# RETATIONSHTPS BETWEEN ASPECTS OF HOUSING AND FTVE HOUSTNG RELATED VALUES AS DETERMTNED BY OPINIONS OF MOXHERS OF EXPANDING FAMTLIES 

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RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND FIVE HOUSING RELATED VALUES AS DETERMINED BY OPINIONS OF MOTHERS OF EXPANDING<br>FAMILIES

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## PREFACE

A value is "an internalized standard which materially affects the way in which a person will react when confronted with a situation permitting more than one course of action."1 Families usually find themo selves in choice-making situations when seeking suitable housing. In chese situations a family's values enter to influence what will be selected. The purpose of this study is to determine the relationships made by a selected group of women between certain aspects of housing and five housingerelated values. It is hoped that the data obtained in this study will be of help to architects, building contractors, and housing specialists as a guide in planning homes for individuals and families that will better meet with the family's value orientation.

The writex wishes to express her sincere gratitude to Dr. Maie Nygren, Professor and Head of Housing and Interior Design, for her competent guidance, helpful suggestions, constructive criticism, and encouragement. Indebtedness is acknowledged also to Mrs. F。G. Salmon, Associate Professor in Housing and Interior Design and Miss Leevexa Pepin, Assistant Professor in Housing and Interior Design, for their contributions as members of the advisory commitee. The writer also acknowledges indebtedness to Dr. Carl E. Marshall, Professor of Statistics and Director of the Statistics Laboratory, for his help in

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## CHAPTER I

## INTRODUCTION

A basic assumption of the study is that people have values which operate to determine what people do. Values have been the focus of many socialopsychological studies, the findings of which support this assumption. A study of values serves as a means of gaining insights into the formation of norms and social organization since values are a fundamental part of these things: A clear conception of current theories concerning the nature of values may help one to recognize and analyze their function in relation to housing.
"A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influm ences the selection from available modes, moans, and ends of action "1. Or to say this another way, a value is "an internalized standard which materially affects the way a person will react when confronted with a situation permitting more than one course of action. ${ }^{12}$ Pointing out some of the major characteristics of values may help to clarify the function served by values. One characteristic of a person's values is that the values are not really seen. What is seen is but the indexes of these values. The values held by a person may be either conscious

[^1]or unconscious as they operate within the individual. Another characw teristic of values is that values are largely cultural products which come from the society, yet no: two individuals within the same society share identical values. The emphasis given each value may be a little more for some and a little less for others. The values that one holds come from his environment and become a part of him quite slowly and uns consciously, A long period of years is required for a value system to develop within an individual. Values, once acquired, are relatively stable but not necessarily permanent. It is possible that values may change over a period of time, Values will be influential in overt behavior only when there is a free choice to be made between two or more courses of action. Values are emotionally charged; they do matter and they are really important. As long as one behaves in terms of agreea ment with his values he will feel good about the behavior but when be has not followed his value orientation, he may feel anxious or guilty. Conflict between values may exist within a given society and within a given individual. ${ }^{3}$

Williams has identified fifteen major categories of values in our society as being:

1. Achievement and success 9。 Freedom
2. Activity and work 10. External conformity
3. Moral orientation 11. Science and secular rationala
4. Humanitarian mores ization
5. Efficiency and practicality
6. Nationalismpatriotism
7. Progress 13. Democracy
8. Material comfort 14. Individual peraonality
9. Equality
${ }^{3}$ James $\Sigma_{\text {a }}$ Montgomery, "Housing Values: Meaning, Measurement and Implications, Address to Oklahoma Home Economics Association, Oklahoma City, Oklahoma, October 5, 1957.
10. Racism and related group-superiority themes. ${ }^{4}$

The term value differs from such closely related terms as preferences, attitudes, and goals. A value differs from a perference inasmuch as a preference generally is based on an individual's range of experience and may not be justified on the basis of any commonly accepted standerds or moral judgments. A value differs from an attio tude inasmuch as an attitude may refer only to what is desired, while a value is what is desirable. Both preferences and attitudes are likely to change more frequently than values; values tend to endure. A difo ferentiation may be made between values and goals by recognizing that values are not the concrete goals of behavior but rather are aspects of these goals. Values appear as the criteria against which goals are chosen, and as the implications which these goals have in a situation。 ${ }^{5}$

Values are characteristic of groups and of individuals. Values are not limited to any one area or activity but they play a part in the many aspects that make up an individual. Since it is known that these values influence overt behavior, it may logically be assumed that certain values will be related to housing and hence will infiuence what a family does concerning not only the structure in which they live but also the total housing environment. Families usually find themselves in choicemaking situations when seeking suitable housing. In these situations their values enter to influence what they will select.
${ }^{4}$ Robin M. Williams, Ir., American Society: A Sociological Interpretation, (New York, 1955), pp. 391-399.
${ }^{5}$ Glen H. Beyer, Housing and Personal Values, Cornell University Agricultural Experiment Station Memoir 362, (Ithaca, New York, July 1959) pp. $4-5$.

Studies done previously on preferences and values have dealt primarily with the isolation of the broad general area defined by large segments of society. ${ }^{6}$ A few studies dealing specifically with housing values have revealed considerable amounts of information. Cutler measured ten values which she considered as related to housing; comfort, friends, economy, health, beauty, safety, convenience, location, privacy, and hobbies. Her findings indicate that the values which a number of rural people consider to be the most important differ according to age, sex, social status, marital status, occupation, etc. ${ }^{7}$

The Cornell Housing Study measured nine value orientations as they relate to housing: economy, family centrism, physical health, aesthetics, leisure, equality, freedom, mental health, and social prestige. This study produced evidence that values cluster. In theix final analysis, the investigators concluded that only four value clusters aconomy, family centrism, prestige and personal $\Rightarrow$ represent the scope of housing values. The study also revealed differences in the importance of housing values to home-owner wives and husbands. The most important findings from this study are that the gap between the way wives and husbands behave toward and react to housing is often great, and the higher the socioeconomic status the greater is this domestic disagreement. With the help of acchitects, plans were drawn up in an effort to plan a house
${ }^{6}$ Francena Li Nolan, "The Nature of Attitudes, Values, and Pref erences and Their Application to Housing Research," Papers on Research Methodology, New Jersey Agricultural Experiment Station Bulletin No. 776 , (New Brunswick, $\mathrm{n} . \mathrm{d}$.$) , \mathrm{p}$. 18 。
${ }^{7}$ Virginia $F$. Cutler, Personal and Family Values in the Choice of a Home, Gornell Univ. Agricultural Experiment Seation Bulletin 840, (Ithaca, New York, 1947.)
for each of the value ciusters. ${ }^{8}$
The Cornell Housing Study, or Buffalo Study as it is sometimes referred to, served as the pilot study for the Triple Cities Study conducted by Beyer. The same nine values were used as in the Buffalo Study but this study did not combine the values into four clusters. Scale analysis was used for an operational criteria in obtaining the data. This study revealed that values tend to fall into two clusters rather than four. The first cluster has the traits of realism and group or collective extroverted activities while the second group has idealism and personal whimsical demands with disregard of basic physical needs. This study concluded that it is necessary to develop a sound understanding of these basic value orientations and how they influence housing requirements in order to better provide satisfactory shelter for families. ${ }^{9}$

In spite of previous studies relating to housing values, there remains some areas that are yet relatively unexplored. One such area concerns values as they may relate to the various stages of the family life cycle. Beyer states that three things are important in influencing the choice of a particular house that a family may select at a given time; values, stage in the life cycle, and income. Furthermore, he says that the degree of satisfaction that will be dexived ultimately from the house will be determined by the family"s value orientation. ${ }^{10}$ The
${ }^{8}$ Glen H. Beyer, Thomas W. Mackesey, and James E. Montgomery, Houses Are For People: A Study of Home Buyer Motivations, Cornell University Housing Research Center, (Ithaca, New York, 1955).
${ }^{9} \mathrm{Glen} \mathrm{H}$. Beyer, Housing and Personal Values, pp. 506.
10 p. 176-177.
importance of the stage in the family life cycle as an influence is again emphasized by Beyer when he says，

With respect to changed needs over a period of time，the greatest changes probably will result from changes in the stage in the life cycle，with further changes due to possible changes in income．The values a family holds tend to endure through time and，therefore while they may change to a degree， would be less prone to causing different requirements than some other factors．

As these changes occur，previously unfamiliar demands requiring atten－ tion are made on housing．

A study of housing choices and housing selections by Ruth Smith， Laura Kivlin and Cecile Sinden looked at certain housing factors to see which were preferred by families at various stages of the life＝ cycle．The investigators found that significant differences exist be－ tween the factors preferred by families in each of the various stages of the lifeacycle。 ${ }^{12}$ As families are put into choicemaking situations to decide which aspects of housing they prefer，their values come into play．This leads to a second relatively unexplored area。 Little rea search has been done to find out just which value is assigned to various aspects of housing．

Because limitations of time and money make it impossible to study the values of all families as they relate to housing，this study is limited to one stage of the family life cycle，the expanding family， Home buyers today are showing preferences for features in new homes that are especially planned for the child．It is the expanding family

[^2]that is concerned most with the child and its care. The expanding family experiences sudden changes in composition which make demands on housing and often force families into choicemaking situations. For these reasons the expanding family has been selected as the stage in the family life cycle to be considered in this study.

By determining the prepotent values of expanding families and then further determining which of certain aspects of housing are related to these values, plans could successfully be made for a house that would meet a given family's value orientations. Such information could be used by planners and builders of large housing projects as well as by builders of individual units in an effort to better fit houses to the values of families in the expanding stage.

Statement of the Problem

This study seeks to determine which of certain aspects of housing will be assigned to each of five specific, housingorelated values by mothers of families in the expanding stage of the family life cycle. The values held by an individual come into play in choicemaking situations. The final decision for action will be influenced by the values of the individual. In selecting a house, many decisions must be made in regard to certain aspects of housing in order to select those that most nearly meet the needs of a family.

## Purpose

The purposes of this study are: first, to determine which of cer tain aspects of housing will be assigned to specific value categories, second, to determine whether the aspects of housing axe assigned to
only one value or to several, and third, to determine if there is any difference in the aspects of housing assigned to given value according to family size, family composition, or education of the mother.

Assumptions

The first assumption of this study is that mothers of expanding families do have values. The second is that certain aspects of housing can be assigned to value categories.

## Hypotheses

## Major Hypothesis:

Certain aspects of housing are related to the values held by mothers of expanding families.

## Sub-Hypothesis:

Association made between certain aspects of housing and selected, housing-related values vary according to education of mother, age of children, sex of children, and number of children.
Description of Variables

## Antecedent Variable

The antecedent variable in this study is stage in the family life cycle. Limitations of time and finances made it impossible to study all stages of the life cycle. The expanding stage was chosen for study because it is during this stage that families experience sudden changes in composition which make demands on housing and often force families into choicemaking situations. The expanding stage is defined as that time during which children are still being born into a family. For
purposes of this study, the expanding stage was determined by the childbearing age of the mother Landis has set the childbearing age for women as the period from twenty*one years of age to twentyaeight years of age. ${ }^{13}$ The sample selected for this study was composed of women between the ages of twenty and thirty who have at least one child.

## Independent Yariables

1. Education of Mothers: Education of the mothers was classified into four categories:
a. less than high school graduate
b. high school graduate
c. high school plus some college
d. college graduate

The categories wexe dichotomized in the analysis so that the only two used were:

$$
\begin{aligned}
& a_{0} \text { high school or less } \\
& \mathrm{b}_{*} \text { some college }
\end{aligned}
$$

2. Family Composition: The independent variable of family compo sition was divided into three parts; number of children, age of children, and sex of children.
A. Number of Children

The range of this variable was from one child to six children. In the analysis this variable was trichotomized as follows:

1) One child
2) Two children
3) Three or more children

Bo Age of Children

1) Only children of preschool age (from birth through five years)
2) Only children of school age (six years and over)
3) Both preschool and school age children
${ }^{13}$ Paul Landis. Making the Most of Marriage, (New York, 1960), p. 596

In the analysis, this variable was dichotomized as:

1) Only children of preschool age (birth through five years)
2) At least one child of school age (six years and over)
C. Sex of Children
3) One child only
4) Two or more children of the same sex
5) Two or more children of different sex

In the analysis this variable was dichotomized as:

1) One child only or two or more children of the same sex
2) Two or more children of different sex

## Dependent Variable

The dependent variable for this study is the association or nonassociation of housing aspects with five selected housing-related value categories. The housing aspects considered in this study are fifty* seven in number and are concerned with structural elements of a house or facilities for activities both inside and outside the home.

The five value categories are beauty, comfort, privacy, prestige and family centeredness. The working definitions established for each of the value categories are as follows:

1. Beauty

Into this category should go those aspects of housing which have a quality or aggregate of qualities which give pleasure to the senses, or those aspects of housing which you feel would add to the attractiveness of a home.
2. Comfort

Into this category should go those aspects of housing which you feel would make a home more restful or easier to live in.
3. Privacy

Into this category should go those aspects of housing which you feel would allow for an individual or family to be apart from company or observation if they so desired.
4. Prestige

Into this category should go those aspects of housing
which you feel would create in a house the indication that the residents were of a figher class in society; a house that would demand admiration or esteem。
5. Family Centeredness

Into this category should go those aspects of housing which you feel would focus on the family as the center of activities; anything about a house that would make it easier for the family to be together while working or playing in the home.

Measurement of the relationship of the fiftyeseven aspects of housing to the five selected housingarelated value categories was based on the opinions of mothers whose families are in the expanding stage of the life cycle.

CHAPTER II

## REVIEW OF LITERATURE

## Values and Their Measurement

One basic factor which makes families, as well as individuals, differ from each other is human values. A well known anthropologist, Dorothy Lee has pointed out that one important way of helping people to have a meaningful life in a world of change is to aid them in beo coming
... aware of the value content of their everyday iife. to recognize the values channelled through the simple operations they performs and to be aware of the values at the base of their choices and decisions. 1

Values have been the focus of many social-psychological studies which have given insight into structural elements of rorms and social organization. Perry gives a definition of value in his book Realms of Value.
... a thing - any thing - has value or is valuable, in the original and generic sense when it is the object of an interest any interest. Or, whatever is object of interest is ipso fact valuable. ${ }^{2}$

In order to give meaning to this definition of value, Perry thought it necessary to define interest.

Interest is a train of events determined by expectation of its
${ }^{1}$ Dorothy Lee, "The Individual in a Changing Society," Journal of Home Economics, Vol. LII, (February, 1960), pp. 79-82.
${ }^{2}$ Ralph B. Perry; Realms of Vaiue, (Cambridge, Mass., 1954), pp. 2-3.
outcome. Or, a thing is an object of interest when its being expected induces actions looking to its realization or nonrealization: ${ }^{3}$

By this definition, then, the quality that makes something valuable is the amount of interest a person has for that particular. This does not mean that interest creates values but rather that interest is owed to values.

Other definitions have been given to values.
A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, or the desirable which influences the selection from available modes, means and ends of action; an internalized standard which matexially affects the way a person will react when confronted with a situation permitting more than one course of action. ${ }^{4}$

Robin Williams has done a great deal of research into the study and meaning of values and value systems. He identifies values as being:
. . . things in which people are intexested - things that they want, desire to be or become, feel as obligatory, worship or enjoy. Values are modes of organizing conduct o meaningful, affectively invested pattern principles that guide human action. ${ }^{5}$

Value is a continuum with some things being very high on this continuum. The person feels severe guilt if he violates these things which he holds with strong value. Values play an important part in the central institutional structure of the society and concern goals or ends of action. Beliefs and other cognitive elements are closely associated with values. A belief may be distinguished from a value in that a
$3_{\text {Ibid. }}$ p. 3 .
${ }^{4}$ Clyde Kluckhonn, and others, "Values and Value-Orientations in the Theory of Action," Talcot Parsons, and Edward A. Shils, Toward A General Theory of Action, (Cambridge, Mass., 1951), p. 395.

5 Robin Williams, American Society: A Sociological Interpretation. (New York, 1957), p. 375.
belief is "a conviction that something is real, but a value is a preference." ${ }^{6}$

Williams enumerated several ways of finding out about the existence of values; (1) a systematic study of the regulaxity of choices made by a given group or social system, (2) observation of direction of interests, (3) by focusing upon what people say their values are, and (4) by ino ferring directly from verbal materials such as arguments. ${ }^{7}$ He also identified fifteen major clusters of values in our society. They are:

| Achievement and success | Freedom |
| :--- | :--- |
| Activity and work | External conformity |
| Moral orientation | Science and secular rationalization |
| Humanitarian mores | Nationalismopatriotism |
| Efficiency and practicality | Democracy |
| Progress | Individual personality |
| Material comfort | Racism and related group |
| Equality | superiority themes. |

Parsons and Shils attempt to incorporate a systematic definition of valuation into scientific theory of human behavior. ${ }^{9}$ They challenge philosophers to review the habit of separating the scientist"s world of facts from the philosopher's realm of values and to use skills in phic losophy to help science make a sounder and more sophisticated explow ration of the value dimensions of human behavior. 10

The Cornell value-study group listed some generic characteristics

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6Tbido., p. 379.
7 Ibid., pp. 378-379.
8}\mp@subsup{\mathrm{ Ibid., pp. 391-399.}}{}{\mathrm{ . }
9Talcott, Parsons and Edward.A.Shils, eds. Toward a General
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Theory of Action, (Cambridge, Mass., 1951).

10 Lawrence $G$ 。Thomas, "Prospects of Scientific Research into Values." Educational Theory, VI, (October, 1956), p. 1961.
of values which will help define values in a more tangible way.

1. Valuing is in some sense conceptual.
2. The conceptual element of value may ox may not be conscious or explicit.
3. Values are "affectively charged."
4. Values are not identical with particular segmental "needs" of the organism.
5. Values are not the concrete goals of behavior, but racher are aspects of these goals.
6. Values as components in conductochoices are dixectional.
7. Values may or may not be highly organized into "systems."
8. Some values are directly involved in the individual ${ }^{3}$ s existence as a "self."
9. Value is "important;" the quality of which we axe speaking is not "trivial" or of "slight concern"
10. In groups or social systems values:
a. are widespread, permeate many activities.
b, are tangibly supported, fostered, encouraged, rewarded, praised, emulated.
c. tend to endure through time.
d. are important. 11

In studies by Asahel Woodrull values have been shown to vary with professional attainment and the level of security among college students and staff, and with religious backgrounds. ${ }^{12}$ Allport, Vernon, and Lindzey reported from their study that values differ according to eduo cation and occupation. 13

Values, housing and othexwise, may be and have been measured and studied. Montgomery in an address to the Oklahoma Home Economics

Association enumerated and defined five techniques for measurement.

[^3]One technique was used by anthropologists as they attempted delineations of values. In a second technique sociologists determined value profiles by carefully examining literature relating to such forms of institutional behavior as business, industry, government, education, the family, churches, and formal and informal organizations. This method was used by Williams in his work on American values. Although such a technique gives a sweeping account of major values it does not attempt to determine the extent to which a given individual embraces these common values: ${ }^{14}$

Content analysis is still another technique for measuring values or value-related behavior. Berelson has defined content analysis as a "technique for the objective, systematic, and quantitiative description of the manifest content of communication." ${ }^{15}$ In a study of values by the content analysis technique, Montgomery investigated nine values: social prestige, physical health, mental health, aesthetics, leisure, economy, equality, family centrism, and freedom. ${ }^{16}$ His study revealed that physical health, economy, and aesthetics were emphasized far more often than all the other six values combined.

A four th technique of measuring values is that of paired compario sons which was used by virginia Cutler in her study of housing values. Her study will be discussed in more detail later in this section. The

14 James E.o Montgomery, "Housing Values" Meaning, Measurement and Implications," An address delivered at the annual meeting of OHEA, Oklahoma City, October 5, 1957, pp. 5-7.

15 Bernard Berelson, Content Analysis in Communication Research, (Glencoe, I11., 1952), p. 18.

16
James Montgomery, "Housing Value Themes in Selected Consumer Magazines," (Mimeo).
fifth technique defined by Montgomery is that of scalogram or scale analysis. In this method a number of related questions are used to form a continuum on which a given person's scale score can be located by ranking him from high to low or from favorable to unfavorable for aray one value. The scalogram analysis was used to measure housing values in the study conducted at Cornell University. This study will be dealt with in more detail later in this section.

## Housing Related Values

Previously mentioned studies of values, along with many others, have dealt primarily with the isolation of the broad general areas defined by large segments of society. ${ }^{17}$ Since these studies have revealed that values influence overt behavior, it may logically be assumed that values relating to housing will influence what that family does concerning not only the structure in which they live, but also the total housing eno vironment. Housing values or housingorelated values have been the main focus of three major studies and have been incorporated as a part of other studies since 1946. Housing values may be detined simply as values which are thought to have particular relevance to housing.

Virginia Cutler chose to study personal and family values by doing research on the interest one has in his home. 18 with this study

17 Nolan, "The Nature of Attitudes, Values, and Preferences and Their Application to Housing Research," p. 18.

18
Virginia Cutler, Personal and Family Values in the Choice of a Home, Cornell University Agricultuxal Experiment Station Bulletin 840 , (Ithaca, New York, 1947)。

Cutler has shown that values play a powerful role in determining one's satisfaction with one's house because the house has a decided influence on the possibility of engaging in certain general conditions of living. The technique used for making the home values test was developed with the aid of techniques introduced by Woodruff. Cutlex s test rests on six major assumptions:

1. That a home value is a condition of the home which offers an individual or family maximum enhancement of home life.
2. That a home is a compound of various conditions or values.
3. That in any home vaxious yalues may be present to a large or small degree in a pattexn unique to each home.
4. That the home values of greatest importance to the individual and family should be allowed for in the structure of the house so that it will contribute maximally to the type of living desired.
5. That it is possible by the use of the paired compaxison technique to determime the relative importance of one s values and to establish a family pattern made up of the patterns of its members.
6. That a knowledge of the relative importance of home values will enable the family to recognize specific features in a home which yield maximum satisfaction. 19

Ten basic home values provided the core of the test designed by Cutler. They were selected following a review of the literature per taining to housing values in the fields of education, housing, archio tecture, sociology, and family life. Interviews with authorities in these subjects and interviews with families were used to determine which ten basic values should be used in the instrument. Cutiex spoke of these values collectively as "home values" assuming that a home value "is a condition of the home which offers an individual or family maxio mum enhancement of home life." 20 The ten values selected include beauty,

$$
\begin{aligned}
& 19 \text { Tbid., p. } 141 . \\
& 20_{\text {Ibid., p. }} 142 .
\end{aligned}
$$

comfort, convenience, location, health, personal interests, privacy, safety, friendship activities, and economy.

Six different methods were used in this values test to elicit re= sponses that would disclose values of the respondents.

1. Ten brief descriptions of homes, each reflecting one of the values, were to be ranked in order of preference.
2. From the paragraphs describing ten kinds of homes, each reflecting one of the values, the respondent was to choose the three kinds of homes in which he would like best to live and the two in which he would like least to live.
3. Forty-fi.ve statements arranged in pairs allowed the respondent to compare every kind of home with every other kind of home and to indicate a choice.
4. Values were to be ranked according to the responses to the comparisons in the preceding section.
5. Each value was to be rated on a three-point scale to indicate how satisfactory the respondent felt his home was in relation to this value.
6. The respondent was to make statements about the meaning of each value to him. ${ }^{21}$

It was Cutler's intention to develop a test that would be a self. teaching device to be used with family members of all ages and with people of high and low educational levels. It was intended to help family members know the extent of satisfaction they are drawing from their home in relation to these values and to provoke thought about the attributes which make up these values. She used 50 families with a total of 201 participants to validate her test. This group was large enough in number to allow comparisons of home value patterns for sex, age, and special interests and to allow comparisons of home value patterns between the different social classes and within each class. The families were of one race and had lived in the community long enough to hold rather

[^4]well-defined positions in it.
Cutler found significant differences in sex, socioneconomic status, marital status, and occupation. She did not attempt to make any comparisons between families of different stages in the life cycle. The data on children's values seem to indicate that during the early school life of children their values are much alike regardless of social status but that as children mature they take on patterns similar to those of their parents.

The accuracy with which the test measures that which it has been designed to measure was determined in three ways:

1. by correlating the results from the paired comparisons with results from other parts of the test.
2. by comparing results of the test with conditions in the homes.

3 . by confirmation of results by the individuals concerned. ${ }^{22}$
The discriminative ability of the test was determined by: (I) comparing the functional patterns for different members in a family, and (2) comparing the composite patterns of groups from widely different sets of homes. 2.3
"Since studies of 'human values' have not been widely undertaken, and since research in the application of these values to the field such as housing is especially new," a study was undertaken in 1952 in Buffalo, New York to work with values. The purposes of the research were: (1) to determine more clearly what housing values were held by a sample of urban fami1ies, (2) to learn to what extent these values affected the selection of housing and subsequent satisfaction or
${ }^{22}$ Cutler, "A Technique for Improving Family Housing." Journal of Home Economics XXXVIX (March, 1947), pp. 141-142.

23
Ibid。, p. 146 .
dissatisfaction with the house secured, and (3) to illustrate how values might be incorporated into house plans. 24 The values used in the study were those which might be considered to be linked to housing. This was done by making a search of socioopsychological literature to see what values others had identified and through conferences with authorities on the Cornell campus who were currently engaged in reo search on values. Certain values were then tentatively chosen for study. Each value was examined for its relation to life in general and to housing in particular. After intensive interviews a question naire was developed, pretested, subsequently revised and pretested again. An elaborate schedule was finally prepared which included nine values:

| Economy | Aesthetics | Freedom |
| :--- | :--- | :--- |
| Family centrism | Leisure | Mental health |
| Physical health | Equality | Social prestige |

Seven hundred seventy-three families who had recently purchased new houses were interviewed. Husbands and wives were interviewed separately. Each of the families interviewed had one or more children under 18 years of age living at home.

Six sample groups were obtained, five of which were families living in owner occupied homes and one of which consisted of families in rental units of various sizes. The measurement technique used in the study was a scalogram analysis. For each of the nine values either four or five related attitudinal questions were asked. The respondent was asked to answer whether he "agreed strongly," "agreed," was "indifferent,"
${ }^{24}$ G1enn Beyer, Thomas Mackesey, and James Montgomery, Houses Are For People, Cornell Univ. Housing Research Center, Research Publication No. 3, (Ithaca, New York, 1955).
"disagreed," or "disagreed strongly" with each of the statements. By use of the scaling technique husbands and wives were arrayed separately on the nine-value continuum. Other additional questions were asked of the wives and of the husbands at the end of the questionnaire.

The nine values were found to cluster into three major groups:

1. Certain families placed strong economy value on housing and varied in the degree to which they stressed the other eight values. These families were put in the "economy" group.
2. Some families valued physical health, mental health, and family centrism above all others. Since these three values seemed to fall together, the group of families that considered them of prime importance was designated the "family" group.
3. A third group of families put greatest stress on a combination of aesthetics, leisure, and equality. They were termed the "personal" group.
4. Although social prestige ranked low, it was believed by authorities that houses are the outward symbols of the social status of those who occupy them so social prestige was adopted along with the other three groups. 25

With the help of architects, plans were devised in an effort to design a house for each of the value clusters. Some of the significant findings of the study were that home-owner wives held each of the nine values, except economy, to a significantly greater degree than did their husbands. It was found also that $67 \%$ of the 751 wives were "high" on two or more of the nine values as compared with $56 \%$ of the 751 husbands; $36 \%$ of the wives and $21 \%$ of the husbands ranked high on four or more of the values. These findings indicate that people want and/or need houses that will enable them to satisfy several housing values.

Respondents were categorized in terms of education, occupation and income of the head of the family and their responses analyzed in terms of the nine values. Montgomery reports that one of the important findings in the Buffalo research project is the fact that the gap between the

[^5]way that wives and husbands behave toward and react to housing is often great, and that the higher the socio-economic status, the greater is this domestic disagreement. For women it was found that the higher the emphasis on the values leisure, aesthetics and family centrism, the greater was their satisfaction with their housing. But on the other six values there was no relationship between value positions and housing satisfaction. ${ }^{26}$ The fact that values played a relatively minor role for women and men in the selection of their houses might logically be attributed to the fact that few people are aware of their values sufficiently to select a house that will give them satisfaction during their occupancy.

The Buffalo Study served as a pilot study for the Triple Cities Study conducted by Glenn Beyer. Two important phases or aspects of values are pertinent to his study; "explicitness and implicitness." The exp1icit aspect is that which is readily expressed or "asserted"; in other words, it can usually be verbalized by the respondent because he is likely to be conscious of it. The implicit aspect must be ine ferred from an individual's behavior. Sometimes this is called the operative aspects, and the individual may not be conscious of its existence. ${ }^{27}$ Some twenty possible values were considered but only nine were chosen. The same nine values were used as in the Buffalo Study but the investigator did not deem it feasible to combine the values into four clusters as had been done in the Buffalo Study. Scale

[^6]analysis was used for an operational criteria. Orientations toward the various values were systematically evaluated in this way.

A continuum of responses were developed for each of the values in order to reflect the agreement or disagreement with the statements. The plan of this study called for identifying a group of values rem lated to housing and the field testing of those values; but it also suggested testing the possible application of the values identified to planning and architecture. Some questions of this nature were included in the schedules of the Buffalo and rural area studies. Three field studies were made, Buffalo, (the pilot study) Triple Cities and the Upstate New York Rural Area. Segment sampling was used in the rural area. In the Triple Cities every house in 22 designated areas was visited but interviews were taken at only every other house if: the family had unmarried children under 21 years of age living in the house, owned the house, was the only family living regularly in the house and had lived in the house 30 days or more.

This study revealed that most of these values tend to fall into two clusters, each having quite distinctive characteristics. One cluster contains equality, family centrism, economy, physical health; and in the other cluster is freedom, aesthetics, mental health, with leisure and privacy being divided into both groups. The first group has the traits of realism and group or collective extroverted activities, while the second group has idealism and personal whimsical demands with disregard for basic physical needs. A sound understanding of these basic value orientations and how they influence housing requirements may lead to new solutions that more nearly fit people's requirements
for shelter. 28

Housing values were a part of a study conducted in Garfield County, Oklahoma by Montgomery, Sutker and Nygren. The purposes of this study were: (1) to describe the characteristics of a sample of rural owneroccupied dwellings and to learn the extent to which families are satisfied with them, (2) to examine housing improvements made within the past year and those planned for the next year, (3) to investigate the processes by which home improvements are made and new houses are built, (4) to discover the images of the house rural homemakers would like to have, and (5) to identify the major values associated with housing behavior. 29

An area sampling procedure was employed in selecting families to be studied. Interview was the method used to obtain the data. The schedule consisted of several types of questions, including threerlevelintensity, forced choice, openaended, and check list. The schedule was designed to be administered to the homemaker. Six values were examined: comfort, economy, family centeredness, privacy, social prestige, and beauty. One of the techniques by which the importance of these values was assessed was to ask the respondent to indicate if each of the following statements was "very important," "fairly important," or "not very important":

1. A house that is comfortable to live in.
2. A house that is beautiful to look at.
${ }^{28}$ Ibid., p. 32 .
29
James E. Montgomery; Sara S. Sutker, Maie Nygren. Rural Housing in Garfield County, Oklahoma, Oklahoma State Univ. Publication LVI, No. 2, (August 1, 1959), p. 8.
3. A house that is economical to maintain.
4. A house that has privacy for each family member.
5. A house that friends and neighbors will admire.
6. A house that will help the family work and play together.

The values of comfort, economy and family-centeredness were the most important to virtually all the women. Values were also measured by asking the respondent to choose among alternatives in that they were asked to select from the six values the ones which they considered most important, second most important, and third most important. Comfort, economy and familymcenteredness again were chosen as being either first or second in importance far more often than the other values. It was found that with few exceptions the variables of socioneconomic status, family-life cy cle and age were not related to the ranking of the values. Familyolife cycle was related only to the ranking of the value familycenteredness. Fifty five percent of the respondents in the earlier stages of the life cycle placed this value first or second as contrasted with $37 \%$ in the later stages. 30

Values may be revealed in aspects of our housing. The matching of these aspects to the values that a person holds prepotent might bring greater satisfaction from the residence. Smith, Kivlin, and Sinden conducted a study of housing choices and selections. The purposes of this study were:

1. to discover the causative factors which impelled families to move from one owned house to another as related to choice-making situations.
2. to develop a configuration of housing features with a high value rating for a large range of family situations, and to determine which features have a different value rating in particular family situations.
${ }^{30}$ Ibid., p. 43.
3. to relate changes in situations to changes in choices cono cerning housing. 31

The hypothesis was that factors which impel families to move from one owned residence to another owned residence may be indicative of family values as related to housing. Families were interviewed from two geographical locations; small cities and metropolitan areas. An interview was conducted with homemakers using a card sort technique to determine reasons for moving from the former house and choices made in selecting the present house. Fifty-two items were used as factors which caused moves, and 97 items comprised the list of features which influenced the choice of the present house. An adaptation of Stephenson's card sort was used for the instrument. The 97 items included in the card sort were derived from a pilot study as housing features which a family might want to attain. Each item was put on a card and the participants were asked to sort the cards first into groups and then into sub-groups as follows:
I. Items we wanted and got in our present house and location A. Items we would in insist on in another house B. Items we would not choose again
II. Items we wanted and did not get in our present house and location
A. Items we plan to add later
B. Items we would insist on in another house
C. Items we would never insist on
III. Items we did not choose
A. Items we got and would want in another house
B. Items we got and would not want in another house
C. Items we did not get and would not want
D. Items we did not get and would want in another house
IV. Items which did not apply in our situation
${ }^{31}$ Ruth H. Smith, Laura D. Kivlin, Cecile P。Sinden, Housing Choices and Selections as Evidenced by Residential Mobility, Pennsylvania State University, College of Home Ec. Research Publication 204, (University Park, May, 1963), p.48.

Housing features were considered as having a high value rating in influencing housing choices if they were placed in the following categories: I $A$, II $A$, II $B$, III $C$, III $D$, and a low value rating if they were placed in the remaining categories. The hypothesis that housing values have different significance as situations differ was sub= stantiated by the fact that only 15 of the 97 statements were given a high value rating by $75 \%$ or more of the families within all the variables studied, in both commuities. Stage in the family life cycle was related to the selection of 15 housing features in the Small City and the Suburb. Certain features showed a significant difference in relation to stage of the family=life cycle in one community but not in the other. Family income was significantly related to 18 features chosen by the Small City families in their expressed choices. However, only 14 features were significantly related to the family income of Suburb families. In this study no attempt was made to determine a hierarchy of housing values. "Because the selection of a house encompasses many choices, and the same value may be expressed through a variety of choices, it could be hypothesized that families may attain similar values through a variety of housing choices." 32

## Measuring Personal Values

The need for an instrument to measure personal values which would do so reliably, validly, and as objectively as possible led Eleanore L. Kohlmann to construct an instrument which would identify values of

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32_{\text {Ibid., p. }} 51
$$

homemakers as individuals and as groups. ${ }^{33}$ The study was limited by two factors. One was the number of values that could be included in the instrument and yet have it be of a practical length for use with homemakers of varying ages and amounts of education. Two criteria were selected as guides for choosing the values to be included in the instrument Kohlmann developed: (1) that they be values believed to be closely related to the objectives for home economics education, and (2) that they be selected to be consistent with the definition of values as accepted for the study and thus regarded as values by the writer.

A second limitation of the study was the nature of the population used to test the instrument. It was beyond the scope of the study to try the instrument on a systematically drawn sample of homemakers. After several revisions and trials the final form of the instrument was administered to 146 homemakers in three groups with 52 homemakers (systematically drawn) in one rural group, 37 homemakers in a second rural group, and 57 homemakers in a town group. Health and family life were the two values which received the top two scores for all groups. Insofar as it was possible to determine validity, this instrument was believed to be a valid measure of the eight values included in the study. Reliability of the instrument was tested by the "split-half" method corrected by the Spearman-Brown Prophecy Formula. "After using the instrument, "My Portrait as a Homemaker," the following conclusions were reached: (1) it is a valid and reasonably reliable instrument,
$33_{\text {Eleanore L. Kohlmann, "Development of an }}$ Instrument to Determine Values of Homemakers," (unpublished Ph.D. dissertation, Lowa State University of Science and Technology, 1961).
(2) it was well received by homemakers, and (3) it can be checked in a reasonable length of time." 34

Murray Straus recognized the need for a measurement technique to be used in rural sociological studies. He developed the "Rural Attitudes Profile ${ }^{135}$ to measure values in rural life. This profile measures four value dimensions considered important in contemporary American rural life: innovation proneness, rural life preference, primary group preference, and economic motivation. ${ }^{36}$ The technique used in developing this instrument was an adaptation of the "forcedchoice" method. Straus chose this technique as the most promising method of measuring value dimensions, because:

1. it eliminates response sets toward answering most questions as either "yes" or "no".
2. it seems to arouse less respondent resistance than comparable single response questions.
3. it controls for the tendency of some respondents to answer in terms of the social desirability of the response rather than their own feelings or behavior.
4. measurement of values in terms of choice is theoretically consistent with the concept of value.
5. interview time is shortened considerably.

The "Rural Attitude Profile" is a two page leaflet, containing 12
sets of four items, referred to as a tetrad. Each of the four value variables is represented by an item in the tetrad, with two items describing approximately equally uncomplimentary behaviors. The respondent is asked to select from each tetrad two items; one which best describes and which least describes his typical behavior. A scoring procedure
${ }^{34}$ Ibid., pp. 161-162.
${ }^{35}$ Murray A. Straus, A Technique for Measuring Values in Rural Life, Wash. Ag. Expt. Sta. Technical Bulletin 29, (Pullman, August, 1959).

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{ }^{36} \text { Ibid., p. 8. }
$$

was proposed with possible scores ranging from \& $\$ 12$ to +12 for each value variable. The Profile was designed for self-administration by farm men, including those with minimal reading ability. Straus also constructed a parallel form for use with farm homemakers by altering the phrasing of the statements to make them applicable to women. The Profile was tested and found to be both reliable and valid. Some reo spondents, however, appeared to have difficulty making choices among the four items in the tetrad. For this reason Beyer, in his study, recommend that it might be better to use pairs of items in developing other forced-choice tests. ${ }^{37}$

Dr. James Montgomery has stated that "values are most meaningful when they are considered along with such other crucially important housing variables as the family life cycle, place of residence, roles, income, education, and the housing supply available." ${ }^{38}$ The various stages of the family life cycle may cause considerable variation in the degree to which one holds a given value and the corresponding value symbols. In 1931, P. Sorokin and others divided the life of a family into four stages which were based on the changing family member constellation within the family. These stages were: (1) married couples just starting their independent economic existence, (2) couples with one or more children, (3) couples with one or more adult selfo supporting children, and (4) coup1es growing old. ${ }^{39}$
${ }^{37}$ Straus, A Technique for Measuring Values in Rural Life, as reported in Kohlmann.

38 James Montgomery, "Housing Values, Meaning, Assessment, Fulw fillment," Forecast for Home Economics, LXXV(April, 1959), p. 8.
${ }^{39}$ P. Sorokin, C. Zimmerman, and C. J. Galpin, A Systematic Source Book in Rural Sociology, II, (Minneapolis, 1931).

Later, E. L. Kirkpatrick and others divided the family life cycle in terms of the place of the children in the educational system and they, too, set up four stages: (1) preschool family, (2) grade-school family, (3) high-school family, and (4) all adult family. 40 Howard Bigelow did research concerning financial patterns through the family life cycle. In his work he elaborated on the schooloplacement factor and divided the family life cycle into seven periods: (1) establishment, (2) childo bearing and preschool period, (3) elementary-school period, (4) high= school period, (5) college, (6) period of recovery, and (7) period of retirement. 41

Evelyn Duvall has given perhaps the most recent division to the family life cycle in her book, Family Development, 1962.42 In her divisions the age and school placement of the oldest child were used as criteria of family cycle stage placement. After the launching center stage the criteria of division shifts to the situation facing those remaining in the original family. The family cycle divisions out1ined by Duvall are:

1. Beginning Families
2. Childbearing Families
3. Families with Preschool Children
4. Families with School Children
5. Families with Teenagers
6. Eamilies as Launching Centers
${ }^{40}$ E.L. Kirkpatrick, et.al. The Life Cycle of the Farm Family in Relation to Its Standard of Living, (Madison, 1934), Research Bulletin No. 121, Wis.Ag。Expt. Sta.
$41_{\text {Howard }} F$. Bigelow, "Money and Marriage," in Marriage and the Family, Becker and Hill, eds. (Boston, 1942), pp. 382-386.

42 Evelyn M. Duvall, Family Development, (New York, 1962).
7. Families in the Middle Years
8. Aging Families. 43

Family development can be predicted to a degree which helps us know what to expect of families during given life cycles.

The family life cycle, as a frame of reference, is a way of taking a long look at family life. It is based upon the recognition of the successive patterns within the continuity of family living over the years. It opens the way for study of the particular problems and potentials, rewards and hazards, vulnerabilities and strengths of each phase of family experience from beginning to end. 44

Divisions of the family into life cycles is just a convenient way of taking a closer look at the family which in real life flows from one stage to another without pause. One purpose of this study is to take a closer look at that stage of the family life cycle during which the family is expanding with the birth of children.

Paul Glick compiled information taken from the 1950 U. S. Popua lation Census to determine the ages of the mother and father during the different stages of the life cycle. 45 The median age of the wife at first marriage was 20.1 years while the median age of the husband at first marriage was 22.8 years. Median age for mother at the birth of the first child was 22.5 years and for the father, 25.2 years. Birth of the last child occurred when the mother was 26.1 years and the father was 28.8 years. ${ }^{8}$ Because the range of variations in age at first marriage is not very great, these data provide a tolerable
${ }^{43}$ Ibid., p. 9 。
${ }^{44}$ Ibid.,$~ p .5$.
${ }^{45}$ Paul Glick, "The Life Cycle of the Family," Marriage and Family Living, XVII (February, 1955), pp. 3-9。
approximation of family characteristics during the successive periods of married life. $"^{46}$ Paul Landis has also done research in determining the childbearing years of American wives. In his book, Making the Most of Marriage, he states that the wife's childbearing years begin at age 21 and for most wives childbearing ends by the 28 th year of age. ${ }^{47}$

## Summary

Research in values has shown that values are internalized standards which materially affect the way a person will react when confronted with a situation which permits more than one course of action. Since it is known that values influence overt behavior, it may logically be assumed that values will influence what a family does concerning not only the structure in which they live, but also the total housing eno vironment. Families during the childbearing years experience changes in composition which make strong demands on their housing. These families then will find themselves in one or more choicemaking situations when they are seeking suitable housing; at this time their values enter to influence what they will select. By determining the housing values that are related to various aspects of housing, one can better plan housing that will meet family needs and provide satisfaction.
${ }^{46}$ Paul Glick, American Families, (New York, 1957), p. 71.
${ }^{47}$ Pau1 Landis. Making the Most of Marriage. (New York, 1960), p. 596 .

## CHAPTER III

METHODOLOGY

Development of Instrument and Its Use in Collection of Data
The instrument used for the collection of data for this study evolved as the result of several developmental steps. A study of other methods used for measuring values was conducted by reviewing previous housing•related value studies. While reviewing other housing studies, a 1ist of statements was compiled. The statements related to aspects of housing which included both the structural elements of the house and activities carried on in a house. The initial listing consisted of one hundred and twelve statements. The listing was narrowed down to the aspects of housing which were related to the structural elements or to facilities for activities both inside and outside the home. Fiftyoseven statements were used in the final instrument. The elimination of statements was based upon prewtests and upon advice from the investigator's advisory committee.

The value categories selected for this study were also derived from a review of previous housingarelated value studies and other related literature. Limitations of time and finances made it impossible to study all possible values so eight value categories were chosen from the total group. These were later narrowed to five. These five value categories were: beauty, prestige, privacy, comfort, and family centeredness.

A cardwsorting technique was chosen as the means for obtaining the data. The cardmsorting technique was considered to be the best technique because it places the respondent in a choicemaking situation. The theory that underlies values is that values operate to determine an individual's behavior in choicemaking situations*

In the premtesting situations each of the fiftymseven statements was put on an individual card. Respondents were asked to sort the state ments into one of eight value categories. No statement could go into more than one value category. Prewtests revealed weaknesses in this technique. Respondents often found they could not say that a given statement was related to only one value. For this reason, the technique was modified.

The major goal of the second approach was to enable the respondent to place a given statement into more than one value category if she felt that it could not be limited to one. The fiftyoseven statements, each on an individual card, were again used. In this technique the number of value categories was reduced to five; beauty, prestige, privacy, comfort; and family centeredness. Five decks of cards made up the measuring instrument. Each deck represented a value category and contained all fiftymseven statements. Only a single deck, representing one value category, was presented at a time to the respondent. After having been given a working definition of the value category the respondent was asked to sort the fifty-seven statements into two piles; 1) those statements that were associated with or representative of that value category, 2) those statements that were not associated with or representative of that value category. The respondent was then asked to select three statements which she thought to be the best
representation of the value category under consideration.
When this process had been completed, the respondent was given a working definition of a second value category: Again she was asked to sort the same fiftyeseven statements into two piles; those that were associated with this value and those that were not. She again selected three statements as best representatives of this value category. The same procedure was followed for each of the remaining three value categories.

As each respondent was presented with this choicemaking situation, she was reminded that it was not a matter of whether she particularly liked these aspects of housing or not or whether she would want them in her home or not. Instead the respondent was asked to select the aspects of housing which she felt would be an expression of each of the value categories; disregarding the location of the housing aspects in any particular house. The decision of the value category into which any of the housing aspects were placed was to be the respondents' own opinion so that the respondents would not be faced with the need for making "right or wrong" answers" The instrument was purposely not directed at the present house of the respondent. It was hoped that this technique would leave the respondent in a position to make free responses.

The cards in each deck were shuffled after a respondent had sorted them so that the statements were never in any particular order. The order of presenting the values to the respondents was also varied. If one respondent was asked to sort on beauty, privacy, prestige, family centeredness, and comfort, the next respondent might be asked to sort on family centeredness, comfort, privacy, beauty, and prestige. By
using this procedure the values would not always come in the same order; nor would one value always be presented first nor last.

The measuring instrument also included a few questions designed to obtain information about the education of the respondent, the composition of her family, the occupation of the household head, and whether the respondent rented or owned her home. Each of one hundred respondents was interviewed individually in her own home.

Selection of the Sample
The study was designed to determine the relationship between certain aspects of housing and selected housing↔related values in the opinion of mothers of families in the expanding stage of the family life cycle. The expanding stage is defined as that period during which children are being born into the family. For purposes of this study, the expanding stage is defined by the childbearing age of women, approximately twenty to thirty years of age. It was also specified that there be at least one child already in the family.

In obtaining the sample a combination of the random sampling technique and the quota sampling technique was used. First, forty blocks were randomly selected from within the city limits of Stillwater, Oklahoma, excluding all university housing. Ten alternate blocks were selected randomly which were to be used if one hundred respondents could not be found within the first forty blocks. The interviewer then started at some point on each block, knocking on doors until she found three respondents who would fit the qualifications and would participate in the study, or until the block had been completely covered. The interviewer proceeded to another block only when the instrument had been
completed by three respondents or when the euntire block had been covered. Some blocks contained less than three qualified respondents. When this situation occurred, the interviewer covered the entire block to make sure that all qualified respondents were contacted and then went on to another block. This process continued until one hundred respondents had completed the instrument. All*of the first forty blocks and nine of the ten alternate blocks were covered before one hundred instruments were completed.

## Treatment of Data

## The Antecedent Variable

This study is limited to one stage of the family life cycle, the expanding stage. This stage was selected because home buyers today are showing preferences in new homes for features planned especially for the child. It is the expanding family that is concerned most with children and their care. It is the expanding family which experiences sudden changes in composition that increase demands on housing and often force families into choicemaking situations. The stage in the life cycle, therefore, is the antecedent variable in this study.

## Dependent Variable

The major hypothesis for the study is that values held by mothers of expanding families are related to certain aspects of housing. The dependent variable for the study is the association or non-association of housing aspects with five selected housingorelated values. The first analysis deals with the overall picture of the way in which the respondents associate the various aspects of housing with the five
values. Tabulations were made to obtain frequency counts of the aspects of housing which were related by the respondents to each value. These totals are expressed in percentages. Aspects of housing are 1isted for each value in rank order according to percentages.

Frequency counts were obtained also for the aspects of housing which respondents selected as the three best examples of each value. Tabulations were made to obtain: 1) frequency counts of the aspects of housing which were selected as the three best examples for any and all values, 2) frequency counts of the aspects of housing which were selected as one of the three best examples for only one value. These tabulations produced evidence as to which of the aspects of housing were most frequently related to each of the values.

## Independent Variables

The subohypothesis for this study is that for expanding families values assigned to certain aspects of housing vary according to family size, composition of the family by sex and ages of children, and education of the mother. The data were analyzed in terms of these independent variables. Age of children was classified into two cateo gories: preschool age children only, and some school age children. The families were classified into two categories according to sex of the children: one child only or two or more children of the same sex, and two or more children of different sex. The variable, number of children was assigned three classifications: one child, two children, or three or more children. Education of mother was classified as: higher education meaning more college had been completed or a college degree had been earned, and lower education meaning the respondent was
a high school graduate or had not earned a high school diploma. Freo quency counts of the responses were tabulated for each of the subgroups within each variable.

## Statistical Treatment

The Chi-square Test was used to determine association between the independent variableswoeducation of mother, age of children, sex of children, and number of childrenomand the dependent variablesoothe association or non-association of housing aspects with each of the selected, housingorelated values. Danie1's table of "Statistically Significant Differences in Observed Per Cents ${ }^{\prime 2}$ was used to determine significant differences between proportions of two populations of relatively equal size. This table could not be used in cases where the observed percentage was less than 10 . When this situation occurred the Chi-square formula: $X^{2}=\frac{(0-E)^{2}}{E}$, was used to compute the Chi-square value for that particular response. In this formula, 0 represents the observed frequency in a cell and E represents the ex pected frequency for a cell.

The variable, number of children, was composed of three groups which also did not permit the use of Daniel ${ }^{f}$ s table. The frequency counts for each of these populations were recorded on IBM DAta Cards. Computations were made on an electronic high speed computer in the Computing Center at Oklahoma State University, to obtain the Chiosquare values for the responses made by each of these subegroups. Siga nificant differences were determined at . 05 level with two degrees of

2Daniel Cuthbert, "Statistically Significant Differences in 0 b served Per Cents," Journal of Applied Psychology, (1940), pp. 826-827.
freedom。 To account for the small sample size and increase the valido ity of the Chirsquare computations a correction factor was used in obo taining Chiesquare values when any expected frequency was less than five. The formula used was: $x^{2}=\Sigma \frac{(0-E=5)^{2}}{E}$

Description of Sample

The sample population for the study was composed of one hundred respondents who were mothers of expanding families. of these respondents, fortymseven'had high school education or less and fiftymthree had some college or were college graduates. Sixty three of the respondents had children of preschool age only, while thirtyoseven respondents had some children of schoolage. Fortymeight respondents had one child only or two or more children of the same sex and fifty two respondents had two or more children of different sex. Thirty respondents had only one child, fortyotwo respondents had two children and twentymeight rea spondents!had three or more children.

## INTERPRETATION OF DATA

## Part I

The major hypothesis for the study is that certain aspects of housing are related to values held by mothers of expanding families. The first part of the analysis of data is concerned with the overall picture regarding this relationship. The aspects of housing investigated are listed below in Table I. The values studied are:

## Beauty

Comfort
Prestige
Privacy
Family Centeredness
Respondents were able, with little difficulty, to associate the various aspects of housing with one or more values. The data are examined in more than one way to clearly reveal these associations.

One of the purposes of the study is to determine which of certain aspects of housing will be assigned to specific values. The data in Table $I$ show the percentages of respondents indicating a relationship between the individual aspects of housing and each of the five values. Respondents were free to express a relationship between each aspect of housing and: 1) all of the values, 2) one or more of the values, or 3) none of the values. For this reason, it is possible that the percentages expressed under each of the values for any given aspect of
housing could range from one hundred to zero per cent.

TABLE I

## PERCENTAGE OF RESPONDENTS CITING A RELATIONSHIP BETWEEN ASPECTS OF HOUSING AND SELECTED VALUES

| ASPECTS OF HOUSING |  | VALUES |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Beauty | Comfort Prestige Privacy Family |  |  |
| Centered- |  |  |  |  |
| ness |  |  |  |  |

TABLE I (Continued)

| ASPECTS OF HOUSING |  | VALUES |
| :--- | :--- | :--- | :--- | :--- | :--- |

The listings below reveal the aspects of housing which are most often associated with each of the selected values. The aspects of housing which were related by the respondent to each value are listed in descending order according to the percentage of respondents indiw cating an association between the housing aspect and the value with which it is listed。

## BEAUTY

PER CENT

## Wa11-to wall carpeting <br> 95

Landscaping around the house ..... 95
A fireplace ..... 95
An interior which pleases the eye ..... 94
A pleasant entrance ..... 93
Ceramic tile walls in the bathroom ..... 88
A backyard patio ..... 86
Space and facilities for arranging furniture in more than one way ..... 81
Brick construction ..... 79
A picture window ..... 74
A large amount of window area ..... 71
An entry hall ..... 70
COMFORT
Airoconditioning ..... 97
Central heating ..... 92
A house that is easy to clean and keep̀ clean ..... 90
Counter surfaces that are the right height for you ..... 88
Wallato wall carpeting ..... 88
An automatic dryer ..... 85
A second bath (half or full) ..... 85
Protection from the weather when going from the house to the car ..... 84
Children's outside play area which can be watched from inside the house ..... 83
Space and facilities for cooking, relaxing and enterm taining in the backyard ..... 82
A special place for children to play inside the house ..... 82
Adequate storage in every bedroom ..... 82
Separate bedrooms for each of the children ..... 79
Special area for washing and ironing that does not interfere with other activities in the house ..... 78
Space and facilities for sitting to work in the kitchen ..... 77
Dressing area that is adjacent to the bath ..... 76
Space and facilities for eating in the kitchen ..... 75
COMFORT (Continued) PER CENT
Indoor traffic patterns that permit having converw sation without interruption ..... 70
Coat closet at the front entrance ..... 70
A house located near the school ..... 68
A garage ..... 62
A house located near the places where your family most often goes ..... 54
Floors in all rooms of the house on the same level ..... 51
PRESTIGE
A neighborhood made up of families that are of good social standing ..... 92
A large house ..... 86
A house that friends and neighbors will admire ..... 84
Brick construction ..... 79
A house that is owned ..... 75
Two car garage ..... 73
An entry hall ..... 67
A separate dining room ..... 64
A large kitchen ..... 54
PRIVACY
A place for telephoning which keeps conversation from being overheard or from interfering with conversation of others ..... 95
Plenty of space between houses ..... 89
A fence around the yard ..... 87
Separate bedrooms for each of the children ..... 87
A bathroom that is not visible from the front door or the living area ..... 85
A house located away from highweys or busy streets ..... 81
A second bath (half or full) ..... 80
Indoor traffic patterns which permit having conversation without interruption ..... 76
A place to watch TV without interruption ..... 76
A dressing axea that is adjacent to the bath ..... 75
A separate living room ..... 71
FAMILY CENTEREDNESS
Space for the family to work and play together inside the house ..... 95
W. Facilities for cooking, relaxing and entertaining in the backyard ..... 92
A family room ..... 91
A backyard patio ..... 83
A special place for children to play inside the house ..... 83
Space for other family members to be in the kitchen while you are working ..... 80
 ..... 64

FAMILY CENTEREDNESS (Continued)
PER CENT
A family room and kitchen combined64
A house located near the places where your family most often goes50

After identifying those aspects of housing which she felt were res lated to a given value, each respondent was asked to select three aspects of housing which she felt were the best expression of that value. Respondents repeated this same process for the remaining four values. In Table II are listed the aspects of housing most often selected as one of the three aspects of housing best expressing each value. The three aspects of housing selected according to this criterion are hereafter referred to as the "Top Three." The data in Table II show the per* centage of respondents placing a given aspect of housing within the "Top Three" for a given value. This does not mean that this same aspect of housing was not named among the "Top Three" for another value as well. The data also show percentages of respondents placing a given aspect of housing within the "Top Three" for one value only.

TABLE II

## ASPEGIS OF HOUSING INCLUDED WITHIN "TOP THREE"

| ASPECTS OF HOUSING | BEAUTY | BEAUTY ONLY |
| :--- | :---: | :---: |
| Landscaping around house | Per Cents |  |
| Interior which pleases the eye | 50 | 43 |
| Wallotomall carpeting | 52 | 36 |
| Brick construction | 23 | 15 |
| A fireplace | 18 | 17 |
|  |  | 15 |
| Airoconditioning | COMFORT | COMFORT ONLY |
| House easy to clean | 41 | 38 |
| Central heating | 34 | 28 |

TABLE II (Continued)

ASPECTS OF HOUSING
A house that is owned
A large house

## Neighborhood made up of families

 that are of good social standingA large house
A house that friends will admire
Landscaping around the house
An interior which pleases the eye

Space between houses
Separate bedrooms for children
A fence around the yard
A house away from busy streets A place for telephoning

COMFORT COMFORT ONLY
Per Cents
16 Per 9
15
PRESTIGE
PRESTIGE ONLY

58
44
37
23
16
PRIVACY
52
32
27
25
22

56
29
34
11
6
PRIVACY ONLY

36
28
24
16
22

FAMILY CENTEREDNESS FAM. CEN. ONLY
Space for family to work and play together inside the house 73

56
Cooking, relaxing, entertaining in the backyard
$51 \quad 41$
A family room 40 27
Space for children to play inside
23
20
Family room and kitchen combined
19
18

Independent Variables

Analysis of the data in terms of the independent variable is another way to reveal relationships: Data were analyzed in terms of the mother's education, the age and the sex (es) of her children. The entire sample is composed of one hundred respondents. Classifying this small sample into subagroups for analysis regarding the effect of the independent variables rendered it more difficult to determine if differences in subm group responses are really significant. The Chissquare Test for indew pendence was used to ascertain whether or not the responses made by
one group differ significantly from the responses made by another group, i.e., if the differences between the responses could be attributed to something other than chance alone. The .05 level of confidence was used as the criterion for significance.

## Education

Informal observation reveals that women of higher education show more discrimination in identifying relationships which they feel exist between the various aspects of housing and the five values. This statement is based on the fact that larger percentages of respondents in the lower education group more often associate a given aspect of housing with all values than do respondents in the more highly educated group.

In discussion which follows, the terms "first," "second," and "third," refer to percentages of respondents relating a given aspect of housing with the various values: "first" meaning the largest percentage of re* spondents indicating a given relationship, "second" meaning the second largest percentage of respondents and so on. Data in Table III show percentages of respondents of higher and lower education who assign a given aspect of housing to each of the five values. Only data revealing significant differences are presented to supplement the discussion.
"Wall-to-wall carpeting" is related first to BEAUTY, second to COMFORT, and third to PRESTIGE by women of higher education and women of lower education as well. A significant difference emerges, however, in relation to the value, FAMILY CENTEREDNESS. Women of lower education associate "wall-to-wall carpeting" with this value more readily than do women of higher education.

TABLE III

## RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND VALUES ACCORDING TO EDUCATION


*Significant differences at . 05 level of confidence
"A large kitchen" is related first to COMFORT, second to BEAUTY, and third to PRESTIGE by women with lower education. Women with higher education relate "a large kitchen" first to COMFORT, second to PRESTIGE, and third to BEAUTY. Women with higher education indicate a relation ship between "a separate dining room" and the values PRESTIGE, BEAUTY, and PRIVACY, in that order, whereas, the order in which women with lower education associate "a separate dining room" with is COMFORT, PRESTIGE, and BEAUTY. A significant difference occurs between the two educational groups in regard to the value, COMFORT. In the responses regarding both the statements, "a large kitchen" and "a separate dining room," it is women having lower education who associate these aspects of housing more often with COMFORT.
"Space and facilities for sitting to work in the kitchen" is related more of ten to COMFORT by women in both educational groups. Alo though the two educational groups differ in the rank order by percentage of values with which this housing aspect is associated, the two groups differ significantly only in regard to the value, PRIVACY. In cono. trast to 13 per cent of the women of higher education who relate this aspect of housing to PRIVACY, 34 per cent of the women with lower education feel that this relationship exists.

No other significant differences emerged in the analysis of responses accotding to education, however, differences in patterns of response did appear. Had the sample size been larger, permitting a more adequate distribution of responses, some of these differences may have emerged as significant.

## Age of Children

The variable, age of children, was assigned two classifications: those families whose children are all preschool age (including, age 5 years) and those families having at least some or all children of school age- Several significant differences emerged when responses were analyzed according to this variable. Data in Tables IV, V, and VI show percentages of respondents having children of preschool age only and those having some or all children of school age who assign a given aspect of housing to each of the five values.
"A special area for washing and ironing" is related first to COMFORT, second to PRIVACY, and third to BEAUTY by both subogroups. There was a significant difference, however, between the two groups concerning the value PRESTIGE. A possible explanation for this
difference is that women having only preschool children are younger families who have not yet been able to build or buy their own home and are still renting. Rental property is less likely to have a special utility area which offers "a special place for washing and ironing that would not interfere with other activities in the house." These women could have a strong desire for such facilities, and, therefore, interpret this as a prestige item.

TABLE IV
RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND VALUES According to Age of children

| ASPECT OF HOUSING | AGE OF CHILDREN | Beauty | Comfort | VAlUES Prestige <br> r Cents | Privacy | Family <br> Centered ness |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Place for washing and ironing | Preschool School | $\begin{aligned} & 47.6 \\ & 40.4 \end{aligned}$ | $\begin{aligned} & 79.4 \\ & 75.7 \end{aligned}$ | $\begin{aligned} & 44.4 \% \\ & 24.3 \% \end{aligned}$ | $\begin{aligned} & 71.4 \\ & 64.9 \end{aligned}$ | $\begin{aligned} & 23.8 \\ & 18.9 \end{aligned}$ |
| Large amount of window area | Preschool School | $\begin{aligned} & 69.8 \\ & 73.0 \end{aligned}$ | $\begin{aligned} & 46.0 \\ & 40.5 \end{aligned}$ | $\begin{aligned} & 42.9 \\ & 21.6 \end{aligned}$ | $\begin{aligned} & 7.9 \\ & 5.4 \end{aligned}$ | $\begin{array}{r} 9.5 \\ 13.5 \end{array}$ |
| Air*conditioning | Preschool <br> School | $\begin{aligned} & 41.3{ }^{\%}{ }^{\circ} \\ & 21 .{ }^{\circ} \end{aligned}$ | $\begin{aligned} & 98.4 \\ & 94.6 \end{aligned}$ | $\begin{aligned} & 82.5 \\ & 70.3 \end{aligned}$ | $\begin{aligned} & 28.6 \\ & 24.3 \end{aligned}$ | $\begin{aligned} & 25.4 \\ & 29.7 \end{aligned}$ |
| Adequate storage in every bedroom | Preschool School | $\begin{aligned} & 55.6 \\ & 43.2 \end{aligned}$ | $\begin{aligned} & 84.1 \\ & 89.2 \end{aligned}$ | $\begin{aligned} & 44.4 \\ & 86.5 \end{aligned}$ | $\begin{aligned} & 34.9{ }^{9 \%} \\ & 10.8 \end{aligned}$ | $\begin{aligned} & 23.8 \\ & 21.6 \end{aligned}$ |
| Landscaping around the house | Preschool <br> School | $\begin{aligned} & 46.8 \\ & 94.6^{7 t} \end{aligned}$ | $\begin{aligned} & 44.4 \\ & 46.0 \end{aligned}$ | $\begin{aligned} & 85.7 \\ & 86.5 \end{aligned}$ | $\begin{aligned} & 41.3 \\ & 46.0 \end{aligned}$ | $\begin{aligned} & 19.1 \\ & 24.3 \end{aligned}$ |

Although "a large amount of window area" is related first to BEAUTY, second to PRESTIGE, and third to COMFORT by both sub-groups, a
significant difference emerged in the relationship indicated between this aspect and the value, PRESTIGE. Mothers of preschool children associate this housing feature with PRESTIGE much more frequently than do mothers of children of school age.

Whereas, "airmconditioning" is related first to COMFORT, and second to PRESTIGE by both subagroups, the groups differ significantly in regard to the value, BEAUTY. Women whose children are younger associate "air-conditioning" more often with BEAUTY than do the mothers of older children.

Women having some or all children of school age relate "adequate storage in every bedroom" to COMFORT, PRESTIGE, BEAUTY, and FAMILY CENTEREDNESS, in that order. Women whose children are preschool age, on the other hand, relate "adequate storage in every bedroom" to COMFORT, BEAUTY, PRESTIGE, and PRIVACY, in that order. Significant differences emerged in regard to the, values, PRESTIGE and PRIVACY. Mothers of older children are more inclined to associate "adequate storage in every bedroom" with PRESTIGE while mothers whose children are younger associate it with PRIVACY.
"Landscaping around the house" is related first to BEAUTY, second to PRESTIGE, and third to COMFORT and PRIVACY by women having some or all children of school age. Women whose children are preschool age re1ate "landscaping around the house", to PRESTIGE, BEAUTY, and COMFORT, in that order . The two groups differ significantly in their associations of this housing aspect with BEAUTY. Nearly all of the women whose children are of school age perceive "landscaping around the house" as an expression of BEAUTY while only onewhalf of the women whose children are preschool age perceive this relationship.

TABLE V

## RELATIONSHIPS BEIWEEN ASPECTS OF HOUSING AND VALUES ACCORDING TO AGE OF CHILDREN

| ASPECT OF <br> HOUSING | AGE OF <br> CHILDREN |  | Beauty Comfort Prestige Privacy Family |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Centered |  |  |  |

"A picture window" is related first to BEAUTY, second to PRESTIGE, and third to COMFORT by both subegroups, however, a significant difference emerged in the relationship indicated between "a picture window" and the value, PRESTIGE. Mothers of younger children more frequently than mothers of older children associated this aspect of housing with this value.

Women having preschool age children perceive" a house located near the places where your family most often goes" as related first to FAMILY CENTEREDNESS and second to COMFORT. The order of these value relationships is reversed for women having school age children. A
significant difference emerged in their association of this aspect of housing with the value FAMILY CENTEREDNESS. Threeofifths of the women having younger children compared to less than one-third of the women having older children indicated this relationship.
"A house that friends and neighbors will admire" is related first to PRESTIGE, second to BEAUTY, and third to COMFORT by the respondents in both subagroups. The group differs significantly, however, in their relating "a house that friends and neighbors will admire" to the value, COMFORT. Mothers whose children are younger make this association much more frequently than do the mothers whose children are older.

Mothexs having preschool age children relate "a separate dining room" first to PRESTIGE, second to BEAUTY, and third to COMFORT, wherem as, mothers having school age children relate this same aspect of housing first to PRESTIGE and COMFORT, second to PRIVACY, and third to BEAUTY. A significant difference emerged in their association of this housing aspect with the value, BEAUTY. Women in the former group are much more inclined to make this association than are the women in the latter group. Relating "a house that is easy to clean and keep clean" first to COMFORT and second to BEAUTY is the pattern which emerges from the responses given by both subegroups. They differ, however, in their association of ease of cleanliness.with the values, BEAUTY and PRESTIGE. In both instances, it is again the mothers of younger children more than those of older children who associate this housing aspect with BEAUTY and with PRESTIGE.

Both subegroups relate "a family room" to FAMILY CENTEREDNESS first, second to COMFORT, and thixd to PRIVACY. A significant difference emerged in regard to the value, BEAUTY, with the women having younger children
identifying "a family room" with this value more than do mothers having older children. "A separate living room" is related first to BEAUTY, second to COMFORT, and third to PRIVACY by women whose children are preschool age, while women whose children are older relate this same aspect of housing first to PRIVACY, second to COMFORT, and thixd: to BEAUTY and PRESTIGE. The groups differ significantly in their rem lating the aspects, "a family room" and "a separate living room" to BEAUTY. The mothers of younger children associated these two aspects with BEAUTY much more frequently than mothers of older children.
table vi

RELATIONSHIPS BEIWEEN ASPECTS OF HOUSING AND VALUES ACCORDING TO AGE OF CHILDREN

| $\begin{gathered} \text { ASPECT OF } \\ \text { HOUSING } \end{gathered}$ | AGE OF <br> CHILDREN | Beauty | Comfort <br> Per | VALUES Prestige <br> $r$ Cents | Privacy | Family <br> Centeredness |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A family room | Preschool <br> School | $\begin{aligned} & 61.9 \\ & 40.5 \end{aligned}$ | $\begin{array}{r} 77.8 \\ \times \quad 73.0 \end{array}$ | $\begin{aligned} & 60.3 \\ & 51.4 \end{aligned}$ | $\begin{aligned} & 65.1 \\ & 48.6 \end{aligned}$ | $\begin{aligned} & 88.9 \\ & 94.6 \end{aligned}$ |
| A separate living room | Preschool School | $\begin{aligned} & 76.2 \\ & 56.8 \end{aligned}$ | $\begin{aligned} & 73.0 \\ & 59.5 \end{aligned}$ | $\begin{aligned} & 69.8 \\ & 56.8 \end{aligned}$ | $\begin{array}{r} 71.4 \\ 70.3 \end{array}$ | $\begin{aligned} & 28.6 \\ & 29.7 \end{aligned}$ |
| Arranging furniture in more than one way | Preschool <br> School | $\begin{aligned} & 87.3 \\ & 70.3 \end{aligned}$ | $\begin{aligned} & 69.8 \\ & 62.2 \end{aligned}$ | $\begin{aligned} & 46.0_{9 *} \\ & 24.3 \end{aligned}$ | $\begin{array}{r} 20.6 \\ 8.1 \end{array}$ | $\begin{aligned} & 31.8 \\ & 21.6 \end{aligned}$ |
| Sitting to work in the kitchen | Preschool <br> School | $\begin{aligned} & 22.2 \\ & 16.2 \end{aligned}$ | $\begin{aligned} & 77.8 \\ & 75.7 \end{aligned}$ | $\begin{gathered} 30.2 \\ 8.1^{*} \end{gathered}$ | $\begin{aligned} & 27.0 \\ & 10.2 \end{aligned}$ | $\begin{aligned} & 28.6 \\ & 32.4 \end{aligned}$ |
| Outside play area | Preschool School | $\begin{aligned} & 31.8 \\ & 24.3 \end{aligned}$ | $\begin{aligned} & 88.9 \\ & 72.5 \end{aligned}$ | $\begin{aligned} & 30.2 \\ & 10.8^{*} \end{aligned}$ | $\begin{aligned} & 52.4 \\ & 27.0^{*} \end{aligned}$ | $\begin{aligned} & 69.8 \\ & 67.6 \end{aligned}$ |

*Significant difference at . 05 level of confidence

Whereas both sub-groups associate "space which permits the arranging of furniture in more than one way" with BEAUTY, COMFORT, and PRESTIGE, in that order, their responses relative to the value, PRESTIGE, differ significantly. This relationship is perceived more frequently by women with younger children than by women whose children are older. "Space and facilities for sitting to work in the kitchen" is related first to COMFORT, second to PRESTIGE, and third to FAMILY CENTEREDNESS by women whose children are preschool age. Women having school age children relate this aspect of housing first to COMFORT, second to FAMILY CENTEREDNESS, and third to BEAUTY. A significant difference occurs in regard to the value, PRESTIGE. Here again, mothers of younger children more than those of older children identify "space and facilities for sitting to work in the kitchen," as a prestige item.
"Children's outside play area which can be watched from inside the house" is related first to COMFORT and second to FAMILY CENTEREDNESS by both of the sub-groups. The groups differ significantly, however, in their associations between this aspect of housing and the values, PRESTIGE and PRIVACY. In both instances the mothers whose children are younger make these associations more frequently than their counter parts with older children.

Sex of Children
The variable, sex of children, was assigned two classifications: those families having one child only or two or more children of the same sex, and those families having two or more children of different sex. A number of significant differences appear when the responses are analyzed according to this variable. Data in Tables VII, VIII, and

IX show the percentages of responses given according to the mothers' kaving one child only or children of the same sex, or her having chilo dren of different sex.

TABLE VII
RELATIONSHIPS BETWEEN ASPEGTS OF HOUSING AND VALUES ACCORDING TO SEX OF CHILDREN

| $\begin{gathered} \text { ASPECT OF } \\ \text { HOUSING } \end{gathered}$ | $\begin{aligned} & \text { SEX OF } \\ & \text { CHILDREN } \end{aligned}$ | Beauty | Comfort | VALUES Prestige <br> Cents | Privacy | Family Center ed ness |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A backyard patio | Same | 89.6 | 83.3 \% | 85.4 | 52.1 | 89.6 |
|  | Different | 82.7 | 65.4 | 73.1 | 44.2 | 76.9 |
| Large amount of window area |  |  |  |  |  |  |
|  | Same | 75.0 | 41.7 | 45.8* | 8.3 | 12.5 |
|  | Different | 67.3 | 46.2 | 25.0* | 5.8 | 9.6 |
| Dressing area adjace to the bathroom |  |  |  |  |  |  |
|  | Same | 52.1 | 77.1 | 70.8 | 79.2 | 29.2 |
|  | Different | 40.4 | 75.1 | 57.7 | 71.2 | 11.5 |
| Adequate storage in every bedroam | Same | 58.3 | 87.5 | 50.0 | 37.5 | 31.2 |
|  | Different | 44.2 | 76.9 | $30.8{ }^{\text {\% }}$ | 26.9 | 15.4 |
| A family room and kitchen combined |  |  |  |  |  |  |
|  | Same | 35.4* | $43.8$ | $16.7$ | $14.6$ | 66.7 61.5 |
|  | Different | $17.3^{*}$ | $38.5$ | 19.2 | $9.6$ | 61.5 |

Both subogroups, women having children of the same sex and those having children of different sex, most often relate "a backyard patio" to BEAUTY, FAMILY CENTEREDNESS, and PRESTIGE. A significant diffexence emerged, however, in their relating this aspect of housing to the value, COMFORT. Women having one child only or children of the same sex make this relationship more often than do women having both sexes represented among their children.
"A dressing area adjacent to the bathroom" is considered by women having children of the same sex as being related first to PRIVACY, second to COMFORT, and third to PRESTIGE. Women having children of different sex relate this same aspect of housing first to COMFORT, second to PRIVACY, and third to PRESTIGE. Their patterns of association in regard to the value FAMILY CENTEREDNESS proved to differ significantly, with women whose children are of the same sex making this association more frequently than women whose children are of different sex.
"A large amount of window area" is most often associated with BEAJTY by both subsgroups. The second largest percentage of women having children of the same sex relate "a laxge amount of window area" with PRESTIGE and the third largest percentage relate this aspect of housing with COMFORT. The order for these values is reversed for women having children of different sex. The two subegroups interpret "adequate storage in every bedroom" as being related first to COMFORT, second to BEAUTY; and third to PRESTIGE. Significant differences.emerged, however, in their relating both "a large amount of window area" and "adequate storage in every bedroom" to the value, PRESTIGE. In both instances more mothers who have children of on1y one sex see these aspects of housing as PRESTIGE items than do those mothers having children of both sexes.
"A family room and kitchen combined" is related first to FAMILY CENTEREDNESS and second to COMFORT by both groups of women. The third largest pericentage of women whose children are of the same sex relate this aspect of housing to BEAUTY while the third largest percentage of women whose children are of different sex relate this aspect of housing to PRESTIGE A significant difference emerged relative to their
association of the family roommitchen combination with the value, BEAUTY. Again, it is the mothers whose children are of the same sex who make this association more than do mothers whose children represent both sexes.

TABLE VIII
RELATIONSHIPS BEIWEEN ASPEGTS OF HOUSING AND VALUES ACCORDING TO SEX OF CHILDREN

| ASPECT OF HOUSING | SEX OF CHILDREN | Beauty | Comfort <br> Per | VALUES Prestige <br> Cents | Privacy | Family <br> Centeredo <br> ness |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Near places where family most of tên goes | Same Different | $\begin{aligned} & 4.2 \\ & 3.8 \end{aligned}$ | $\begin{aligned} & 64.6 \\ & 44.2 \end{aligned}$ | $\begin{aligned} & 20.8 \\ & 13.5 \end{aligned}$ | 8.3 5.8 | $\begin{aligned} & 58.3 \\ & 42.3 \end{aligned}$ |
| House friends and neíghbors will admire | Same <br> Different | $\begin{aligned} & 66.7 \\ & 53.8 \end{aligned}$ | $\begin{aligned} & 33.3 \\ & 34.6 \end{aligned}$ | $\begin{aligned} & 87.5 \\ & 80.8 \end{aligned}$ | $\begin{array}{r} 18.8 \\ 3.8 \end{array}$ | $\begin{aligned} & 37.5 \\ & 15.4^{*} \end{aligned}$ |
| Away from highways and busy streets | Same Different | $\begin{aligned} & 27.1 \\ & 26.9 \end{aligned}$ | $\begin{aligned} & 54.2 \\ & 75.1 \end{aligned}$ | $\begin{aligned} & 22.9 \\ & 11.5 \end{aligned}$ | $\begin{aligned} & 37.5 \\ & 30.8 \end{aligned}$ | $\begin{aligned} & 70.8 \\ & 63.5 \end{aligned}$ |
| Brick construction, | Same Different | $\begin{aligned} & 81.2 \\ & 76.9 \end{aligned}$ | $\begin{array}{r} 37.5 \\ 38.5 \end{array}$ | $\begin{aligned} & 31.2 \\ & 76.9 \end{aligned}$ | $\begin{aligned} & 22.9 \\ & 11.5 \end{aligned}$ | $\begin{aligned} & 4.2 \\ & 5.8 \end{aligned}$ |

Although, "a house located near the places where your family most often goes" is related first to COMEORT, second to FAMILY CENTEREDNESS, and third to PRESTIGE by both subogroups, the groups differ significantly in regard to the value, COMFORT. Women whose children are of the same sex, more than mothers having children of different sex identify location of the house with COMFORT.

Both sub-groups associate "a house that friends and neighbors will admire" most often with PRESTIGE first and with BEAUTY second. Women having children of the same sex feel that the third relationship is with FAMILY CENTEREDNESS. The relationship which emerged third in the responses given by women having children of different sex is relative to the value, COMFORT. Their associations between this aspect of housing and FAMLLY CENTEREDNESS differ significantly. Women whose children are of the same sex make the association more often than do women whose children are of different sex.

Women whose children are of the same sex relate "a house located away from highways and busy streets" most often to FAMILY CENTEREDNESS first, COMFORT second, and to PRIVACY third. This same aspect of housing is related first to COMFORT, second to FAMLLY CENTEREDNESS, and third to PRIVACY by women whose children are of different sex. Women whose children are of different sex associate "a location away from highways and busy streets with COMFORT significantly more often than do those whose children are of the same sex.
"Brick construction" is related by the largest percentage of women having children of the same sex to BEAUTY, second to COMFORT, and third to PRESTLGE. Women having children of different sex relate "brick cono struction" first to BEAUTY and PRESTIGE, equally, and second to COMFORT. This latter group associate "brick construction" with the value PRESTIGE significantly more often than the former group.

Women having children of the same sex relate "a separate dining room" to PRESTIGE first, to BEAUTY second, and to COMEORT third. This same aspect of housing is related first to PRESTIGE, second to BEAUTY and COMFORT, equally, and third to PRIYACY by women whose children are
of different sex. A significant difference emerges in their associo ations of this aspect of housing with PRESTIGE. Over three fourths of the women whose children are of the same sex relate "a separate dining room" with PRESTIGE while slightly over one- half of the women whose children are of different sex make this relationship.

TABLE IX
RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND VALUES ACCORDING TO SEX OF CHILDREN


Although both subogroups associate "a house that is easy to clean and keep clean" first to COMFORT, second to BEAUTY, and third to FAMILX CENTEREDNESS, the groups differ significantly in regard to the value, FAMILY CENTEREDNESS: Here again, more of the women having children of the same sex make this relationship than do women having children of both sexes.
"A large house" is related first to PRESTIGE, second to COMFORT, and third to BEAUTY by both groups of women, but a significant difference emerges between the two groups in the association of this aspect of housing with the value, BEAUTY. Women whose children represent one sex again make this association more than do women whose children are of both sexes,

Women who have children of the same sex interpret "space and facilities for eating in the kitchen" as being related first to FAMILY CENTEREDNESS and second to COMFORT: while with women whose children are of different sex the pattern of relationship is reversed. A significant difference occurs in regard to the relationship between "space and facilities for eating in the kitchen" and COMFORT. Women having chile dren of different sex perceive this relationship more often than it is perceived by women whose children are of the same sex.

## Part II

A second way in which the data are analyzed is in terms of combio nations of values. Associations made by the respondents, including all possible combinations of values, from all to none of the values, were analyzed as a separate response for each of the various statements con cerning aspects of housing. In most instances the largest percentages of the respondents relate a given aspect of housing to one or two combi= nations of values. These combinations most often contain two or three values. In some instances, however, the most often cited response is one value only rather than a combination of two or more values. Since there were a possible thirty two combinations of values the numbers appearing in the following listings will be smaller than the numbers
and percentages which emerged in the first analysis discussed in Part I.

It was possible for a given aspect of housing not to be related to any of the values. The aspects of housing which received this response by a relatively large number of respondents are:

NO VALUE
Number

Frame construction : 73
A house located near relatives 66
Floors of all rooms in the house on the same level 34
A garage $\quad . \quad 28$
A family room and kitchen combined 27
A house located near the school 27
A house located near the places where your family most often goes

23

It was also possible for a given aspect of housing to be related to only one of the values. The aspects of housing which the respondents related more often to one value only are listed below along with the value with which each was associated. Following the aspect of housing is the number of respondents making this association.

BEAUTY ONLY

A picture window. 27
Ceramic tile walls in the bathroom 23
A large amount of window area 21
Space and facilities for arranging furniture in more than one way21

Counter surfaces that are the right height for you
Protection from the weather when going from the house to the car37
Space and facilities for sitting to work in the kitchen ..... 37
An automatic dryer ..... 36
Adequate storage in every bedroom ..... 17
A coat closet at the front entrance ..... 162721

COMFORT ONLY
COMFORT ONLY
A neighborhood made up of families that are of good social standing ..... 42
A house that friends and neighbors: will admire ..... 22
A two car garage ..... 21
PRIVACY ONLY
High, closelymplanted shrubbery around the yard ..... 29
A bathroom that is not visible from the front door or living area ..... 13
FAMILY CENTEREDNESS ONLY
A house located near relatives ..... 66
Space and facilities for other family members to be in the kitchen while you are working ..... 30
Patterns of responses emerged for the aspects of housing when
data were analyzed in terms of all possible combinations of values.
The following 1 isting indicates the combinations of values with which
various aspects of housing were related by a relatively large ..... number
of respondents.
BEAUTY AND PRESTIGE ..... Number
Brick construction ..... 29
Landscaping around the house ..... 22
COMFORT AND PRESTTGE
Air-conditioning ..... 28
Central heating ..... 26
COMFORT AND PRIVACY
A place for telephoning which keeps conversation from being overheard or from interfering with conversation of others ..... 25
A place to watch television with interruption ..... 18
Indoor traffic patterns which permit having con* versation without interruption ..... 18
Special area for washing and ironing that does not interfere with other activities in the house ..... 16
A house located away from highways and busy streets ..... 14
BEAUTY, COMFORT, AND PRESTTAE Number
Wall-to wall carpeting ..... 48
An interior which pleases the eye
A pleasant entrance ..... 22
BEAUTY, COMFORT AND FAMLLY CENTEREDNESS
A house that is easy to clean and keep clean ..... 17
COMFORT, PRIVACY, AND FAMILY CENTEREDNESS
Children's outside play area that can be watched from inside the house ..... 16
BEAUTY, COMFORT, PRESTIGE, FAMILY CENTEREDNESS
A fireplace ..... 26
A large kitchen ..... 14
BEAUTY, COMFORT, PRESTIGE ${ }_{2}$ AND PRIVACY
A dressing area that is adjacent to the bath ..... 19
A. second bath (half or full) ..... 18
An entry hall ..... 18
A separate dining room ..... 12
ALI VALUES
A backyard patio ..... 27
Space and facilities for cooking, relaxing and entertaining in the backyard ..... 24
A special place for children to play inside the house ..... 23
A family room ..... 21
A fence around the yard ..... 21
A house that is owned ..... 20
Plenty of space between houses ..... 19
Separate living room ..... 16
Separate bedrooms for each of the children ..... 16

Each of the statements concerning aspects of housing was not re lated to any of the values by at least a few of the respondents; and all but two of the statements are related to all values by one or more of the respondents. The data in Table $X$ indicates the number of rem: spondents perceiving a given aspect of housing as associated with: 1) none of the values; or 2) all of the values.

TABLE X
RELATTONSHTPS OF ASPECTS OF HOUSTNG WITH ALL OF
THE VALUES OR NONE OF THE VALUES

| ASPECT OF HOUSING | No VALiJe | ALL VALUES |
| :---: | :---: | :---: |
| Wall-to-wall carpeting | 1 | 4 |
| Adequate storage in every bedroom | 10 | 8 |
| Separate bedrooms for each of the children | 2 | 16 |
| Separate living room | 3 | 16 |
| A backyard patio | 2 | 27 |
| Landscaping around the yard | 1 | 12 |
| A two car garage | 11 | 6 |
| A large house | 4 | 26 |
| A special area for washing and ironing | 6 | 9 |
| A picture window | 17 | 1 |
| A fireplace | 1 | 12 |
| A second bath | 2 | 13 |
| A special area for children to play inside | 2 | 23 |
| A place to watch TV without interruption | 10 | 8 |
| Bathroom not visible from front door | 5 | 11 |
| Neighborhood of good social standing | 2 | 5 |
| All floors of the house on the same level | 34 | 1 |
| An automatic dryer | 7 | 5 |
| A house that is owned | 9 | 20 |
| Indoor traffic patterns that permit having conversation without interruption | 8 | 11 |
| Counter surfaces that are the right height | 9 | 5 |
| Central heating | 3 | 7 |
| Airuconditioning | 1 | 7 |
| Coat closet at front entrance | 14 | 5 |
| House that is easy to clean and keep clean |  |  |
| Space for other family members to be in the kitchen while you are working | 16 | 2 |
| A pleasant entrance | 3 | 6 |
| An interior which pleases the eye | 1 | 9 |
| Plenty of space between houses | 2 | 19 |
| Family room and kitchen combined | 27 | 3 |
| Separate dining room | 11 | 11 |
| Space and facilities for sitting to work in the kitchen | 14 | 6 |
| A dressing area adjacent to the bath |  | 10 |
| A garage | 28 | 10 |
| A children's outside play area that can be watched from inside the house | 4 | 5 |
| Space and facilities for relaxing, cooking, and entertaining in the backyard | 3 | 24 |
| A fence around the yard | 4 \% | $21^{\text {ge }}$ |
| A house located near relatives | 66 * | 0 |
| A special place for telephoning where conversation will not be overheard or interrupt other activities | 4 | 6 |

TABLE X (Continued)

| ASPECT OF HOUSING NO | Number |  |
| :---: | :---: | :---: |
| High, closelyoplanted shrubbery around the yard | 17 | 3 |
| Brick construction | 6 | 3 |
| Space and facilities for the family to work and play together inside the house | 7 | 11 |
| A large amount of window area | 18 | 4 |
| An entry hall | 5 | 6 |
| A house that friends and neighbors will admire | - 5 | 6 |
| Space and facilities which permit the arranging of furniture in more than one way | g 18 | 4 |
| A large kitchen | $11{ }_{\text {\% }}$ | $13_{*}$ |
| Frame construction | 73 | 0 |
| A house located away from highways or busy streets | 5 | 10 |
| Space and facilities for eating in the kitchen | 14 | 6 |
| A house located near the school | 27 | 2 |
| Ceramic tile walls in the bathroom | 7 | 4 |
| Protection from the weather when going from the house to the car | 9 | 6 |
| A house located near the places where your family most often goes | 23 | 2 |
| A family room: |  |  |

Two aspects of housing $-\infty$ a house located near relatives, and frame construction appear to be considered quite differently from the others which were investigated, for an extremely large proportion of the women failed to associate them with a value and no one associated them with all of the values. Two other aspects of housing were found by obser* vation to have little association with any value and were, therefore, eliminated from the analysis of the data at an early stage. These aspects of housing are: 1) a small house and 2) a house that is rented.

Independent Variables

A more detailed analysis reveals variations in associations made
between combinations of values and the various aspects of housing according to the independent variables: the mother's education, ages of children, sex of children, and number of children. In this analysis the limited sample size again affected computations of significant differences. Had the sample been large, significant differences may have been more readily apparent. In order to increase the validity of the Chimsquare test for independence, a correction factor was in* cluded in the formula whenever the "expected" frequency for a response was less than five。

## Education

Few significant differences were found relative to the combinations of values that women of higher education or lower education associated with various housing features. Data in Table XI show significant differences in the association of aspects of housing to combinations of values when the responses were analyzed according to education of the mother. An !! $X^{\prime \prime}$ in any of the value columns indicates values which emerge as a combination associated with each of the aspects of housing listed in the table.

The combination of values most often associated with "airmcone ditioning ${ }^{38}$ is COMFORT and PRESTLGE. This is true for both educational groups, however, the difference in their responses is significant. A larger percentage of the women with higher education associate both COMFORT and PRESTIGE with "air conditioning" than do women with lower education.

Although the largest percentages of women with higher and with lower education indicated that high, closelyoplanted shrubbery around
the yard is related to PRIVACY ONLY, significant difference occurs in the combination of values with which this housing aspect is associated. While 11 per cent of the women with lower education thought this aspect of housing was related best to a value combination, BEAUTY and PRESTIGE, none of the women having a higher education made such an association.

TABLE XI
REIATIONSHIPS BEIWEEN ASPECTS OF HOUSING AND COMBINATIONS OF VALUES DIFFERING SIGNIFICANTLY ACCORDING TO EDUCATION

| ASPECTS OF HOUSING | $\begin{gathered} \text { VALUE } \\ \text { B C } \end{gathered}$ | $\begin{aligned} & \text { COMBINATIONS } \\ & \mathrm{P}_{1} \\ & \mathrm{P}_{2} \end{aligned} \mathrm{FC}^{*}$ | $\begin{gathered} \mathrm{EI} \\ \mathrm{High} \\ \mathrm{PE}_{6} \end{gathered}$ | $\begin{aligned} & \text { ION } \\ & \text { Low } \\ & \text { nts } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Air-conditioning | X | X | 35.8 | 19.2 |
| High, closelyoplanted shrubbery around the yard | X | X | 0.0 | 10.6 |
| Frame construction | $\bigcirc \square$ | $\cdots 0000$ | 83.0 | 61.7 |
| Eating in the kitchen | X | X | 9.4 | 31.9 |

"A house of frame construction" is generally not related to any of the values. This also is true of both educational groups but a significant difference occurs in the percentages of women in the two groups who did not associate "frame construction" with any of the values. Eightythree par cent of the women having higher education felt that "frame construction" was not related to any of the values whereas only 62 per cent of the women having lower education failed to associate this aspect with any of the values.

COMFORT and FAMILY CENTEREDNESS are the values included in the combination most often perceived by women of lower education as
related to "space and facilities for eating in the kitchen. The largest percentage of women with higher education perceived this aspect as not being related to any of the values. The two educational groups differ significantly in relating eating in the kitchen with COMFORT and FAMIIY CENTEREDNESS. Only nine per cent of the women with higher education but 32 per cent of the women with lower education express this refationship.

Age of Children
TABLE XII
RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND COMBINATIONS OF VALUES DIFFERING SIGNIFICANTLY ACCORDING TO AGE OF : CHILDREN

"A fence around the yard" is most often associated with PRIVACY ONLY by women having school age children, but the same statement is most often identified with a combination of ALL FIVE VALUES by women having only preschool age children. This may be because the need for having a confined play area is greater for younger children than for
older children. The fact that mothers of younger children feel "a fence around the yard" is a necessity might be responsible for their relating this aspect of housing to all values. The two groups differ significantly in their association of this housing feature with a combio nation of ALL VALUES. More mothers having preschool age children relate "a fence around the yard" to ALL FIVE VALUES than do mothers having school age children.
"Indoox traffic patterns permitting conversation without inter ruption" is related to PRIVACY ONLY by nearly 22 per cent of the women having some school age children. The same relationship was indicated by only three per cent of the women having preschool age children, a difference which proved significant. The combination of values with which both groups must associate "indoor traffic patterns permitting conversation without interruption" is COMFORT and PRIVACY.

The largest percentage of women whose children are older related "a house that friends and neighbors will admire" to one value only, PRESTIGE. A significant difference emerged regarding this response. Whereas 35 per cent of the women with older children made this relation ship, only 14 per cent of the women having younger children perceived a like relationship. The combination of values, BEAUTY and PRESTIGE, are associated with "a house that friends and neighbors will admire" by the largest percentage ( 21 per cent) of women having younger children.
"A pleasant entrance" is most often associated with the combination of BEAUTY, COMFORT, and PRESTIGE, The groups differ significantly in this association as nearly 29 per cent of the women having preschool age children related "a pleasant entrance" with BEAUTY, COMFORT, and"

PRESTIGE, while only 11 per cent of the women having school age children perceived this relationship.

Sex of Children

TABLE XIII
RELATIONSHIPS BETWEEN ASPEGTS OF HOUSING AND COMBINATIONS
OF VALUES DIFFERING SIGNIFICANTLY ACCORDING TO SEX OF CHILDREN


Associating "a backyard patio" with a combimation of All VRUES emerged as the response given most frequently by the women classified according to sex composition of their children. A significant difw ference occurs in regard to the women's association of "a backyard patio" with a combination of four values. Twentyoseven per cent of the women having one child only or two or more children of the same sex think "a backyard patio" is related to BEAUTY, COMFORT, PRESTIGE, and FAMILX CENTEREDNESS while only 11 per cent of the women having two or more children of different sex feel that this relationship exists.
"Adequate storage in every bedroom" is most often related to the combination of BEAUTY, COMFORT, and PRESTIGE by mothers whose children
are of the same sex. Mothers whose children are of different sex most often relate "adequate storage" to COMFORT ONLY。 A significant difference emerged between the two groups in their association of this housing aspect with COMFORT ONLY. Twenty-five per cent of the mothers having children of different sex think that "adequate storage" is rem lated to COMFORT ONLY, but a mere eight per cent of the mothers having children of the same sex make this association.

The largest percentage of women having children of the same sex did not relate "high, closelymplanted shrubbery around the yard" to any of the values. The largest percentage ( 38 per cent) of women whose children represent different sexes relate this housing aspect to PRIVACY ONLY. In contrast to this, 19 per cent of the women whose children represent only one sex make this same relationship, a difference which proved significant.

Women of both groups relate "a house that friends and neighbors will admire!" most frequently with PRESTIGE ONLY. A significant differ. ence occurs, however, between the two groups in their association of this aspect of housing with the combination of BEAUTY, PRESTIGE, and FAMILI CENTEREDNESS. Seventeen per cent of the women having one child only or two or more of the same sex feel "a house that friends and neighbors will admire" is related to a combination of these three values but a mere two per cent of the women having two or more children of different sexes indicate such a relationship.
"Counter surfaces that are the right height for you" is most of ten related to COMFORT ONLY by both of the subogroups, but a significant difference emerged in the proportions of each group responding in this way. Sixty per cent of the women whose children are of different sexes
think that "counter surfaces which are the right height for you" res lates to COMFORT ONLY, while 40 per cent of the women whose children are of the same sex responded in this way.

TABLE XIV
RELATTONSHIPS BETWEEN ASPEGTS OF HOUSING AND COMBINATIONS OF VALUES DIFFERING SIGNIFICANTLY ACCORDING

TO SEX OF CHILDREN


A significant difference emerged between the two subegroups in their association of "a house that is easy to clean and keep clean" with COMFORT ONLY。 Over 20 per cent of the women having children of different sex associate ease of cleaning with COMFORT ONLY, while six per cent of the other group expressed this relationship.

A combination of the values BEAUTY, COMFORT, and PRESTIGE in association with "an interior which pleases the eye" is the response cited by the largest percentage (about 35 per cent) of women whose children represent both sexes. This association differed significantly from the per cent of women (17 per cent) whose children are of one sex perceiving this same relationship. The values, BEAUTY, COMFORT, PRESTIGE,
and FAMILY CENTEREDNESS were included in the responses given most often by the latter group in regard to "an interior which pleases the eye."
"An automatic dryer" is related most often by both groups to COMFORT ONLX. The groups differ significantly in their resporises, how ever. Fortyotwo per cent of the women having two or more children of different sexes gave this response while only 22 pex cent of the women having one child only or two or more of the same sex make this associco ation.

## Number of Children

TABLE XV

REIATIONSHIPS BETWEEN ASPECTS OF HOUSING AND COMBINATIONS
OF VALUES DIFFERING SIGNIFICANTLY ACCORDING TO NUMBER OF CHILDREN

"A large amount of window area" is associated with BEAUYY and PRESTIGE by the largest proportion of women having one child and to BEAUTY ONIY by most women having three or more children, but the largest proportion of women having two children do not associate this housing aspect with any of the values. The three groups differ significantly in their association of "a large amount of window area" with a combie nation BEAUTY and PRESTIGE. More women having one child only make this relationship than do women in the other two groups combined.

Women with one child only most often relate "a house that is owned" with a combination of values, COMFORT, PRESTIGE, and PRIVACY (20 per cent). Only two per cent of the women with two children and none of the women with three or more children perceive this relationship. This difference was significant. The largest percentage (29 per cent) of women having two children relate "a house that is owned" to all of the values while the largest percentage (18 per cent) of women having three or more children do not relate this aspect to any of the values.

The largest percentage of women in all groups feel that "protection from the weather when going from the house to the car is related to COMEORT ONLY. There is a significant difference here, however, as this relationship is expressed by 68 per cent of the women having three or more children, but by only 30 per cent of the women with one child and 21 per cent of the women having two children.

- "Adequate storage in every bedroom" is related most frequently to a combination of the values, BEAUTY, COMFORT, and PRESTIGE, by women having only one child. Equal proportions of women having two children relate this aspect to a combination of BEAUTY and COMFORT and to COMFORT ONLY. The three groups differ significantly in their
association between "adequate storage in every bedroom" and COMFORT ONLY. Thirtyasix per cent of the women having three or more children, but only 14 per cent of the women having two children and a mere three per cent of the women having one child make this relationship.
"Separate bedrooms for each of the children" is associated with the combination, COMFORT and PRIVACY, by 29 per cent of the women whose children number three or more, while only seven per cent of the women having two children and three per cent of the women having only one child make this relationship. This difference proves to be significant. Women with only one child most often relate ( 20 per cent) "separate bedrooms for each of the children" to a combination of ALL VALUES. Women having two, children relate this aspect of housing most frequently ( 27 per cent) to a combination of the values COMFORT, PRESTIGE, and PRIVACY. Women with three or more children relate the same aspect of housing to the combination, COMFORT and PRIVAGY (29, per cent) more than to any other combination.

TABLE XVI

## RELATIONSHIPS BETWEEN ASPECTS OF HOUSING AND COMBINATIONS OF VALUES DIFEERING SIGNTFICANTLY ACOORDING TO NUMBER OF CHILLDREN


$\mathrm{B}=$ Beauty, $\mathrm{C}=$ Comfort, $\mathrm{P}_{1}=$ Prestige, $\mathrm{P}_{2}=$ Privacy, $\mathrm{FC}=$ Family.
Centeredness

The largest proportion of all three subogroups relate "a twoo car garage" to PRESTIGE ONLY, but the groups differ significantly in their association of "a twomcar garage" with the value COMFORT ONLY. Almost 18 per cent of the women whose families include three or more children perceive this relationship while only three per cent of the women having one child and none of the women having two children relate "a two-car garage" to COMFORT ONLY.
"A fireplace" is associated by all groups with a combination of the values, BEAUTX, COMFORT, PRESTIGE, and FAMILY CENTEREDNESS. A significant difference emerged in the responses of these three groups relative to this aspect of housing being associated with the three values BEAUTY, COMFORT, and FAMILY CENTEREDNESS. Eighteen per cent of the women with large families feel "a fireplace" is related to these three values but none of the women in the other two groups make this relationship.

The groups differ significantly also in their associations between "a special place for children to play inside the house" with the value COMFORT ONLX. Eighteen per cent of the women having three or more children indicate this relationship but none of the women in the other two groups expressed this association. A combination of ALL VALUES is most often related to this aspect of housing by the women having one or two children. Women with three or more children most often relate "a special place for children to play inside the house" with a combio nation of only three values, COMFORT, PRIVACY; and FAMILY CENTEREDNESS。

Number of children appears to influence how women perceive "a house that is easy to clean and keep clean." This feature is related to COMFORT ONLX by 32 per cent of the women having three or more children,
while a mexe seven per cent of the women having two children and six per cent of the women having only one child make this relationship, a difference which proved significant. Women as a whole (16 per cent), relate ease of cleanliness most often to the value combination, BEAUTY and COMFORT. This same aspect of housing is related most often by women having two children to a value combination of BEAUTY, COMFORT, and FAMILY CENTEREDNESS and by women having only one child to a combination of the values BEAUTY, COMFORT, PRESTIGE, and FAMILY CENTEREDNESS.
"An outside play area for children which can be watched from inside the house" is related most of ten to a combination of the values, COMFORT, PRIVACY, and FAMILY CENTEREDNESS, by women having one or two children. The combination of values with which this aspect is most often associated by women having three or more children is COMFORT and FAMILY CENTEREDNESS. The groups differ significantly in associating "an outside play area" with a combination of the values, COMFORT and FAMILY CENTEREDNESS. Thirty two per cent of the women having three or more children, 14 per cent of the women having two children, and three per cent of the women having one child only make the association dem scribed above.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

By determining which of certain aspects of housing are related to values and by identifying which values are most important to a given family, plans could be made for a house that would meet more satiso factorily the value orientation of that family. It is during the exo panding stage of the family life cycle that a family experiences sudden changes in composition which often increase demands on housing and force families into choicemaking situations. It is in choicemaking situations that values operate to influence a family's behavior。

The purposes of this study are: 1) to determine which of certain aspects of housing will be assigned by mothers of expanding families to specific value categories, 2) to ascertain if the statements cons cerning aspects of housing are assigned to only one value or to several values, and 3) to determine if associations between a given housing aspect and a given value vary according to education of the mother, age of the children, sex of the children, and number of children in a family.

The major hypothesis of the study is: Certain aspects of housing are related to the values held by mothers of expanding families. The subohypothesis is: Associations of aspects of housing with values vary
according to education of the mothers of expanding families, age of children, sex of children, and number of children.

The population from which the sample was drawn is defined by the city limits of Stillwater, Oklahoma, excluding all university housing. In obtaining the sample, a combination of random sampling and quota sampling techniques was used. A total of one hundred respondents composed the sample.

An instrument using a cardesorting technique was devised as the means for obtaining data. This technique was considered to be appropriate because it places the respondent in a choicemaking situation. The card-sorting technique was designed to identify relationships made by individual respondents between certain aspects of housing and five selected values. The instrument also included a few questions to obo tain pertinent information relating to the independent variables: edus cation of mother, age of children, sex of children, and number of chilo dren. Data were collected in individual interviews held in the homes of the respondents.

The data were processed on a high speed electronic computer and an IBM tabulator. The Chiosquare Test for independence was used to determine significance of association between the dependent variable-mo the association or nonassociation of housing aspects to five selected housingorelated value categories $\infty$ and the independent variables $\infty$ age of children, sex of children, number of children, and education of mother . Daniel's table of "Statistically Significant Differences in Observed Per Cents" was used in determining significant differences between two subagroups of nearly equal size. Chiosquares were computed for the variable, number of children, which had three subgroups. The
formula used for this computation was: $x^{2}=\frac{(0-E \infty-5)^{2}}{E}$.

## Conclusions

Significant differences emerging from the Chimsquare Test at the .05 level of confidence are designated by an asterisk (\%) in the tables in Appendixes $A$ and B. From the analysis of the data, the following conclusions relating to the hypotheses of the study are drawn:

1: The major hypothesis mon that aspects of housing are related to values $\infty$ is supported by the fact that respondents were able with little difficulty to relate a given aspect of housing with at least one of five given values. The aspects of housing which were most of ten related by the respondents to each of the values are as follows:

BEAUTY

Wall-towwall carpeting Landscaping around the house A fireplace
An interior which pleases the eye
COMFORI
Aircconditioning
Central heating
A house that is easy to clean and keep "clean Counter surfaces that are the right height for you

PRESTIGE
A neighborhood made up of families that are of good social standing
A large house
A house that friends and neighbors Will admixe Brick construction

## PRIVACY

A place for telephoning which keeps conversation from being overheard or from interfering with conversation of others
PRIVACY (Continued)
Plenty of space between houses
A fence around the yard
Separate bedrooms for each of the children
FAMILY CENTEREDNESS
Space and facilities for the family to work and play togetherin the house
Facilities for cooking, relaxing and entertaining in thebackyardA family roomA backyard patio
2. Those aspects of housing related by 20 per cent or more of therespondents to ONLY ONE of the values are:
BEAUTY Per Cent
A pleasant entrance ..... 20
Ceramic tile walls in the bathroom ..... 23
COMFORT
Protection from the weather when going from the house to the car ..... 37
Counter surfaces that are the right height for you ..... 50
Facilities for sitting to work in the kitchen ..... 37
An automatic dryer ..... 36
A house located near a school ..... 21
PRESTIGE
Neighborhood made up of families that are of good social standing ..... 42
A house that friends and neighbors will admire ..... 22
A two car garage ..... 21
PRIVACY
High, closelymplanted shrubbery around the yard ..... 29
A place for telephoning which keeps conversation from being overheard or from interfering with the conversation of others ..... 24
FAMILY CENTEREDNESS
Space for other family members to be in the kitchen while you are working ..... 30
Family room and kitchen combined ..... 21
A house located near relatives ..... 20
3. The sub-hypothesis proposing that association made between certain aspects of housing and selected housing related values vary according to the independent variables, can be conditionally accepted. Chiosquare tests reveal a number of significant differences when the data are analyzed according to the indew pendent variables mo education of mother, age of children, sex of children and number of children. The writer recognizes the need for additional studies using a larger sample to subm stantiate these findings.
4. Fewer significant differences emerge in association patterns when the data are analyzed by education of mother than in analyses concerning the variables: age of children, sex of children, and number of children。
5. Aspects of housing which appear to have little relationship to values are:

1. A small house
2. A house that is rented
3. Frame construction
4. Floors of all rooms of the house on the same level

## Recommendations

The writer submits the following recommendations relative to further study in the area of housingorelated values:

1. That a comparable study, using a larger sample, be conducted to see if patterns of association and differences indicated in this study will be substantiated.
2. That a larger study, including two or three stages in the family life cycle, could ascertain the effect of stage in the
life cycle on relationships made between aspects of housing and housingorelated values.
3. That the present study be enlarged using: 1) other aspects of housing, 2) other housingorelated values, 3) other factors which may influence patterns of association such as income, socioweconomic status, and ruralwurban background.
4. That results from the present study and from extensions of the study as suggested in recommendations 1,2 , and 3 be collated and used as a basis for constructing, two instruments: one for identifying values held by an individual or a family, and the other for architects, home builders, housing spew cialists, etc., to be used as a guide in planning homes for individuals or families with given value orientations.
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Books
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APPENDIX: A

Schedule Number $\qquad$
1．Who lives in this home？
a． $\qquad$ wife b． $\qquad$ husband
c． $\qquad$ children d．other $\qquad$

2．Ages and sex of children
a．Boys

b．Girls

$$
\text { 1. } 20.30 \text {, }
$$

3．Occupation of husband（or of wife if widowed or divorced，etc．）
a． $\qquad$
4．Education of wife
a． $\qquad$ less than high school graduate
b。 $\qquad$ high school graduate
c． $\qquad$ high school graduate plus some college
d． $\qquad$ college graduate

5．At present，do you own or rent this house？
a． $\qquad$ own
b。 $\qquad$ rent

6．In the past did you live the major part of your life in owned housing，or rented housing？
a。 $\qquad$ owned
b。 $\qquad$ rented
c． $\qquad$ both
＊＊If both，could you say that it was primarily one or the other？
a． $\qquad$ primarily owned
ba $\qquad$ primarily rented

## RECORDING SHEET



APPENDIX B

## DESCRIPTION OF TABLES

Tables in Appendix B show percentages of respondents in each of the various subegroups who associate a given aspect of housing with each of the five housingærelated values.

The number of respondents in each of the sub-groups are as follows: Education

High 53
Low 47
Age of Children
Preschoo1 63
Some schoo 1 : 37
Sex of Children
One only or same 48
Different 52
An asterisk (*) indicates significant differences at the . 05 leve1 of confidence.

TABLE I

WALL-TO-WALL CARPETING

|  |  | Beauty | Comfort | Presti | Privacy | Fam. Cen。 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 94.34 | 84.19 | 81.13 | 9.43 | 9.43* |
|  | Low | 95.74 | 91.49 | 87. 23 | 19.15 | 29.79* |
| AGE OF CHILDREN | Preschool | 93.65 | 87.30 | 82.54 | 15.87 | 17.46 |
|  | Some school | 97.30 | 89.19 | 86.49 | 10.81 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 93.75 | 85.42 | 87.50 | 14.58 | 14.58 |
|  | Two or more of different sex | 96.15 | 90.38 | 80.77 | 13.46 | 23.08 |

TABLE II

## A BACKYARD PATIO

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 86.79 | 69.81 | 77.36 | 47.17 | 86.79 |
|  | Low | 85.11 | 78.92 | 80.85 | 48.94 | 78.12 |
| AGE OF CHILDREN | Preschool | 90.48 | 74.60 | 79.37 | 50.79 | 87.30 |
|  | Some school | 78.38 | 72.97 | 78.38 | 43.24 | 75.68 |
| SEX OF CHILDREN | One only or two or more same sex | 89.58 | 83.33* | 85.42 | 52.08 | 89.58 |
|  | Two or more of different sex | 82.69 | 65.38* | 73.08 | 44.23 | 76.92 |

TABLE III

SPECIAL AREA FOR WASHING AND IRONING


TABLE IV

A PLACE FOR TELEPHONING WITHOUT INTERRUPTION

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 16.98 | 58.49 | 28.30 | 98.11 | 24.53 |
|  | Low | 21.28 | 68.09 | 31.91 | 91.49 | 31.91 |
| AGE OF CHILDREN | Preschool | 17.46 | 60.32 | 30.16 | 93.65 | 26.98 |
|  | Some school | 21.62 | 67.57 | 29.73 | 97. 30 | 29.73 |
| SEX OF CHILDREN | One only or two or more same sex | 20.83 | 66.67 | 35.42 | 93.75 | 35.42 |
|  | Two or more of different sex | 17. 31 | 59.62 | 25.00 | 96. 15 | 21.15 |

TABLE Y

A LARGE AMOUNT OF WINDOW AREA

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 73.58 | 35.85 | 37.74 | 5.66 | 9.43 |
|  | Low | 68.09 | 53.19 | 31.91 | 8. 51 | 12.77 |
| AGE OF CHILDREN | Preschool | 69.84 | 46.03 | $42.86 \%$ | 7.94 | 9.52 |
|  | Some school | 72.97 | 40.54 | 21.62* | 5.41 | 13.51 |
| SEX OF CHILDREN | One only or two or more same sex | 75.00 | 41.67 | 45.83 \% | 8.33 | 12.50 |
|  | Two or more of different sex | 67. 31 | 46.15 | 25.00\% | 5.77 | 9.62 |

TABLE VI

A LARGE KITCHEN

|  |  | Beauty | Comfort | Prestige | Privacy | $\mathrm{Fam}_{4}$ Cens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 52.83 | 64.15* | 56.60 | 22.64 | 47.17 |
|  | Low | 59.57 | 85.11* | 57.06 | 29.79 | 55.32 |
| AGE OF ChILDREN | Preschool | 58.73 | 80.95 | 58.73 | 26.98 | 53.97 |
|  | Some school | 51.35 | 62.16 | 45.95 | 24.32 | 45.95 |
| SEX OF CHILDREN | One only or two or more same sex | 64.58 | 77.08 | 62.50 | 29.17 | 50.00 |
|  | Two or more of different sex | 48.08 | 71.15 | 46.15 | 23.08 | 51.92 |

TABLE VII
A HOUSE LOCATED NEAR A SCHOOL

|  |  | Beauty | Comfort | Presti | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 13.21 | 62.26 | 20.75 | 1.89 | 30.19 |
|  | Low | 2.13 | 74.47 | 21.28 | 14.89 | 42.55 |
| AGE OF CHILDREN | Preschool | 4.76 | 69.84 | 26.98 | 6.35 | 38.10 |
|  | Some school | 13.51 | 64.86 | 10,81 | 10.81 | 32.43 |
| SEX OF CHILDREN | One only or two or more same sex | 8.33 | 72.92 | 29.17 | 10.42 | 35.42 |
|  | Two or more of different sex | 7.69 | 63.46 | 13.46 | 5.77 | 36.54 |

TABLE VIII
PLENTY OF SPACE BETWEEN HOUSES

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 67.92 | 67.92 | 69.81 | 92.45 | 24.53 |
|  | Low | 65.69 | 68.09 | 61.70 | 85.11 | 40.43 |
| AGE OF CHILDREN | Preschool | 68.25 | 69.84 | 65.08 | 87.30 | 30.16 |
|  | Some school | 64.86 | 64.86 | 67.57 | 91.89 | 35.14 |
| SEX OF CHILDREN | One only or two or more same sex | 66.67 | 62.50 | 68.75 | 89.58 | 39.58 |
|  | Two or more of different sex | 67.31 | 73.08 | 63.46 | 88.46 | 25.00 |

TABLE IX

A DRESSING AREA THAT IS ADJACENT TO THE BATH

|  |  | Beauty | Comfort | Prest | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 45.28 | 77.36 | 69.81 | 71.70 | 18.87 |
|  | Low | 46.81 | 74.47 | 57.45 | 78.72 | 21.28 |
| AGE OF ChILDREN | Preschool | 49.21 | 77.78 | 65.08 | 71.43 | 19.05 |
|  | Some school | 40.54 | 72.97 | 62.16 | 81.08 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 52.08 | 77.08 | 70.83 | 79.17 | 29.17* |
|  | Two or more of different sex | 40.38 | 75.09 | 57.69 | 71.15 | 11.52* |

TABLE X

A FENCE AROUND THE YARD

|  |  | Beauty | Comfort | Prestige | Privacy | $\begin{aligned} & \text { Fam. } \\ & \text { Cen. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 60.38 | 71.70 | 41.51 | 86.79 | 56.60 |
|  | Low | 55.32 | 78.72 | 34.04 | 87.23 | 57.45 |
| AGE OF CHILDREN | Preschool | 63.49 | 77.78 | 47.62 | 85.71 | 61.90 |
|  | Some school | 45.95 | 70.27 | 21.62 | 89.19 | 48.65 |
| SEX OF CHILDREN | One only or two or more same sex | 60.42 | 72.92 | 41.67 | 91.67 | 59.17 |
|  | Two or more of different sex | 53.85 | 76.92 | 34.62 | 82.69 | 59.62 |

TABLE XI

BATHROOM NOT VISIBLE FROM THE FRONT DOOR OR THE LIVING AREA

|  |  | Beauty | Comfort | Prestig | Privacy | Fam。 Cen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 56.60 | 54.72 | 41.51 | 88.68 | 13.21 |
|  | Low | 63.83 | 65.96 | 34.04 | 80.85 | 25.53 |
| AGE OF CHILDREN | Preschool | 65.08 | 61.90 | 42.86 | 85.71 | 17.46 |
|  | Some school | 51.35 | 56.76 | 29.73 | 83.78 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 58.33 | 60.42 | 41.67 | 87.50 | 25.00 |
|  | Two or more of different sex | 61.54 | 59.62 | 34.62 | 84.62 | 13.46 |

TABLE XII

A HOUSE THAT IS OWNED

|  |  | Beauty | Comfort | Prestig | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 39.62 | 56.60 | 71.70 | 52.83 | 33.96 |
|  | Low | 31.91 | 70.21 | 78.72 | 48.94 | 42.55 |
| AGE OF CHILDREN | Preschool | 39.68 | 63.49 | 76.19 | 53.79 | 38.10 |
|  | Some school | 29.73 | 62.16 | 72.97 | 45.95 | 37.84 |
| SEX OF CHILDREN | One only or two or more same sex | 35.42 | 68.75 | 81.25 | 47.92 | 39.58 |
|  | Two or more of different sex | 36.54 | 57.69 | 69.23 | 53.85 | 36.54 |

## TABLE XITI

AIR•CONDITIONING

|  |  | Beauty Comfort | Prestige | Privacy | Fam. <br> Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 32.08100 .00 | 84.91 | 28.30 | 24.53 |
|  | Low | $36.17 \quad 93.62$ | 70.21 | 25.53 | 29.79 |
| AGE OF CHILDREN | Preschool | 41.27*98.41 | 82.54 | 28.57 | 25.40 |
|  | Some school | 21.62* 94.59 | 70.27 | 24.32 | 29.73 |
| SEX OF CHILDREN | One only or two or more same sex | 35.42100 .00 | 83.33 | 29.17 | 27.08 |
|  | Two or more of different sex | 32.69 94.23 | 73.08 | 25.00 | 26.92 |

TABLE XIV

PROTECTION EROM THE WEATHER WHEN GOING FROM THE HOUSE TO THE CAR

|  |  | Beauty | Comfort | Prestig | Privacy | Eam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 22.64 | 84.91 | 35.85 | 18.87 | 15.09 |
|  | Low | 23.40 | 82.98 | 40.43 | 29.79 | 19.15 |
| AGE OF CHILDREN | Preschool | 26.98 | 84.13 | 41.27 | 20.63 | 19.05 |
|  | Some school | 16.22 | 83.78 | 32.43 | 29.73 | 13.51 |
| SEX OF CHILDREN | One only or two or more same sex | 29.17 | 89.58 | 43.75 | 22.92 | 20.83 |
|  | Two or more of different sex | 17.31 | 78.85 | 32.69 | 25.00 | 13.46 |

TABLE XV

ADEQUATE STORAGE IN EVERY BEDROOM

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Gen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATTIN | High | 54.72 | 77.36 | 47.17 | 33.96 | 18.87 |
|  | Low | 46.81 | 87.23 | 31.91 | 29.79 | 27.66 |
| AGE OE CHILDREN | Preschool | 55.56 | 84.13 | 44.448 | $34.92 \%$ | 23.81 |
|  | Some school | 43.24 | 89.19 | $86.49 \%$ | $10.81 \%$ | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 58.33 | 87.50 | $50.00^{*}$ | 37.50 | 31.25 |
|  | Two or more of different sex | 44.23 | 76.92 | 30.778 | 26.92 | 15.38 |

TABLE XVI
Landscaping around the house

|  |  | Beauty | Comfort | Prest | Privacy | Eam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 100.00 | 41.51 | 92.45 | 45.28 | 18.87 |
|  | Low | 89.36 | 48.94 | 78.72 | 40.43 | 23.40 |
| AGE OF CHILDREN | Preschool | $46.83 *$ | 44.44 | 85.71 | 41.27 | 19.05 |
|  | Some school | 94.59* | 45.95 | 86.49 | 45.95 | 24.32 |
| SEX OF CHILDREN | One only or two or more same sex | 95.83 | 47.92 | 89.58 | 45.83 | 27.08 |
|  | Two or more of different sex | 96, 15 | 42.31. | 82.69 | 42.31 | 15.38 |

TABLE XVII.

## A PICTURE WINDOW

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATTON | High | 73.58 | 28.30 | 32.08 | 3.77 | 5.66 |
|  | Low | 74.47 | 27.66 | 48.94 | 6. 38 | 8.51 |
| AGE OF Chtideren | Preschool | 80.95 | 34.92 | 47.62 \%r | 6.35 | 9.52 |
|  | Some school | 62.16 | 16.22 | 27.03\% | 2.70 | 2.70 |
| SEX Of Chilldren | One only or two or more same sex | 72.92 | 33.33 | 41.67 | 6.25 | 8.33 |
|  | Two or more of different sex | 75.09 | 23.08 | 38.46 | 3.85 | 5.77 |

TABLE XVIII
HIGH, CLOSELY-PLANTED SHRUBBERY AROUND THE YARD

|  |  | Beauty | Comfor | Presti | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 32.08 | 16.98 | 24.53 | 69.81 | 15.09 |
|  | Low | 40.43 | 17.02 | 38.30 | 61.70 | 10.64 |
| AGE OF Chilldren | Preschool | 36.51 | 17.46 | 33.33 | 61.90 | 14.29 |
|  | Some school | 35.14 | 16.22 | 27.03 | 72.97 | 10.18 |
| SEX OF Childiden | One only or two or more same sex | 41.67 | 16.67 | 31.25 | 58.33 | 16.67 |
|  | Two or more of different sex | 30.77 | 17.31 | 30.77 | 73.08 | 9.62 |

TABLE XIX
AN ENTRY HALL

|  |  | Beauty | Comfor | Prest | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 71.70 | 49.06 | 66.04 | 62.26 | 7.55 |
|  | Low | 68.09 | 55.32 | 68.09 | 34.04 | 12.77 |
| AGE OF CHILDREN | Preschool | 76.19 | 52.38 | 73.02 | 52.38 | 9.52 |
|  | Some school | 59.46 | 51.35 | 56.76 | 43.24 | 10.81 |
| SEX OF CHILDREN | One only or two | 72.92 | 58.33 | 70.83 | 47.92 | 12.50 |
|  | or more same sex |  |  |  |  |  |
|  | Two or more of different sex | 67,31 | 46.1 .5 | 63.46 | 50.00 | 7.69 |

TABLE XX
CERAMIC TILE WALLS IN THE BATHROOM

|  |  | Beauty | Comfort | Prest | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 86.79 | 39.62 | 58.49 | 7.55 | 3.77 |
|  | Low | 89.36 | 53.19 | 42.55 | 14.89 | 8.51 |
| AGE OF CHILDREN | Preschool | 88.89 | 44.44 | 53.97 | 12.70 | 6.35 |
|  | Some school | 86.49 | 48.65 | 45.95 | 8.11 | 5.41 |
| SEX OF CHILDREN | One only or two | 89.58 | 50.00 | 58.33 | 14.58 | 8.33 |
|  | or more same sex |  |  |  |  |  |
|  | Two or more of different sex | 86.54 | 42.31 | 44.23 | 7.69 | 3.85 |

TABLE XXI
FAMILY ROOM AND KITCHEN COMBINED

|  |  | Beauty Comfort | Prestige | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 26.4237 .74 | 20.75 | 7.55 | 69.81 |
|  | Low | $25.53 \quad 44.68$ | 14.89 | 17.02 | 57.45 |
| AGE OF CHILDREN | Preschool | $28.57 \quad 41.27$ | 19.05 | 11.11 | 65.08 |
|  | Some school | $21.62 \quad 40.54$ | 16.22 | 13.51 | 62.16 |
| SEX OF CHILDREN | one only or two or more same sex | 35.42943 .75 | 16.67 | 14.58 | 66.67 |
|  | Two or more of different sex | 17.31.te 38.46 | 19.23 | 9.62 | 61.54 |

TABLE XXII
A GARAGE

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## TABLE XXIII

NEIGHBORHOOD MADE UP OF FAMILIES THAT ARE OF GOOD SOCIAL STANDING

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen。 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 24.53 | 39.62 | 96.23 | 16.98 | 15.09 |
|  | Low | 25.53 | 46.81 | 87.23 | 27.66 | 25.53 |
| AGE OF CHITDREN | Preschool | 30.16 | 49.21 | 95.24 | 26.98 | 20.63 |
|  | Some school | 16.22 | 32.43 | 86.49 | 13.51 | 18.92 |
| SEX OF CHILDREN | One only or two or more same sex | 27.08 | 43.75 | 95.83 | 29.17 | 29.17 |
|  | Two or more of different sex | 23.08 | 42.31 | 88.46 | 15.38 | 11.54 |

TABLE XXIV
INDOOR TRAEFIC PATIERNS WHICH PERMIT HAVING CONVERSATION WITHOUT INTERRUPTION

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TABLE XXV

## COAT CLOSET AT FRONT ENTRANCE

|  |  | Beauty | Comfort | Prestige | Privacy | Fam． <br> Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 45.28 | 67.92 | 47.17 | 22.64 | 13．21 |
|  | Low | 38.30 | 72.34 | 44.68 | 29.79 | 19．15 |
| AGE OF CHILDREN | Preschool | 46.03 | 71.43 | 50.79 | 25.40 | 15.81 |
|  | Some schoo 1 | 35.14 | 67.57 | 37.84 | 27.03 | 16.22 |
| SEX OF CHILDREN | One only or two or more same sex | 50.00 | 68.75 | 52.08 | 29.17 | 22.92 |
|  | T＇wo or more of different sex | 34,62 | 71.15 | 40.38 | 23.08 | 9.62 |

TABLE XXVI

## A HOUSE LOCATED NEAR THE PLACES WHERE YOUR FAMLLY MOST OFTEN GOES

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen。 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 3.77 | 47.17 | 20.75 | 9.43 | 52.83 |
|  | Low | 4.26 | 61.70 | 12.77 | 4． 26 | 46．81 |
| AGE OF CHILDREN | Preschool | 3.17 | 57.14 | 20.63 | 9.52 | $60.32 \%$ |
|  | Some school | 5．41 | 48.65 | 10.81 | 2.70 | 32．43＊ |
| SEX OF CHILDREN | One only or two or more same sex | 4.17 | $64.58 \%$ | 20.83 | 8.33 | 58.33 |
|  | Two or more of different sex | 3.85 | $44.23 \%$ | 13.46 | 5.77 | 42.31 |

## TABLE XXVII

SEPARATE BEDROOMS FOR EACH OF THE CHILDREN

|  |  | Beauty | Comfort | Prestig | Priyacy | Fam。 Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 35.85 | 81.13 | 62.26 | 83.02 | 33.96 |
|  | Low | 46.81 | 76.60 | 46.81 | 91.49 | 36．17 |
| AGE OF CHILDREN | Preschool | 44.44 | 79.37 | 58.73 | 87.30 | 36．51 |
|  | Some school | 35.14 | 78.38 | 48.05 | 86.49 | 32.43 |
| SEX OF CHILDREN | One only or two or more same sex | 93.75 | 85.42 | 87.50 | 14.58 | 14.58 |
|  | Two or more of different sex | 96.15 | 90．38 | 80.77 | 13.46 | 23.08 |

## TABLE XXVIII

## A TWO CAR GARAGE

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 33.96 | 56.60 | 77.36 | 16.98 | 16.98 |
|  | Low | 42.55 | 51.06 | 68.09 | 27.66 | 10,64 |
| AGE OF CHILDREN | Preschool | 38.10 | 55.56 | 74.60 | 17.46 | 14.29 |
|  | Some school | 37.84 | 51.35 | 70.27 | 29.73 | 16.22 |
| SEX OF CHILDREN | One only or two or more same sex | 37.50 | 43.75 | 75.00 | 16.67 | 10.42 |
|  | Two or more of different sex | 38.46 | 63.46 | 71.15 | 26.92 | 19.23 |

TABLE XXIX
A. HOUSE THAT FRIENDS AND NEIGHBORS WILL ADMTRE

|  |  | Beauty | Comfort | Prestig | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 64.15 | 28.30 | 81. 1.3 | 3.77 | 28.30 |
|  | Low | 55.32 | 40.43 | 87.23 | 19.15 | 23.40 |
| AGE OF CHILDREN | Preschool | 66.67 | 41.27\% | 84.13 | 14.29 | 25.40 |
|  | Some school | 48.65 | $21.62{ }^{\text {\% }}$ | 83.78 | 5.41 | 27.03 |
|  | One only or two or more same sex | 66.67 | 33.33 | 87.50 | 18.75 | 37.50* |
| SEX OF CHILDREN | Two or more of different sex | 53.85 | 34.62 | 80.77 | 3.85 | 15-. 38 |

TABLE XXX

A HOUSE LOCATED AWAY FROM HIGHWAYS OR BUSY STREETS

|  |  | Beauty | Comfort | Prestige | Privacy | Famo Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 45.28 | 66.04 | 49.06 | 81.13 | 43.40 |
|  | Low | 34.04 | 74047 | 36.17 | 80.85 | 40,43 |
| AGE OF CHILDREN | Preschool | 44.44 | 76.19 | 39.68 | 84.13 | 44.44 |
|  | Some school | 32.43 | 59.46 | 48.65 | 75.68 | 37.84 |
| SEX OF CHILDREN | One only or two or more same sex | 27.08 | 54.17\% | 22.92 | 37.50 | 70.83 |
|  | Two or more of different sex | 26.92 | 75.09\% | 11.52 | 30.77 | 63.46 |

TABLE XXXI

## A FTREPIACE

|  |  | Beauty | Comfort | Prestig | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 96.23 | 62.26 | 83.02 | 15.09 | 56.60 |
|  | Low | 93.62 | 61.70 | 72.34 | 14.89 | 59.57 |
| AGE OF CHILDREN | Preschool | 96.83 | 65.08 | 82.54 | 15.87 | 55.56 |
|  | Some school | 91.89 | 56.76 | 70.27 | 13.51 | 62.16 |
| SEX OF CHILdREN | One only or two or more same sex | 97.92 | 64.58 | 83.33 | 16.67 | 62.50 |
|  | Two or moxe of different sex | 92.31 | 59.62 | 73.08 | 13.46 | 53.85 |

TABLE XXXII

BRICK CONSTRUCTION

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 79.25 | 37.74 | 84.91 | 13.21 | 3.77 |
|  | Low | 78.72 | 38.30 | 72.34 | 21.28 | 6.38 |
| AGE OF CHILDREN | Preschool | 84.13 | 42.86 | 77.78 | 19.05 | 4.76 |
|  | Some school | 70.27 | 29.73 | 81.08 | 13.51 | 5.41 |
|  | One only or two or more same sex | 81.25 | 37.50 | 31.25\% | 22.92 | 4.17 |
| SEX OF CHILDREN | Two or more of different sex | 76.92 | 38.46 | $76.92 \%$ | 11.54 | 5.77 |

TABLE XXXIIT
PLEASANT ENTRANCE

|  |  | Beauty | Comfor | Presti | Privacy | Fam。 $\mathrm{Cen}_{\text {}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 96.23 | 50.94 | 66.04 | 18.87 | 24.53 |
|  | Low | 89.36 | 55,32 | 72.34 | 17.02 | 19.15 |
| AGE OF CHILDREN | Preschool | 95.24 | 52,38 | 73.02 | 15.87 | 22.22 |
|  | Some school | 89.19 | 54.05 | 62.16 | 21.62 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 95.83 | 60.42 | 72.92 | 18.75 | 29.17 |
|  | Two or more of different sex | 90.38 | 46.15 | 65.38 | 17.31 | 15,38 |

TABLE XXXIV

## A SEPARATE DINING ROOM

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 54.72 | 41.51* | 67.92 | 49.06 | 18.87 |
|  | Low | 55.32 | 68.09* | 59.57 | 48.94 | 25.53 |
| AGE OF CHILDREN | Preschool | 65.08 \% | 53.97 | 69.84 | 50.79 | 20.63 |
|  | Some school | 37.84\% | 54.05 | 54.05 | 45.95 | 24.32 |
| SEX OF Chilldren | One only or two or more same sex | 60.42 | 58.33 | 77.08\% | 50.00 | 22.92 |
|  | Two or more of different sex | 50.00 | 50.00 | 51.92\% | 48.08 | 21.15 |

TABLE XXXV
FACILITIES FOR COOKING, REIAXING AND ENTERTAINTNG IN THE BACKYARD

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 <br> Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 64.15 | 79.25 | 60.38 | 45.28 | 98.11 |
|  | Low | 57.45 | 85.11 | 72.34 | 57.45 | 85.11 |
| AGE OF CHILDREN | Preschool | 65.08 | 80.95 | 68.25 | 5.5 .56 | 90.48 |
|  | Some school | 54.05 | 83.78 | 62.16 | 43.24 | 94.59 |
| SEX OF CHILDREN | One only or two or more same sex | $66 \cdot 67$ | 77.08 | $72 \times 92$ | 58.33 | 89.58 |
|  | Two or more of different sex | 55.77 | 86.54 | 59.62 | 44.23 | 92.31 |

TABLE XXXVX
A SPECIAL PLACE FOR CHILDREN TO PLAY INSTDE THE HOUSE

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 45.28 | 79.25 | 45.28 | 75.47 | 83.02 |
|  | Low | 42.55 | 85.11 | 42.55 | 76.60 | 82.98 |
| AGE OF CHILDREN | Preschool. | 50.79 | 82, 54 | 24.44 | 79.37 | 85,71 |
|  | Some school | 32.43 | 81.08 | 43.24 | 70.27 | 78.38 |
| SEX OF CHILDREN | One only or two or more same sex | 45.83 | 81.25 | 52.08 | 85.42 | 85.42 |
|  | Two or more of different sex | 42.31 | 82.69 | 36.54 | 67.31 | 80.77 |

TABLE XXXVII
FLOORS OF ALL ROOMS OF THE HOUSE ON THE SAME LEVEL

|  |  | Beauty | Comfort | Presti | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 24.53 | 39.62 | 96. 23 | 16.98 | 15.09 |
|  | Low | 25.53 | 46.81 | 87. 23 | 27.66 | 25.53 |
| AGE OF CHILDREN | Preschool | 28.57 | 52.38 | 9.52 | 7.94 | 25.40 |
|  | Some school | 16.22 | 48.65 | 16.22 | 5.41 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 25,00 | 56. 25 | 12.50 | 8.33 | 25,00 |
|  | Two or more of different sex | 23.08 | 46.15 | 11.54 | 5.77 | 23.08 |

## TABLE XXXVIIII

COUNTER SURFACES THAT ARE THE RIGHT HEIGHT

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 27.66 | 91.49 | 17.02 | 17.02 | 12.77 |
|  | Low | 30.19 | 84.91 | 20.75 | 7.55 | 16.98 |
| AGE OF CHILIDREN | Preschool | 31.85 | 88.89 | 25.40 | 14.29 | 17.46 |
|  | Some school | 24. 32 | 86.49 | 8.11 | 8.11 | 10.81 |
| SEX OF CHILDREN | One only or two or more same sex | 35.42 | 87.50 | 25.00 | 14.58 | 20.83 |
|  | Two or more of different sex | $23 \times 08$ | 88.46 | 13.46 | 9.62 | 9.62 |

TABLE XXXIX
A HOUSE THAT IS EASY TO CLEAN AND KEEP CLEAN

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 73.58 | 90.57 | 32.08 | 11.32 | 49.06 |
|  | Low | 61.70 | 89.36 | 31.91 | 23.40 | 51.06 |
| AGE OF Children | Preschool | 77.78* | 90.48 | 39.68\% | 19.05 | 52,38 |
|  | Some school | 51. 35 * | 89.19 | 18.92* | 13.51 | 4595 |
| SEX OF CHILDREN | One only or two or more same sex | 72.92 | 89.58 | 41.67 | 25.00 | $60.42^{\text {\% }}$ |
|  | Two or more of different sex | 63.46 | 90.38 | 23.08 | 9.62 | 40.38\% |

TABLE XI.
A FAMILY ROOM

|  |  | Beauty | Comfort | Presti | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 49.06 | 73.58 | 64.15 | 52.83 | 86.79 |
|  | Low | 59.57 | 78.72 | 48.94 | 65.96 | 95,74 |
| AGE OF CHILDREN | Preschool | 61.90 * | 77.78 | 60.32 | 65.08 | 88.89 |
|  | Some schoo 1 | 40, 54* | 72.97 | 51.35 | 48.65 | 94.59 |
| SEX OF CHILDREN | One only or two or more same sex | 68.75 | 75.00 | 62.50 | 62.50 | 85.42 |
|  | Two or more of different sex | 40.38 | 76.92 | 51.92 | 55.77 | 96.15 |

TABLE XLI
A SEPARATE LIVING ROOM

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen ${ }_{0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EdUCATION | High | 67.92 | 64.15 | 62.26 | 79.25 | 20.75 |
|  | Low | 70. 21 | 72.34 | 68.09 | 61.70 | 38.30 |
| AgE OF Children | Preschool | 76. 19 \% | 73.02 | 69.84 | 71.43 | 28.57 |
|  | Some school | 56.76\% | 59.46 | 56.76 | 70.27 | 29.73 |
| SEX OF Chtldrien | One only or two or more same sex | 75.00 | 72.92 | 72.92 | 72.92 | 27.08 |
|  | Two or more of different sex | 63.46 | 63.46 | 57.69 | 69.23 | 30.77 |

TABLE XLII
A LARGE HOUSE

|  |  | Beauty | Comfort | Prestig | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 57.45 | 76.60 | 85.11 | 48.94 | 44.68 |
|  | Low | 52.83 | 69.81 | 86.79 | 49.06 | 43.40 |
| AGE OF CHILDREN | Preschool | 61.90 | 71.43 | 82.54 | 49.21 | 49.21 |
|  | Some school | 43.24 | 75.68 | 91.84 | 48.65 | 35.14 |
| SEX OF CHILDREN | One only or two or more same sex | 66.67* | 81.25 | 91.67 | 56.25 | 50.00 |
|  | Two or more of different sex | 44.23\% | 65.38 | 80.77 | 42.31 | 38.46 |

TABLE XLITI
SECOND BATH（HALE OR FULL）

|  |  | Beauty | Comfor | Presti | Privacy | Fam． Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 39.62 | 84.91 | 75.47 | 79.25 | 28.30 |
|  | Low | 44.68 | 85.11 | 68，09 | $80_{0} 85$ | 25.53 |
| AgE OF Children | Preschool | 41.27 | 84．13 | 73.02 | 80.95 | 20.63 |
|  | Some school | 43.24 | 86.49 | 70.27 | 78.38 | 37．84 |
| SEX OF CHILDREN | One only or two or more same sex | 45.83 | 85.42 | 70.83 | 81.25 | 31.25 |
|  | Two or more of different sex | 38.46 | 84.62 | 73.08 | 78.85 | 23.08 |

TABLE XLIV

SPACE FOR FAMILY TO WORK AND PLAY TOGETHER IN THE HOUSE

|  |  | Beauty | Comfort | Prestig | Privacy | Fam。 Cen。 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 37．74 | 81.13 | 32.08 | 47.17 | 100．00 |
|  | Low | 38．30 | 78.72 | 34.04 | 4894 | 89．36 |
| AgE OF CHILDREN | Preschool | 42.86 | 77.78 | 38.10 | 49.21 | 98.41 |
|  | Some school | 29.73 | 83.78 | 24.32 | 45.95 | 89.19 |
| SEX OF CHILDREN | One only or two or more same sex | 41.67 | 77.08 | 37.50 | 62．50 | 97.42 |
|  | Two or more of different sex | 34.62 | 82．69 | 28.85 | 34.62 | 92.31 |

TABLE XLTT

SPACE WHIGH PERMITS THE ARRANGTNG OE FURNITURE TN MORE THAN ONE WAY

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 83.02 | 62．26 | 39.62 | 15．09 | 30.19 |
|  | Low | 78.72 | 72.34 | 36.17 | 17.02 | 25.53 |
| AGE OF CHILDREN | Preschool | 87.30 | 69.84 | 46．03\％ | 20.63 | 31.75 |
|  | Some school | 70.27 | 62.16 | 24．32\％ | 8．11 | 21.62 |
| SEX OF CHILDREN | One only or two or more same sex | 85.42 | 75.00 | 43.75 | 18.75 | 29.17 |
|  | Two or more of different sex | 76.92 | 59.62 | 32.69 | 13.46 | 26.92 |

TABLE XLVI
SPACE AND FACILITIES FOR EATING IN THE KITCHEN

|  |  | Beauty | Comfort | Presti | Privacy | Fam。 Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 32.08 | 71.70 | 18.87 | 39.96 | 60.38 |
|  | Low | 21.28 | 78.72 | 14.89 | 34.04 | 74.47 |
| AGE OF CHILDREN | Preschool | 26.98 | 77.78 | 22.22 | 36.51 | 69.84 |
|  | Some school | 27.03 | 70.27 | 8.11 | 29.73 | 62.16 |
| SEX OF CHILDREN | One only or two or more same sex | 27.08 | 54.17 \% | 22.92 | 37.50 | 70.88 |
|  | Two or more of different sex | 26.92 | 75.09\% | 11.52 | 30.77 | 63.46 |

## TABLE XLVII

AN INTERIOR WHICH PLEASES THE EYE

|  |  | Beauty | Comfort | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 98.11 | 69.81 | 81.13 | 13.21 | 45.28 |
|  | Low | 89.36 | 78.72 | 76.68 | 17.02 | 36.17 |
| AGE OF CHILDREN | Preschool | 100.00 | 71.43 | 84.13 | 20.63 | 44.44 |
|  | Some school. | 83.78 | 78.38 | 70.27 | 5.41 | 35.14 |
| SEX OF CHILDREN | One only or two or more same sex | 97.92 | 72.92 | 85.92 | 20.83 | 50.00 |
|  | Two or more of different sex | 90.38 | 75.09 | 73.08 | 9.62 | 32.69 |

TABLE XIVIII
SPACE AND FACLLTTIES FOR SITTTNG TO WORK IN THE KITCHEN

|  |  | Beauty | Comfor | Prestige | Privacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 20.75 | 73.58 | 26.42 | 13.21* | 28.30 |
|  | Low | 19.15 | 80. 85 | 17.02 | 34.04* | 31.91 |
| AGE OF CHILDREN | Preschool | 22.22 | 77.78 | $30.16 \%$ | 26.98 | 28.57 |
|  | Some school | 16.22 | 75,68 | 8.11* | 10. 22 | 32.43 |
| SEX OF CHILDREN | One only or two or more same sex | 20.83 | 75.00 | 27.08 | 29.17 | 35.42 |
|  | Two or more of different sex | 19.23 | 78.85 | 17.31 | 17.31 | 25.00 |

## TABLE XLIX

CHILDREN＇S OUTSIDE PLAY AREA WHICH CAN BE WATCHED FROM INSIDE THE HOUSE

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 28.30 | 88.68 | 26.42 | 39.62 | 62.26 |
|  | Low | 29.79 | 76.60 | 19.15 | 46.81 | 76.60 |
| AGE OF CHILDREN | Preschool | 31.75 | 88.89 | $30.16 \%$ | $52.38 \%$ | 69.84 |
|  | Some school | 24.32 | 72.47 | 10.81 \％ | 27．03＊ | 67.57 |
| SEX OF CHILDREN | One only or two or more same sex | 37.50 | 83.33 | 27.08 | 50.00 | 64.58 |
|  | Two or more of different．sex | 21.15 | 82．69 | 19.23 | 36.54 | 73.08 |

T＇ABLE L

A PLACE TO WATCH TV WITHOUT INTERRUPTION

|  |  | Beauty | Comfort | Prestige | Privacy | Fam。 Cen。 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 24.53 | 66.04 | 28.30 | 83.02 | 37.74 |
|  | Low | 25.53 | 72.34 | 29.79 | 68.09 | 55.32 |
| AGE OF CHILDREN | Preschool | 26.98 | 68.25 | 31.75 | 77.78 | 44.44 |
|  | Some school | 21.62 | 70.27 | 24.32 | 72.97 | 48．65 |
| SEX OF CHILDREN | One only or two or more same sex | 27.08 | 64.58 | 35.42 | 81.25 | 47.92 |
|  | Two or more of different sex | 23.08 | 73.08 | 23.08 | 71.15 | 44.23 |

TABLE LI

AN AUTOMATIC DRYER

|  |  | Beauty | Comfort | Prestig | Privacy | Fam。 Cen． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 13.21 | 83.02 | 52.83 | 20.75 | 13.21 |
|  | Low | 17.02 | 87.23 | 34.04 | 25.53 | 23.40 |
| AGE OF CHILDREN | Preschool | 14.29 | 85.71 | 50.79 | 28.57 | 23.81 |
|  | Some school | 16.22 | 83.78 | 32.43 | 13．51 | 8.11 |
| SEX OF CHILDREN | One only or two or more same sex | 18.75 | 83.33 | 52.08 | 29.17 | 18.75 |
|  | Two or more of different sex | 11.54 | 86.54 | 36.54 | 17．31 | 17．31 |

## TABLE LII

CENTRAL HEATING

|  |  | Beauty | Comfort | Prestig | Priyacy | Fam. Cen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EDUCATION | High | 30.19 | 96.23 | 79.25 | 18.87 | 22.64 |
|  | Low | 34.04 | 87.23 | 61.70 | 23.40 | 21.28 |
| AGE OF CHILDREN | Preschool | 38.10 | 95.24 | 76.19 | 22.22 | 20.63 |
|  | Some school | 21.62 | 86.49 | 62.16 | 18.92 | 24.32 |
| SEX OF CHILDREN | One only or two or more same sex | 27.08 | 100.00 | 77.08 | 22.92 | 22.92 |
|  | Two or more of different sex | 36.54 | 84.62 | 65.38 | 19.23 | 21.15 |

TABLE LIII
SPACE FOR OTHER FAMILY MEMBERS TO BE IN THE KITCHEN WHILE YOU ARE WORKING

|  |  |  | Beauty | Comfort | Prestige Privacy | Fam。 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cen |  |  |  |  |  |  |

APPENDIX C

## DESCRIPTION OF TABLES

Tables in Appendix C show the percentage of respondents in each of the submgroups who associate a given aspect of housing with one value only or with combinations of values. An "x: in any of the value columns indicates values which emerge as a combination associated with each of the aspects of housing.

In the table headings: $\mathrm{B}=$ Beauty, $\mathrm{C}=$ Comfort, $\mathrm{P}_{1}=$ Prestige, $P_{2}=$ Privacy, and $F C=$ Family Centeredness.

The number of respondents in each of the subogroups are as follows:

Education
High 53
Low . 47
Age of Children
Preschool 63
Some school 37
Sex of Children
Same 48
Different 52
Number of Children

| One | 30 |
| :--- | :--- |
| Two | 42 |
| Three | 28 |

An asterisk (*) indicates significant differences at the . 05
level of confidence.

TABLE I
WALL-TO-WALL CARPETING

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EDUCATION |  | AGE OF <br> Preschool | CHILDRENSome School | $\begin{gathered} \text { SEX of CHILDREN } \\ \text { Same } \quad \text { Different } \end{gathered}$ |  | NUMBER OT CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  |  |  | One | Two | Three or more |
| $\chi$ |  | X | ; |  | 11.32 | 4.26 | 9.52 | 5.41 | 8.33 | 7.69 | 6.67 | 11.90 | 3.57 |
|  | X |  |  |  | 11.32 | 8.51 | 9.52 | 10.81 | 4.17 | 15.38 | 3.33 | 7.14 | 21.43 |
|  | $x$ | X |  |  | 53.83 | 42,55 | 44.44 | 54.05 | 52.08 | 44.23 | 56.67 | 40.48 | 50.00 |
|  | X | X |  | X | 5.66 | 19.15 | 12.70 | 10.81 | 10.42 | 13.46 | 10.00 | +6.67 | 7.14 |
|  | X | X | X |  | 5.66 | 9.51 | 7.49 | 5,41 | 8.33 | 5.77 | 3.33 | 7.14 | 10.71 |
|  | X | X | X | X | 3.77 | 4.26 | 3.17 | 5,41 | $\cdots$ | 7.69 | -...-- | 9.52 | --.--. |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | apon | nses |  |  | 8.44 | 12.76 | 13.16 | 8.10 | 16.67 | 5.78 | 20.00 | 7.15 | 7.15 |

TABLE II
A backyard patio

| B. $\mathrm{C}, \mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | education |  | AGE OF CHTLDRENPreschool Some School |  | SEX OF CHILDRENSameDIEEREnt |  | NUMBER OF |  | Childien <br> Three or moxe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two |  |
|  | X | X | x | X | 1.89 | 6.38 | 3.17 | 5.41 |  |  | 3.85 | 4.17 | 3.33 | 4.76 | 3.57 |
| $x$ |  | X |  | X | 9.43 | 4.26 | 9.52 | 2.70 | 8.33 | 5.77 | 10.00 | 9.52 | -**-* |
|  |  | K | X | X | 5.86 | 6.38 | 6.35 | 5.41 | 4.17 | 7.69 | 6.67 | 7.14 | 3.57 |
| X | X |  |  | X | 7.55 | 6.38 | 4.76 | 10.81 | 2.08 | 11.54 | 3.33 | 4.76 | 14.29 |
|  | X |  | X | X | 3.77 | 6.38 | 6.35 | 2.70 | 6.25 | 3.85 | 6.67 | 4.76 | 3.57 |
|  | X | x |  |  | 3.77 | 8.51 | 3.17 | 10.81 | 4.17 | 7.69 | 3.33 | 4.76 | 10.71 |
| $X$ | $X$ | X |  | $x$ | 18.87 | 19.15 | 22.22 | 13.51. | 27.08* | 11.54* | 26.67 | 16.67 | 14.29 |
|  | $x$ | X | X | $x$ | 28.30 | 25.55 | 28.57 | 24.32 | 29.79 | 24.53 | 33.33 | 28.57 | 17.86 |
| Alit ocher |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | espon | nses |  |  | 20.76 | 17.03 | 15.89 | 24.33 | 14.28 | 23.22 | 6.67 | 19.06 | 32.14 |

TAbLE III
a special area for washing and ironing

table IV
A PLACE FOR TELEPHONING WHICH KEEPS CONVERSATION FROM BEING OVERHEARD

| B. C. P |  |  |  |  | EdUCATYON |  | AGE OF Preschoal | CHILDREN <br> Some School | SEX OF CHILDRENSame Different |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ${ }^{1}$ |  |  | High | low |  |  |  |  | One | Two | Three or more |
|  |  |  | X |  | 30.19 | 17.02 | 25.40 | 21.62 | 16.67 | 30.77 | 23.33 | 16.67 | 35.71 |
|  | X |  | x |  | 22.64 | 27.66 | 22.22 | 29.73 | 22.92 | 26.92 | 13.33 | 26.19 | 35.71 |
|  | X |  | X | X | 9.43 | 6.38 | 9.52 | 5.41 | 10.42 | 5.77 | 16.67 | 4.76 | 3.57 |
|  | X | X | X |  | 5.66 | 4.26 | 7.94 |  | 6.25 | 3.85 | 6.67 | 7.14 | -n |
|  | X | X | X | x | 7.55 | 6.38 | 4.76 | 10.81 | 14.58 | 3.85 | 10.00 | 7.14 | 3.57 |
| X | X |  | X | X | ----m | 8.51 | 3.17 | 5.41 | 6.25 | 1.92 | 10.00 | ---*- | 3.57 |
|  | K | X | X |  | 3.77 | 6.38 | 3.17 | 8.11 | 2.08 | 7.69 |  | 9.52 | 3.57 |
| X | X | X | X | x | 5.66 | 6.38 | 6.35 | 5.41 | 6.25 | 5.77 | 6.67 | 7.14 | 3.57 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spon | ns |  |  | 15.10 | 17.03 | 17.47 | 13.50 | 14.58 | 13.46 | 13.33 | 21.44 | 10.73 |

table V
A LARGE AMOUNT OF WINDOW AREA

| B. C. $\mathrm{P}_{2} \mathrm{P}_{2} \mathrm{FC}$ | EDUCAT ION |  | AGE OF CHILDRENPreachool Some School |  | $\begin{aligned} & \text { SEX OF CHILDREN } \\ & \text { Same } \quad \text { DIfforent } \end{aligned}$ |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  | One | Two | Three or trore |
|  | 18.87 | 17.02 | 15.87 | 21.62 |  |  | 12.50 | 23.08 | 16.67 | 23.81 | 10.71 |
| $X$ | 5.66 | 2.13 | 4.76 | 2.70 | 6.25 | 1.92 | 10.00 | --** | 3.57 |
| x | 3.77 | 8.51 | 7.94 | 2.70 | 8.33 | 3.85 | 6.67 | 7.14 | 3.57 |
| X | 20.75 | 21.28 | 17.46 | 27.03 | 18.75 | 23.08 | 6.67 | 21.43 | 35.71 |
| X X | 15.09 | 7.14 | 14.29 | 5.41 | 16.67 | 5.66 | 26.67* | 2,38* | 7.14* |
| x X | 18.87 | 17.02 | 14.29 | 24.31 | 12.50 | 23.08 | 3.33 | 21.43 | 25.57 |
| X X x | 5.66 | 8.51 | 9.25 | 2.70 | 8.33 | 5.77 | 10.00 | 7.14 | 3.57 |
| X X X X | 3.77 | 4.26 | 4.76 | 2.70 | 6.25 | 1.92 | 10.00 | 2.38 | ----- |
| All Other |  |  |  |  |  |  |  |  |  |
| Responses | 7.56 | 14.13 | 11.38 | 10.83 | 10.42 | 11.64 | 9.99 | 14.29 | 10.16 |

table VI
A Large kitchen

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | Education |  | $\begin{gathered} \text { AGE OF CHIIDREN } \\ \text { Preschool Some School } \end{gathered}$ |  | $\begin{aligned} & \text { SEX OF CHILDREN } \\ & \text { Same } \quad \text { Different } \end{aligned}$ |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two | Three or more |
|  |  |  |  |  | 15.09 | 6.38 | 6.35 | 18.92 |  |  | 6.25 | 15.38 | 6.67 | 9.52 | 17.86 |
|  |  |  |  | X | 9.43 | 2.13 | 6.35 | 5.41 | 4.17 | 7.69 | ----- | 7.14 | 10.71 |
|  | x |  |  |  | 3.77 | 12.77 | 7.94 | 8.11 | 6.25 | 9.62 | 3.33 | 7.14 | 14.29 |
|  | X |  |  |  | 5.66 | 8.51 | 4.76 | 10.81 | 8.33 | 5.77 | 6.67 | 2.38 | 14.29 |
|  | X |  |  | X | -...-- | 10.64 | 6.35 | ----- | 4:17 | 7.69 | 3.33 | 4.76 | 7.14 |
|  | X | X |  |  | 11.32 | 4.26 | 9.52 | 5.41 | 12.50 | 3.85 | 16.67 | 4.76 | 3.57 |
|  | X | X |  | K | 15.09 | 12.77 | 17.46 | 8.11 | 14.58 | 13.46 | 23.33 | 14.29 | 3.57 |
|  | X | x | X | K | 7,55 | 19.15 | 11.11 | 16.22 | 10.42 | 15.38 | 6.67 | 19.05 | 10.71 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spot | ses |  |  | 32.09 | 23.39 | 30.16 | 27.01 | 33.33 | 21.26 | 33.33 | 30.96 | 17.86 |

TABCE VII
a house located near a school

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | age of ChildrenEreschool Some School |  | SEX OF CHILDRENSame $\quad$ Different |  | Number of childiren |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  | One | Two | Three or more |
|  | 30.19 | 23.40 | 23.81 | 32.43 |  |  | 20.83 | 32.69 | 16.67 | 33.33 | 28.57 |
| $x$ | 18.87 | 23.40 | 22.22 | 18.92 | 20.83 | 21.15 | 26.67 | 11.90 | 28.57 |
| $x \quad \mathrm{x}$ | 16.98 | 23.40 | 20.63 | 18.92 | 14.58 | 25.00 | 13.33 | 21,43 | 25.00 |
| X X | 11.32 | 6.38 | 11.11 | 5.41 | 12.50 | 5.77 | 13.33 | 4.76 | 10.71 |
| X x x | 3.77 | 8.51 | 7.94 | 2.70 | 10.42 | 1.92 | 13.33 | 4.76 | -- |
| X X | 7.55 | - | 1.59 | 8.11 | 4.17 | 3.85 | ----* | 9.52 | ----- |
| All Oeher |  |  |  |  |  |  |  |  |  |
| Responses | 11.32 | 14.91 | 12.70 | 13.51 | 16.75 | 9.62 | 16.67 | 14.30 | 7.15 |

table vili
PIENTY OF SPACE RETWEEN hOUSES

| B. C. P |  |  |  |  | EDUCATION |  | AGE OF <br> Preschool | CHILDREN <br> Some School | SEX OP CHILDRENSameDIfferent |  | Number of |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High |  | Low | One |  |  |  |  | Two |  |
|  |  |  |  | x |  | 5.66 | 6.38 | 3.17 | 10.81 | 2.08 | 0.62 | 3.33 | 2.38 | 14.29 |
|  | X | X | X |  | 9.43 | 10.64 | 11.11 | 8.11 | 12.50 | 7.69 | 3.33 | 16.67 | 7.14 |
| X |  |  | X |  | 5.66 | 10.64 | 11.11 | 2.70 | 8.33 | 7.69 | 13.33 | 7.14 | 3.57 |
| X |  | x | x |  | 9.43 | 2.13 | 3.17 | 10.81 | 8.33 | 3.85 | 3.33 | 7.14 | 7.14 |
| X | X |  |  |  | 3.77 | ----- | 3.17 | ----- | 6.25 | --a. | 10.00 | --mor- | ------ |
| X | X |  | x | x | 3.77 | 6.38 | 4.76 | 5.41 | 6.25 | 3.85 | 10.00 | 4.76 | --com |
| X | X | X | X |  | 18.87 | 12.77 | 15.87 | 16.22 | 10.42 | 21.15 | 13.33 | 11.90 | 25.00 |
| $X$ | X | X | X | X | 13.21 | 25.53 | 17.46 | 21.62 | 20.33 | 17.31 | 20.00 | 23.81 | 10.71 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | ns |  |  | 30.20 | 25.53 | 30.18 | 24.32 | 25.01 | 28.84 | 23.35 | 26.20. | 32,15 |

TABLE IX
a dressing area that is adjacent to the bath

| B. C. ${ }^{\text {P }} 1$ |  |  |  |  | EdUCATION |  | ACE OF CHILDREN <br> Preschool Sume School |  | SEX OF CHILDRENSame |  | Number of cilldren |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High |  | Low | One |  |  | Two | Tinree or поге |
|  |  |  |  | X |  | 5.66 | 6.38 | 4.76 |  |  | 8.11 | 4.17 | 7.69 | 6.67 | 4.76 | 7.14 |
|  |  | $x$ |  |  | 5.66 | -s.m | 4.76 | +-...0 | 4.17 | 1.92 | 3.33 | 4.76 | -acme |
|  | X |  |  |  | 5.66 | 6.38 | 6.35 | 5.41 | 4.17 | 7.69 | 6.67 | -amm | 24. 29 |
|  | X |  | X |  | 11.32 | 8.51 | 7.94 | 13.51 | 12.42 | 9.62 | 10.00 | 9.52 | 10,71 |
|  | X | X | x |  | 9.43 | 21.28 | 14.29 | 16.22 | 14.58 | 15.38 | 10.00 | 21.43 | 10.71 |
|  | X |  | X |  | ---** | 8.51 | 4.76 | 2.70 | 2.08 | 5.77 | 3.33 | 4.76 | 3.57 |
|  | X | X | X |  | 24.53 | 12.77 | 22.22 | 13.51 | 16.67 | 21.15 | 13.33 | 21.43 | 21.43 |
| X | X | X | X | X | 11.32 | 8.51 | 7.94 | 13.51 | 16.67 | 3.85 | 20.00 | 7.14 | 3.57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nses |  |  | 26.42 | 27.66 | 26.98 | 27.03 | 25.07 | 26,93 | 26.67 | 26.20 | 28.58 |

TABLE X
a fence around the yard


TAble xi
A BATHROOM THAT IS NOT VISIBLE FROM THE FRONT DOOR OR LIVING AREA

| B. C. P |  |  |  |  | EDUCATION |  | ACE OF <br> Preschool | CHILDREN <br> Sorne School | SEX OF CHILDRENSame |  | NUMiser of chilldren |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High |  | Low | One |  |  |  |  | Two | Three or more |
|  |  |  |  |  |  | 5.66 | 4.26 | 7.94 | ------ | 10.42 | ----- | 10.00 | 4.76 | --.*- |
|  |  |  | X |  | 13.21 | 12.77 | 7.94 | 21.62 | 2.08 | 23.08 | 3.33 | 11.90 | 25.00 |
|  | x |  | x |  | 15.09 | 6.38 | 11.11 | 10.81 | 14.58 | 7.69 | 13.33 | 7.14 | 14.29 |
| X |  |  | X |  | 11.32 | 10.64 | 12.70 | 8.11 | 12.50 | 9.62 | 10.00 | 14. 29 | 7.14 |
| X |  | X | X |  | 9.43 | ----*- | 6.35 | 2.70 | 8.33 | 1.92 | 10.00 | 2.38 | 3.57 |
| x | x |  | x |  | 7.55 | 17.02 | 14.29 | 8.11 | 6.25 | 17.31 | 10.00 | 16.67 | 7.14 |
| X | X | $x$ | $x$ |  | 11.32 | 8.51 | 11.11 | 8.11 | 10.42 | 9.62 | 10.00 | 14.29 | 3.57 |
| X | X | X | x | $X$ | 12.77 | 9.43 | 12.70 | 8.11 | 12.50 | 9.62 | 13.33 | 14.29 | 3.57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nse |  |  | 13.65 | 30.99 | 15.86 | 32.43 | 22.92 | 21.14 | 20.01 | 14.28 | 35.72 |

table Xif
a house that is ouned

| B. c. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | age of children |  | sex of children |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low | Preschool | Some School | Same | Different | One | Two | Three or more |
|  | 9.43 | 8.57 | 7.94 | 10.81 | 6.25 | 11.54 | 10.00 | 2.38 | 17.86 |
| x | 3.77 | 4.26 | 4.76 | 2.70 | 2.08 | 5.77 | 3.33 | 2.38 | 7.14 |
| X | 20.75 | 1.2.77 | 15.87 | 18.92 | 16.67 | 17.31 | 13.33 | 21.43 | 14.29 |
| x | 3.77 | 6.38 | 4.76 | 9.41 | 7.69 | -... | ---- | 7.14 | 2.14. |
| x X | 5.66 | 12.77 | 7.94 | 10.81 | 12.50 | 5.77 | 10.00 | 7.14 | 10.71 |
| $\mathrm{x} \times \mathrm{x}$ | 7.55 | 6.38 | 9.52 | 2.70 | 12.50 | 1.92 | 20.00* | 2.38 * | -----* |
| $\mathrm{X} \mathbf{X} \cdot \mathrm{X}$ X | ....- | 12.74 | 3.17 | 10.81 | 4.17 | 7.69 | 3.33 | 7.14 | 7.14 |
| $\underline{x} \times \mathrm{X} \times \mathrm{x}$ | 16.98 | 23.40 | 20.63 | 18.92 | 14.58 | 25.00 | 13.33 | 28.57 | 14.29 |
| All Other | 32.09 | 12.70 | 25.41 | 18.92 | 23.56 | 25.00 | 26.54 | 21.44 | 78.57 |
|  |  |  |  |  |  |  |  |  |  |

table XIII
AIR-CONDITIONing

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EDUCATION |  | AGE OF CHILDRENPreschool Some School |  | SEX OF ChILDRENSame Different |  | NUMEER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two |  |
|  | X |  |  |  | 13.21 | 19.15 | 12.70 | 21.62 |  |  | 14.58 | 17.31 | 13.33 | 11.90 | 25.00 |
|  |  | x |  |  | 35.85* | 19.15* | 26.98 | 29.73 | 29.79 | 26.92 | 23.33 | 26.19 | 35.71 |
|  | X | X | X |  | 7.55 | 8.51 | 7.94 | 8.11 | 8.33 | 7.69 | 6.67 | 9.52 | 7.14 |
|  | X | X | X | x | 5.66 | 2.13 | 4.76 | 2.70 | 6.25 | 1.92 | 10.00 | 2.38 | ----- |
|  | X | X |  |  | 11.32 | 10.64 | 17.46 | ----- | 10.42 | 11.54 | 16.67 | 14.29 | ---.** |
|  | X | X |  | X | 7.55 | 8.51 | 6.35 | 10.81 | 8.33 | 7.69 | 10.00 | 4.76 | 10.71 |
|  | X | X | X |  | 5.66 | 4.26 | 4.76 | 5.41 | 8.33 | 1.92 | 10.00 | 2.38 | 3.57 |
| X | X | X | X | X | 7.55 | 6.38 | 7.94 | 5.41 | 4.17 | 9.62 | 3.33 | 14.29 | ----- |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | ns |  |  | 5.65 | 21.27 | 11.11 | 16.21 | 9.80 | 15.39 | 6.67 | 14.29 | 17.87 |

TABLE XIV
PROTECTION FROM ZHE WEATHEE WHEN GOING FROM HOUSE TO THE CAR

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | AGE OF Preschool | CHILDREN <br> Some School | SEX OF CHILDRENSameDifferent |  | NUMEER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Lov |  |  |  |  | One | Two | Three or more |
|  | 11.32 | 6.38 | 4.52 | 8.11 | 6.25 | 11.54 | 6.67 | 14.29 | 3.57 |
| X | 41.51 | 31.91 | 33.33 | 43.24 | 29.17 | 44.23 | 30.00* | 21.43* | 67.86* |
| $x \quad x$ | 1.89 | 10.64 | 3.17 | 10.81 | 8.33 | 3.85 | 6.67 | 4.76 | 7.14 |
| X X | 9.43 | 6.38 | 11.11 | 2.70 | 14.58 | 1.92 | 13.33 | 9.52 | ----- |
| $\mathrm{x} \times \mathrm{X}$ | 3.77 | 4.26 | 4.76 | 2.70 | 4.17 | 3.85 | 6.67 | 4.76 | --- |
| X x | 5.66 | 4.26 | 7.94 | ---* | 6.25 | 3.85 | 10.00 | 4.16 | ----- |
| $x$ x $x$ | 3.77 | 4.26 | 3.17 | 5.41 | 6.25 | 1.92 | 6.67 | 4.16 | --- |
|  | 5.66 | 6.38 | 6.35 | 5.41 | 4.17 | 7.69 | 6.67 | 7.14 | 3.57 |
| All Other |  |  |  |  |  |  |  |  |  |
| Responses | 16.99 | 25.53 | 25.65 | 21.62 | 79.17 | 21.15 | 13.32 | 29.78 | 17.86 |

table xv
landscaping around the house

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EdUCATİON |  | AGE OF CHILDREN <br> Preschool Some School |  | $\begin{array}{cc}\text { SEX OF } & \text { ChILDREN } \\ \text { Same } & \text { Different }\end{array}$ |  | NUMPER OF |  | CHILDREN Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two |  |
| x |  |  |  |  | 5.66 | 8.51 | 7.94 | 5.41 |  |  | 4.17 | 9.62 | 3.33 | 7.14 | 10.71 |
| X |  | X |  |  | - 28.30 | 14.89 | 20.63 | 24.32 | 18.75 | 24.53 | 16.67 | 16.67 | 35.71 |
| X |  | X |  | X | 3.77 | 2.13 | 3.17 | 2.70 | 6.25 | --.--- | 10.00 | -...-- | ----- |
| X |  | X | X |  | 16.98 | 12.77 | 14.29 | 16.22 | 12.50 | 17.31 | 10.00 | 16.67 | 17.86 |
| X | X | X |  |  | 15,09 | 17.02 | 20.63 | 8.11 | 18.75 | 13.46 | 20.00 | 14.29 | 14.29 |
| x | X | X | X |  | 13.21 | 8.51 | 9.52 | 13.51 | 10.42 | 11.54 | 6.67 | 19.05 | 3.57 |
| X | X | X | X | X | 9.43 | 14.89 | 9.52 | 16,22 | 12.50 | 11.54 | 13.33 | 11.90 | 10.71 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nses |  |  | 7.56 | 21.28 | 14.30 | 13.51 | 16.66 | 12.00 | 20.00 | 14.28 | 7.15 |

table xvi
A PICture window

| ${ }^{\text {B. C. }} \mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | education |  | AGE OF CHILDREN <br> Preschool Some School |  | SEX OF CHILDRENSame $\quad$ Dịferent |  | Nimber of children |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  | One | Two | Three or more |
|  | 20.75 | 12.77 | 12.70 | 24.32 |  |  | 18.75 | 15.38 | 13.33 | 14.29 | 25.00 |
| x | 3.77 | 6.38 | 3.17 | 8.11 | 6.25 | 3.85 | 6.67 | 4.76 | 3.57 |
| x | 28.30 | 25.53 | 23.81 | 32.43 | 22.92 | 30.77 | 23.33 | 23.81 | 35.71 |
| $x \quad \mathrm{x}$ | 15.09 | 17.02 | 17.46 | 13.51 | 12.50 | 19.23 | 16.67 | 14.29 | 17.86 |
| X X | 11.32 | 8.51 | 11.11 | 10.81 | 10.42 | 11.54 | 3.33 | 16.67 | 10.71 |
| $\mathrm{x} \times \mathrm{X}$ | 7.55 | 10.64 | 22.70 | 2.70 | 12.50 | 5.77 | 16.67 | 7.14 | 3.57 |
| All Other |  |  |  |  |  |  |  |  |  |
| Responses | 13.22 | 19.15 | 80.95 | 8.12 | 16.66 | 13.46 | 20.00 | 19.04 | 3.58 |

table xvil
high closely-planted shrubgery around the yard

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EdUCATION |  | $\begin{gathered} \text { ACE OF CHILDREN } \\ \text { Preschool Some School } \end{gathered}$ |  | SEX OF CHILDRENSame Different |  | $\begin{gathered} \text { NUMBER OF CHILDREN } \\ \text { One Two Three or } \\ \text { more } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  |  |  |  |  |  |
|  |  |  |  |  | 20.75 | 12.77 | 20.63 | 10.81 | 22.92 | 11.54 | 20.00 | 21.43 | 7.14 |
|  |  |  | X |  | 32.08 | 25.53 | 23.81 | 37.84 | 18.75* | 38.46* | 16.67 | 28.57 | 42.86 |
|  |  | X |  |  | 3.77 | 6.38 | 4.76 | 5.41 | 4.17 | 5.77 | 3.33 | 4.76 | 7.14 |
| X |  |  | X |  | 9.43 | 6.38 | 11.11 | 2.70 | 10.42 | 5.77 | 13.33 | 4.76 | 7.14 |
| x |  | X |  |  | --.--** | 10.64\% | 6.35 | 2.70 | 6.25 | 3.85 | 10.00 | 2.38 | 3.57 |
| X |  | X | x |  | 3.77 | . 6.38 | 3.17 | 8.11 | 6.25 | 3.85 | 3.33 | 4.76 | 7.14 |
|  | X | X | $x$ |  | 5.66 | 6.38 | 6.35 | 5.41 | 6.25 | 5.77 | --4.0 | 7.14 | 10.71 |
| X | X | X | X | X | 1.89 . | 4.26 | 3.17 | 2.70 | 2.08 | 3.85 | 3.33 | 4.76 | ----- |
| All otherResponses |  |  |  |  |  |  |  |  | . |  |  |  |  |
|  |  |  |  |  | 22.65 | 21.28 | 20.45 | 27.02 | 22.91 | 21.14 | 30.01 | 21.44 | 14.30 |

TABLE XVLII

| B. C. $\mathrm{P}_{1} \cdot \mathrm{P}$ |  |  |  | FC | EDUCATION |  | AGE OF CHLLDRENPreschool Some School |  | SEX OF CHILDRENSameDifferent |  | NUNBER OF |  | CHIDREN <br> Three or nore |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Low | One |  |  | Two |  |
|  |  |  |  |  |  | 13.21 | 6.38 | 7.94 |  |  | 13.51 | 8.33 | 11.54 | 6.67 | 9.52 | 14.29 |
|  | 'X |  |  |  | 13.21 | 21.28 | 14.29 | 21.62 | 8.33* | 25.00* | 3.33* | 14.29* | 35.71* |
|  | X |  | $\chi$ |  | 7.55 | 4.26 | 7.94 | 2.70 | 6.25 | 5.77 | 10.00 | 4.76 | 3.57 |
|  | X | x | X | x | - | 6.38 | 3.17 | 2.70 | 4.17 | 1.92 | 3.33 | 4.76 | ----- |
| X | X |  |  |  | 7.55 | 19.15 | 14.29 | 10.81 | 12.50 | 13.45 | 10.00 | 14.29 | 14.29 |
|  | X |  | X |  | 3.77 | 6.38 | 3.17 | 8.11 | 6.25 | 3.85 | 6.67 | 7.14 | - - -- |
|  | X | X |  |  | 13.21 | 4.26 | 12.70 | 2.70 | 12.50 | 5.77 | 13.33 | 11.90 | -- |
| X | x | X |  | $\lambda$ | 7.55 | 2.70 | 4.76 | 5.41 | 6.25 | 3.85 | 6.67 | 4.76 | 3.57 |
|  | x | X | X |  | 7.55 | 2.70 | 4.76 | 5.41 | 2.08 | 7.69 | 3.33 | 7.14 | 3.57 |
| x | X | X | X | x | 5.66 | 10.64 | 9.52 | 5.41 | 10.42 | 5.77 | 10.00 | 7.14 | 7.14 |
| All other |  |  |  |  | 20.74 | 15.87 | 17.46 | 21.62 | 22.92 | 14.47 | 26.67 | 14.30 | 17.86 |

Table xix
AN ENTRY H HLL

|  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TABIE. XX
FRAME CONSTRUCTION

| 3. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | AGE OF <br> Preschool | CHILDREN Some School | SEX Of. CHILDREN |  | NUMEER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  | Same | Different | One | Two | Three or more |
| ! | $\because 83.02 \times$ | 61.70* | 73.02 | 72.97 | 72.92 | 73.08 | 70.00 | 71.43 | 78.57 |
| X | 3.77 | ----- | 3.17 | ------ | 4.17 | ----- | 6.67 | -..--- | --..-- |
| X | 3.77 | 8.51 | 7.94 | 5.41 | 4.17 | 9.62 | 6.67 | 7.14 | 7.14 |
| X | 5.66 | 8.51 | 6.35 | 8.11 | 8.33 | 5.77 | 6.67 | 4.76 | 10.71 |
| X X | 3.77 | 6.38 | 4.76 | 5.41 | 6.25 | 3.85 | 6.67 | 7.14 | --- |
| All other |  |  |  |  |  |  |  |  |  |
| Responses | 0 | 14.90 | 4.76 | 8.10 | 4.16 | 7.58 | 3.32 | 9.53 | 3.58 |

TABLE XKI
CERAMIC TILE WALLS IN THE bathroom

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | AGE OI <br> Preschool | CHILDREN <br> Some School | SEX OF CHILDREN <br> Same Different |  | Number of |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  |  |  | One | Two |  |
|  | 11.32 | 2.13 | 6.35 | 8.11 | 8.33 | 5.77 | 10.00 | 2.38 | 10.71 |
| X | 20.75 | 25.33 | 23.81 | 21.62 | 20.83 | 25.00 | 26.67 | 9.52 | 39.29 |
| $X \quad X$ | 26.42 | 12.77 | 22.22 | 16.22 | 18.75 | 21.15 | 20.00 | 23.81 | 14.29 |
| X X | 9.43 | 14.89 | 9.52 | 16.22 | 6.25 | 17.31 | 6.67 | 14.29 | 14.29 |
| X X, X | 22.64 | 19.15 | 20.63 | 21.62 | 27.08 | 15.38 | 23.33 | 26.19 | 10.71 |
| $\mathrm{X} \times \mathrm{X} \times \mathrm{X}$ | 1.89 | 6.38 | 4.76 | 2.70 | 4.17 | 3.85 | 6.67 | 4.76 | --...- |
| All Other |  |  |  |  |  |  |  |  |  |
| Responses | 7.55 | 19.35 | 12.71 | 13.51 | 14.59 | 11,54 | 6.66 | 19.05 | 10.71 |

TABLE XXII
FAMILY ROOM AND KITCHEN COMBINED

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  | EDUCATION |  | $\begin{aligned} & \text { AGE OF CHILDREN } \\ & \text { Preschool Some School } \end{aligned}$ |  | SEX OF CHIIDRENSame Different |  | NUMBER OF CHILDRENOne TwoThree or <br> more |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High | Low |  |  |  |  |  |  |  |
|  |  |  | 28.30 | 25.53 | 26,98 | 27.03 | 22.92 | 30.77 | 33.33 | 23.81 | 25.00 |
|  |  | X | 28.30 | 12.77 | 22.22 | 18.92 | 20.83 | 21.15 | 20.00 | 16.67 | 28.57 |
|  | x | X | 5.66 | 2.13 | 4.76 | 2.70 | 4.17 | 3.85 | 6.67 | 2.38 | 3.57 |
|  | x |  | - | 8.51 | 6.35 | -n-m. | 5. 25 | 1.92 | 10.00 | 2.38 | -w-..- |
|  | X | X | 9.43 | 8.51 | 4.76 | 16.22 | 6.25 | 11.54 | 3.33 | 4.76 | 21.43 |
| X |  | X | 1.89 | 2.13 | 1.59 | 2.70 | 4,17 | ---- | 6.67 | -mmmon | --... |
| X | x | X | 5.66 | 12.77 | 11.11 | 5.41 | 10.42 | 7.69 | 6.67 | 14.29 | 3.57 |
| X | X X | X | 9.43 | 4.26 | 9.52 | 2.70 | 8.33 | 5.77 | 6.67 | 11.90 | ------ |
|  | 1 Other sponses |  | 11.33 | 23.39 | 12.71 | 24.32 | 16.67 | 17.31 | 6.66 | 23.81 | 82.14 |

TABLE XXIII
a house located near relatives

table xxiv
a garage


TABLE XXV
netghborhood made up of families that are of a cood social standino

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EDUCATION |  | AGE OF CHILDRENPreschool Some School |  | GEX OF CHILDRENSame Different |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two | Three os more |
|  |  |  |  |  | 3.77 | ---** | 3.17 | - |  |  | 4.17 | -*-** | 6.67 | -4.0* | -**** |
|  |  | X |  |  | 45.28 | 38.30 | 36.51 | 51.35 | 35.42 | 48.08 | 30.00 | 38.10 | 60.71 |
|  |  | X | X |  | 3.77 | 4.26 | 3.17 | 5.41 | 8.33 | ---- | 6.67 | 2.38 | 3.57 |
|  | X |  |  |  | -- | 4.26 | ----- | 5.41 | --.-. | 3.85 | ----- | 2.38 | 3.57 |
|  | X | X |  |  | 15.09 | 6.38 | 12.70 | 8.11 | 8. 33 | 13.46 | 10.00 | 11.90 | 10.71 |
|  | X | X |  | X | 5.66 | 6.38 | 7.94 | 2.70 | 8.33 | 3.85 | 13.33 | 4.76 | -..--- |
| X |  | X |  |  | 5.66 | ---- | 4.76 | ---0. | 6.25 | ----- | 10.00 | ---- | ----- |
|  | X | X |  |  | 5.66 | 4.26 | 6.35 | 2.70 | 2.08 | 7.69 | - | 11.90 | ---- |
|  | $x$ | X | X |  | 1.89 | 6.38 | 6.35 | ---- | 4.17 | 3.85 | 3.33 | 4.76 | 3.57 |
| X | X | X | X | X | 3.77 | 6.38 | 4.76 | 5.41 | 6.25 | 3.85 | 6.67 | 4.76 | 3.57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nse |  |  | 9.55 | 23.40 | 14.29 | 18.91 | 16.67 | 15.37 | 13.33 | 19.06 | 14.30 |

TABLE XXVI
INDCOR TRAFFIC PATTERNS WHICH PERMIT HLAVING CONVERSATION WITHOUT INTERRUPTION


tabie xxvil


TABLE XXVIII
SEPARATE BEDROOMS FOR EACH OF THE CHILDREN

| B. C. P |  |  | $\mathrm{P}_{2} \mathrm{FC}$ |  | EDUCATION |  | AGE OF CHILDREN |  | SEX OF CHILDREN <br> Same Different |  | NUMBER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High | Low | Preschool | Some School | Same | Different | One | Two | Three or more |
|  |  |  |  |  | X |  | 7.55 | 4.26 | 6.35 | 5.41 | 4.17 | 7.69 | 6.67 | 2.38 | 10.71 |
|  |  | X | x |  | 5.66 | 6.38 | 3.17 | 10.81 | 4.17 | 7.69 | 3.33 | 9.52 | 3.57 |
|  | X |  |  |  | 3.77 | 2.70 | 1.59 | 5.41 | ---- | 5.77 | ---* | 2.38 | 7.14 |
|  | X |  | X |  | 11.32 | 12.77 | 7.34 | 10.92 | 12.50 | 11.54 | 3.33* | 7.14* | 28.57* |
|  | X |  | X | x | 9.43 | 4.26 | 6.35 | 8.11 | 6.25 | 7.69 | 6.67 | 7.14 | 7.14 |
|  | X | X | X |  | 15.09 | 12.77 | 17.46 | 8.11 | 14.58 | 13.46 | 13.33 | 26.67 | 7.14 |
| X | X |  | X |  | 1.89 | 12.77 | 7.94 | 5.41 | 8.33 | 5.77 | 10.00 | 7.14 | 3.57 |
| X | X |  | X | X | 1.89 | 8.51 | 4.76 | 5.41 | 6.25 | 3.85 | 6.67 | 2.38 | 7.14 |
| X | X | X | X |  | 13.21 | 4.26 | 9.52 | 8.11 | 8.33 | 9.62 | 10.00 | 9.52 | 7.14 |
| X | X | X | X | X | 15.09 | 17.02 | 17.46 | 13.51. | 14.58 | 17.31 | 20.00 | 19.05 | 7.14 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | espon | nse |  |  | 15.10 | 14.30 | 17.46 | 18.79 | 20.84 | 12.61 | 20.00 | 6.68 | 10.71 |

TABLE XXIX
A two car garage


TABLE XXX
a house located near the places where your family most often goes

| B. C. $P_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCAT LON |  | AGE OF Preachool | CHILDREN <br> Some School | $\begin{gathered} \text { SEX } \\ \text { Same } \end{gathered}$ | CHILDREN Different | NUMBER OF |  | CHILUREN <br> Chree or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  |  |  | One | I'wo |  |
|  | 26.42 | 19.15 | 19.05 | 29.73 | 16.67 | 28.85 | 13.33 | 28.57 | 25.00 |
| X | 20.73 | 12.77 | 17.46 | 16.22 | 16.67 | 17.31 | 20.00 | 14.29 | 17.86 |
| X | 2.13 | 1.89 | 3.17 | ---** | 2.08 | 1.92 | -a.-- | 4.16 | -*** |
| $\mathrm{X} \times \mathrm{X}$ | 3.77 | ----. | 3.17 | --- | 2.08 | 1.92 | 3.33 | 2.38 | $\cdots$ |
| X | 15.09 | 25.53 | 17.46 | 24.32 | 18.75 | 21.15 | 16.67 | 11.90 | 35.71 |
| $x \quad \mathrm{X}$ | 16.98 | 25.53 | 25.40 | 13.51 | 27.08 | 15.38 | 33.33 | 14.05 | 10.71 |
| X X | 3.77 | 2.13 | 1.59 | 5.91 | 4.17 | 1.92 | --.-- | 4.16 | 3.57 |
| $\mathbf{X} \times \mathbf{X}$ | 1.89 | 2.13 | 3.17 | ----- | 4.17 | -m- | 6.67 | --ッ" | - |
| All Orher |  |  |  |  |  |  |  |  |  |
| Responses | 7.20 | 10.87 | 9.53 | 10.31 | 8.33 | 11.55 | 6.67 | 20.49 | 7.15 |

table XXXI
A FIREPLACE

| B. C. $P_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  | EDUCATION |  | AGE OF CHILDREN <br> Preschool Some School |  | SEX OF CHILDREN  <br> Same DIfferent |  | NLPMBER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Low |  |  | One | Two |  |
| X |  |  |  | 1.89 | 8.51 | 4.76 | 5.41 |  |  | 4.17 | 5.77 | 3.33 | 4.76 | 7.14 |
| X |  | X |  | 22.64 | 10.64 | 17.46 | 16.22 | 14.58 | 19.23 | 13.33 | 16.67 | 21.43 |
| X |  | X | X | 7.55 | 10.64 | 6.35 | 13.51 | 12.50 | 5.77 | 6.67 | 11.90 | 7.14 |
|  | X |  |  | 3.77 | 6.38 | 4.76 | 5.41 | 2.08 | 7.69 | 3.33 | 7.14 | 3.57 |
|  | X |  | X | 5.66 | 4.26 | 3.17 | 8.11 | 4.17 | 5.77 | -..---** | ---..-* | 17.86* |
|  | X | X |  | 11.32 | 8.51 | 14.29 | 2.70 | 16.67 | 3.85 | 20.00 | 7.14 | 3.57 |
|  | X | X | X | 24.53 | 27.66 | 26.48 | 24.32 | 25.00 | 26.92 | 23.33 | 28.57 | 25.00 |
|  | X | X X | X | 11.32 | 12.77 | 12.70 | 10.81 | 12.50 | 11.54 | 16.67 | 14.29 | 3.57 |
| All Othe: |  |  |  |  |  |  |  |  |  |  |  |  |
|  | apo | ases |  | 1.32 | 10.63 | 10.03 | 13.51 | 8.33 | 13.46 | 13.34 | 4.53 | 10.72 |

table XXXII
BRICK CONSTRUCTION


TABLE XXXIII
A house that friends and neighbors will admire


TABLE XXXIV
a house located away fron highays and busy streets


TABLE XXXV
Pleasant entrance

|  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TABLE XXXVI
a separate dining noom

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  | EDUCATION |  | AGE OF Preschool | CHILDREN Some School | $\begin{gathered} \text { SEX } \\ \text { Same } \end{gathered}$ | OF CHILDREN Different | NUMBER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Low |  |  |  |  | One | Two |  |
|  |  |  |  | 9.43 | 12.77 | 9.52 | 13.51 | 10.42 | 11.54 | 10.00 | 4.76 | 21.43 |
|  |  | X |  | 9.43 | 4.26 | 6.35 | 8.11 | 4.17 | 9.62 | 3.33 | 9.52 | 7.14 |
|  |  | X |  | 13.21 | 6.38 | 7.94 | 13.51 | 12.50 | 7.69 | 6.67 | 14.29 | 7.14 |
|  | X |  |  | 3.77 | 6.38 | 3.17 | 8.11 | 4.17 | 5.77 | 6.67 | 2.38 | 7.14 |
| X |  | X |  | 3.77 | 4.26 | 6.35 | -- | 2.08 | 5.77 | 3.33 | 4.76 | 3.57 |
| X |  | X X |  | 13.21 | 2.13 | 7.94 | 8.11 | 8.33 | 7.69 | 10.00 | 7.14 | 7.14 |
| X | X |  |  | 5.66 | 2.13 | 4.76 | 2.70 | 4.17 | 3.85 | 3.33 | 4.67 | 3.57 |
| X | x | X | X | -- | 6.38 | -.--- | 8.11 | 2.08 | 3.85 | 3.33 | 2.38 | 3.57 |
| X | X | X | X | -- | 4.26 | ---* | 5.41 | 2.08 | 1.92 | ----- | 2.38 | 3.57 |
| X |  | X X |  | 9.43 | 14.89 | 14.29 | 8.11 | 18.75 | 5.77 | 20.00 | 9.52 | 7.14 |
| X | X | X X | X | 11.32 | 10.64 | 14.29 | 5.41 | 12.50 | 9.62 | 16.67 | 11.90 | 3.57 |
| All orher |  |  |  | 20.77 | 25.52 | 25.39 | 18.91 | 18.75 | 26.91 | 16.67 | 26.30 | 25.02 |

table Xxxvil
facilities for cooking, relaxing, and entertaining in the backyard


TABLE XXXVIII
a speclal space for children to play inside the house

table xxxix
floors of all rooms of the house on the same level


TABLE XL
COUNTER surfaces that are the right height for you

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ | EDUCATION |  | $\begin{aligned} & \text { AGE OF } \\ & \text { Preschool } \end{aligned}$ | CHILDREN. <br> Some School | $\begin{array}{cc}\text { SEX OF CHILDREN } \\ \text { Same } & \text { Different }\end{array}$ |  | NUMEER OF CHILDREN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Low |  |  |  |  | One | Two | Three or more |
|  | 11.32 | 6.38 | 9.52 | 3.11 | 8.33 | 9.62 | 10.00 | 7.14 | 10.71 |
| X | 47.17 | 53.19 | 46.03 | 56.76 | 39.58* | 59.62* | 40.00 | 47.62 | 64.29 |
| x - X | 5.66 | -1 | 4.76 | ----* | 4.17 | 1.92 | 6.67 | 2.38 | -w--- |
| X X | 13.21 | 10.64 | 12.70 | 10.81 | 14.58. | 9.62 | 13.33 | 11.90 | 10.71 |
| $\mathrm{X} \mathbf{X}$ X | ----- | 4.26 | 1.59 | 2.70 | 2.08 | 1.92 | ----* | 2.38 | 3.57 |
| $x$ x $x$ | 1.89 | 2.13 | 3.17 | - | 4.17 | --.-- | 6.67 | ----- | 3,5 |
| X X X X X | 5.66 | 4.26 | 6.35 | 2.70 | 6,25 | 3.85 | 10.00 | 4.76 | ------ |
| All Other |  |  |  |  |  |  |  |  |  |
| Reoponses | 15.09 | 19.14 | 15.88 | 18.92 | 20.84 | 13.45 | 25.33 | 23.82 | 10.72 |

table Xli
a house that is easy to clean and keep clean

table xlifi
A FAMILY ROOM

| S. C. $\mathrm{P}_{1} \mathrm{P}$ |  |  | $\mathrm{P}_{2}$ |  | EDUCATION |  | $\begin{aligned} & \text { AGE OF CHILDREN } \\ & \text { Preschool Some School } \end{aligned}$ |  | $\begin{aligned} & \text { SEX } \\ & \text { Same } \end{aligned}$ | CHILDREN Different | NUMBER OF Childiren |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High |  | Low | One |  |  | Two |  | Three or more |
|  |  |  |  |  | X | 5.66 | 10.64 | 4.76 |  | 13.51 | 6.25 | 9.62 | --"* | 9.52 | 14.29 |
|  |  |  | X | X | 1.89 | 4.26 | 3.17 | 2.70 | ----- | 5.77 | --7-- | ---- | 10.71 |
|  | X |  |  | X . | 11.32 | 4.26 | 6.35 | 10.81 | ----- | 15.38 | ----- | 9.52 | 14.29 |
|  | X |  | X | x | 3.77 | 6.38 | 4.76 | 5.41 | 4.17 | 5.77 | 6,67 | $4.16{ }^{\text { }}$ | 3.57 |
|  | X | X |  | x | 5.66 | 4.26 | 3.17 | 8.11 | 2.08 | 7.69 | ----- | 4.16 | 10.71 |
|  | X | X | X | X | 13.21 | 6.38 | 9.52 | 10.81 | 10.42 | 9.62 | 3.33 | 14.29 | 3.57 |
| $x$ | X |  | X | X | 5.66 | 19.15 | 12.70 | 10.81 | 16.67 | 7.69 | 13.33 | 11.90 | 10.71 |
| $x$ | \% | x |  | $x$ | 9.43 | 8.51 | 9.52 | 8.11 | 10.42 | 7.69 | 13.33 | 9.52 | 3.57 |
|  | \% | * | \% | X | 16.98 | 25.53 | 25.40 | 13.51 | 20.83 | 21.15 | 26.67 | 19.05 | 14.86 |
| Alf Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spor | lises |  |  | 26.42 | 10.63 | 20.65 | 16.22 | 29.16 | 9.62 | 36.67 | 17.88 | 10.72 |

table xlisl
separate living room

| B, C. $P_{1} P_{2} \mathrm{FC}$ |  |  |  | educarion |  | age of children |  | SEX Of CHILDREN |  | number of children |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | H1gh | Low | Preschool | Some School | Same | Different | One | Two | Three or more |
|  |  | X |  | 7.55 | ---* | 3.17 | 5.41 | 4.17 | 3.85 | 3.33 | 2.38 | 7.14 |
|  |  | $x$ x |  | 11.32 | 2.70 | 6.35 | 8.11 | 4.17 | 9.62 | 3.33 | 9.52 | 7.14 |
|  | x | x |  | 5.66 | 4.26 | 6.35 | 2.70 | 4.17 | 5.77 | 6.67 | 2.38 | 7.14 |
|  | x | x x |  | 1.89 | 2.70 |  | 5.41 | 4.17 | --... | --. | 2.38 | 3.57 |
|  | x | X X |  | 7.55 | 4.26 | 4.76 | 8.11 | 4.17 | 7.69. | 3.33 | 4.76 | 10.71 |
|  | x | x |  | 7.55 | 6.38 | 4.76 | 10.81 | 6.25 | $7.69{ }^{\circ}$ | 3.33 | 4.76 | 14.29 |
|  | X | X |  | 7.55 | 12.77 | 14.29 | 2.70 | 14.58 | 5.77 | 23.33 | 4.76 | 3.57 |
|  | X | X x |  | . 18.87 | 10.64 | 14.05 | 8.11 | 16.67 | 13.46 | 20.00 | 16.67 | 7.14 |
|  | X | $\mathrm{X} \times$ | x | 11.32 | 21.28 | 15.87 | 16.22 | 16.67 | 15.38 | 20.00 | 16.67 | 10.71 |
|  | 11 ot | Other |  | 20.74 | 35.01 | 30.40 | 32.42 | 24.98 | 30.77 | 16.68 | 35.72 | 28.59 |

TABLE XLIV
A LARGE HOUSE


TABLE XLV
SECOND BATH (HALF OR FULL)

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | Education |  | $\begin{gathered} \text { AGE OF CHILDREN } \\ \text { Preschool Some School } \end{gathered}$ |  | SEX OF CHILDRENSame |  | NLMBER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Two |  |
|  |  |  |  |  | ----- | 4.26 | 3.17 | ----* |  |  | 4.17 | ----- | 6.67 | ----* | ----- |
|  |  | X | $X$ |  | 7.55 | 2.13 | 4.76 | 5.41 | 2.08 | 7.69 | 3.33 | 2.38 | 10.71 |
|  | X |  |  |  | 5.66 | 4.26 | 3.17 | 8.11 | 4.17 | 5.77 | 3.33 | 2.38 | 10.71 |
|  | X |  | $\chi$ |  | 15.09 | 8.51 | 14.29 | 8.17 | 10.42 | 13.46 | 13.33 | 9.52 | 14.29 |
|  | X | X |  |  | 5.66 | 4.26 | 6.35 | 2.70 | 6.25 | 3.85 | 6.67 | 7.14 | --..- |
|  | X | X | X |  | 16.98 | 14.86 | 17.46 | 13.51 | 14.58 | 17.31 | 13.33 | 10.05 | 14.29 |
|  | X | X | X | X | 5.66 | 6.38 | 4.76 | 8.11 | 8.33 | 3.85 | 6.67 | 7.14 | 3.57 |
| X | X | X | X |  | 11.32 | 23.40 | 19.05 | 16.22 | 16.67 | 19.23 | 13.33 | 19.05 | 21.43 |
| X | X | X | X | X | 11.32 | 12.77 | 11.11 | 16.22 | 12.50 | 13.46 | 16.67 | 14.29 | 7.14 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nse |  |  | 20:76 | 19.17 | 15.88 | 21.61 | 20.83 | 15.38 | 16.67 | 28.05 | 17.86 |

TABLE XLVI
SPACE fOR THE FAMILY TO WORK and fiay together inside the house

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | Education |  | ACE OF <br> Preschool | CHILDREN <br> Some School | $\begin{aligned} & \text { SEX } \\ & \text { Same } \end{aligned}$ | CHILDREN Different | Number of |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  |  |  | One | Two |  |
|  |  |  |  |  | 7.55 | 6.38 | 7.94 | 5.41 | 4.17 | 9.62 | 3.33 | 7.14 | 10.71 |
|  | X |  |  | X | 20.75 | 21.28 | 17.46 | 27.03 | 14.58 | 26.92 | 13,33 | 14.29 | 39.29 |
|  | K |  | X | X | 16.98 | 8.51 | 14.29 | 10.81 | 18.75 | 7.69 | 23.33 | 7.14 | 10.71 |
|  | X | X |  | X | 1.82 | 6.38 | 1.59 | 8.11 | 2.08 | 5.77 | --.--- | 4.76 | 7.14 |
|  | X | X | K | X | 9.43 | 2.13 | 7.94 | 2.70 | 8.33 | 3.85 | 10.00 | 4.76 | 3.57 |
| K |  |  |  | X | 3.77 | --.-- | 3.17 | ----- | 4.17 | ----- | 6.67 | --..-- | ------ |
|  | K |  |  | X | 9.43 | 6.38 | 9.52 | 5.41 | 2.08 | 13.46 | --..-- | 9.52 | 14.29 |
|  | K |  | X | X | 3.77 | 10.64 | 4.76 | 10.81 | 10.42 | 3.85 | 13.33 | 2.38 | 7.14 |
| X | K | X |  | X | 7.55 | 4.26 | 7.94 | 2.70 | 8.33 | 3.85 | 10.00 | 7.14 | ----- |
|  | X | X | X | X | 9.43 | 12.77 | 12.70 | 8.11 | 10.42 | 11.54 | 6.67 | 19.05 | 3.57 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nses |  |  | 9.45 | 21.27 | 12.69 | 18.91 | 16.67 | 13.38 | 23.34 | 23.82 | 7.15 |

TABLE XLVII
SPACE WHICH PERMITS ARRANGING OF FURNITURE IN MORE THAN ONE WAY

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EDUCATION |  | AGE OF CHILDREN <br> Preschool Some School |  | $\begin{array}{cc}\text { SEX OF } & \text { CHILDREN } \\ \text { Same } & \text { DIEferent }\end{array}$ |  | NUTIEER OF |  | CHIIDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One | Tro |  |
|  |  |  |  |  | 9.43 | 8.51 | 4.76 | 16.22 |  |  | 4.17 | 13.46 | 3.33 | 7.14 | 17.06 |
|  | x |  |  |  | 3.77 | 7.14 | 3.17 | 8.11 | 6.25 | 3.85 | ---.-- | 4.76 | 10.71 |
| X |  |  |  |  | 18.87 | 14.89 | 19.05 | 13.51 | 16.67 | 17.31 | 16.67 | 14.29 | 21.43 |
| X | X |  |  |  | 16.98 | 21. 28 | 19.05 | 18.92 | 18.75 | 19.23 | 16.67 | 19.05 | 21.43 |
|  | X |  |  | x | 3.77 | 2.13 | --.-- | 8.11 | 2.08 | 3.85 | --.-.- | 2.38 | 7.14 |
|  | X | x |  |  | 9.43 | 14.89 | 11.11 | 13.51 | 14.58 | 9.62 | 16.67 | 14.29 | 3.57 |
| X | X | X |  | X | 13.21 | 8.51 | 15.87 | 2.70 | 12.50 | 9.62 | 20.00 | 9.52 | 3.57 |
|  | X | X | X | X | 7.55 | 1.0 .64 | 11.11 | 5.41 | 10.42 | 7.69 | 10.00 | 11.90 | 3.57 |
| All Other Responses |  |  |  |  | 16.99 | 12.01 | 15.88 | 12.51 | 14.58 | 15.37 | 16.67 | 16.67 | 10.72 |

table XlviII
SPACE AND FACILITLES FOR EATING IN THE KITCHEN

| B. C. $P_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | Education |  | AGE OF CHILDREN <br> Preschool Some School |  | $\begin{aligned} & \text { SEX } \\ & \text { Sanne } \end{aligned}$ | CHILDREN Different | NUMBER OFOne Two |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One |  | Thoo |  |
|  |  |  |  |  | 10.98 | 10.64 | 11.11 | 18.92 |  | 10.42 | 17.31 | 10.00 | 1.4 .29 | 17.86 |
|  |  |  |  | X | 5.66 | 2.13 | 6.35 | -.-.- | 6.25 | 1.92 | 6.67 | 4.76 | --.... |
|  | X |  |  |  | 11.32 | 8.51 | 9.52 | 10.81 | 6.25 | 13.46 | 6.67 | 14.29 | 7.14 |
|  | X |  |  | X | 9.43* | 31.91* | 20.63 | 18.92 | 18.75 | 21.15 | 16.67 | 16.67 | 28.57 |
|  | $x$ |  | X | X | 11.32 | 10.64 | 12.70 | 8.11 | 12.50 | 9.62 | 13.33 | 7.14 | 14.29 |
|  | K | X | X | X | 1.89 | 6.38 | 4.76 | 2.70 | 6.25 | 1.92 | 6.67 | 4.76 | --...- |
| X | X |  |  | X | 7.55 | 6.38 | 3.17 | 13.51 | 6.25 | 7.69 | 3.33 | 7.14 | 10.71 |
|  | X |  | X | x | 9.43 | 6.38 | 6.35 | 10.81 | 6.25 | 9.62 | 10.00 | 9.52 | 3.57 |
|  | X | X | X | X | 5.66 | 6.38 | 9.52 | -- | 6.25 | 5.77 | 3.33 | 9.52 | 3,57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nse |  |  | 20.76 | 10.65 | 15.89 | 16.22 | 20.83 | 11.54 | 23.33 | 11.91 | 14.29 |

TABLE XLIX
SPACE AND FACILITIES FOR SITTING TO WORK IN THE KITCHEN

| D. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  | EDUCATION |  | AGE OF <br> Preschool | CHILDREN <br> Some School | $\begin{aligned} & \text { SEX } \\ & \text { Same } \end{aligned}$ | ChILDREN Different | ntmber of |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Low |  |  |  |  | One | Two |  |
|  |  |  |  | 15.09 | 12.77 | 12.70 | 15.22 | 12.50 | 15.38 | 10.00 | 19.05 | 10.71 |
|  | X |  |  | 37.74 | 36.17 | 34.92 | 40.54 | 31.25 | 42.31 | 30.00 | 35.71 | 46.43 |
|  | X |  | X | 7.55 | 6.38 | 6.35 | 8.11 | 4.17 | 9.62 | 6.67 | 4.76 | 10.71 |
|  | X | X | X | 3.77 | 8.51 | 5.35 | 5.41 | 10.42 | 1.92 | 10.00 | 2.38 | 7.14 |
|  | X | X |  | 5.66 | 2.13 | 4.76 | 2.70 | 4.17 | 3.85 | 3.33 | 4.76 | 3.57 |
| X | X |  | X | - | 4.26 | ----- | 5.41 | 2.08 | 1.92 | 3.33 | ----- | 3.57 |
| X | x | X |  | ~~..-- | 4.26 | 1.59 | 2.70 | 2.08 | 1.92 | 3.33 | 2.38 | ---- |
| X | X | X X | x | 5.66 | 6.38 | 9.52 | -- | 8.33 | 3.85 | 6.67 | 7.14 | 3.57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |
|  | espo | onses |  | 24.53 | 19.14 | 23.81 | 18.91 | 25.00 | 19.23 | 25.67 | 76.18 | 14.30 |

TABLE L
an interior which pleases the eye

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  | EDUCATION |  | ACE OF CHIIDREN Preachool Some School |  | SEX OF CHILDRENSame Different |  | NUMBER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Low |  |  | One | Two |  |
|  | X | X |  | 3.77 | 4. 26 | 1.59 | 8.11 |  |  | 4.17 | 3.85 | 3.33 | 4.76 | 3.57 |
| X |  |  |  | 9.43 | 6.38 | 6.35 | 10.81 | 8.33 | . 7.69 | 10.00 | 2.38 | 14.29 |
| X |  | X |  | 11.32 | 8.51 | 14.29 | 2.70 | 10.42 | 9.62 | 10.00 | 9.52 | 10.71 |
| x |  | X | X | 5.66 | - | 3.17 | 2.70 | 6.25 | - | 6.67 | 2.38 | ----- |
| X | X |  |  | 3.77 | 8.51 | 4.76 | 8.11 | 4.17 | 7.69 | ---..- | 4.76 | 14.29 |
| X | X | X |  | 24.53 | 27.66 | 23.81 | 29.73 | 16.67* | 34.62* | 13.33 | 26.19 | 39.29 |
| X | X | X | X | 24.53 | 21.28 | 23.81 | 21.62 | 29.17 | 17.31 | 33.33 | 26.19 | 7.14 |
| X | X | X X | X | 7.55 | 10.64 | 12.70 | 2.70 | 12.50 | 5.77 | 13.33 | 9.52 | 3.57 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |
|  | espo | nses |  | 9.44 | 12.76 | 9.52 | 13.52 | 8.32 | 13.45 | 10.01 | 14.30 | 7.14 |

TABLE LI
CHILDREN'S OUTSIDE PLAY AREA HHICH CAN DE WATCHED FROM INSIDE THE HOUSE

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  | EdUCATION |  | AGE OF CHILDRENPraschool Some School |  | $\begin{aligned} & \text { SEX OF CHILDREN } \\ & \text { Same Different } \end{aligned}$ |  | NTMBER OF |  | CHILDREN <br> Tliree or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Luw |  |  | One | Two |  |
|  |  |  |  | -*--- | 0.51 | 1.59 | 8.11 |  |  | 2.08 | 5.77 | -0.-.- | 7.04 | 3.57 |
|  |  |  | X | 7.55 | 6.38 | 4.76 | 10.81 | 6.25 | 7.69 | 6.67 | 4.76 | 10.11 |
|  | X |  |  | 15.09 | 6.38 | 12.70 | 8.11 | 14,58 | 7.69 | 16.67 | 7.14 | 10.71 |
|  | X |  | X | 15.09 | 17.02 | 5.92 | 27.03 | 4.17 | 26.92 | 3.33* | 14,29* | 32.14* |
|  | X | X |  | 5.66 | 2.13 | 4.76 | 2.70 | 6.25 | 1.92 | 3.33 | 4.76 | 3.57 |
|  | X | X | X | 15.09 | 17.02 | 20.63 | 8.11 | 14.58 | 17.31 | 20.00 | 16.67 | 10.71 |
|  | X | X |  | 5.66 | ---.- | 3.17 | 2.70 | 4.17 | 1.92 | 3.33 | 2.38 | 3.57 |
|  | X | $\mathrm{X} \times$ | X | 3.77 | 6.38 | 6.35 | 2.70 | 6.25 | 3.85 | 10.00 | 4.76 | ---- |
|  | X | ${ }^{\text {. } \mathrm{X}}$ |  | 3.77 | 4.26 | ---- | 10.81 | 6.25 | 1.92 | 3.33 | 2.38 | 7.14 |
|  | X | X | X | 3.77 | 10.64 | 5.92 | 2.70 | 10.42 | 3.85 | 16.67 | 2.38 | 3.57 |
| X | X | X | X | 7.55 | 2.13 | 6.35 | 2.70 | 2.08 | 7.69 | 3.33 | 7.14 | 3.57 |
| X | X | $X \quad \mathrm{X}$ | X | 3.77 | 6.38 | 6.35 | 2.70 | 6.25 | 3.85 | 3.33 | 7.14 | 3.57 |
| All other |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spon | nses |  | 13.23 | 12.77 | 21.50 | 10.82 | 16.67 | 9.62 | 10.01 | 18.46 | 7.77 |

TABLE LII
SPACE FOR OTHER FAMILY MEMBERS TO BE LN THE KITCHEN WHILE YOU ARE WORKING


TABLE LIII
a place to watch t.v: Without interruption

| 1. C. $P_{1} \mathrm{P}_{2}{ }^{\text {FC }}$ |  |  |  |  | EDUCATION |  | AGE OF CHILDREN Preschool Some School |  | $\begin{array}{r} \text { SEX } \\ \text { Same } \end{array}$ | CHILDREN Different | NUMBER OF |  | CHILDREN <br> Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One |  | Two |  |
|  |  |  |  |  | 9.43 | 10.64 | 11.11 | 8.11 |  | 4.17 | 13.46 | 10.00 | 9.52 | 10.71 |
|  |  |  | X |  | 11.32 | *---- | 6.35 | 5.41 | 8.33 | 3.85 | 6.67 | 7.14 | 3.57 |
|  |  | X | X |  | 5.66 | 2.13 | 3.17 | 5.41 | 6.25 | 1.92 | 3.33 | 7.14 | ----- |
|  | X |  | X |  | 20.75 | 14.89 | 20.63 | 13.51 | 10.42 | 25.00 | 10.00 | 16.67 | 28.57 |
|  | X |  | X | X | 15.09 | 10.64 | 7.49 | 21.62 | 12.50 | 13.46 | 13.33 | 9.52 | 17.86 |
|  | X | X | X | X | 5.66 | 8.51 | 7.49 | 5.41 | 10.42 | 3.85 | 16.67 | 2.38 | 3.57 |
| X | X |  | X | X | 3.77 | 14.89 | 9.52 | 8.11 | 10.42 | 7.69 | 13.33 | 9.52 | 3.57 |
| X | x | X | X | X | 7.55 | 8.51 | 7.49 | 8.11 | 4.17 | 11.54 | ---*- | 14.29 | 7.14 |
| All Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | spo | nse |  |  | 20.77 | 29.79 | 26.75 | 24.31 | 33.32 | 19.23 | 26.67 | 23.82 | 25.01 |

TABLE LIV
AN AUTOMATIC DRYER


TABLE LV
CENTRAL HEATING

| B. C. $\mathrm{P}_{1} \mathrm{P}_{2} \mathrm{FC}$ |  |  |  |  | EDUCATION |  | AGE OF CHILDREN <br> Preschool Some School |  | $\begin{gathered} \text { SEX } \\ \text { Same } \end{gathered}$ |  | CHILDREN Different | NUMBER OF |  | CHILDREN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low |  |  | One |  |  | Two | Three or more |
|  | X |  |  |  | 18.87 | 17.02 | 14.29 | 24.32 |  | 17.02 |  | 19.23 | 13.33 | 14.29 | 28.57 |
|  | x |  | x |  | 1.89 | 4.26 | 4.76 | -..-.- | 4.17 |  | 1.92 | 6.67 | 2.38 | ----- |
|  |  | X |  |  | 32.08 | 19.15 | 26.98 | 24.32 | 33.33 |  | 19.23 | 26.67 | 26.19 | 25.00 |
|  | X | X |  | x | 7.55 | 2.13 | 4.76 | 5.41 | 8.33 |  | 1.92 | 6.67 | 7.14 | ----- |
|  | X | X | X |  | -.-.- | 6.38 | 3.17 | 2.70 | 6.25 |  | ----- | 3.33 | --- | 7.14 |
| X | X |  |  |  | -.-.... | 6.38 | 4.76 | ---.- | 2.08 |  | 3.85 | 3.33 | 2.38 | 3.57 |
|  | X | x |  |  | 15.09 | 10.64 | 15.87 | 8.11 | 10.42 |  | 15.38 | 13.33 | 11.90 | 14.29 |
| K | X | X |  | X | 3.77 | 6.38 | 6.35 | 2.70 | 6.25 |  | 3.85 | 10.00 | 4.76 | - |
| X | X | X | X |  | 5.66 | ----- | 4.76 | --- | 4.17 |  | 1.92 | 6.67 | 2.38 | - |
| X | X | K | X | x | 5.66 | 8.51 | 6.35 | 8.11 | 4.17 |  | 9.62 | 3.33 | 11.90 | 3.57 |
|  | 10 | ther |  |  | 9.43 | 27.66 | 7.95 | 24.33 | 3.81 |  | 23.08 | 16.67 | $16.68{ }^{\circ}$ | 17.86 |

VITA
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Candidate for the degree of
Master of Science

## Thesis: REIATIONSHIPS BETWEEN CERTAIN ASPECTS OF HOUSING AND FTVE HOUSING $\sim$ RELATED VALUES AS DETERMINED BY OPINIONS OF MOTHERS OF EXPANDING FAMILIES

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[^0]:    $\mathrm{l}_{\text {Talcot Parsons, }}$ and Edward A. Shils, eds., Toward a General Theory of Action (Cambridge, 1951), p. 395.

[^1]:    $\mathrm{I}_{\text {Talcot Parsons, }}$ and Edward A. Shils, (eds. ), Toward a General Theory of Action, (Cambridge, 1951), po.395.
    ${ }^{2}$ Ibid

[^2]:    ${ }^{11}$ Ibid，p． 177 ．
    ${ }^{12}$ Ruth Ho Smith，Laura D。Kivlin，Cecile P。Sinden，Housing Choices and Selections，Penn．State University，Pub1ication 204，（University Park，May，1963）．

[^3]:    ${ }^{11}$ Summary of Discussions by the Cornell Value-study group (Mimeo.) June 11, 1949, reported in Glenn Beyer, Housing and Personal Values, Memoire 364, Cornell Agricultural Experiment Station, Ithaca, New York, July, 1959, p. 4 。
    ${ }^{12}$ Asahel D. Woodruff, The Psychology of Teaching, (New York, 1951), p. 134 。
    ${ }^{13}$ Gordon Allport, Phil1ip Vernon, and Gardner Lindzey, Study of Values, A Scale for Measuring the Dominant Interests in Personality, (Boston, 1960).

[^4]:    ${ }^{21}$ Virginia Cutler, "Personal and Family Values in the Choice of a Home," as reported in Eleanore L. Koh1mann, "Development of an Instrument to Determine Values of Homemakers," (unpublished Ph.D. dissertation, Iowa State University of Science and Technology, 1961), pp. 62-63.

[^5]:    ${ }^{25}$ Ibid., p. 55.

[^6]:    ${ }^{26}$ Montgomery, "Housing Values: Meaning, Measurement and ImpIications," pp. 10-11.
    ${ }^{27}$ Beyer, Housing and Personal Values, pp. 5-6.

