while the largest percentage of whites were over sixty years old. In Delaware, 61 percent of the black subjects were under 35 years of age, and 46 percent of the whites were between 35 and 59 years old. The oldest person interviewed was eighty-five years old; the youngest was twenty-two.

The majority of families in both North Carolina (65.4%) and Delaware (61.5%) were comprised of two to five members. Those homemakers who lived alone were white in all cases. Fifteen percent of all North Carolina families and 23 percent of the Delaware families had six or more members. The largest family in the sample included eleven persons.

The largest percentage of North Carolina families had children whose ages ranged from pre-school to eighteen years of age. In Delaware, the largest percentage had children no older than elementary school age.

Twenty-three percent of the respondents in each area had no children. Only a few families had children over eighteen years of age living at home, and only a small percentage of the respondents in both areas had all pre-school age children. One High Point homemaker had a twenty-five year old niece who was mentally retarded living with her. The youngest child in the study was three weeks old.

A few families in North Carolina and Delaware had one or two others living with them, aside from members of the immediate family. These others included a sister, grandsons, granddaughters, a niece, and a mother. Aside from the elderly mother, all others were no older than twenty-five years.

In North Carolina, only four of the twenty-six families had a male head of household present. The two blacks worked at semiskilled occupations, while one white held a sales job and the other was non-employed. Twelve Delaware households had a male head present. Of these twelve, five were non-employed; the others were in semiskilled, unskilled, or service jobs. These jobs were factory worker, equipment operator, mover, cook, and guard.

Eighty-four percent of the North Carolina homemakers and 65 percent of those in Delaware were non-employed. Those North Carolina homemakers who did hold a job were semiskilled, working as factory laborers for either a textile or furniture manufacturer, whereas the employed Delaware subjects were in service occupations. This category included cooks, domestic workers, a custodian, a waitress, and a nurses' aid.

The highest schooling completed by the male heads of the households covered a wide range, from no school whatsoever to some college courses. The largest percentage of males had completed grades ten, eleven, or twelve. Forty-six percent of the North Carolina homemakers had completed grades seven, eight, or nine, while 15 percent had never attended school. All of the Delaware subjects had attended school; 65 percent had completed grades ten, eleven, or twelve.

Description of the Public Housing

Because all dwellings in a public housing authority are subject to government standards and regulations, the three sites were similar in many ways. There were, however, several basic differences.

All of the dwellings in the Newark Housing Authority were duplex units. Each unit included a living room, dining area, kitchen, one to four bedrooms, and one bath. Those houses with two to four bedrooms had two-stories. The exterior of each was constructed of brick and aluminum siding. A small fence enclosed an open outdoor storage area, and each house had a concrete patio which might take the place of a porch. The three major kitchen appliances--range, refrigerator, and a double sink--were provided by the Authority, along with a hook-up for an automatic washer. The Newark Housing Authority was divided into two sites, one was a family site, while the other was strictly for the elderly.

The Dover Housing Authority consisted of three different sites. At Colonial Gardens, which was comprised of families only, the houses were constructed of brick or stucco. The dwellings at this site

contained two to five bedrooms, a living room, kitchen, dining room or area, and a bath. Those units with two to four bedrooms were duplex or triplex, and those having five bedrooms were single-family dwellings. The four- and five-bedroom units had an additional bath. A range, sink, and refrigerator were provided by the Authority. There was a hook-up for a washing machine, but clothes dryers were not permitted. Only the elderly in Dover public housing were allowed to have air-conditioners. It is not known whether this was also true of the other housing authorities.

The Clara Cox project of the High Point Housing Authority, (North Carolina), where the interviews for this study were conducted, was made up primarily of families. The one-, two-, or three-bedroom units included a living room, kitchen, pantry, and bath. The eating area was in the kitchen. All of the dwellings were either duplex or three or more units per structure and were constructed of brick. Some upstairs apartments were also available, and many of the multiple-unit dwellings had two-stories. Each unit had a porch area which was usually shared with a neighbor. A range, refrigerator, and double sink were provided by the Authority, but there was no hook-up for a washing machine at this site.

All of the dwellings units had tile or asphalt floors, although some of the families had laid carpeting. Several of the homemakers stated that they would prefer wood flooring. The walls were painted throughout, except at the Newark site where there was wood paneling in the living room. At the High Point project, a large space heater was located in the living room. All kitchens, for the most part, were

small and there was little counter space. Kitchen storage was also at a minimum, although the Clara Cox dwellings did have a pantry. The cabinet space in there included both open and closed shelving. The investigator noted that the interiors of some of the units were clean, neat, and adequately maintained, while others were dirty and deteriorating. Five of the respondents complained of rodents. For the most part, the dwellings were sparsely furnished with only the bare necessities.

At all three sites of this study, each family had a small amount of property that it could call its own. A family was responsible for its own yard and for keeping the grass cut. The families were free to plant a garden on their property, although few gardens were noted. Fences could be put up with the approval of the housing authority.

For the most part, the sites were adequately maintained. The researcher noted torn screens, broken windows, and an excess of trash around some units in all three locations. At each site, there was a playground or public area for all to use. Dover and High Point Authorities had provided playground equipment for the children. These public areas were maintained by the housing authority. Little or no landscaping had been done; in Newark and Dover, there was almost a complete absence of trees.

Sites for the elderly and for families were separated in each authority. In Newark, the elderly were housed in either duplex units or two-story apartments. Both Dover and High Point had provided high-rise apartments for their elderly. In all cases, the units appeared to be extremely well maintained by the residents.

Housing Likes and Dislikes

When given the opportunity for free response, subjects cited economy and ease of maintenance as the best-liked features of the present dwelling units (Table 2). The greatest sources of dissatisfaction were the neighborhood and lack of space and privacy (Table 3).

Table 2

Best-Liked Features in Public Housing Dwellings (N=52)

| Item (multiple responses) | Frequency | Percent |
|---|-----------|---------|
| Satisfaction with house in general, no one feature liked best | 32 | 61 |
| Economy | 9 | 17 |
| Neighborhood | 6 | 11 |
| Convenience: Ease of maintenance of unit | 12 | 23 |
| To neighborhood facilities | 7 | 13 |
| Privacy and quiet | 6 | 11 |
| Physical facilities: Sufficient space | 5 | 10 |
| Heat | 7 | 13 |
| Amount of storage | 3 | 6 |
| Kitchen layout | 2 | 4 |
| Indoor plumbing | 2 | 4 |
| Liked nothing at all about house | 7 | 13 |

Suggestions by the respondents for improvement of their housing were also noted (Table 4). The most desired change was found to be a yard or place for children to play. Additional findings about liked and disliked features will be noted in discussion of the structured answers relating to housing satisfactions.

Table 3
Least-Liked Features in Public Housing Dwellings (N=52)

| Item (multiple responses) | Frequency | Percent |
|--|-----------|---------|
| Lack of space: Bedrooms and bathrooms too small or too few | 16 | 31 |
| Lack of storage facilities: Indoor or outdoor | 6 | 11 |
| Neighborhood: Some people don't keep up property Racial trouble among children | 15 | 29 |
| Lack of privacy: Exterior | 15 | 29 |
| Interior: Due to construction or space | 8 | 15 |
| Too many restrictions by housing authority | 5 | 10 |
| Maintenance problems: Of dwelling unit | 2 | 4 |
| No repairs without charge | 1 | 2 |
| Physical facilities: | | |
| Construction of houses | 5 | 10 |
| Heating system: Not adjustable, inadequate | 5 | 10 |
| Floors: asphalt, too cold or slippery | 7 | 13 |
| Windows and doors: Heat loss, screens taken off | 6 | 11 |
| Not enough electrical outlets | 3 | 6 |
| Poor structural lighting | 1 | 2 |
| No exhaust fan in kitchen | 1 | 2 |
| Poor plumbing | 1 | 2 |
| Layout of dwelling | 1 | 2 |
| No features in dwelling disliked by homemaker | 15 | 29 |

Table 4

Suggestions of Public Housing Residents for Improvement
of Dwelling Units (N=52)

| Suggestion | Frequency | Percent |
|---|-----------|---------|
| Yard or place for children to play outdoors | 10 | 19 |
| Single-story unit | 8 | 15 |
| Two-story unit | 8 | 15 |
| Doors on cabinets and closets | 8 | 15 |
| Place in the house for children to play | 5 | 10 |
| A laundramat on premises | 5 | 10 |
| Lights on front and back porch | 4 | 8 |
| Single-family dwelling | 4 | 8 |
| Recreation room in house and also on site | 3 | 6 |
| Front and back door for alternate fire escape route | 2 | 4 |
| Basement for storage | 2 | 4 |
| Private porch | 1 | 2 |
| One-and-a-half baths | 1 | 2 |
| To be able to have air-conditioner | 1 | 2 |

Analyses of the Value Statements

What are the housing values of low-income families as they relate to the physical design of the house? Are there geographic or racial differences in these housing values? Tables indicating response to the value statements were developed to indicate grand mean, percent of respondents who strongly agreed with the statement, and analysis of

variance results in instances where these were statistically significant at either the .01 or .05 level. For interpretive purposes, an arbitrary classification for degrees of importance of the values as a whole was established according to the percentage of respondents in strong agreement to an interview item. These classifications are as follows: over 50 percent of strong agreement responses equals extreme importance, importance equals 21 to 50 percent of strong agreement, and unimportance equals a response with under 20 percent strong agreement. All statements are listed in incidence of strong agreement in Appendix B. Analyses of variance for those statements which were not statistically significant by race or area may be found in Appendix C.

Economy. As a whole, extremely high scores were given to the economy statements (Table 5). No significant differences were noted between races or geographic areas. Each statement had a high mean and high percentage of strong agreement. Sixty percent of all respondents strongly agreed that low maintenance costs were a desirable feature in the house. One High Point subject noted that a small fee was charged for any repairs made by the housing authority. Forty-four percent of the subjects strongly agreed that they wished to pay as little as possible for their housing. Although this was important, several homemakers commented that the amount of rent paid was automatically set by the housing authority on the basis of income, and they had little control over this amount. Seventeen percent of the respondents, however, did mention that they thought their dwellings were economical (Table 2).

Table 5

Economy: Grand Mean and Percent of Strong Agreement
of Scores by Item (N=52)^a

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|---|---------------|------|---------------------------------|
| I want a house that doesn't cost very much to keep up. | 4.54 | 0.64 | 60 |
| I want to pay as little as possible for my housing. | 4.27 | 0.82 | 44 |

^aN is equal to 52 in all subsequent tables and will not be shown hereafter.

Personal freedom. The statement concerning personal freedom was the question second in importance to the respondents (Table 6). Once again, 60 percent strongly agreed that they wanted complete freedom to do as they pleased in their house, and the mean value was second highest in the study. No significant regional or racial differences were noted.

Table 6

Personal Freedom: Grand Mean and Percent of Strong Agreement
of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|---------------|------|---------------------------------|
| In my house, I want complete freedom to do as I please. | 4.50 | 0.73 | 60 |

Five of the respondents stated that they thought too many restrictions were placed upon them by the housing authority (Table 3). Very strict regulations were placed on the families as to what they could or could not do with the physical structure of the house. For example, some of the subjects were not free to paint their walls, put up a T.V. antenna, or put nails in the walls to hang pictures. Restrictions were also placed on the family by the housing authority concerning overnight visitors. The more elderly respondents, particularly those who lived alone, objected to this restriction.

Privacy. The scores assigned to the different aspects of privacy varied (Table 7). As a whole, the subjects valued privacy for their children more highly than for themselves. A higher degree of importance was placed on those statements concerning a place for their children's possessions and a private place for study. Thirty-three and thirty-seven percent, respectively, strongly agreed with these two privacy statements. The analysis of variance of the possession statement showed a significant difference between races. Inspection of the means indicated that the blacks were more concerned that each child have a place for his or her possessions than were the white subjects. No significant differences were noted by race or region concerning a study place for children. The homemakers, as a whole, placed a much lower value on a private area for themselves. Only 15 percent strongly agreed that they wanted a place in the house where they would not be interrupted by family members. The High Point respondents, however, significantly valued this personal privacy more

Table 7

Privacy: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|---|--------------------|--------------------|------------------------------|
| I want a house that gives me some privacy from my neighbors. | 4.42 | 0.80 | 56 |
| I want each of my children to have a place for his or her possessions. | 4.30 | 0.51 | 33 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.62 | 4.38 | 4.50 |
| White | 4.15 | 4.08 | 4.12 |
| Total | 4.38 | 4.23 | |
| <u>Source</u> | <u>DF</u> | <u>Mean Square</u> | <u>F</u> |
| Area | 1 | 0.31 | 1.37 |
| Race | 1 | 1.92 | 8.57** |
| Race by Area | 1 | 0.08 | 0.34 |
| Error | 48 ^a | 0.22 | |
| A house should have a place where children can study without interruptions. | 4.29 | 0.64 | 37 |
| I want a place in the house where I can be alone when I want to be. | 3.71 | 0.91 | 15 |
| I want a place in the house where I won't be interrupted by family members. | 3.56 | 1.00 | 15 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 3.85 | 3.23 | 3.54 |
| White | 3.85 | 3.31 | 3.58 |
| Total | 3.85 | 3.27 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 4.33 | 4.47* | |
| Race | 0.02 | 0.02 | |
| Race by Area | 0.02 | 0.02 | |
| Error | 0.97 | | |

*Significant at the .05 level.

**Significant at the .01 level.

^aThe Degree of Freedom is the same for all analyses of variance and will not be repeated hereafter.

than those from Delaware. An equal percentage (15%) indicated that they wanted a place in the house where they could be alone when they wanted to be. No significant racial or regional differences were noted with this statement. In talking about their housing, over one-fourth of the respondents cited lack of space and privacy as the feature they liked least in their dwellings (Table 3, p. 37). Several noted that they were forced to have as many as four children in one bedroom, and in several cases, a child was sleeping in the parents' bedroom.

The highest score in the privacy category, however, was given to privacy from the neighbors (Table 7). Fifty-six percent of all respondents strongly agreed that this was an important feature in housing. Over one-fourth of the respondents complained that this type of privacy was lacking in the dwelling in which they were now living (Table 3). Closeness of the neighbors was one of the most objectionable features. Time and again, the investigator was told that much noise could be heard through the walls of the adjoining units. Lack of privacy from neighborhood and street noises was also cited. On the other hand, it must be noted that 11 percent stated that privacy and quietness were the two features they liked most in their housing (Table 2, p. 36).

Convenience. Ease of maintenance in the care of a house was ranked as being very important by 44 percent of the homemakers (Table 8). No significant differences were noted according to race or area. Convenience was listed as the best-liked feature of the dwelling by 23 percent of the respondents (Table 2, p. 36). As a whole, the subjects

Table 8

Convenience: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand | | Percent Who "Strongly Agree" |
|--|--------------------|----------|---------------------------------|
| | Mean | S.D. | |
| I want a house that is easy to take care of. | 4.40 | 0.57 | 44 |
| I think that a house that is all on one floor is the most convenient type of house | 4.08 | 1.13 | 48 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.46 | 2.77 | 3.62 |
| White | 4.54 | 4.54 | 4.54 |
| Total | 4.50 | 3.65 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 9.31 | 12.41** | |
| Race | 11.08 | 14.77** | |
| Race by Area | 9.31 | 12.41** | |
| Error | 0.75 | | |
| I think a house can make housework too difficult. | 2.79 | 1.09 | 2 |

**Significant at the .01 level.

tended to disagree with the statement that a house can make housework too difficult (Table 8). Less than 2 percent strongly agreed with this statement, while 58 percent of the subjects either disagreed or strongly disagreed.

There was strong agreement among all respondents (48%) with the statement that a house that is all on one floor is the most convenient type of house. The analysis of variance of this statement yielded

significant results for differences due to race, area, and the interaction of the two. The blacks gave lower scores than the whites, and Delaware scores were lower than those in High Point. The significant interaction, however, suggested that these differences were not being produced in additive fashion but were due to specific patterning in individual group means. Inspection of these means showed that all subgroups were quite similar except the Delaware blacks, who showed a very low mean. This single low score produced the racial and area differences. In suggesting improvements for the dwelling units, an equal number of homemakers from both regions expressed a preference for either single- or two-story dwellings (Table 4, p. 38).

Leisure. Scores given to the leisure statements were low (Table 9). Only 15 percent strongly agreed with the statement that care of the house should leave the homemaker with free time to do those

Table 9

Leisure: Grand Mean and Percent of Strong Agreement of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|------------|------|------------------------------|
| I want the care of my house to leave me free time to do the things I want to do. | 4.08 | 0.55 | 15 |
| I want a house where I can have plenty of room for my recreation. | 3.80 | 0.74 | 12 |

things she wished. Having plenty of room for recreation was not as important to the homemakers as some of the other housing features, although 6 percent of the respondents specifically mentioned that they would like to have a recreation room (Table 4, p. 38). Many of the women commented that they engaged in no form of recreation or simply did not have the time for it. No significant racial or regional differences were noted for the leisure scores.

Social Prestige. Social prestige, as a whole, was important to the respondents (Table 10). The grand mean for the statement concerning the neighborhood that the house was in was high, and 58 percent of the respondents strongly agreed that the neighborhood was important. In the analysis of variance, racial differences were significant at the .01 level. The white subjects believed that the neighborhood where a house was located was more important than did the black subjects. No geographic differences were noted. When asked what they least liked about their housing, 29 percent of the respondents mentioned the neighborhood (Table 3, p. 37). Some noted that they did not enjoy living in a place labeled as "public housing"; while several others mentioned that the neighbors did not keep up their property, and this was a source of discontent. Also important was a house which they could be proud to have their friends see (Table 10); 44 percent of the homemakers strongly agreed with this statement. On the other hand, only 8 percent of the respondents strongly agreed that their house influenced what their friends thought of them. Racial or regional differences were not found on these two prestige questions.

Table 10

Social Prestige: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand | | Percent Who "Strongly Agree" |
|--|--------------------|----------|---------------------------------|
| | Mean | S.D. | |
| I think that the neighborhood that a house is in is important. | 4.40 | 0.87 | 58 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.30 | 3.85 | 4.08 |
| White | 4.85 | 4.62 | 4.73 |
| Total | 4.58 | 4.23 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 1.56 | 2.39 | |
| Race | 5.56 | 8.54** | |
| Race by Area | 0.17 | 0.27 | |
| Error | 0.65 | | |
| I want a house which I can be proud to have my friends see. | 4.38 | 0.63 | 44 |
| I think my house has a lot to do with what my friends think of me. | 3.42 | 1.05 | 8 |

** Significant at the .01 level.

Aesthetics. Aesthetics was of limited importance to the homemakers (Table 11). Twenty-nine percent indicated that it was very important for their house to be beautiful, while 21 percent strongly agreed that they desired a house which was pleasant to look at. The High Point residents were more desirous of a beautiful house than the Delaware residents, this difference being significant at the .01 level. No other significant effects were found for the aesthetics statements.

Table 11

Aesthetics: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|--------------------|----------|------------------------------|
| I want a house that is pleasant for me to look at. | 4.21 | 0.41 | 21 |
| I want my house to be beautiful. | 4.10 | 0.72 | 29 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.38 | 3.92 | 4.15 |
| White | 4.38 | 3.69 | 4.04 |
| Total | 4.38 | 3.80 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 4.33 | 9.51** | |
| Race | 0.17 | 0.38 | |
| Race by Area | 0.17 | 0.38 | |
| Error | 0.46 | | |
| I want my house to give me a feeling of neatness. | 4.10 | 0.45 | 14 |

**Significant at the .01 level.

Fourteen percent responded that it was very important for their house to give them a feeling of neatness. Several of the homemakers substituted the word "cleanliness" for the word "neatness" in answering this question. Some of the respondents indicated that they did not mind that their house was not beautiful as long as it was neat.

Family Centrism. As indicated by the grand mean scores, family centrism was relatively unimportant to the respondents (Table 12). Fifteen percent strongly agreed that they wanted a house where family

Table 12

Family Centrism: Grand Mean and Percent of Strong Agreement of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|---|------------|------|------------------------------|
| I want a house where family members can spend time together. | 4.10 | 0.45 | 15 |
| I want a house where friends and relatives can get together easily. | 3.98 | 0.58 | 14 |

members could spend time together, while 14 percent indicated it was very important to have a house where friends and relatives could get together easily. No significant differences were found among races or areas.

Equality. Twenty-five percent of the subjects strongly agreed that teenage children should feel free to enjoy their house with their friends (Table 13). On the other hand, only 12 percent strongly agreed that each family member should have the same right to use any room in the house. These findings are not surprising, however, considering the high overall scores given to privacy. Significant racial or regional differences were not found for any of the equality questions.

Health. The statements relating to health encompassed both its physical and mental aspects (Table 14). None of the homemakers strongly agreed that they felt too closed in within their present dwellings. The grand mean indicated general disagreement with this statement. This is

Table 13

Equality: Grand Mean and Percent of Strong
Agreement of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|------------|------|------------------------------|
| I think that teenage children should feel free to enjoy their house with their friends. | 4.13 | 0.69 | 25 |
| I think each member of the family should have the same right to use any room in the house. | 3.50 | 1.06 | 12 |

also true of the grand mean and the percent in the statement relating housework to physical health. Only 4 percent of the homemakers strongly agreed that housework might have a negative effect on health. No significant regional or racial differences were found for either question.

Twenty-nine percent of the sample strongly agreed that they wanted a house where a sick person could be easily cared for. The analysis of variance, however, indicated specific sub-group differences (significant interaction). Inspection showed that both racial groups from High Point gave intermediate scores, while the Delaware whites gave the highest mean score and the blacks the lowest. Six out of the 52 respondents in the study were disabled. The fact that four out of these six disabled persons were Delaware whites might explain the high rate of agreement among this sub-group.

Table 14

Health: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|--------------------|----------|------------------------------|
| When I'm inside my house, I feel too closed in. | 2.90 | 1.00 | 0 |
| I think that a house can make house-work so difficult that it affects physical health. | 2.87 | 1.09 | 4 |
| I want a house where a sick person can be easily cared for. | 3.98 | 0.92 | 29 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.15 | 3.54 | 3.85 |
| White | 3.92 | 4.31 | 4.12 |
| Total | 4.04 | 3.92 | |
| <u>Source</u> | <u>Mean Square</u> | | <u>F</u> |
| Area | 0.17 | | 0.22 |
| Race | 0.94 | | 1.17 |
| Race by Area | 3.25 | | 4.04* |
| Error | 0.80 | | |
| I think that a house and where it is located have a lot to do with your health. | 3.90 | 1.12 | 29 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 3.38 | 4.23 | 3.81 |
| White | 4.38 | 3.62 | 4.00 |
| Total | 3.88 | 3.92 | |
| <u>Source</u> | <u>Mean Square</u> | | <u>F</u> |
| Area | 0.02 | | 0.02 |
| Race | 0.48 | | 0.42 |
| Race by Area | 8.48 | | 7.33** |
| Error | 1.16 | | |

*Significant at the .05 level.

**Significant at the .01 level.

Twenty-nine percent of the respondents strongly agreed that a house and where it is located influenced health. Here again, the analysis of variance showed specific sub-group differences. High Point whites and Delaware blacks were the two groups who attached the greatest importance to this statement.

Safety. For the most part, respondents disagreed with the statement that houses were dangerous places that cause too many accidents (Table 15). The stairs were mentioned by homemakers as being the greatest source of danger. Six of the fifty-two respondents were either disabled themselves or had a disabled person in the family. The two greatest sources of danger noted by these respondents were slippery tile floors and stairways. Several also believed it was important to have doorways wide enough to allow a wheelchair to pass through. For this statement, no regional or racial differences were noted.

Table 15

Safety: Grand Mean and Percent of Strong Agreement of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|------------|------|------------------------------|
| Houses are dangerous places that cause too many accidents. | 2.44 | 0.94 | 4 |

Other Factors Related to Satisfaction. Several additional statements were included by the investigator to determine what influence these factors might have on housing satisfactions. Each of these statements was found to be significant (Table 16).

Table 16

Other Factors Related to Satisfaction: Grand Mean, Percent of Strong Agreement, and Significant Analyses of Variance of Scores by Item

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|---|--------------------|----------|------------------------------|
| I think that having a place for a garden makes living much nicer. | 4.08 | 0.81 | 29 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 3.92 | 3.69 | 3.81 |
| White | 4.38 | 4.31 | 4.35 |
| Total | 4.15 | 4.00 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 0.31 | 0.50 | |
| Race | 3.77 | 6.13* | |
| Race by Area | 0.88 | 0.13 | |
| Total | 0.62 | | |
| I think a house should have a place for children to play. | 4.42 | 0.50 | 42 |
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.62 | 4.31 | 4.46 |
| White | 4.23 | 4.54 | 4.38 |
| Total | 4.42 | 4.42 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 0.00 | 0.00 | |
| Race | 0.08 | 0.32 | |
| Race by Area | 1.23 | 5.19* | |
| Error | 0.24 | | |
| I think it costs a lot of money to have a beautiful home. | 3.87 | 1.28 | 44 |

Table 16 (continued)

| Question | Grand Mean | .S.D | Percent Who "Strongly Agree" |
|-----------------------------|--------------------|----------|------------------------------|
| <u>Analysis of Variance</u> | | | |
| | High Point | Delaware | Total |
| Black | 4.08 | 3.85 | 3.96 |
| White | 4.38 | 3.15 | 3.77 |
| Total | 4.23 | 3.50 | |
| <u>Source</u> | <u>Mean Square</u> | <u>F</u> | |
| Area | 6.94 | 4.54* | |
| Race | 0.48 | 0.31 | |
| Race by Area | 3.25 | 2.13 | |
| Error | 1.53 | | |

*Significant at the .05 level.

Twenty-nine percent of the respondents strongly agreed that having a place for a garden would make living much nicer. The white subjects, however, indicated a more favorable response to a garden than the black subjects, this difference being significant at the .05 level.

A children's play area was of great importance to 42 percent of the subjects. The grand mean for this statement was high, ranking third among all questions. Delaware white subjects and High Point black subjects were the two groups who attached the greatest importance to a play area (significant interaction). When asked what features they most desired in their housing, 19 percent of all respondents mentioned a yard or outdoor play area for their children (Table 4, p. 38).

Forty-four percent of the respondents strongly agreed that it costs a lot of money to have a beautiful home. Although no racial

differences were found, this statement did indicate a significant regional difference. The High Point residents equated beauty with money more highly than the Delaware residents.

Satisfaction with Present Housing

When asked whether they liked living in their present dwellings, 81 percent of the total sample indicated that they did, while 19 percent of the subjects did not. The High Point whites were the least satisfied with their housing. Five respondents out of that sub-group stated that they did not enjoy living in their dwelling units. Only one or two subjects from each of the other sub-groups shared this negative feeling. The Delaware whites expressed the most satisfaction with their housing, with twelve out of the thirteen respondents stating that they did enjoy living in their present dwellings. One Northern subject specifically stated that her family liked living in an integrated community, while one Southern homemaker was strongly opposed to this integrated living situation. Some of the homemakers seemed to have resigned themselves to living in public housing and were satisfied because they knew they could not afford to acquire a better living situation. Several of the homemakers stated that this was a better house than they had ever had before, the primary reasons for this satisfaction being indoor plumbing and heat (Table 2, p. 36). Twenty-nine percent of the respondents stated that although they were satisfied with the dwelling unit itself, the neighborhood was a great cause of dissatisfaction (Table 3, p. 37).

Interpretations of Findings and Conclusions

Those values found to be most important to the low-income homemakers were economy and personal freedom, with social prestige, privacy, and convenience ranking next in importance. Leisure, family centrism, and health were least important to the respondents.

Different aspects of privacy appeared to be important to the homemakers. Although they tended to value privacy for their children more than for themselves, the highest score was assigned to privacy from the neighbors. This type of privacy was almost completely lacking in all three housing developments and was a cause of great dissatisfaction. A lack of space, both interior and exterior, may account for this high value placed on privacy. There may be, however, a difference in the way races and persons in different locations view the concept of personal space.

Although, for the most part, health was unimportant to the subjects, the Delaware whites more strongly agreed than the others that they wanted a house where a sick person could be easily cared for. Since most of the disabled persons in the study were Delaware whites, this finding indicates that this factor may not become important until a sickness or disability occurs in a family.

It is difficult to determine just how important safety was to the homemakers. For the most part, the respondents did not think that houses were dangerous places that cause too many accidents. Response to only one question, however, does not actually indicate the degree of importance placed on the value, safety. The findings would have been more significant had more questions related to safety been asked.

The findings of this study revealed that although the expressed overall satisfaction with present dwelling units was high, throughout the interview in many instances the respondents expressed a lack of complete satisfaction.

For the most part, suggestions made for the improvement of the dwelling were valid, and not an expression of the respondent's "wildest hopes and dreams." Some of these suggestions could be easily incorporated into the dwelling units with little effect on the housing authority budget, while several other suggestions incorporated physical changes in the dwelling units themselves. Better design of the units seems imperative, with or without increased initial costs. It is expected that long-term costs would be reduced due to a greater satisfaction with the dwelling unit.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

Summary

Are the values, wants, and needs of low-income families being considered in building government-subsidized housing? Very little research has been conducted in the area of housing values of low-income families. Since low-income families usually have little or no choice about the type of dwelling in which they live, it is important to understand and consider their values. Therefore, it is necessary that the values of low-income groups be identified, so that their housing can meet their expressed wants and needs. This study was undertaken (1) to determine housing values of low-income families as they relate to the physical design of the house, and (2) to compare housing values of black and white subjects. The investigator also believed it important to compare the housing values of the Northern subjects to those of the Southern subjects to determine if significant differences in housing values do exist on a geographic basis.

This study was limited to two areas of the country--Delaware and North Carolina. One-half of the sample was drawn from housing authorities in Newark and Dover, Delaware, while the other one-half was taken from the housing authority in High Point, North Carolina. All residents were classified as "low-income" according to government

standards and were living in subsidized housing. The study was further limited to fifty-two women who were married or were acting as head of their household, and to equal numbers of white and black respondents.

Data were secured by a pretested value scale adapted by the investigator from existing scales. Values tested were convenience, leisure, health, safety, family centrism, equality, privacy, personal freedom, aesthetics, social prestige, and economy. The subjects were divided into black and white groups, and a sample was randomly drawn from a list of all those that were eligible. All interviews were conducted by the investigator, and responses were recorded on a coded answer sheet. Information regarding the site and layout of the houses was obtained from the director of each housing authority. To assess whether the scores assigned by occupants to the interview statements differed in relation to race, geographic region, or between specific sub-groups, analyses of variance were performed for each statement. Both the mean derived from the numerical scores of the answers and the percentage of strong agreement with the statement were also studied to determine the overall importance placed on a statement.

Most of the Delaware residents lived in duplex units, while a majority of the North Carolina families lived in dwellings containing three or more units. The length of occupancy by any family ranged from five months to seventeen years. In North Carolina, 84 percent of both black and white families had a female head of the household, while this was true for 53 percent of all Delaware families. Male heads of household ranged in age from twenty-four to eighty years, with

educational levels of no school whatsoever to some college courses. Employed males were in unskilled, semiskilled, sales, or service occupations. Six of the sixteen male heads of household were non-employed. As a whole, homemakers in both regions were under sixty years of age. All homemakers who were sixty years old or over were white. The oldest person interviewed was eighty-five years old; the youngest was twenty-two. Eighty-four percent of the High Point homemakers had attended school at some time; however, their educational level was slightly lower than that of the adult males. All of the Delaware subjects had some schooling, with 65 percent completing grades ten, eleven, or twelve. Eighty-four percent of the High Point homemakers and 65 percent of the Delaware homemakers were non-employed. Those respondents who did hold a job were either semiskilled or in a service occupation. The majority of families in both North Carolina and Delaware were comprised of two to five members. All homemakers who lived alone were white. North Carolina families had children of older ages than did those in Delaware. Twenty-three percent of the respondents in each area had no children. A few families in both states had others living with them, aside from members of the immediate family.

The units of the Newark Housing Authority were duplexes, consisting of a living room, dining area, kitchen, one to four bedrooms, and a bath. Those houses that had two to four bedrooms were two-story units. The dwellings at the Dover Housing Authority contained two to five bedrooms, a living room, kitchen, dining room or area, and a

bath. Those units with two to four bedrooms were duplex or triplex, and those having five bedrooms were single-family dwellings. The four- and five-bedroom units also had an additional bath. In the High Point Housing Authority, the one-, two-, or three-bedroom units contained a living room, kitchen, pantry, and bath. All of the dwellings were either duplex or contained three or more units per structure. Some upstairs apartments were available, and many of the multiple-unit dwellings had two-stories. Each unit was provided with a range, refrigerator, and sink. The Newark and Dover units also had a hook-up available for a washing machine. The kitchens, for the most part, were small, and there was little counter space or storage. All of the public housing had tile or asphalt floors, and usually walls were painted throughout. In Newark, however, there was wood paneling in the living area. Some of the dwellings were clean, neat, and adequately maintained, while others were dirty and deteriorating; many were sparsely furnished with only the bare necessities. In all three locations, each family had a small amount of property for which it was responsible. The public areas were maintained by the housing authority, and each site had a playground or public area for all residents to use. Little or no landscaping had been done, and in Newark and Dover, there was almost a complete absence of trees.

For the most part, the homemakers expressed satisfaction with the dwelling units in which they were presently living. The High Point whites were the least satisfied with their housing, while the Delaware white homemakers expressed the most satisfaction. The greatest sources of dissatisfaction were the neighborhood and lack of space and privacy.

The most desired change was a yard or place for children to play. Economy and ease of maintenance were cited as two of the best-liked features of the dwelling.

As a whole, extremely high scores were assigned to statements indicative of the value, economy. Low maintenance costs were of primary importance in that that statement received the highest grand mean and percentage of strong agreement (60%). Forty-four percent of the subjects strongly agreed that they wished to pay as little as possible for their housing. No significant differences were noted between races or areas.

The statement concerning personal freedom was the second most important statement to the respondents. Once again, 60 percent strongly agreed that they wanted complete freedom to do as they pleased in their houses, and the mean score was second highest in the study. No significant regional or racial differences were noted.

The homemakers tended to value privacy for their children more than for themselves. A place for each child's possessions and a private place for study were important. The blacks, however, were more concerned that each child have a place for his or her possessions than were the white subjects. No significant differences were noted by race or region concerning a study place for children. On the other hand, only 15 percent of the respondents strongly agreed that they wanted a place in the house where they would not be interrupted by family members. The High Point homemakers valued this personal privacy significantly more than those from Delaware. An equal percentage of the subjects indicated that they wanted a place in the house where they

could be alone when they wanted to be. The highest grand mean score for privacy was given to privacy from the neighbors, with 56 percent of all respondents strongly agreeing to this statement. No regional or racial differences were noted.

Social prestige, as a whole, was important to the respondents. Fifty-eight percent of the respondents strongly agreed that the neighborhood where a house is located is important. In the analysis of variance, racial differences were significant in that the white subjects believed the neighborhood was more important than did the black subjects. Also important was a house which they could be proud to have their friends see, although only 8 percent of the respondents strongly agreed that their house influenced what their friends thought of them. Racial or regional differences were not found in responses to these two prestige statements.

Ease of maintenance in the care of a house was ranked as being important by 44 percent of the homemakers. For the most part, the subjects tended to disagree with the statement that a house can make housework too difficult. Significant differences were not noted according to race or area for either statement. The percentage of strong agreement with the statement that a house that is all on one floor is the most convenient type of house was high, although a significant interaction was noted. Most Delaware blacks expressed a preference for two-story dwellings.

Aesthetics was awarded a lesser degree of importance by the homemakers. Twenty-nine percent indicated that it was very important for their house to be beautiful, while 21 percent strongly agreed that

they desired a house which was pleasant to look at. The High Point residents were more desirous of a beautiful house than were the Delaware residents. No other significant effects were found for the aesthetics statements. Fourteen percent responded that it was very important for their house to give them a feeling of neatness.

Twenty-five percent of the subjects strongly agreed that teenage children should feel free to enjoy their house with their friends. On the other hand, only 12 percent strongly agreed that each family member should have the same right to use any room in the house. The equality statements yielded no significant racial or regional differences.

Scores assigned to the leisure statements were low, and no significant racial or regional differences were found. Only 15 percent of the subjects strongly agreed that the care of the house should leave the homemaker with free time to do those things she wished. An even smaller percentage (12%) strongly agreed that they wanted a house with plenty of room for recreation.

Family centrism was also relatively unimportant to the respondents. Fifteen percent strongly agreed that they wanted a house where family members could spend time together, while 14 percent indicated that it was very important to have a house where friends and relatives could get together easily. No significant differences were found among races or regions.

For the most part, health was unimportant to the homemakers. A significant interaction was found on two of the statements, however.

Delaware whites most strongly agreed that they wanted a house where a sick person could be easily cared for. High Point whites and Delaware blacks were the two groups who attached the greatest importance to the statement that a house and its location can influence health. None of the homemakers strongly agreed that they felt too closed in within their present dwellings, and only 4 percent strongly agreed that housework might have a negative effect on health. No significant regional or racial differences were found for either statement.

As a whole, the respondents did not think that houses were dangerous places that cause too many accidents. Regional or racial differences were not noted for this safety statement. It is believed by the investigator that the findings for safety would have been more significant had additional questions been asked in this category.

Three other statements were included to determine what influence these factors might have on housing satisfactions, and each of these statements was found to be significant at the .05 level. Twenty-nine percent of the respondents strongly agreed that having a place for a garden would make living much nicer, but the white subjects indicated a more favorable response to a garden than the black subjects. A children's play area was of particular importance to 42 percent of the subjects. Delaware white subjects and High Point black subjects were the groups that attached the greatest importance to a play area (significant interaction). Forty-four percent of the respondents strongly agreed that it costs a lot of money to have a beautiful home, but the High Point residents equated beauty with money more highly than the Delaware residents.

Findings significant at the .01 level, either by race or area, were these: the black subjects were more concerned with a place for their children's possessions than were the whites; the white subjects assigned greater importance to the neighborhood than did the black respondents; the High Point homemakers were more desirous of a beautiful house than the Delaware subjects.

Recommendations

Findings of this study point out the need for more extensive research in the area of housing values of low-income families. It is recommended that this study be repeated in this and other parts of the country and among different races and nationalities. With further study, satisfactions and dissatisfactions can be analyzed in greater depth.

Further study is needed to determine which aspects of the neighborhood are most objectionable to public housing residents, since the neighborhood was found to be a great source of dissatisfaction. The findings of this study concerning the value of social prestige conflict with those of other studies. Additional research would further help to determine if there are significant regional or racial differences for this value.

Although the importance of privacy has been established, further study is needed to determine what aspects of privacy are most desired. There is also a need to determine if there is a difference in the way races and persons in different locations view the concept of personal space and privacy. The architecture of future public housing dwellings

should stress both interior and exterior privacy. Low-cost furniture could be designed to create a total environment for an individual within a room, thus providing additional privacy.

Additional questions should be included in the value scale for the values of personal freedom, convenience, health, and safety to further determine the importance of each. It is believed that the findings for these values in this study might have been more significant had additional questions been asked.

It is hoped that architects, designers, contractors, and government officials will become motivated to sponsor research and utilize research of others as to the needs and wants of future occupants when designing public housing. Those values found to be significant can be considered indicative of the perceived housing needs of low-income groups, and these needs could be incorporated into the physical design of the house as the budget allows. The importance of economy, personal freedom, and privacy have been established. These values should definitely be considered in future public housing design. Also to be considered are the least-liked features of present dwellings and those suggestions by the residents for improvement of future housing.

Opportunities for home economists in the area of public housing are many. Educational programs should be devised to teach public housing residents how to appreciate and to care for their dwellings. Consumer education classes would be beneficial for those homemakers interested in buying furniture, and the homemaker could also be shown ways to make her home more attractive with the furnishings she now has.

Designers with a home economics background would further prove invaluable in helping architects and contractors adapt housing values to the physical design of the dwelling.

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APPENDIXES

The following are the names of the persons who have been appointed to the various positions in the office of the Secretary of the Board of Education, and the dates of their appointments:

1. Secretary of the Board of Education: _____

2. _____

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100. _____

39. Sabors
 40. Galch
 41. Spray
 42. Tapp
 43. Tapp
 44. U. S.
 45. U. S.
 46. Wain
 47. Will
 48. Wood

APPENDIX A

BASIC DATA SHEET AND INTERVIEW SCHEDULE

FOR INTERVIEWER TO INDICATE:

1. Address of house (street and number):
2. Location: ___ a. High Point
 ___ b. Delaware
3. Type of dwelling: ___ a. Single-family
 ___ b. Duplex
 ___ c. Three or more units
4. Race: ___ a. Black
 ___ b. White

First of all, let me ask you a few questions about yourself.

- 5a. Would you tell me what persons live here with you, starting with the head of the household?

| <u>Number</u> | <u>Ages</u> |
|-----------------------|--------------|
| ___ Head of household | ___ |
| ___ Homemaker | ___ ___ Same |
| ___ Daughter(s) | ___ |
| ___ Son(s) | ___ |
| ___ Other(s) | ___ |
| Please indicate | ___ |

- 5b. May I ask you your age? (Ask the age of each family member and indicate above.)

6. Do you work? ___ Yes What is your occupation? _____
 ___ No

7. Does the head of the house work? ___ Yes ___ No
 ___ Not applicable

What is his occupation? _____

8. What was the highest grade in school that you completed? _____

What was the highest grade in school that the head of the household completed? _____

9. How long have you lived in this house? _____

INTERVIEW SCHEDULE

1. What do you like best about this house?

2. What do you like least about this house?

Now I am going to give you a card with five possible answers on it. (Give visual and read off answers, pointing to each one as it is read.) The choices are:

STRONGLY AGREE
AGREE
DOESN'T MATTER
DISAGREE
STRONGLY DISAGREE

I am going to read to you some statements about housing and I would like for you to tell me which of these five answers best describes how you feel. Don't think just about this house, but about all houses. Please consider each statement carefully before you answer.

| | STRONGLY AGREE | AGREE | DOESN'T MATTER | DISAGREE | STRONGLY DISAGREE | NO ANSWER | COMMENTS |
|--|-------------------|-------|-------------------|----------|----------------------|--------------|----------|
| (c) 3. I want a house that is easy to take care of. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (h) 4. I want a house where a sick person can be easily cared for. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (fc) 5. I want a house where family members can spend time together. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (pf) 6. In my house, I want complete freedom to do as I please. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (a) 7. I want a house that is pleasant for me to look at. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (sp) 8. I want a house which I can be proud to have my friends see. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (e) 9. I want a house that doesn't cost very much to keep up. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (c) 10. I think a house can make housework too difficult. | 5 | 4 | 3 | 2 | 1 | 0 | |

| | STRONGLY AGREE | AGREE | DOESN'T MATTER | DISAGREE | STRONGLY DISAGREE | NO ANSWER | COMMENTS |
|--|-------------------|-------|-------------------|----------|----------------------|--------------|----------|
| (s) 11. Houses are dangerous places that cause too many accidents. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (eq) 12. I think that teenage children should feel free to enjoy their house with their friends. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (p) 13. I want each of my children to have a place for his or her possessions. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (a) 14. I want my house to be beautiful. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (sp) 15. I think that the neighborhood that a house is in is important. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (fc) 16. I want a house where friends and relatives can get together easily. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (p) 17. I want a place in the house where I won't be interrupted by family members. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (a) 18. I want my house to give me a feeling of neatness. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (h) 19. I think that a house and where it is located have a lot to do with your health. | 5 | 4 | 3 | 2 | 1 | 0 | |

| | STRONGLY AGREE | AGREE | DOESN'T MATTER | DISAGREE | STRONGLY DISAGREE | NO ANSWER | COMMENTS |
|---|-------------------|-------|-------------------|----------|----------------------|--------------|----------|
| (c) 20. I think that a house that is all on one floor is the most convenient type of house. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (e) 21. I want to pay as little as possible for my housing. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (l) 22. I want the care of my house to leave me free time to do the things I want to do. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (h) 23. I think a house can make housework so difficult that it affects physical health. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (eq) 24. I think each member of the family should have the same right to use any room in the house. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (p) 25. I want a house that gives me some privacy from my neighbors. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (sp) 26. I think my house has a lot to do with what my friends think of me. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (l) 27. I want a house where I can have plenty of room for my recreation. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (h) 28. When I'm inside my house, I feel too closed in. | 5 | 4 | 3 | 2 | 1 | 0 | |

| | STRONGLY AGREE | AGREE | DOESN'T MATTER | DISAGREE | STRONGLY DISAGREE | NO ANSWER | COMMENTS |
|--|----------------|-------|----------------|----------|-------------------|-----------|----------|
| (p) 29. I want a place in the house where I can be alone when I want to be. | 5 | 4 | 3 | 2 | 1 | 0 | |
| (p) 30. A house should have a place where children can study without interruptions. | 5 | 4 | 3 | 2 | 1 | 0 | |
| 31. I think that having a place for a garden makes living much nicer. | 5 | 4 | 3 | 2 | 1 | 0 | |
| 32. I think a house should have a place for children to play. | 5 | 4 | 3 | 2 | 1 | 0 | |
| 33. I think it costs a lot of money to have a beautiful home. | 5 | 4 | 3 | 2 | 1 | 0 | |
| 34. Do you like living here? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | | |
| Why or why not? | | | | | | | |

THANK YOU VERY MUCH!

APPENDIX B

Table 17

Percent of Strong Agreement and Mean for
the Value Statements

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|---|---------------|------|---------------------------------|
| I want a house that doesn't cost very much to keep up. | 4.54 | 0.64 | 59.6 |
| In my house, I want complete freedom to do as I please. | 4.50 | 0.73 | 59.6 |
| I think that the neighborhood that a house is in is important. | 4.40 | 0.87 | 57.7 |
| I want a house that gives me some privacy from my neighbors. | 4.42 | 0.80 | 55.8 |
| I think that a house that is all on one floor is the most convenient type of house. | 4.08 | 1.13 | 48.1 |
| I want a house that is easy to take care of. | 4.40 | 0.57 | 44.2 |
| I want a house which I can be proud to have my friends see. | 4.38 | 0.63 | 44.2 |
| I want to pay as little as possible for my housing. | 4.27 | 0.82 | 44.2 |
| I think it costs a lot of money to have a beautiful home. | 3.87 | 1.28 | 44.2 |
| I think a house should have a place for children to play. | 4.42 | 0.50 | 42.3 |
| A house should have a place where children can study without interruptions. | 4.29 | 0.64 | 36.5 |
| I want each of my children to have a place for his or her possessions. | 4.30 | 0.51 | 32.7 |
| I want my house to be beautiful. | 4.10 | 0.72 | 28.8 |

Table 17 (continued)

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|------------|------|------------------------------|
| I think that having a place for a garden makes living much nicer. | 4.08 | 0.81 | 28.8 |
| I think that a house and where it is located have a lot to do with your health. | 3.90 | 1.12 | 28.8 |
| I think that teenage children should feel free to enjoy their house with their friends. | 4.13 | 0.69 | 25.0 |
| I want a house that is pleasant for me to look at. | 4.21 | 0.41 | 21.2 |
| I want a house where family members can spend time together. | 4.10 | 0.45 | 15.4 |
| I want the care of my house to leave me free time to do the things I want to do. | 4.08 | 0.55 | 15.4 |
| I want a place in the house where I can be alone when I want to be. | 3.71 | 0.91 | 15.4 |
| I want a place in the house where I won't be interrupted by family members. | 3.56 | 1.00 | 15.4 |
| I want my house to give me a feeling of neatness. | 4.10 | 0.45 | 13.5 |
| I want a house where friends and relatives can get together easily. | 3.98 | 0.58 | 13.5 |
| I want a house where I can have plenty of room for my recreation. | 3.80 | 0.74 | 11.5 |
| I think each member of the family should have the same right to use any room in the house. | 3.50 | 1.06 | 11.5 |
| I think my house has a lot to do with what my friends think of me. | 3.42 | 1.05 | 7.7 |
| I think a house can make housework so difficult that it affects physical health. | 2.87 | 1.09 | 3.8 |

Table 17 (continued)

| Question | Grand Mean | S.D. | Percent Who "Strongly Agree" |
|--|------------|------|------------------------------|
| Houses are dangerous places that cause too many accidents. | 2.44 | 0.94 | 3.8 |
| I think a house can make housework too difficult. | 2.79 | 1.09 | 1.9 |
| When I'm inside my house, I feel too closed in. | 2.90 | 1.00 | 0 |

I want to pay as little as possible for my housing.

Analysis of Variance

| | High Point | Baltimore | Total | Source | Mean Square | F |
|-------|------------|-----------|-------|---------------|-------------|------|
| Block | 4.23 | 3.91 | 4.08 | Area | 1.92 | 9.05 |
| White | 4.59 | 4.23 | 4.46 | Block | 1.92 | 1.05 |
| Total | 4.46 | 4.58 | | Block by Area | 0.08 | 0.11 |
| | | | | Error | 0.23 | |

In my house, I want complete freedom to do as I please.

Analysis of Variance

| | High Point | Baltimore | Total | Source | Mean Square | F |
|-------|------------|-----------|-------|---------------|-------------|------|
| Block | 4.55 | 4.21 | 4.43 | Area | 0.08 | 0.14 |
| White | 4.54 | 4.21 | 4.38 | Block | 0.31 | 0.56 |
| Total | 4.55 | 4.21 | | Block by Area | 0.31 | 0.56 |
| | | | | Error | 0.22 | |

I want a house that gives me some privacy from my neighbors.

Analysis of Variance

| | High Point | Baltimore | Total | Source | Mean Square | F |
|-------|------------|-----------|-------|---------------|-------------|------|
| Block | 4.77 | 4.23 | 4.50 | Area | 1.52 | 3.08 |
| White | 4.48 | 4.23 | 4.35 | Block | 0.31 | 0.49 |
| Total | 4.63 | 4.23 | | Block by Area | 0.31 | 0.49 |
| | | | | Error | 0.63 | |

APPENDIX C

Table 18

Analyses of Variance for Non-Significant
Value StatementsEconomy

I want a house that doesn't cost very much to keep up.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.69 | 4.15 | 4.42 | Area | 1.23 | 3.23 |
| White | 4.69 | 4.62 | 4.65 | Race | 0.69 | 1.82 |
| Total | 4.69 | 4.38 | | Race by Area | 0.69 | 1.82 |
| | | | | Error | 0.38 | |

I want to pay as little as possible for my housing.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.23 | 3.92 | 4.08 | Area | 1.92 | 3.05 |
| White | 4.69 | 4.23 | 4.46 | Race | 1.92 | 3.05 |
| Total | 4.46 | 4.08 | | Race by Area | 0.08 | 0.12 |
| | | | | Error | 0.63 | |

Personal Freedom

In my house, I want complete freedom to do as I please.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.54 | 4.31 | 4.42 | Area | 0.08 | 0.14 |
| White | 4.54 | 4.61 | 4.58 | Race | 0.31 | 0.56 |
| Total | 4.54 | 4.46 | | Race by Area | 0.31 | 0.56 |
| | | | | Error | 0.55 | |

Privacy

I want a house that gives me some privacy from my neighbors.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.77 | 4.23 | 4.50 | Area | 1.92 | 3.06 |
| White | 4.46 | 4.23 | 4.35 | Race | 0.31 | 0.49 |
| Total | 4.62 | 4.23 | | Race by Area | 0.31 | 0.49 |
| | | | | Error | 0.63 | |

Table 18 (continued)

A house should have a place where children can study without interruptions.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.54 | 4.08 | 4.31 | Area | 0.48 | 1.20 |
| White | 4.23 | 4.31 | 4.27 | Race | 0.02 | 0.05 |
| Total | 4.38 | 4.19 | | Race by Area | 0.94 | 2.35 |
| | | | | Error | 0.40 | |

I want a place in the house where I can be alone when I want to be.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.85 | 3.38 | 3.62 | Area | 3.25 | 4.01 |
| White | 4.08 | 3.54 | 3.81 | Race | 0.48 | 0.59 |
| Total | 3.96 | 3.46 | | Race by Area | 0.02 | 0.02 |
| | | | | Error | 0.81 | |

Convenience

I want a house that is easy to take care of.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.46 | 4.23 | 4.35 | Area | 0.02 | 0.06 |
| White | 4.31 | 4.62 | 4.46 | Race | 0.17 | 0.54 |
| Total | 4.38 | 4.42 | | Race by Area | 0.94 | 2.94 |
| | | | | Error | 0.32 | |

I think a house can make housework too difficult.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.00 | 2.54 | 2.77 | Area | 0.94 | 0.76 |
| White | 2.85 | 2.77 | 2.81 | Race | 0.02 | 0.02 |
| Total | 2.92 | 2.65 | | Race by Area | 0.48 | 0.39 |
| | | | | Error | 1.23 | |

Table 18 (continued)

Leisure

I want the care of my house to leave me free time to do the things I want to do.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.08 | 4.15 | 4.12 | Area | 0.00 | 0.00 |
| White | 4.08 | 4.00 | 4.04 | Race | 0.08 | 0.24 |
| Total | 4.08 | 4.08 | | Race by Area | 0.08 | 0.24 |
| | | | | Error | 0.32 | |

I want a house where I can have plenty of room for my recreation.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.77 | 4.08 | 3.92 | Area | 0.69 | 1.25 |
| White | 3.62 | 3.77 | 3.69 | Race | 0.69 | 1.25 |
| Total | 3.69 | 3.92 | | Race by Area | 0.08 | 0.14 |
| | | | | Error | 0.55 | |

Social Prestige

I want a house which I can be proud to have my friends see.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.38 | 4.46 | 4.42 | Area | 0.00 | 0.00 |
| White | 4.38 | 4.31 | 4.35 | Race | 0.08 | 0.18 |
| Total | 4.38 | 4.38 | | Race by Area | 0.08 | 0.18 |
| | | | | Error | 0.42 | |

I think my house has a lot to do with what my friends think of me.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.15 | 3.31 | 3.23 | Area | 1.23 | 1.16 |
| White | 4.00 | 3.23 | 3.62 | Race | 1.92 | 1.82 |
| Total | 3.58 | 3.27 | | Race by Area | 2.77 | 2.62 |
| | | | | Error | 1.06 | |

Table 18 (continued)

Aesthetics

I want a house that is pleasant for me to look at.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.08 | 4.38 | 4.23 | Area | 0.48 | 2.88 |
| White | 4.15 | 4.23 | 4.19 | Race | 0.02 | 0.12 |
| Total | 4.12 | 4.31 | | Race by Area | 0.17 | 1.04 |
| | | | | Error | 0.17 | |

I want my house to give me a feeling of neatness.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.23 | 4.00 | 4.12 | Area | 0.17 | 0.82 |
| White | 4.08 | 4.08 | 4.08 | Race | 0.02 | 0.09 |
| Total | 4.15 | 4.04 | | Race by Area | 0.17 | 0.82 |
| | | | | Error | 0.21 | |

Family Centrism

I want a house where family members can spend time together.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.08 | 4.23 | 4.15 | Area | 0.17 | 0.81 |
| White | 4.00 | 4.08 | 4.04 | Race | 0.17 | 0.81 |
| Total | 4.04 | 4.15 | | Race by Area | 0.12 | 0.09 |
| | | | | Error | 0.21 | |

I want a house where friends and relatives can get together easily.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.85 | 4.08 | 3.96 | Area | 0.02 | 0.06 |
| White | 4.08 | 3.92 | 4.00 | Race | 0.02 | 0.06 |
| Total | 3.96 | 4.00 | | Race by Area | 0.48 | 1.40 |
| | | | | Error | 0.34 | |

Table 18 (continued)

Equality

I think that teenage children should feel free to enjoy their house with their friends.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 4.08 | 4.08 | 4.08 | Area | 0.17 | 0.35 |
| White | 4.08 | 4.30 | 4.19 | Race | 0.17 | 0.35 |
| Total | 4.08 | 4.19 | | Race by Area | 0.17 | 0.35 |
| | | | | Error | 0.49 | |

I think each member of the family should have the same right to use any room in the house.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 3.46 | 3.77 | 3.62 | Area | 0.00 | 0.00 |
| White | 3.54 | 3.23 | 3.38 | Race | 0.69 | 0.60 |
| Total | 3.50 | 3.50 | | Race by Area | 1.23 | 1.07 |
| | | | | Error | 1.15 | |

Health

When I'm inside my house, I feel too closed in.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 2.69 | 2.92 | 2.81 | Area | 0.94 | 0.99 |
| White | 3.38 | 2.62 | 3.00 | Race | 0.48 | 0.50 |
| Total | 3.04 | 2.77 | | Race by Area | 3.25 | 3.40 |
| | | | | Error | 0.96 | |

I think that a house can make housework so difficult that it affects physical health.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 2.77 | 2.54 | 2.65 | Area | 2.33 | 2.03 |
| White | 3.38 | 2.77 | 3.08 | Race | 2.33 | 2.03 |
| Total | 3.08 | 2.65 | | Race by Area | 0.48 | 0.42 |
| | | | | Error | 1.14 | |

Table 18 (continued)

Safety

Houses are dangerous places that cause too many accidents.

Analysis of Variance

| | High Point | Delaware | Total | Source | Mean Square | F |
|-------|------------|----------|-------|--------------|-------------|------|
| Black | 2.08 | 2.77 | 2.42 | Area | 1.56 | 1.79 |
| White | 2.46 | 2.46 | 2.46 | Race | 0.02 | 0.02 |
| Total | 2.27 | 2.62 | | Race by Area | 1.56 | 1.79 |
| | | | | Error | 0.87 | |