

RELATIVE IMPORTANCE OF SELECTED
CRITERIA FOR MULTIPLE-UNIT HOUSING
AS SEEN BY STUDENT FAMILIES
WITH YOUNG CHILDREN

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ABSTRACT

RELATIVE IMPORTANCE OF SELECTED CRITERIA FOR MULTIPLE-UNIT HOUSING AS SEEN BY STUDENT FAMILIES WITH YOUNG CHILDREN

by Bettie S. Torrey

The purposes of this study were to determine what student families with young children consider important in their housing and to discover relationships between important criteria of multiple-unit housing and aspects of family living in families with young children.

A tentative list of criteria of housing, compiled from results of an exploratory questionnaire, from the literature and from suggestions of specialists in the fields of child development and in housing, was submitted to a panel of seven judges for their ratings of the relative importance of the criteria.

This list of sixty-eight criteria in nine categories was presented to a panel of seven judges for their ratings of relative importance. The revised list of sixty-seven criteria was pretested twice before the final questionnaire was completed.

A total of sixty-five criteria emerged in the final questionnaire which was submitted to one hundred seventy-three families living in the married student housing on the Michigan State University campus who fit the following criteria.

1. One or both parents were students.
2. There were two or more children or preschool age in the family.
3. Families must have lived in the housing at least six months and planned to remain one or more terms beyond the time of data collection.

The families had a total of two hundred forty-nine children. The mean age of the children was 2.46 years or almost two and one-half years.

Only the mother was asked to respond in terms of her total family's needs. The returns consisted of one hundred questionnaires.

The responses were weighted: very important 3, moderately important 2, of little importance 1, and of no importance 0. Criteria were ranked according to the weighted averages and divided into groups of relative importance on the basis of the weighted averages.

The criteria which the student wives rated highest in the study, arranged in rank order, were the following.

Rank

1. Spaces between the railings too small to permit a child to slip through.
2. Both sides of stairs enclosed enough to prevent a child falling through.
3. Walls painted with washable paint and resistant to marking.
4. Glass in doors and windows strong enough to withstand small children leaning or pushing against it.
5. Outdoor play areas for preschool children which can be readily seen and reached from indoors.
6. A place to store children's outside toys.
7. Outdoor play areas equipped for preschool children.
- 8.5 Warm floors where children play.
- 8.5 A compact, modern, apartment with reasonable rent.
10. Temperature regulation within each apartment.
11. Stairs with hand rail within reach of small children.
12. Maintenance provided by the university.
14. Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.

14. Incönerator convenient to apartment.
14. Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.
- 16.5 Windowscreens strong enough to withstand small children leaning or pushing against them.
- 16.5 A floor surface in the entire apartment which is easy to clean.
18. Electrical outlets having shockproof device for children's safety.
19. Stairs with closed risers between the treads.
20. A variety of apartments to choose from with one, two, or three bedrooms.

The criteria were organized for discussion of the reasons for their high rating after examination of the responses made by the mothers indicated the general categories their statements might fit.

Concerns for the safety of their children on the stairs, the health of their children in apartments with uneven temperatures and problems with humidity, play space for young children convenient to the apartment for easy supervision, storage space for children's toys that had to be left outside all the time, surfaces easy to clean throughout the apartment and privacy while studying were mentioned as reasons for the high rating of the "very important" criteria.

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By

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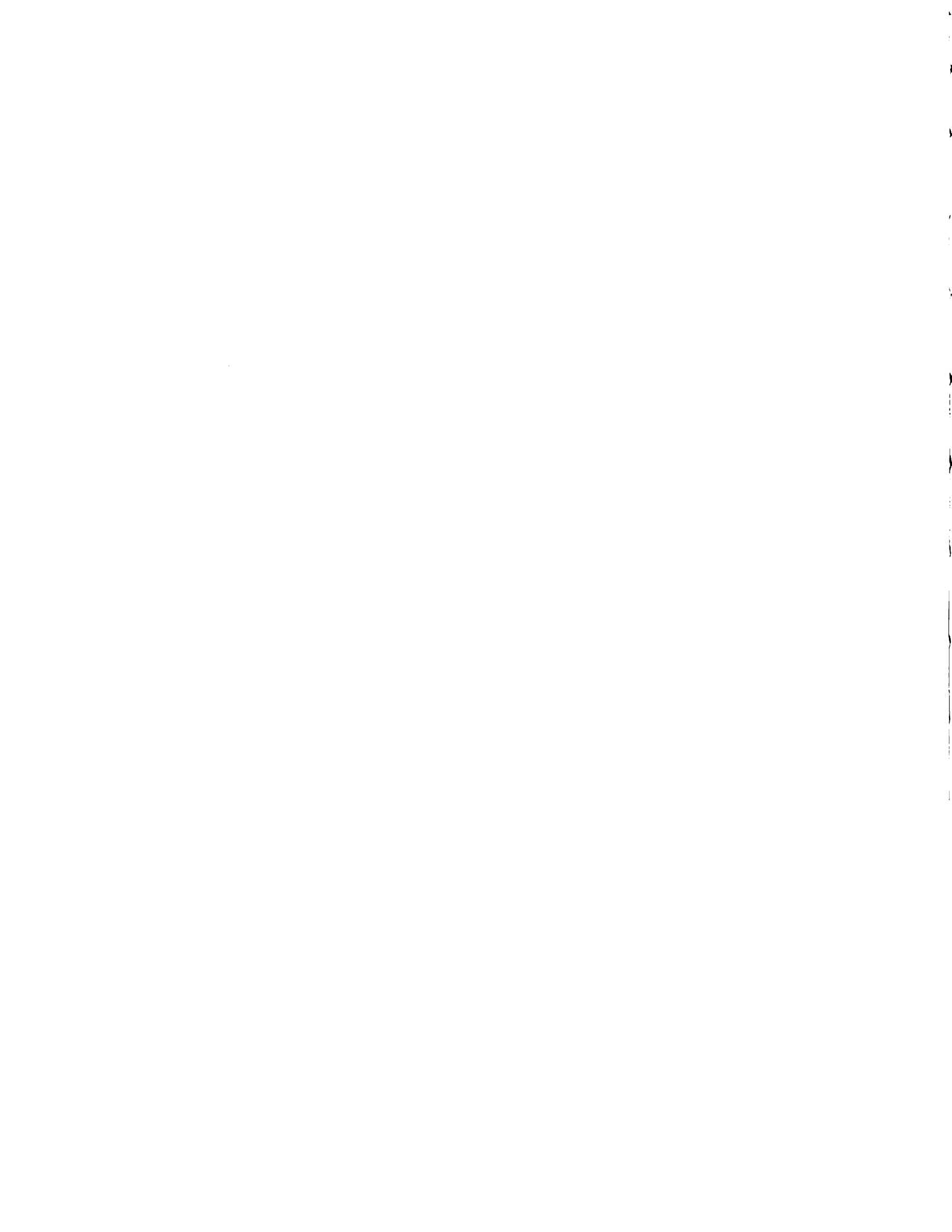
The women living in the married student housing at Michigan State University who received and responded to the final questionnaire.

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CHAPTER I

INTRODUCTION

Today many young couples find themselves beginning their families in the atmosphere of a college or university while one or both are still students. Often in the larger universities their housing will consist of a type of multiple-unit dwelling provided by the university.]

Kirkendall (Cavan, 1960, p. 261) substantiated the belief that campus marriages are here to stay. He suggested that universities could do much to assist the married student make a better adjustment. The married student often goes through college with the idea that he is postponing "living" until graduation.

Another author, Frank (1957, p. 347), stated, "Indeed [the aim of student housing is, or should be, to provide a way of living commensurate with the needs and the aspirations of students, incorporating in the housing whatever may be conducive to these purposes."]

[Since the housing of married students affects the whole family, the planning for this housing should include all family members.]

Kennedy (1953, p. 7) commenting on the usual situation stated that, "in the building of the dwelling unit, the builders do not know the people who will live in their products. The families concerned are statistical entities only." It would seem that special planning of housing might well be done for such a specific population as married students with preschool children. Since the fathers are all students, they would have the same occupations. Also there is much homogeneity among student families as to their stage in the family life cycle. Most are young

parents with young children. Thus, the family needs in this group are more similar than among families in a normal population.

The question arises as to the extent to which young children have been considered as parts of families occupying this housing. Many people have written on the subject of housing needs of the preschool child and lists of criteria have been developed. The general importance of housing to children is expressed in the following statement by Wright (1954, p. 169).

It is more important for the child to live in an appropriate well-considered home development than it is for the grown-ups because the grown-ups are halfway through and consequently do not have so much to lose or gain from the home atmosphere. The child, however, is a beginning; he has the whole way to go and he may go a lot further in the course of time than Pa and Ma ever had a chance to go. It is in childhood that impressions become most indelible.

For these and many unmentioned reasons it is peculiarly important that a child should grow up in building conditions that are harmonious, live in an atmosphere that contributes to serenity and well-being and to the consciousness of those things which are more excellent, in childhood.

Mumford (1940, p. 244) states that, "the family's basic need is for space . . . And space is precisely what is lacking; we have been trained to do without it."

The absence of necessary space and other criteria in the home becomes even more important, observed Koppe (1955, p. 131), "when we consider the fact that children spend most of their preschool life in the home and over a third of their waking time at home during most of the school years."

A similar concern was expressed by Kennedy (1953, p. 84).

Children's needs and requirements, insofar as the house is concerned, are dependent on three factors. First, unlike adults, who have presumably been indoctrinated with our culture, children have everything to learn. The house is therefore a part of their training, while for an adult it is an expression of established attitudes. Second, child training is largely an adult

responsibility, and thus for the adult's sake as well as that of the children, it should be facilitated in every possible way. And third, children's own needs at various stages are entirely compulsive, cannot be altered except at great cost to both parents and child, and thus should be provided for in terms of space and zoning.

There has been little research conducted on the subject of housing for student families with preschool children. Since Michigan State University has one of the largest married student housing developments in America, it seems an appropriate place to begin.

Therefore, the purposes of this study were to determine what student families with young children consider important in their housing and to discover relationships between important criteria of multiple-unit housing and aspects of family living in families with young children. It is hoped that the study will provide useful information for future planning of multiple-unit dwellings for families with young children.

CHAPTER II

REVIEW OF LITERATURE

The material that is available on the subject of housing for student families with young children is limited. Therefore, it was necessary to approach the subject from several angles. References involving segments of the subject were explored and an attempt was made to apply the material to the specific setting of student families with young children living in multiple-unit housing.

Characteristics of the Married Student

Information on the married student in the college setting was explored first. Marchand and Langford (Cavan, 1960) attempted to discover adjustments of families where both parents were students and who had at least one child under six years of age. Some men and nearly all women in the study indicated that they participated in fewer extracurricular activities than before marriage because of their home activities. Fathers often studied in the library because it was quieter than the home. Caring for children was checked by the fathers as a pleasure more often than other activities of homemaking. The college-operated barracks type apartments were preferred because of their efficient arrangement, their compactness and convenient location. The advantage of relatively cheap rent meant that money was released for other needs of the family. From the analysis of the data the authors concluded that the young people in the study were fashioning a satisfying way of living for themselves and for their families.

Christopherson, Vandiver, and Krueger (1960), reported on the characteristics of today's married student. This study included a control group of families who were not students. The results of the study indicated some interesting similarities and differences between the married college student and young married people in other occupations. A greater percentage of wives of the college group worked outside the home. The participation in household tasks by the husbands of the two groups was similar indicating a general equalitarian arrangement in domestic roles. The married students' standard of living could be described as deferred. It was only a temporary arrangement and thus difficult to compare with another group. The number of children desired by the student couples was higher than the control group. Reciprocal babysitting arrangements by student families was not the usual pattern. The husbands were more frequently the baby sitters in the student families when the mothers were out of the home. There were more positive than negative responses to the questions concerning desirability of college marriage. However, the students' statements reflected much ambivalence. The advantage most often mentioned was that marriage acts as a stabilizing factor. The most often mentioned disadvantage was financial hardship.

Frank's (1957) observations of the characteristics of married students coincided with those reported by Christopherson, Vandiver and Krueger.

Housing for Married Students

* Frank (1957) expressed the belief that housing for married student families should provide the economical optimum of equipment, facilities and services for married students at the beginning of their marriage and family life.

Although Frank (1957, p. 348-349) recognized that his suggestions were for an ideal situation, he set up some criteria for housing married students with young children which included the following:

1. Equipment and facilities within the buildings should be planned to permit common use and make possible group or social performance of many basic tasks of household and child care.

2. Low buildings should be constructed to facilitate ingress and outgoing by mothers with young children.

3. Interior construction and finishing should be designed to minimize cleaning and repairing of walls, floors and interior trim and to provide maximum safety by installing such features as window guards, child-proof electrical outlets and switches and safe gas connections. This calls for a critical scrutiny of all specifications in terms of potential hazards, vulnerability and suitability for children and minimization of the burdensome chores of housekeeping.

4. Arrangements that facilitate coordination of housekeeping and child care and make possible the necessary reading and studying are important.

5. Adequate soundproofing is essential to provide privacy and protection against unavoidable noise of babies and children.

6. The possibility of moving the family to larger apartments with extra bedrooms as the family increases should be included.

Frank believed that too much emphasis cannot be put on the opportunity to design housing specifically for a semi-permanent, identifiable population, as contrasted with the usual anonymous random population in urban housing.

Housing Needs of Young Children

Since this study was concerned with housing criteria for families with preschool children, material on this subject was examined. Certain basic arrangements and requirements were emphasized by authors in reference to young children living in houses. An awareness that houses

were being built with very little consideration for children led to a survey in 1928 to determine the housing needs of children, not coincident with those of adults. Specialists in child welfare work and housing improvement were asked to participate. The results of this survey were combined into a, "Schedule of Housing Requirements for the Child in Addition to Those for the Adults of the Family." From this study, as reported by Gray and Staples (1928, pp. 250-252), the following was found to be pertinent to the present study.

Space

Outdoor Premises

Under two years: Sleeping and play place which may be a porch. It must be safe, sheltered from the wind and have sunshine and shade.

From two to six years: Yard large enough for a swing, riding a bicycle, etc. It should be easily accessible from the house, under the mother's oversight, fenced for safety, dry and have sunshine and shade.

Indoor Premises

Space for Sleeping

All Ages: Space for a free standing bed in a quiet room which may be shut off from noise in other quarters of the house.

Under two years: Space for bed in room with parents.

From two to six years: Space for a bed in room other than the parents', but not necessarily in a room alone.

Play Space

All Ages: Almost the whole house must be given over to the child at times, in addition to definite play places always his.

Under six years: Play room or play corner or corners under mother's supervision.

House Arrangement

Indoor Premises

Under two years: Place near the entrance for the baby carriage.

From two years to adolescence: Coat closet or other place for wraps and overshoes at the entrance used by the child.

Equipment

Indoor Premises

All Ages: Suitable shelves in closet, cupboard or some piece of furniture for play equipment.

Under two years: Low window or some arrangement at window so child may climb up and sit and look out the window. Guards for steps and stairways which are accessible.

Under six years: Guards for open windows.

From two to six years: Some arrangement so that child may use toilet and lavatory without help--either low fixtures or platforms to make those of regular height available. Low rack and hooks for towel and other toilet articles.

From two years to later part of period from six years to adolescence: Low rod and hangers and supports for hats in clothes closet and coat closet used by child.

The authors were aware that this schedule was an ideal and that very few homes, if any, met this ideal. They hoped it would be a guide to families as well as builders who were concerned with children's welfare.

Day (1937, pp. 385-386) described the child's point of view as, "Living in a race of giants." Four major housing needs of children were expressed by this author. They were privacy, safety, play or work space and storage space.

When the above standards and qualifications are compared with more recent studies, it can be seen that they are quite similar. Zimmer (1946, pp. 14-68) was concerned with "housing arrangements affecting certain home management practices when preschool children are included." The results and recommendations of the study are as follows:

In Relation to the Stairs

Stairs presented problems that were not overcome by the end of the fifth year. Thirty-nine children of the fifty-four studied presented various problems throughout the preschool age.

Stairs should have hand rails on either side low enough for the child to use.

Gates should be attached to the wall or rail with small hinges. Small hooks can be used to keep the gate closed so the child will not fall down or climb up stairs.

In Relation to Doors or Doorways in the Home

The lower third of the screen should be reinforced with a piece of plywood or slats so when it is leaned against or bumped the screen itself will not be damaged.

In Relation to Porches

The families in the study whose homes had covered porches large enough for children to play on felt that the railing was inadequate to keep the child on the porch either because it was not strong enough when leaned against or because the space between the railings was too large for the safety of the child.

Homes being constructed should have one porch large enough for children to play on in damp weather; this porch should have a sturdy railing to keep the child safe.

Vertical bars or slats placed in the railing should be spaced either close enough together or far enough apart to prevent the child's knees or feet from getting caught. Bars placed vertically will help prevent the child from climbing on the railing.

In Relation to Kitchen Cupboards and Their Contents

The greatest number of children who presented the problem of pulling pots, pans, and other equipment from cupboards were one-year-olds. However, it did remain a problem until the child was five years old.

Firm catches should be placed on low cupboard doors so the child cannot open them until he is old enough to understand what he is told.

In Relation to Drawers

Drawers used for knives or other equipment which might injure the child should be made with a lock arrangement similar to that used on drawers of office desks.

In Relation to the Home Medicine Chest

When planning a bathroom, the fixtures should be arranged so the child cannot climb from one fixture to another.

A small cupboard which could be locked should be placed high in the bathroom for storage of medicine and disinfectants.

In Relation to Electric Outlets

The greatest problem with this was with children between one and four years of age.

An adequate number of outlets should be installed in every room for any desired use to avoid using long extension cords.

Where a choice is possible, outlets should be placed in an inconspicuous place.

In Relation to the Height of Windows from the Floors

Windows on the first floor should be low enough so the preschool child can see out of them when standing on the floor.

Second floor windows should be high enough from the floor so a child cannot fall out; preferably not less than twenty-four inches from the floor. They should be securely screened at all times and strong enough to hold the child's weight if he should climb to the window.

In Relation to Washing Machines

The laundry room should be located on the main floor of the house.

In Relation to the Placement of the Telephone

The number of problems with the telephone was greatly decreased when the child reached four years. The greatest problems occurred when the telephone was in easy reach of a young child.

A phone with a sufficiently long cord could be placed on a shelf out of the child's reach.

"A study of two kinds of activities of preschool children, dressing activities and play activities, affected by homemaker's activities," was conducted by Edwards (1951, p. 83). On the basis of this study she recommended that:

The bedroom in which the child sleeps have:

Ample storage space, probably chest and closet, for the preschool child's clothes.

Dressing space large enough for mother or someone else to dress the child or help him dress himself.

Self help features, such as low shelf, low drawer, low rod, to encourage independence.

The bathroom:

Be large enough for the mother to take care of the needs of the preschool child or help him, and to store the laundry basket, child's toilet seat, and other equipment used by children in the bathroom.

Have a step to make it possible for the child to reach the lavatory for washing his hands and brushing his teeth.

The work and leisure areas of the house:

Be large enough for the preschool child to play near the mother, help or imitate the mother, play with her equipment or his own toys.

Have storage space for children's toys.

Wiegand and Gross (1958, pp. 19, 23) studied, "the fatigue of homemakers with young children." They compared a less tired group of women with a more tired group. "Nine out of ten in the group with less fatigue regarded the children's space for play and storage as adequate. Less than three-fourths of the more tired group felt that these facilities were sufficient." The study attempted to connect the occurrence of fatigue with factors other than the expenditure of energy. The number of children in the family and the presence of an infant-toddler were the factors with the highest statistical significance.

A homemaker with many children, including an infant-toddler, undoubtedly is using much energy in her daily care of the children. This supports the well-recognized need of the mother at this stage to have help with her homemaking activities.

Another recognized factor, that of the physical arrangements of the house, also received support as connected with fatigue. There were moderate linkages between amount of fatigue and adequacy of space for the children's play and storage of their toys and wraps. Although not a new concept, these areas could be given more consideration by architects and builders.

Shaffer (1959, pp. 27-28) evaluated houses to determine their suitability in relation to cost for families with small children. A selected list of housing features which save work and contribute to more pleasant family living for a family with small children was developed. The following is a summary of that list.

1. A bedroom for each child or a bedroom shared with only one other child near his own age, in order to provide quiet for sleeping, play space, storage of clothing, etc.
2. Indoor play space where the child can romp and play freely without need of excessive quiet or care of furnishings. A basement is suggested for this purpose.
3. Room arrangement and entries planned to provide a traffic pattern throughout the house which avoids cross-room traffic as much as possible.
4. Convenient and adequate storage for toys, buggies, strollers, outdoor wraps, boots, clothing, books, games, hobbies, cleaning equipment, etc.
5. Adequate and conveniently located dining space for at least six persons. The floor covering should be of a type which can be easily cleaned.
6. Bedrooms, especially the children's rooms, separated from living areas to insure quiet during nap and early bed time.
7. The mother's work area, especially the kitchen and laundry facilities, convenient to indoor and outdoor play areas for easy supervision and care of small children.

Monroe (1950, pp. 36-37) investigated working and storage spaces needed in rural homes. A summary of the use of rooms in rural homes was included.

The kitchen was used for a variety of activities. Living and dining areas were used for young children's play in one-fourth to almost half of the homes. Mothers were asked where they would want space for certain activities if they could plan a house. One-half wanted a play-room for young children and one-fourth would have the children play in the bedroom. The majority of the mothers indicated a desire for a basement or porch for children's vigorous play during bad weather. There was a pronounced desire to have the washing machine in the kitchen. No one wanted traffic from the rear door of the kitchen to go through the dining or living area enroute to the bathroom.

Monroe (1950, p. 38) also conducted a study on storage space for children's toys. An inventory was made of kinds and numbers of toys possessed by rural families in Maine. Types of storage were evaluated by observing the ease with which preschool children could get out and put away their toys. Boxes or chests with lids were found not suitable as a general storage for several varieties of toys. Shelves were considered suitable for a great variety of toys because the child could see what he had and could get out a toy without disturbing other possessions. Cupboard doors appeared to be no hindrance. These children had no trouble with drawers that were relatively narrow and equipped with one handle instead of two. Children four years old or older successfully stored books in a magazine rack and in a vertical, "pan-lid" file but younger children managed these better by laying them on a shelf. An open box on wheels was most popular for collecting and storing building blocks, although small canvas bags were acceptable.

Kremer and Day (1959), who also conducted a study among rural families, discovered that having a single play center for the child was the most common practice. Families who lived in houses with one or no social room were less interested in organized play space and had fewer play areas for their children. The single play centers were located in a variety of places in the house: bedroom-living room, family social room or work area. The median size of single centers was thirty-five square feet for one child; fifty square feet for two or more children. The children who had play areas organized for them with furnishings and play materials grouped near free floor space for play, tended to be attracted to the area for most of their indoor play.

Beyer (1958, p. 182) summarized the picture of a mother with preschool children in the following statement.

The requirements of small children are varied, and what is more important is the fact that these requirements occur at a time when the mother is frequently engaged in some other task. Therefore, dressing and undressing, and even bathing, helping

at the toilet, or supervising play activities is likely to be carried on simultaneously with cooking, setting the table, cleaning up or washing dishes. Several problems are created-- play area, circulation and storage.

Agan (Cavan, 1960) pointed out that the house in whatever form it is, is the center of family life. Many of the criteria for families with young children mentioned by Agan are similar to those stated previously. A few additional criteria are included. Controlled temperature and proper illumination are mentioned as important. Finishes should be scar- and water-resistant. A place is needed where the adults can relax or receive their guests and a place for the children, a space large enough to entertain both adults and children.

Most of the criteria mentioned have been directed to children's housing needs in the whole house whether it be rural or urban. Prall (1958) considered the relationship between the dwelling unit and child development. The author discussed the structure of the family dwelling in relationship to the stages of child development. The following is a summary of his suggestions for the child from birth to six years of age.

First Year of life

1. Ready access to the infant's sleeping and play quarters from mother's working areas, including kitchen, sewing, laundry and ironing areas, makes it possible for mother to dispatch her maternal ministrations in a more relaxed and appropriate fashion.
2. A dwelling unit on one level increases ease with which the mother can move the baby's crib, carriage or play pen about without the necessity of carrying these things up and down stairs.
3. An easily cleaned eating area with washable walls and tile or linoleum floor would be wise.
4. Adequate high shelves and counters where the breakable objects can be placed out of the child's reach is needed.
5. When the child begins to climb, there need to be closed cabinets where valuables or dangerous substances can be stored out of the child's reach.

Stage of Toilet Training and Habit Training

Ages two to three and one-half

1. Have a readily accessible toilet facility on each level of the dwelling close to play areas. This is one helpful feature of a one-floor dwelling or apartment.
2. A relatively indestructible play space within which the child can play with clay, sand, water, paints and other forms of messy play is desirable.
3. Ready access to out-of-doors encourages development of motor play as well as messy outdoor play.

Ages Three to Six

1. Set the stage for fathers to perform household activities such as repairing some equipment, washing car, shoveling snow, to help boys with masculine identification.
2. Proximity of the home to other homes with children of similar age makes compatible playmates readily available and facilitates supervision of play.
3. Availability of hard-surfaced areas for bicycle riding, roller skating, scooters, etc. be planned.
4. Provide adequate play areas and storage space for children's outdoor equipment.

Prall emphasized the importance of a one story structure for a child in this age range. He pointed out that this age child is loud, noisy and very active and would tend to disturb tenants in other apartments. It would be for the adults' sake as well as the child's to provide enough space and an adequate arrangement to allow for the "normal spontaneous noisiness of children of this age."

The suggestions made in the material presented here would seem to indicate that housing criteria for married student families with young children may be quite similar to that of most families with preschoolers living in dwelling units or in a whole house. Perhaps arrangements allowing for the study of the student in the family would be an important difference.

CHAPTER III

DEVELOPMENT OF A QUESTIONNAIRE

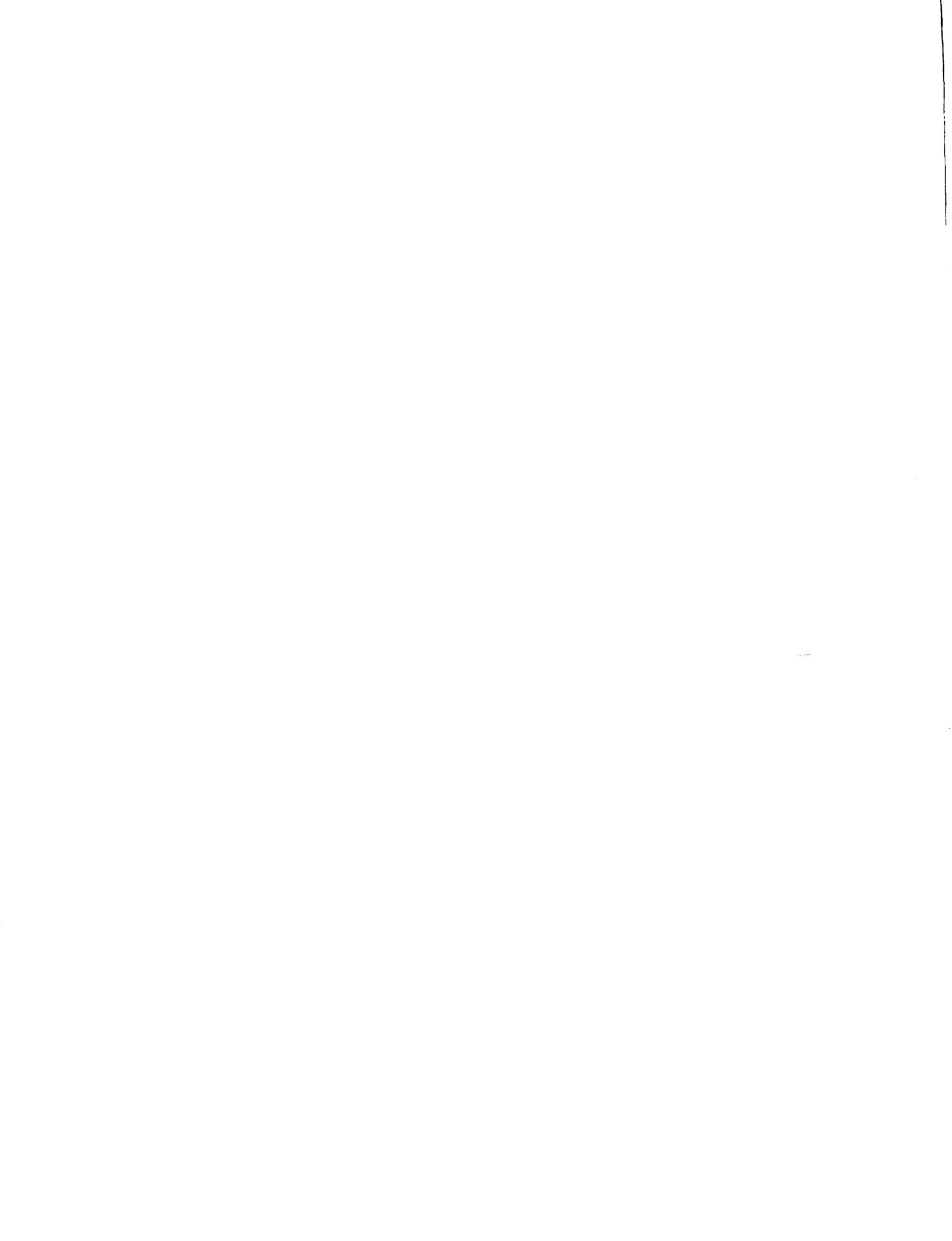
One of the purposes of this study was to determine what student families with young children living in multiple-unit dwellings consider important in their housing. Literature in the field of house planning was studied but little reference could be found to relate specifically to married student, multiple-unit housing. Therefore, it was necessary to find other sources of information to gain background material. Many informal conversations were held with students living in married housing units. Home visits were made. Informal observations were also made in the housing area.

Exploratory Questionnaire Devised

An exploratory questionnaire was devised to gain information in a more systematic manner (See Appendix A). Its purpose was to gain preliminary information identifying areas of concern to the married students regarding housing. The following open-ended questions were included in the exploratory questionnaire.

1. What are some of the difficulties your family has experienced in your present living arrangement?
2. What does your family see as some of the assets?

The questionnaire was distributed to seventy-eight student families whose children were attending Spartan Cooperative Nursery School on the Michigan State University campus. This assured responses from student families with young preschoolers, since only children of married students are enrolled in this nursery school.



Responses were obtained from forty-eight of the seventy-eight families represented. About one-third of these lived in housing off campus, but had recently lived in campus housing.

The families responded to the question on difficulties in their housing with complaints about storage, safety, health practices and convenience for themselves and their children. Their statements concerning assets centered around excellent maintenance, reasonable rent and the satisfactions they felt from living near other students, meeting a variety of people and having many playmates for their children. The assets were less tangible than were the difficulties. The information from the exploratory questionnaire was used in developing the final questionnaire which was directed toward housing for married student families with young children.

When asked how their present housing met their family's needs; Very Well, Moderately Well, Adequately, Inadequately or Very Poorly, all but four responded "Adequately" or above. Those families who were no longer living in the student housing appeared less concerned about housing problems. Some of the answers seemed hurried and lacking in thoughtfulness.

Development of Final Questionnaire

Compilation of Criteria

The answers of the married students to the exploratory questionnaire were examined carefully to see how they could be categorized. Specific attention was given to those statements concerning the children and the housing problems centering around them. The answers lent themselves to the following categories: health, safety, privacy, space, convenience and social interaction. The statements made by the student parents were placed in the appropriate category. Statements from

literature reviewed and suggestions from professional persons in child development were also added to the list.) Before the list reached completion another method of including information was used. Thought was given by the investigator to a typical day in a young child's life and what his housing needs would be in his daily routine. If any outstanding area had not been mentioned or needed expanding, it was done at this time. The needs of the adults caring for the child were also included in thinking through the daily routine.

The statements from all sources were reworded to further clarify them. An attempt was made to keep the statements of criteria objective and positive. The list of sixty-eight criteria were arranged under the following categories.

1. General Statements About Housing
2. Health and Safety
3. Privacy
4. Ease in Cleaning
5. Ease in Caring for Children While Doing Household Tasks
6. Children's Play Needs
7. Storage Needs
8. Adult Companionship
9. Social Interaction

Submitted to Panel of Judges

This list of sixty-eight criteria was presented to seven judges for their ratings of relative importance of each criteria and for their suggestions and criticisms (See Appendix B). Six judges were professional persons: three from the field of child development, one each from the fields of related arts, home management, and architectural engineering. One judge was a nonprofessional person, a mother with preschool children living in married student housing on campus. Along with a brief

description of the study, directions for use of the rating scale were included. The judges were asked to rate each statement by the following scale.

| | |
|----------------------|-----|
| Very Important | (3) |
| Moderately Important | (2) |
| Little Importance | (1) |
| No Importance | (0) |

One rating was given to each criterion. The panel of judges was reminded to do the rating having in mind the needs of married students with young children living in campus multiple-unit housing. They were asked to comment on any of the criteria and add suggestions to the list.

First Revision

The panel's ratings were totaled and averaged. All those criteria with an average below 2.0 were either eliminated from the study or rephrased to improve their clarity and validity. The following statements were eliminated because they had average ratings of less than 2.0.

1. Firm catches placed on low cupboard doors so young children cannot open them (Average rating 1.6).
2. Bathroom fixtures arranged so child cannot climb from one to another (Average rating 1.1).
3. Locks on drawers used for knives or other dangerous equipment (Average rating 1.6).
4. A suitable place where a child can have a small pet, other than a cat or dog (Average rating 1.4).

One statement, "Bedroom space which doubles as play space for children," was eliminated in spite of a rating of 2.1. While the provision made by this criterion was not insignificant, yet this item was judged as not contributing to the study. All the families did have bedrooms; whether or not they doubled as play space was a matter of family choice, not a provision of housing per se. Hence this item was dropped.

Another criterion, "Fenced in, gated, parking areas to protect small children," was rated low (1.5) but was retained. It was the suggestion of some of the student parents made during informal conversation and it seemed important enough to include in the list of statements even though it was not highly rated by the judges. The statement was reworded for clarity.

The following statements were added to the list at the suggestions of the judges.

1. A variety of apartments to choose from with one, two, or three bedrooms.
2. The possibility of selecting needed furnishings from college source (store) to supplement and meet individual needs.
3. Electrical outlets having shockproof device for children's safety.
4. Doors, sills, window frames and like surfaces easy to clean and durable.

The nine main categories of criteria stated previously were unchanged by the panel.

The sixty-seven criteria in the revised list were then arranged for the pretest. The same scale used by the judges was included. The participants in the pretest were asked to rate each criterion. For those criteria which they rated "Very Important," they were asked to write in their reasons. Space was provided for their responses.

First Pretest

The questionnaire was pretested with eleven families having pre-school children and living in married student housing on the Michigan State University campus (See Appendix C). Only the mothers were asked to respond to the statements since they spent more time living with and planning for their children than did student fathers. Each was requested to respond to the criteria in terms of her own particular family.

Eight of the mothers completed the questionnaire in the presence of the investigator and were given the opportunity to ask questions. The remaining three filled out the questionnaire and returned it to the nursery school, including comments they wished to make and a record of the time required to complete the questionnaire.

It was observed that those who worked in the presence of the investigator took less time, about thirty minutes, and asked very few questions. Those who worked alone took more time, forty-five minutes to one hour and there were more comments made on their questionnaires.

Second Revision

The parents' ratings of the criteria in the pretest were examined and emphasis was placed on their reasons why when they responded to the "Very Important" criteria. Revisions were made when it seemed necessary to clarify or improve the validity of a statement. It was necessary to discover the reasons the participants rated certain criteria "Very Important." Sometimes they had forgotten to rate according to their own family. Sometimes they had forgotten to include their family in their answer and rated only for themselves.

Criteria which received an average rating of 2.0 were retained. Those which received an average rating below 2.0 were examined. Of the latter, the following criteria were eliminated.

1. A medicine cabinet equipped with a lock.
2. Windows on the second floor at least twenty-four inches from the floor.
3. A place outdoors to hang clothes on good drying days.

The first was rated low because the participants felt they could control their children without locking up the medicine cabinet. They felt it would be an added unnecessary expense. The second was frequently misunderstood. In the revision it was combined with another statement without using

a specific distance of twenty-four inches. The third statement was important to the participants for their own convenience but they did not see it as relating to care of young children.

Some criteria, which the families in the pretest rated low, were retained because of the importance placed upon them in the literature and/or by the panel of judges.

These included:

| | Average of Judges' Ratings |
|---|-------------------------------|
| 1. Telephone attached to the wall out of child's reach (Zimmer, 1946, p. 68). | 1.6 |
| 2. Some private yard space for every family, which they can use as their own (Prall, 1958). | 2.5 |
| 3. Room arrangement and entries which avoid cross-room traffic as much as possible (Shaffer, 1959, p. 98). | 2.3 |
| 4. Picnic area and playground for family activities close to housing development (These are in the planning stages for the Married Student Housing at Michigan State University). | 2.8 |
| 5. A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc., with adjacent play space for children (Frank, 1957, p. 348). | 2.3 |
| 6. Larger rooms for recreation and group gatherings located convenient to the individual apartments (Frank, 1957, p. 349). | 2.1 |

The following criterion was added at the suggestion of the women in the pretest. It seemed to be a satisfactory compromise between laundry facilities of their own and laundry facilities too far from their apartments.

1. Community laundry facilities provided within each building.

A total of sixty-five criteria emerged as a result of the second revision. Several groupings of statements were made throughout the questionnaire to facilitate clarification of answers. The participants were asked to read each grouping as a unit before checking the statements within the group. This was done in three areas.

Type of Housing

A compact, modern, apartment with reasonable rent.

A modern apartment with more space and planning for small children at correspondingly higher rent.

A small apartment, less modern, with very low rent.

Furnishing in Apartment

A completely furnished apartment.

A partially furnished apartment having essential furniture, stove, and refrigerator.

The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment.

A completely unfurnished apartment.

Parking

A place for parking which is close but not adjacent to the housing.

A place for parking immediately adjacent to entrance to apartment.

Adjacent parking areas, fenced and gated, to protect small children.

The group of criteria concerning social interaction, placed at the end of the questionnaire, was given a different rating scale from the ratings in the first eight categories of criteria. It has already been mentioned that this section was concerned with intangible feelings rather than the more concrete statements throughout most of the questionnaire. In the pretest it was found that while a rating of 0-3 indicated intensity of concern, it did not tell whether the participants had positive or negative feelings toward the criteria. The rating scale developed for this grouping was as follows.

| | |
|------------------------|------|
| Very Desirable | (+2) |
| Moderately Desirable | (+1) |
| Neutral | (0) |
| Moderately Undesirable | (-1) |
| Very Undesirable | (-2) |

The directions for filling out the questionnaire were revised for clarity.

Second Pretest

The revised questionnaire (Second Revision) of the sixty-five criteria was submitted to four families with preschool children who lived in the Michigan State University married student housing units (See Appendix D). A cover letter was included as well as instructions for rating. The mothers filled out the questionnaires and returned them to the investigator with their comments and suggestions.

Final Revision

The suggestions of the mothers in the second pretest were used to clarify four statements in the final questionnaire. None were added or subtracted from the list. The directions on the questionnaire were again reworded to improve clarity (See Appendix E). The cover letter also was revised for greater clarity (See Appendix E).

CHAPTER IV

COLLECTION AND TREATMENT OF DATA

Selection of Subjects

The subjects chosen for the study were families living in the married student housing on Michigan State University campus at the time the questionnaire was administered. The following criteria were established for their selection.

1. One or both parents must be students.
2. There must be two or more children of preschool age in the family. Five-year-olds were included if they had not attended school.
3. Families must have lived in the housing at least six months and planned to remain one or more terms beyond the time of data collection. This allowed enough time for the families to have become acquainted with their present surroundings and avoided a lessening of interest sometimes shown by families who were planning to move soon.

The names of the subjects used in this study were secured from the mailing file in the university office of married housing. There were one hundred seventy-three families that fit the criteria exclusive of those families that had cooperated in the preparation of the questionnaire. Families which had responded in either the exploratory study or in the pretests, were not included in the final collection of data.

Description of Married Student Housing

The married student housing development on the Michigan State University campus was, at the time the study was made, the largest in the United States with 1,940 one- and two-bedroom furnished apartments (Foster, 1960-61). Furnishings for each apartment were complete except for draperies, lamps, and accessories. They included wall-to-wall carpeting, Venetian blinds, a desk, dinette table and chairs, bedroom furniture, refrigerator, stove, lounge chairs and a lounge convertible to a bed. The 1960-61 rates for these apartments were seventy-five dollars per month for the one-bedroom unit and eighty-one dollars per month for the two-bedroom unit, including all utilities. The buildings are mainly two-story brick structures arranged in courts with parking facilities provided in front of each unit. The following facilities were provided by the university for the convenience of the students.

1. Laundry facilities were provided in centrally located laundry buildings.
2. Repairs were made by university maintenance men and no charge was made for repairs which arose from ordinary wear.
3. Paint was issued periodically to occupants to freshen the units if they desired.
4. Incinerators were provided in each building for the disposal of rubbish, garbage, and other waste.
5. Combination screen and storm doors were furnished for all apartments

(Married Housing Department, 1957)

Administering the Questionnaire

The questionnaire was mailed to each of one hundred seventy-three families, together with the cover letter introducing the investigator and explaining the purpose of the study (Appendix E). Only the mother

in the family was asked to respond and to do so in terms of her total family's needs. A mother who was in the situation with two preschoolers was assumed to be well qualified to respond to the criteria and to be in a position to evaluate the importance of the housing to her entire family. She was asked to rate each criterion on a scale of 3-0; 3 if she considered it "very important," 2 if "moderately important," 1 if "of little importance" and 0 if "of no importance." For those statements which she rated "very important" she was asked to give her reasons. A self-addressed envelope was enclosed for the return of the questionnaire.

Returns

There were one hundred nineteen questionnaires (68.7%) returned to the investigator. Nineteen of these were eliminated for the following reasons.

1. The sections that were to have been read as a group were misunderstood and not completed on seven of the questionnaires.
2. One entire page was not completed on five of the questionnaires. It was not always the same page.
3. Families who had two preschoolers but also had children eight-years-old or older were eliminated because their ratings would necessarily include the older children. Since this study was concerned with preschoolers, the answers of families with older children might distort the results. There were six questionnaires in this group.
4. The remaining questionnaire that was not used had only one child of preschool age. Apparently the six-year-old child in the family had been older than listed and had turned from five to six before the data were gathered.

The returns, then, consisted of one hundred questionnaires.

Description of Subjects

Previous Residence

The one hundred families in the study lived in the multiple-unit dwellings in the married student housing area on the Michigan State University campus. Twenty-seven per cent had lived in other large multiple-unit dwellings similar to their present situation. The remaining seventy-three per cent had not lived previously in anything similar to their present situation. Exactly one-half of the one hundred families lived on the first floor and one-half lived on the second floor.

Length of Time in Present Residence

Thirty-two per cent of the families had lived in their present housing between six to twelve months. The remaining sixty-eight had lived there one year or longer.

Forty-five per cent of the families were planning to remain in the student housing for two to six months. Eleven per cent planned to remain six to twelve months longer. Forty-one per cent indicated they planned to stay from one to three years. One family was moving at the time they received the questionnaire. The responses on this questionnaire were thoughtful enough for it to be included. Two subjects did not answer as to length of time they planned to remain.

Working Mothers

Twenty-seven mothers in this group were gainfully employed; nineteen worked full time, seven part time and one irregularly. The remaining seventy-three women were not gainfully employed.

Parents' Ages

The parents' ages ranged from a nineteen-year-old father to a thirty-eight year-old mother. The mothers, as a group, were slightly

older than the fathers. The fathers' mean age was 24.58 years while the mothers' ages averaged 25.42 years.

Parents' Education

All but one of the mothers in the study had received their high school diploma. Forty-one had not continued their education beyond high school. Thirty-five had completed some college work and twenty-three were college graduates. Four of the college graduates had received Master's degrees.

All of the fathers represented had received high school diplomas. There were thirty-three university undergraduate students and sixty-seven university graduate students.

Number of Children

The number of children in these families averaged 2.49 children per family. There were fifty-nine families with two children, thirty-five with three children, four with four children and two families with five children. The one hundred families in the study had a total of two hundred forty-nine children. Two hundred thirty-eight of these children were preschoolers.

Ages of Children

Eleven children were six and seven years old. They represented nine families in the study. Since these children were not far removed from preschool age and their families also had two preschoolers, they were included in the study. The mean age of the children was 2.46 years or almost two and one-half years.

Statistical Treatment of Data

Tabulation of Responses to Criteria No. 1-60

Table 1. Rank, weighted average, frequencies of 3-0 ratings, of no answers, and total responses for each of sixty criteria.

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|--|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 1 | Spaces between the rail-ings too small to permit a child to slip through. | 1 | 2.77 | 80 | 18 | 0 | 0 | 2 | 98 |
| 2 | Both sides of stairs en-closed enough to prevent a child falling through. | 2 | 2.75 | 78 | 20 | 1 | 1 | 0 | 100 |
| 3 | Walls painted with wash-able paint and resistant to marking. | 3 | 2.73 | 75 | 23 | 2 | 0 | 0 | 100 |
| 4 | Glass in doors and win-dows strong enough to withstand small children leaning or pushing against it. | 4 | 2.68 | 73 | 24 | 1 | 1 | 1 | 99 |
| 5 | Outdoor play areas for preschool children which can be readily seen and reached from indoors. | 5 | 2.65 | 68 | 30 | 1 | 1 | 0 | 100 |
| 6 | A place to store children's outside toys. | 6 | 2.61 | 66 | 31 | 1 | 2 | 0 | 100 |
| 7 | Outdoor play areas equip-ped for preschool children. | 7 | 2.60 | 63 | 34 | 3 | 0 | 0 | 100 |
| 8 | A compact, modern, apartment with reason-able rent. | 8.5 | 2.59 | 64 | 32 | 3 | 1 | 0 | 100 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|---|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 9 | Warm floors where children play. | 8.5 | 2.59 | 64 | 31 | 5 | 0 | 0 | 100 |
| 10 | Temperature regulation within each apartment. | 10 | 2.58 | 66 | 26 | 8 | 0 | 0 | 100 |
| 11 | Stairs with hand rail within reach of small children. | 11 | 2.57 | 63 | 32 | 4 | 1 | 0 | 100 |
| 12 | Maintenance provided by the university. | 12 | 2.49 | 56 | 38 | 5 | 0 | 1 | 99 |
| 13 | Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections. | 14 | 2.48 | 58 | 36 | 2 | 3 | 1 | 99 |
| 14 | Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms. | 14 | 2.48 | 54 | 39 | 5 | 1 | 1 | 99 |
| 15 | Incinerator convenient to apartment. | 14 | 2.48 | 54 | 41 | 4 | 1 | 0 | 100 |
| 16 | A floor surface in the entire apartment which is easy to clean | 16.5 | 2.47 | 55 | 40 | 2 | 2 | 1 | 99 |
| 17 | Windowscreens strong enough to withstand small children leaning or pushing against them. | 16.5 | 2.47 | 53 | 42 | 4 | 1 | 0 | 100 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|--|------|---------------------|--------------|----|----|---|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 18 | Electrical outlets having shockproof device for children's safety. | 18 | 2.44 | 53 | 38 | 9 | 0 | 0 | 100 |
| 19 | Stairs with closed risers between the treads. | 19 | 2.41 | 55 | 34 | 8 | 3 | 0 | 100 |
| 20 | A variety of apartments to choose from with one, two, or three bedrooms. | 20 | 2.40 | 46 | 48 | 6 | 0 | 0 | 100 |
| 21 | Doors, sills, window frames and like surfaces easy to clean and durable. | 21 | 2.34 | 42 | 52 | 4 | 0 | 2 | 98 |
| 22 | Windows high enough so a child cannot fall out. | 22 | 2.33 | 48 | 40 | 9 | 2 | 1 | 99 |
| 23 | Paint furnished by the university to freshen walls periodically. | 23 | 2.28 | 37 | 55 | 7 | 0 | 1 | 99 |
| 24 | A partially furnished apartment having essential furniture, stove and refrigerator. | 24.5 | 2.25 | 50 | 32 | 11 | 7 | 0 | 100 |
| 25 | Areas where children can dig in the ground. | 24.5 | 2.25 | 43 | 44 | 8 | 4 | 1 | 99 |
| 26 | A place to study in the apartment. | 26 | 2.23 | 42 | 43 | 11 | 4 | 0 | 100 |
| 27 | Laundry space inside the apartment where you may install your own laundry equipment. | 27 | 2.22 | 52 | 27 | 12 | 7 | 2 | 98 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|--|------|---------------------|--------------|----|----|---|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 28 | Vertical rather than horizontal bars to discourage climbing on railings. | 28 | 2.21 | 37 | 49 | 12 | 1 | 1 | 99 |
| 29 | Community laundry facilities provided within each building. | 29 | 2.20 | 38 | 48 | 10 | 4 | 0 | 100 |
| 30 | Additional storage space outside the apartment for children's large equipment that is not currently in use. | 30 | 2.16 | 45 | 35 | 11 | 9 | 0 | 100 |
| 31 | Shelves or cupboards within child's reach for storage of toys. | 31 | 2.15 | 36 | 48 | 11 | 5 | 0 | 100 |
| 32 | Bedroom space for each child shared by only one other child near the same age. | 32.5 | 2.13 | 39 | 40 | 16 | 2 | 3 | 97 |
| 33 | Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children. | 32.5 | 2.13 | 33 | 51 | 12 | 3 | 1 | 99 |
| 34 | Conveniently located dining table to seat at least six people. | 34 | 2.12 | 28 | 58 | 12 | 2 | 0 | 100 |
| 35 | A quiet place where children sleep. | 35 | 2.11 | 30 | 54 | 13 | 3 | 0 | 100 |
| 36 | Outdoor and indoor play space easily seen and reached from the laundry area. | 36 | 2.02 | 31 | 48 | 13 | 8 | 0 | 100 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 37 | At the top and bottom of the stairs, a gate or a door that could only be operated by adults. | 37.5 | 1.98 | 40 | 29 | 20 | 11 | 0 | 100 |
| 38 | Storage space in the dressing area for childrens clothing with a low bar for hanging and drawers within his reach. | 37.5 | 1.98 | 24 | 56 | 14 | 4 | 2 | 98 |
| 39 | Apartments for families with small children are on the ground floor. | 39 | 1.95 | 29 | 46 | 16 | 8 | 1 | 99 |
| 40 | A covered outside play area where children can spend part of each day outside regardless of the weather. | 40 | 1.94 | 31 | 42 | 17 | 10 | 0 | 100 |
| 41 | Indoor play space where child can play actively and noisily within the building. | 41 | 1.90 | 26 | 46 | 20 | 6 | 2 | 98 |
| 42 | At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out. | 42 | 1.83 | 23 | 49 | 16 | 12 | 0 | 100 |
| 43 | Room arrangement and entries which avoid cross-room traffic as much as possible. | 43 | 1.81 | 17 | 51 | 28 | 3 | 1 | 99 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|--|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 44 | Low hooks or low rods near outside entrances for children to hang outdoor clothing. | 44 | 1.76 | 19 | 50 | 19 | 9 | 3 | 97 |
| 45 | A modern apartment with more space and planning for small children at correspondingly higher rent. | 45 | 1.70 | 24 | 36 | 26 | 13 | 1 | 99 |
| 46 | Some private yard space for every family, which they can use as their own. | 46 | 1.67 | 27 | 30 | 26 | 16 | 1 | 99 |
| 47 | A place for parking immediately adjacent to entrance to apartment. | 47 | 1.66 | 24 | 37 | 20 | 18 | 1 | 99 |
| 48 | Adjacent parking areas, fenced and gated, to protect small children. | 48 | 1.65 | 29 | 25 | 28 | 17 | 1 | 99 |
| 49 | Arrangements for outdoor water play in summer. | 49.5 | 1.64 | 19 | 43 | 21 | 17 | 0 | 100 |
| 50 | Picnic area and playground for family activities close to housing development. | 49.5 | 1.64 | 16 | 45 | 26 | 13 | 0 | 100 |
| 51 | Telephone attached to the wall out of child's reach. | 51 | 1.58 | 16 | 38 | 34 | 12 | 0 | 100 |
| 52 | A study area provided within easy walking distance of the apartment. | 52 | 1.50 | 19 | 32 | 29 | 19 | 1 | 99 |

continued

Table 1 - Continued

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|-----|--|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | | 3 | 2 | 1 | 0 | | |
| 53 | A place for parking which is close but not adjacent to the housing. | 53 | 1.46 | 12 | 40 | 30 | 18 | 0 | 100 |
| 54 | The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment. | 54 | 1.44 | 21 | 29 | 23 | 27 | 0 | 100 |
| 55 | A completely furnished apartment. | 55 | 1.40 | 19 | 24 | 35 | 22 | 0 | 100 |
| 56 | Community laundry facilities provided to serve several buildings. | 56 | 1.37 | 7 | 41 | 34 | 17 | 1 | 99 |
| 57 | Larger rooms for recreation and group gatherings located convenient to the individual apartments. | 57 | 1.26 | 5 | 40 | 31 | 23 | 1 | 99 |
| 58 | A small apartment, less modern, with very low rent. | 58 | 1.03 | 10 | 17 | 39 | 34 | 0 | 100 |
| 59 | A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc. with adjacent play space for children. | 59 | 1.02 | 3 | 25 | 43 | 29 | 0 | 100 |
| 60 | A completely unfurnished apartment. | 60 | 0.59 | 4 | 12 | 23 | 60 | 1 | 99 |

The responses of the subjects were tabulated and the frequency of the rating for each criterion as "very important, moderately important, little importance or no importance," was totaled (See Table 1). In some instances, a total of 26 criteria, scattered throughout the data, the respondents failed to rate each criterion. The totals of "no answer" responses for each criterion are shown in Table 1. The number of "no answer" responses was one in nineteen instances, two in five instances and three in two instances.

The ratings carried weights as follows: very important, 3; moderately important, 2; of little importance, 1; of no importance 0. The weighted average of each criterion was calculated (See Table 1).

Ranking Criteria No. 1-60

Table 2. Weighted average, number of "very important" responses, rank by weighted average, rank by number of "very important" responses and difference in rank, for each of sixty criteria.

| Criterion Number | Weighted Average | No. of V.I. Responses | Rank by Weighted Average | Rank by N. of V.I. Responses | Difference in Rank |
|------------------|------------------|-----------------------|--------------------------|------------------------------|--------------------|
| 1 | 2.77 | 80 | 1 | 1 | 0 |
| 2 | 2.75 | 78 | 2 | 2 | 0 |
| 3 | 2.73 | 75 | 3 | 3 | 0 |
| 4 | 2.68 | 73 | 4 | 4 | 0 |
| 5 | 2.65 | 68 | 5 | 5 | 0 |
| 6 | 2.61 | 66 | 6 | 6.5 | 0.5 |
| 7 | 2.60 | 63 | 7 | 9.5 | 2.5 |
| 8 | 2.59 | 64 | 8.5 | 8.5 | 0 |
| 9 | 2.59 | 64 | 8.5 | 8.5 | 0 |
| 10 | 2.58 | 66 | 10 | 6.5 | -4.5 |
| 11 | 2.57 | 63 | 11 | 9.5 | -2.5 |
| 12 | 2.49 | 56 | 12 | 13 | 1 |
| 13 | 2.48 | 58 | 14 | 12 | -2 |
| 14 | 2.48 | 54 | 14 | 15 | 1 |
| 15 | 2.48 | 54 | 14 | 17 | 3 |
| 16 | 2.47 | 55 | 16.5 | 15 | -1.5 |

continued

Table 2 - Continued

| Criterion Number | Weighted Average | No. of V.I. Responses | Rank by Weighted Average | Rank by N. of V.I. Responses | Difference in Rank |
|------------------|------------------|-----------------------|--------------------------|------------------------------|--------------------|
| 17 | 2.47 | 53 | 16.5 | 18.5 | 2 |
| 18 | 2.44 | 53 | 18 | 18.5 | 0.5 |
| 19 | 2.41 | 55 | 19 | 15 | -4 |
| 20 | 2.40 | 46 | 20 | 23 | 3 |
| 21 | 2.36 | 42 | 21 | 26.5 | 5.5 |
| 22 | 2.33 | 48 | 22 | 22 | 0 |
| 23 | 2.28 | 37 | 23 | 31.5 | 8.5 |
| 24 | 2.25 | 50 | 24.5 | 21 | -3.5 |
| 25 | 2.25 | 43 | 24.5 | 25 | 0.5 |
| 26 | 2.23 | 42 | 26 | 26.5 | 0.5 |
| 27 | 2.22 | 52 | 27 | 20 | -7 |
| 28 | 2.21 | 37 | 28 | 31.5 | 3.5 |
| 29 | 2.20 | 38 | 29 | 30 | 1 |
| 30 | 2.16 | 45 | 30 | 24 | -6 |
| 31 | 2.15 | 36 | 31 | 33 | 2 |
| 32 | 2.13 | 39 | 32.5 | 29 | -3.5 |
| 33 | 2.13 | 33 | 32.5 | 34 | 1.5 |
| 34 | 2.12 | 28 | 34 | 40 | 6 |
| 35 | 2.11 | 30 | 35 | 37 | 2 |
| 36 | 2.02 | 31 | 36 | 35.5 | -0.5 |
| 37 | 1.98 | 40 | 37.5 | 28 | -9.5 |
| 38 | 1.98 | 24 | 37.5 | 44 | 6.5 |
| 39 | 1.95 | 29 | 39 | 38.5 | -1.5 |
| 40 | 1.94 | 31 | 40 | 35.5 | -4.5 |
| 41 | 1.90 | 26 | 41 | 42 | 1 |
| 42 | 1.83 | 23 | 42 | 46 | 4 |
| 43 | 1.81 | 17 | 43 | 52 | 9 |
| 44 | 1.76 | 19 | 44 | 49.5 | 5.5 |
| 45 | 1.70 | 24 | 45 | 44 | -1 |
| 46 | 1.67 | 27 | 46 | 41 | -5 |
| 47 | 1.66 | 24 | 47 | 44 | -3 |
| 48 | 1.65 | 29 | 48 | 38.5 | -9.5 |
| 49 | 1.64 | 19 | 49.5 | 49.5 | 0 |
| 50 | 1.64 | 16 | 49.5 | 53.5 | 4 |
| 51 | 1.58 | 16 | 51 | 53.5 | 2.5 |
| 52 | 1.50 | 19 | 52 | 49.5 | -2.5 |
| 53 | 1.46 | 12 | 53 | 55 | 2 |

continued

Table 2 - Continued

| Criterion Number | Weighted Average | No. of V.I. Responses | Rank by Weighted Average | Rank by N. of V.I. Responses | Difference in Rank |
|------------------|------------------|-----------------------|--------------------------|------------------------------|--------------------|
| 54 | 1.44 | 21 | 54 | 47 | -7 |
| 55 | 1.40 | 19 | 55 | 49.5 | -5.5 |
| 56 | 1.37 | 7 | 56 | 57 | 1 |
| 57 | 1.26 | 5 | 57 | 58 | 1 |
| 58 | 1.03 | 10 | 58 | 56 | -2 |
| 59 | 1.02 | 3 | 59 | 60 | 1 |
| 60 | 0.59 | 4 | 60 | 59 | -1 |

The weighted averages were ranked from highest to lowest. The frequencies of "very important" responses also were ranked from highest to lowest (Edwards, 1959, p. 62). The two rankings were compared (See Table 2). The difference between the two rankings for each criterion was slight in each case. The correlation* between the two rankings which showed the greatest difference (criterion 37 and 48, difference in rankings 9.5) was .95. Further correlations were not computed since lesser differences would have given even higher correlation. Because of the high correlations between the two rankings, either one might have been used to establish the relative importance of the criterion as seen by the subjects in this study. The ranking according to the weighted averages was judged to be slightly more accurate because it already included a heavy weighting for the "very important" criteria. Hence it was chosen as the one measure of relative importance rather than to present results according to two separate rankings namely, weighted average and frequency of "very important" responses.

* Formula used was $\rho = 1 - \frac{6 \sum (dif)^2}{n(n^2 - 1)}$

Grouping Criteria No. 1-60, According to Weighted Averages

Table 3. Intervals used in grouping criteria.

| Groups | Intervals of 0.20 Using Weighted Averages of the Criteria | Number of Criteria in Group | Rank |
|----------------------|--|-----------------------------------|-------|
| Most Important | 2.77-2.57 2.56-2.36 | 20 | 1-20 |
| (High) | 2.35-2.15 2.14-1.94 | 20 | 21-40 |
| Moderately Important | | 31 | |
| (Low) | 1.93-1.73 1.72-1.52 | 11 | 41-51 |
| | 1.51-1.31 1.30-1.10 | | |
| Least Important | 1.09-0.89 0.88-0.68 0.67-0.47 | 9 | 52-60 |

The criteria then were divided into groups of relative importance, according to the following plan (Table 3). Intervals of .20 were established along the continuum of weighted averages as shown in the table above. The number of criteria which fell within the limits of the first two intervals (2.77-2.36) were designated as very important. There were twenty criteria in this group.

The moderately important group consisted of the next four intervals. Within these, two were designated as high and two were designated as low. The number which fell within the limits of the two upper intervals (2.35-1.94) were designated as moderately (high) important.

There were twenty criteria in this group. The number which fell within the limits of the lower two intervals (1.93-1.52) were designated as moderately (low) important. There were eleven criteria in this group.

The last group included five intervals (1.51-0.47). Nine criteria fell into this group and they were designated as least important.

Tabulation of Responses to Criteria No. 61-65.

Table 4. Rank, weighted average, frequencies of +2 to -2 ratings, of "no answers" and of total responses for each of the five criterion on social interaction.

| No. | Criteria | Rank | Weighted Average | f of Ratings | | | | | No Ans- wer | Total Re- sponses |
|-----|---|------|---------------------|--------------|----|----|----|----|-------------------|-------------------------|
| | | | | +2 | +1 | 0 | -1 | -2 | | |
| 61 | Many playmates for the children | 1 | 1.07 | 34 | 47 | 11 | 8 | 0 | 0 | 100 |
| 62 | Neighbors who are living on approximately the same income and daily schedule. | 2 | 0.86 | 24 | 39 | 35 | 1 | 0 | 1 | 99 |
| 63 | Opportunity to live close to people of different races and nationalities. | 3 | 0.80 | 24 | 38 | 33 | 4 | 1 | 0 | 100 |
| 64 | A variety in ages of children's playmates. | 4 | 0.71 | 17 | 49 | 22 | 12 | 0 | 0 | 100 |
| 65 | Close proximity of neighbors. | 5 | -0.11 | 5 | 25 | 34 | 26 | 10 | 0 | 100 |

The responses of the five criteria on social interaction were tabulated separately, since they had been rated on a scale different from that used

for the criteria number 1-60. The frequency of the rating for each criterion, number 61-65, as "very desirable, moderately desirable, neutral, moderately undesirable and very undesirable," was totaled (See Table 4). The totals of "no answer" responses for each criterion are shown in Table 4.

The rating carried weights as follows: very desirable, +2; moderately desirable, +1; neutral, 0; moderately undesirable, -1; very undesirable, -2. The weighted average of each criterion was calculated (See Table 4).

Ranking Criteria No. 61-65.

Table 5. Weighted average, number of "very desirable" responses, rank by weighted average, rank by number of "very desirable," responses and difference in rank, for five criteria on social interaction.

| Criterion Number | Weighted Average | Number of Very Desirable Responses | Rank by Weighted Average | Rank by No. of Very Desirable Responses | Difference in Rank |
|------------------|------------------|------------------------------------|--------------------------|---|--------------------|
| 61 | 1.07 | 34 | 1 | 1 | 0 |
| 62 | 0.86 | 24 | 2 | 2.5 | 0.5 |
| 63 | 0.80 | 24 | 3 | 2.5 | 0.5 |
| 64 | 0.71 | 17 | 4 | 4 | 0 |
| 65 | -0.11 | 5 | 5 | 5 | 0 |

The weighted averages were ranked from highest to lowest. The frequencies of "very desirable" responses were ranked from highest to lowest. The two rankings were compared (See Table 5). There was a slight difference (.5) between the two rankings in the case of two

criteria (criteria 62 and 63). The rankings were the same for the other three criteria in this group. The ranking according to the weighted averages was accepted. It was judged to be slightly more accurate because it already included a heavy weighting for the "very desirable" criteria.

CHAPTER V

FINDINGS

The participants had been asked on the questionnaire to give their reasons when they rated a criterion "very important." All the responses to each criterion were examined along with the criterion to see the relationships existing between the rating of importance the criterion had received and the concerns of family living represented by the statements recorded. Not all the responses recorded were in relation to the "very important" rating. Some were in reference to the "little or no importance" ratings. Those also were considered in the discussion. It appeared that for some criteria the respondents commented when they had a statement to express rather than because they rated the criterion "very important."

The criteria were organized within each group of "most important," "moderately (high) important," "moderately (low) important" and "least important." Within each group they were arranged for discussion according to the reasons of importance the participants had recorded. The reasons of importance stated by the mothers coincided closely with the categories used on the questionnaire: general statements about housing, health and safety, privacy, ease in cleaning, ease in caring for children while doing household tasks, children's play needs, storage needs and adult companionship.

These same categories were used in discussing the criteria except that health and safety were divided to make two categories.

The criteria on social interaction were discussed separately since they were less tangible in nature than the other criteria.

Most Important Criteria

The group of "most important" criteria were sorted into the following categories: safety, ease in cleaning, health, children's play needs, storage needs, general statements about housing, and privacy. These categories were established after examination of the responses to the criterion indicated the reason for its rating.

Safety

Table 6. "Most important" criteria on safety.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Spaces between the rail-ings too small to permit a child to slip through. | 1 | 2.77 | 80 | 18 | 0 | 0 | 2 | 98 |
| Both sides of stairs en-closed enough to prevent a child falling through. | 2 | 2.75 | 78 | 20 | 1 | 1 | 0 | 100 |
| Stairs with hand rail with-in reach of small children. | 11 | 2.57 | 63 | 32 | 4 | 1 | 0 | 100 |
| Stairs with closed risers between the treads. | 19 | 2.41 | 55 | 34 | 8 | 3 | 0 | 100 |
| Glass in doors and win-dows strong enough to withstand small children leaning or pushing against it. | 4 | 2.68 | 73 | 24 | 1 | 1 | 1 | 99 |
| Windowscreens strong enough to withstand small children leaning or push-ing against them. | 16.5 | 2.47 | 53 | 42 | 4 | 1 | 0 | 100 |
| Electrical outlets having shockproof device for children's safety. | 18 | 2.44 | 53 | 38 | 9 | 0 | 0 | 100 |

In the "most important" group statements concerning safety were more numerous than statements from any other category. Seven of the twenty statements in the "most important" group involved the safety of children. The criterion, "Spaces between the railings too small to permit a child to slip through," received the highest ranking in the study. Eighty per cent of the mothers considered this criterion "very important." Twenty of those gave their reasons for the rating. Listed below are a few of their comments.

Necessary to prevent both accidental falls and falls resulting from playing and climbing around.

We've heard of children doing this and I think no precaution is too great.

It's just like the stairs; children will try to climb through them without knowing they can be hurt badly. Railings with too small spaces will prevent this.

The second highest criterion in the study was also concerned with safety on the stairs, "Both sides of stairs enclosed enough to prevent a child falling through." Seventy-eight per cent of the mothers ranked it "very important." Twenty-six of those gave their reasons. Listed below are some of their comments.

The (open) stairs are very dangerous and with so many children, it could be much safer.

Those outside (open) stairs terrorize me when the children are outside.

When children reach the walking stage they would rather walk than be carried. They are not very steady and could fall very easily.

Too many children fall down stairwell too frequently.

This would prevent a lot of mother's worries.

The remaining two statements about safety on the stairs ranked eleventh and nineteenth in the study. The statement ranking eleventh, "Stairs with hand rail within reach of small children," was rated by sixty-three per cent of the mothers as "very important" and nineteen of

those commented. They recognized that children just learning to walk and climb need this support for their convenience and to promote independence as well as safety. Listed below are some of their comments.

Promotes independence and safety.

A necessary safety precaution as well as convenience and support for the children.

Children should learn to safely negotiate stairs.

The statement concerning, "Stairs with closed risers between the treads" ranked nineteenth in the study. Fifty-five per cent of the mothers rated this criterion "very important" and twenty-one of that group commented. The same concerns of children falling through were mentioned as well as strain on adults responsible for the children's safety, as evidenced by the following comments.

Necessary with so many small children.

Young children are attracted to stairs; this would prevent many serious accidents.

Another factor that did not involve children was included by the women. They felt this statement would provide security for themselves as well as their children. They expressed fear when using the stairs while carrying groceries and children. The following are some of their comments.

Feeling of security for everyone.

Yes, I have a fear of open stair risers.

This would be better for the children and for parents carrying small children, groceries, etc. up the stairs.

In the category on safety two statements were concerned with windowscreens and glass in doors and windows. "Glass in doors and windows strong enough to withstand small children leaning or pushing against it" ranked fourth in the study. Seventy-three per cent of the mothers ranked it "very important." Twenty-eight of those commented

on this criterion. Accidents of children being cut as they leaned or pushed against the glass were of frequent concern. The main problem area seemed to be the glass in the storm door of each apartment. Even the wind was mentioned as a cause of broken glass in storm doors. Listed below are some of their comments.

My son went through a glass door and luckily wasn't cut, but he might have been.

Children like to look out them and thus put strain on them.

My own child had a severe cut on hand and arm from an accidental push through the bottom section of a door frame (glass).

Especially glass in the doors; there are so many children playing near these doors.

The storm doors break all the time, even by the wind.

The statement, "Windowscreens strong enough to withstand small children leaning or pushing against them," ranked much lower (16.5) than that concerning glass in doors and windows. Fifty-three per cent of the mothers rated it "very important." Eleven of those commented on the statement. They considered it important for safety of the children but several mentioned it would be too expensive. They reported a desire for stronger screens since children poked holes or pushed against them and were sometimes cut or scratched. The following are some of their comments.

When they push out, the children get cut.

So they won't fall through.

The criterion concerning "Electrical outlets having shockproof device for children's safety" ranked eighteenth in the study. Fifty-three per cent of the mothers rated it "very important." Eighteen of those commented on the subject. Those who seemed most concerned were mothers of infants crawling extensively and toddlers just beginning to walk. They recognized this as a problem with this age child. The serious consequences of this kind of accident seemed to make it important. Listed below are some of their statements.

Our baby is learning to crawl so I can realize the importance of this.

Electrical shock is one of the worst injuries a child can suffer.

A constant problem with toddlers.

Summary

1. The reasons given for rating these safety criteria so high seemed to be related to the seriousness of the injury the child might suffer.

2. Concern for the children's safety seemed important due to the mother's awareness that many children of about the same age were living very close together. This seemed to multiply the problem of safety.

3. The children who were mentioned most frequently in relation to safety criteria were toddlers, those just beginning to walk.

4. One criterion, "Hand rail within child's reach," was important to the mothers because it was a learning experience for the children as well as a safety factor.

5. Only one criterion, "Stairs with closed risers between treads," was mentioned for reasons other than concern for children. The adults in the situation expressed a need for this along with their children.

Ease in Cleaning

This category included criteria concerned with ease in cleaning and caring for apartments. Four criteria in the "most important" group were in this category. One of the criteria, "Walls painted with washable paint and resistant to marking," ranked third in the study. It ranked much higher than the other three criteria in this category. Seventy-five per cent of the mothers rated it "very important."

Copy

Table 7. "Most important" criteria on ease in cleaning.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Walls painted with washable paint and resistant to marking. | 3 | 2.73 | 75 | 23 | 2 | 0 | 0 | 100 |
| Maintenance provided by the university. | 12 | 2.49 | 56 | 38 | 5 | 0 | 1 | 99 |
| Incinerator convenient to apartment. | 14 | 2.48 | 54 | 41 | 4 | 1 | 0 | 100 |
| A floor surface in the entire apartment which is easy to clean. | 16.5 | 2.47 | 55 | 40 | 2 | 2 | 1 | 99 |

Thirty-seven of those commented. Thirteen of the thirty-seven mentioned the need specifically because of small children. Others felt it important because keeping the walls clean by their standards was time-consuming. Some felt that washable paint would reduce cost since painting would not need to be done as often. Listed below are some of their comments.

Saves painting often. Keeps walls cleaner with children.

This would be helpful especially with small children.

With small children the walls get dirty very easily.

This would limit painting costs and also make the apartment easier to clean and more liveable.

This would help upkeep of apartment for future years.

The criterion, "Maintenance provided by the university," ranked twelfth in the study. Fifty-six per cent of the women rated it "very important" and forty-one of those commented. Most of the comments made by the women were very similar. They felt this criterion very

important because it saved expenses and time. Most of them stated that their husbands could not take time to repair. They also recognized that consistent uniform repair was an important factor in the attractiveness of their dwellings. The following comments illustrate this further.

If maintenance was left to each individual family, married housing would become run-down.

Grounds and housing must be well cared for to make the student want to take good care of his own apartment.

Most students do not have the time or the equipment to make necessary repairs around the apartment.

Budget would limit money spent on maintenance.

Another criterion, "Incinerator convenient to apartment," ranked close (14) to that concerned with maintenance. Fifty-four per cent of the women rated it "very important" and twenty-nine of those gave their reasons. Their comments were centered around the sanitation and convenience such a service offers. Listed below are some of the women's statements.

I think this much more sanitary for everyone concerned.

Makes it easier to maintain cleanliness in apartment.

The fourth criterion in this category, "A floor surface in the entire apartment which is easy to clean," ranked close (16.5) with the ones on maintenance and the incinerator. Fifty-five per cent of the women considered it "very important" and twenty-six of those gave their reasons. Four mothers mentioned this criteria was important because of their small children. Seven found the tile floors time-consuming and difficult to keep clean. Five mentioned problems with keeping rugs clean in the apartments. They seemed to feel they were constantly cleaning their small floor space and that the problem was greater because the space was heavily used. Listed below are some of their statements.

Small children are always on the floor and I find the present floor difficult to keep clean.

This would be a timesaver for a working mother like me.

In these small apartments the floors are constantly walked on and need much cleaning to be clean enough for the kids to play on.

Summary

1. Two of the criteria in the category, ease in cleaning, were rated important in reference to the children in the families. The criterion with the highest rating in this category, "Walls painted with washable paint and resistant to marking," was one whose importance was most closely connected with children. The mothers recognized their need for this feature in their housing because of small children. The criterion, "Floor surface which is easy to clean," also was rated important because of small children. The small floor space they had to keep clean was a problem because of its heavy use both by children and adults.

2. The time that could be saved by the convenience offered through the criteria in this category was another factor of importance.

3. The possibility of saving money for other needs because criteria in this category were provided was also designated by several as a reason for their high rating.

4. There seemed to be general agreement that the physical surroundings would be more sanitary and receive better care when the university rather than renters provided maintenance and an incinerator.

Health

In the group of "most important" criteria, three statements were concerned with the health of the families. "Warm floors where children play" ranked highest (8.5) in the category of health. Sixty-four per cent of the mothers rated it "very important." Thirty-eight of those commented. They seemed particularly concerned about their young children who were still crawling and playing close to the floor. The following statements are examples of their comments.

Table 8. "Most important" criteria on health.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Warm floors where children play. | 8.5 | 2.59 | 64 | 31 | 5 | 0 | 0 | 100 |
| Temperature regulation within each apartment. | 10 | 2.58 | 66 | 26 | 8 | 0 | 0 | 100 |
| Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections. | 14 | 2.48 | 58 | 36 | 2 | 3 | 1 | 99 |

Small children spend the majority of their playtime on the floors. I think this point quite essential for health reasons.

Carpeting is especially good for the winter.

Floors are extremely drafty; the cause of many colds.

In limited living space, living on a limited budget and in a very tight time schedule, it is very important that the whole family is healthy and well.

The criterion, "Temperature regulation within each apartment," ranked tenth in the study. Sixty-six per cent of the mothers rated it "very important." Forty of them gave their reasons. They seemed concerned about the general comfort and health of their whole family when they discussed this criterion. Twenty-three of the forty mothers who discussed this statement mentioned specifically that their apartments were much too warm to be healthy. Their only solution to this problem, opening doors and windows, caused drafts and colds resulted. Listed below are some of their comments.

The apartments are much too warm. Our family has shown the effects with constant rounds of colds.

Most residents complain of hot apartments. The only way to cool them is by opening windows or doors thus causing drafts.

With new babies or sick children temperatures should be regulated.

The criterion concerning "Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections" was rated "very important" by fifty-eight per cent of the mothers. It ranked fourteenth in the study. Twenty-five of the fifty-eight mothers gave their reasons for their high rating. Twelve of the twenty-five mentioned their apartments were too dry in the winter. They felt this predisposed them to much infection, especially with their small children. The following are some of their comments.

I rate this very important because of the number of respiratory infections my children have developed because of these very dry apartments.

We have made twelve trips to the doctor in four months because of upper respiratory infections due to dry apartments.

Our doctor has confirmed our belief that these apartments are too arid; conducive to colds.

There is a high rate of respiratory infections caused by these dry apartments. We found it necessary to run a vaporizer several hours a day all winter trying to prevent ear infections. Our youngest child had almost one ear infection every month from September to March.

Summary

1. Two of the criteria, "Warm floors where children play" and "Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections," were considered important because of the children in the families.

2. A drafty floor causing chilling predisposes one to colds and thus warm floors are important to children who spend much of their time on the floor.

3. The arid conditions in the apartments appeared to be conducive to many respiratory infections in the small children of these families. Thus they were aware of the importance of such a statement.

4. The temperature regulation in the apartment appeared to be a concern to all family members. Many colds were reported, assumed to be related to drafty conditions created in an attempt to cool the overheated apartments.

Children's Play Needs and Storage Needs

Table 9. "Most important" criteria on children's play needs and storage needs.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Children's Play Needs</u> | | | | | | | | |
| Outdoor play areas for preschool children which can be readily seen and reached from indoors. | 5 | 2.65 | 68 | 30 | 1 | 1 | 0 | 100 |
| Outdoor play areas equipped for preschool children. | 7 | 2.60 | 63 | 34 | 3 | 0 | 0 | 100 |
| <u>Storage Needs</u> | | | | | | | | |
| A place to store children's outside toys. | 6 | 2.61 | 66 | 31 | 1 | 2 | 0 | 100 |

This category of criteria involved specifically children's needs in reference to their play. Two of the criteria were concerned with play needs and the third was concerned with the storage of toys.

"Outdoor play areas for preschool children which can be readily seen and reached from indoors" ranked fifth in the study. Sixty-eight per cent of the mothers rated it "very important" and twenty-seven of

those commented on the criterion. Some of the mothers were concerned about this statement because they did not like to be running to check on the children. Others thought it important because of the children's safety. The following are some of their own comments.

The mother wouldn't have to stay out-of-doors during play time.

Preschool children need to be watched more, and at the same time be allowed to play freely outdoors.

Mothers cannot at all times be right with their children. They have to do housework. To be able to watch them while doing their household tasks is very important.

I think supervision is important to a preschooler. When left to themselves unwatched just about everything can happen and around here, usually does.

A closely related criterion on play needs in the "most important" group is, "Outdoor play areas equipped for preschool children." It ranked seventh in the study. Sixty-three per cent of the mothers considered it "very important" and thirty-two commented. The mothers seemed to feel that the present play areas were not adequate for preschoolers. They expressed the problem of finding enough for their preschoolers to keep them busy. The following are some of their own statements.

Too much of existing material not geared for this age group.

Preschoolers need equipped areas to keep them amused and busy.

My children don't have much to do when they go outside and if I give them toys the other children take them away.

Children need this for good muscular development.

The only criterion concerning storage which fell within the "most important" group was, "A place to store children's outside toys." It ranked sixth in the study. Sixty-six per cent of the mothers considered it "very important" and thirty-eight of those discussed their reasons. A variety of reasons for the importance of this criterion was listed.

The reasons included destruction of children's toys by neighbor children or by weathering, theft or neighbor children just wandering off with another's toys, accidents occurring when adults fell over toys left outside after dark, overcrowding in the apartments which was the only place toys could be stored, and untidy appearance to all the apartments when toys were left outside. Listed below are some of the mother's statements.

Could prevent many accidents after dark.

There just isn't enough room for wagons and bikes in the apartment.

The place always looks cluttered.

Anything outside the door becomes community. It either disappears or is broken, if not watched.

Summary

1. Some of the mothers recognized a need for easily accessible play areas where they could see their children while mothers were doing household chores. They were concerned for their children's safe supervised play.
2. Others thought this criterion important because it would not require the adult's presence outside while their children played outdoors.
3. The mothers also indicated that the present play areas were not adequate for their preschoolers. There was not enough equipment these children could safely use. The children did not have enough to do outside.
4. The importance of storage of children's outside toys was not directly concerned with the children in the families except in regard to destruction or theft of toys. Other concerns to the family as a whole were toys causing crowded conditions both inside the apartment and outside each apartment door, accidents caused by tripping over toys at night, and the cluttered appearance of the apartments.

General Statements About Housing and Privacy

Table 10. "Most important" criteria on general statements about housing and privacy.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|---|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>General Statements About Housing</u> | | | | | | | | |
| A compact, modern, apartment with reasonable rent. | 8.5 | 2.59 | 64 | 32 | 3 | 1 | 0 | 100 |
| A variety of apartments to choose from with one, two, or three bedrooms. | 20 | 2.40 | 46 | 48 | 6 | 0 | 0 | 100 |
| <u>Privacy</u> | | | | | | | | |
| Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms. | 14 | 2.48 | 54 | 39 | 5 | 1 | 1 | 99 |

There were two criteria in the "most important" group that were concerned with the type of housing preferred. "A compact, modern apartment with reasonable rent" ranked much higher (8.5) than the other criterion in this category. Sixty-four per cent of the mothers rated it "very important," and forty of those gave their reasons. Most of the women indicated that their present conditions were described by this statement. They believed the rent was reasonable and expressed appreciation for the modern facilities. They did not feel they could pay higher rent, however. They mentioned their condition as only temporary and that they could get by for the time required. Most important to them was the need for reasonable rent. Below are some of their own comments.

The housing was one of the reasons we chose Michigan State University to do graduate study.

These apartments can be classified as such and I believe they are perfectly adequate for a family of four. We could not afford higher rent.

Low rent payment very important in family of five trying to get father through school but you can't live in too small an area with three children.

Everyone here needs money and temporarily can do without space.

"A variety of apartments to choose from with one, two, or three bedrooms" ranked lowest (20) in the "most important" group. Forty-six per cent of the women rated it "very important," and thirty-six of those commented. They indicated that they felt a choice should be available. The deciding factor was the number of children in a family. Families with more than two children indicated a necessity for more space. Listed below are some of their statements.

The needs for each family vary so much that I feel we should have the choice for more or less rooms.

When there are children to consider, especially a number of children, space becomes the most important factor next to rent.

A sufficient number of bedrooms is essential to any family's mental and physical health.

A "must" for students with various numbers of children, since this is a permanent home for periods of great length.

Summary

1. The respondents recognized that their facilities could be described as modern, reasonable and compact.
2. They did not feel that they could pay much more for rent than they were paying. Conserving by paying low rent was most important.
3. Next in importance they stated was the need for more space especially for their children. Since they regarded their housing as only temporary, they felt they could sacrifice space temporarily.

4. The importance of the statement referring to choice of one, two, or three bedrooms seemed to be related to the size of the family. The number of children in the family was the deciding factor. Families with more than two children stated a need for more space in this area. There seemed to be a general attitude that adequate bedroom space was necessary for healthy family life.

Privacy

Only one of the criterion on privacy ranked in the "most important" group. "Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms" ranked fourteenth in the study and was considered "very important" by fifty-four per cent of the women. Twenty-eight of those commented. They indicated a greater need for privacy for their family as a whole and also need for individual family members to have more privacy. They recognized problems of neighbors being noisy. There was also the problem of quiet time for study since all families had a student member. The women were concerned about the necessity of restraining their children and now allowing them as much freedom as they would like to because they were afraid the children would disturb those who were studying. The following are some of their comments.

Our own children are noisy enough without having to listen to everyone else.

Privacy is necessary for the normal growth and strength of the family.

Some students study more than others and like not to be disturbed.

This is very important as we do not feel free to let our children cry at all.

Summary

1. Privacy in the form of soundproof construction was important to these families for a number of reasons. They indicated a need for family privacy as well as individual privacy.

2. Quiet study time for the student in the family was another important factor.

3. Noisy neighbors were annoying but they also realized their children made too much noise for others at times.

4. There was concern for the need to keep children quieter than normal. This was especially true during study times.

Moderately Important Criteria

The "moderately important" criteria were divided into two groups. The "moderately (high) important" group included twenty criteria and the "moderately (low) important" group included eleven criteria. Together these groups included thirty-one criteria, slightly over one-half of the criteria in the study.

Moderately (High) Important Criteria

This group of twenty criteria included the following categories: ease in caring for children while doing household tasks, safety, children's play needs, storage needs, privacy, ease in cleaning and general statements about housing.

Ease in Caring for Children While Doing Household Tasks

Five of the twenty criteria in the "moderately (high) important" group were in the category of ease in caring for children while doing household tasks. "Laundry space inside the apartment where you may install your own laundry equipment" ranked twenty-seventh in the study.

Table 11. "Moderately (high) important" criteria on ease in caring for children while doing household tasks.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|----|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Laundry space inside the apartment where you may install your own laundry equipment. | 27 | 2.22 | 52 | 27 | 12 | 7 | 2 | 98 |
| Community laundry facilities provided within each building. | 29 | 2.20 | 38 | 48 | 10 | 4 | 0 | 100 |
| Outdoor and indoor play space easily seen and reached from the laundry area. | 36 | 2.02 | 31 | 48 | 13 | 8 | 0 | 100 |
| Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children. | 32.5 | 2.13 | 33 | 51 | 12 | 3 | 1 | 99 |
| Conveniently located dining table to seat at least six people. | 34 | 2.12 | 28 | 58 | 12 | 2 | 0 | 100 |

Fifty-two per cent of the mothers rated it "very important" and thirty-four of them commented. Eight mothers stated that they owned their own equipment and had had to store it. They objected to the inconvenience of carrying clothes to and from a community laundry and mentioned concern for the children they must take with them. Seven women thought this important because of their children's welfare. The following are some of the mother's statements.

I have all my own equipment in storage. Also, this is a great saver for the working mother.

Those who want to should be able to. Too often children must be left while mother does laundry.

With children, I have a lot of washing and if I had the space to do it inside the apartment, there would be less to do at one time.

So much more convenient with small children.

Another criteria concerning laundry, "Community laundry facilities provided within each building," ranked close (29) to the one preceding. Thirty-eight per cent of the mothers considered this "very important." Twenty-one of those commented. Nine women mentioned this as important because of their children. Some described it as a compromise and thought it would improve their present situation. The following are the women's statements.

Easier for mothers with little children and busy daddies.

Appears to be the most reasonable of all, considering proximity and small children.

This would be easier for child care and also for carrying laundry.

Another criterion in this category was also concerned with the laundry. "Outdoor and indoor play space easily seen and reached from the laundry area" ranked thirty-sixth in the study. Thirty-one per cent of the women rated this criterion "very important" and fifteen of them commented. They recognized a problem in taking their children to the laundry and some mentioned that they did their work at night so husbands could baby-sit. The following are some of their comments.

It is hard to keep small children contented in the laundry and away from wiring and equipment.

The play space now is the laundry floor and the play equipment, the washer doors.

Five mothers who rated this criterion of little or no importance commented. They had no problem because their husbands did the baby-sitting. They did not feel that play space provided at the laundry would solve their problem.

Two criteria in the category of "ease in caring for children while doing household tasks" were concerned with the preparation and serving of meals. "Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children" ranked close (32.5) to the middle of the study. Thirty-three per cent of the mothers rated this criterion "very important" and twelve of them gave their reasons. They mentioned concern for their children and the difficulty they had supervising children's play. The following are their own comments.

Most of the problems that arise with the children are due to the fact that they are not supervised by their parents when playing outside.

This would put my mind at ease. I always like to know where my children are.

Yes, heaven only knows how many meals have been ruined while running to check the children.

The other criterion concerned with mealtime, "Conveniently located dining table to seat at least six people" ranked close (34) to the one preceding. Twenty-eight per cent of the mothers rated it "very important." Ten of those commented. They recognized that they had and needed this arrangement. Some mentioned they needed more chairs. They seemed to believe that in a family of more than two children this was a necessity. The following are some of their comments.

It is important when you have more than two children.

All too often when we have company our table is too small and we do not have enough chairs.

Summary

1. The women placed slightly more importance on having their own laundry equipment than on using community equipment provided in each living unit. Some mentioned they had their own equipment stored. Others could not afford it but thought it important.

2. The women regarded their laundry situation as time consuming and tiring. They indicated that having facilities more convenient would eliminate "lugging" clothes about. They would have less difficulty caring for their children while washing.

3. The women recognized the importance of care for their children while doing the laundry and seemed to prefer not having children about while they were at the laundry. The suggestion of available play space at the laundry ranked below the midpoint in the study indicating that even this provision did not change their attitude. The importance of having easily reached and supervised indoor and outdoor play space convenient to the kitchen rated slightly higher than that for the laundry. Since mealtime is such a busy time, it seemed helpful to have such a provision.

4. The criterion concerning dining space for at least six people was considered important particularly to families with more than two children. The women who commented, felt that they had and needed this arrangement. There was some concern about needing more chairs.

Safety

The category on safety in the "moderately (high) important" group included one criterion on safety at windows and three criteria on safety on the stairs. "Windows high enough so a child cannot fall out" ranked highest (22) in this category. Forty-eight per cent of the mothers rated it "very important" and eleven of them commented. They recognized this as important for safety and expressed more concern for the second floor windows. They stated that their present housing provided this feature. The following are their statements.

To prevent injuries from falls out of windows.

Safety precaution.

Table 12. "Moderately (high) important" criteria on safety.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Windows high enough so a child cannot fall out. | 22 | 2.33 | 48 | 40 | 9 | 2 | 1 | 99 |
| Vertical rather than horizontal bars to discourage climbing on railings. | 28 | 2.21 | 37 | 49 | 12 | 1 | 1 | 99 |
| At the top and bottom of the stairs, a gate or a door that could only be operated by adults. | 37.5 | 1.98 | 40 | 29 | 20 | 11 | 0 | 100 |
| Apartments for families with small children are on the ground floor. | 39 | 1.95 | 29 | 46 | 16 | 8 | 1 | 99 |

"Vertical rather than horizontal bars to discourage climbing on railings" ranked twenty-eighth in the study. Thirty-seven per cent of the mothers rated it "very important" and eight of them commented. They recognized a danger with children climbing and felt anything to discourage them would be important. Below are some of their statements.

Children love to climb. It surely is dangerous to have them playing around the bars.

Adolescent and preadolescent children use them at present time to pole climb and as monkey bars. This stimulates younger children to copy them and try to do some stunts which they are not coordinated for.

They love climbing and this may be a good device to help discourage some.

"At the top and bottom of the stairs, a gate or a door that could only be operated by adults" ranked thirty-seventh and five tenths in the study. Forty per cent of the mothers rated it "very important" and twenty-seven of those commented. They all believed that a gate would help their situation. Five women mentioned that they owned wooden gates which were inadequate. They were mainly concerned with the safety of their toddlers. Below are some of their comments.

To keep children (especially toddlers) from falling down stairs. Our child fell down the stairs once.

If there was a gate upstairs our fifteen-month-old could play out by herself. Now she goes directly to the steps when let outdoors.

You cannot keep small children off the stairs and they are dangerous. My youngest fell from the landing yesterday and his face is badly bumped and scraped.

Would be convenient for toddler too young to realize the danger of the stairs.

Seven mothers who rated this criterion of little or no importance commented. Below are some of their comments.

What about the children old enough to play downstairs? Some mothers would do a lot of running.

This, I think, would result only in much screaming from children and false security for the mother when some delivery person or older child doesn't close the gate.

Another criterion, "Apartments for families with small children are on the ground floor," ranked thirty-ninth in the study. Twenty-nine per cent of the mothers rated it "very important" and twenty-four gave their reasons. They recognized the danger of the stairs with small children and their uneasiness about their difficulty in supervising children playing outside on the balcony. Many accidents were mentioned. Below are some of their comments.

Too much noise and confusion and constant fear of neighbors disapproval.

Easier supervision and also the danger of little ones on the stairway.

Steps and balconies are hazardous. Mother on ground floor can watch children out-of-doors more easily.

Cement stairs and inadequate railing on upper floor are the cause of many accidents. Children also throw objects off upper level causing danger to children and adults below.

Living on the ground floor, next to the stairways, I have seen too many children come down the stairs on a tricycle or very young children playing on stairs unchaperoned.

Five mothers who rated this criterion of little or no importance commented. The following are some of their statements.

Upstairs gives younger children safe play area.

It is easier and safer to put gates up upstairs than to watch the road downstairs.

Summary

1. All these criteria were rated important because of safety of **the** children living in the housing.
2. The height of windows to prevent children from falling was **e**specially important on the second floor. Most of the people indicated **t**heir present situation provided this and thought it important.
3. The criterion mentioning a gate at the top and bottom of the **s**tairs was considered important especially to those with toddlers. **T**here were those, however, who felt this gate would be a false security, **b**ecause too many people would be responsible for its supervision.
4. Vertical rather than horizontal bars to discourage climbing **w**as rated important because the mother's realized the danger involved **a**nd expressed willingness to accept anything that would discourage **c**limbing on second floor balcony railings.
5. Although the criterion on apartments on the ground floor for **f**amilies with small children did not rank high in the study, those who **r**ated it "very important" reported accidents and much concern for **c**hildren on the stairs. They felt it would be easier to supervise children

on the ground floor. A few of the women who did not rate this criterion of high importance believed that by blocking off their upstairs area, they could better supervise their children. They felt it was easier to watch the stairs than deal with the cars in front of the apartments downstairs.

Children's Play Needs and Storage Needs

Table 13. "Moderately (high) important" criteria on children's play needs and storage needs.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Children's Play Needs</u> | | | | | | | | |
| Areas where children can dig in the ground. | 24.5 | 2.25 | 43 | 44 | 8 | 4 | 1 | 99 |
| A covered outside play area where children can spend part of each day outside regardless of the weather. | 40 | 1.94 | 31 | 42 | 17 | 10 | 0 | 100 |
| <u>Storage Needs</u> | | | | | | | | |
| Additional storage space outside the apartment for children's large equipment that is not currently in use. | 30 | 2.16 | 45 | 35 | 11 | 9 | 0 | 100 |
| Shelves or cupboards within child's reach for storage of toys. | 31 | 2.15 | 36 | 48 | 11 | 5 | 0 | 100 |
| Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach. | 37.5 | 1.98 | 24 | 56 | 14 | 4 | 2 | 98 |

Children's Play Needs

This category included two criteria. "Areas where children can dig in the ground" ranked twenty-fourth and five-tenths in the study. Forty-three per cent of the mothers rated it "very important" and twenty-one of those commented. They indicated that their children loved to dig and their concern was that the only place was either in the sandboxes or digging up the grass. This seemed to be important to them because they thought digging a necessary activity for their children. The following are some of their comments.

Believe this is natural for all children but refuse to let them destroy the lawn and mar the landscape.

They will do it anyway; they need this outlet.

It seems it is a must for all of them.

Very economical way to keep children occupied.

Some children dig in the front which leaves dangerous holes and ruins the looks.

Four women who rated this criterion of little or no importance commented. The following statement describes their feelings.

I do not like my children digging in the ground.

"A covered outside play area where children can spend part of each day outside regardless of the weather" ranked much lower (40) than the above criterion on play needs. Thirty-one per cent of the mothers rated it "very important." Nineteen of those commented. They all expressed a greater need for space especially in bad weather. Some believed children should be out as much as possible. Below are some of their own comments.

Outdoor play every day is beneficial to both children and mother.

Children need to be outdoors every day and if such an area existed, children could get their daily fresh air and sunshine.

Under present conditions in inclement weather the children are penned up inside for days on end. Nerve wracking!

Four of the twenty-seven mothers who rated this criterion of little or no importance commented. They believed that the overhang on the downstairs level was adequate for the children. One woman believed mothers push their children out to play too much without proper supervision.

Summary

1. The women indicated that they recognized the children's need for a place to dig in the ground (rank 24.5) more than they did a covered outside play area (rank 40).

2. The mothers who commented on a place to dig mentioned that their children had no place except in the grassy areas or in the sandboxes. Some felt that neither place was appropriate but they did think it was necessary for their children. Others indicated they did not want their children digging at all.

3. Two opposing ideas were expressed in the statements about a covered outside play area. The women who considered it very important indicated that children should be outside as much as possible and this arrangement would be wonderful. Others considered it of little or no importance, stating that their balcony overhang was adequate and indicating that they were not interested in going outside with their children to supervise such an area.

Storage Needs

The "moderately (high) important" group included three criteria on storage needs. Two were concerned with storage of toys and one with storage of clothing. "Additional storage space outside the apartment for children's large equipment that is not currently in use" ranked exactly in the middle (30) of the study. Forty-five per cent of the mothers rated it "very important" and seventeen of those commented. Ten women

were concerned about the overcrowding when equipment was brought inside and its disrepair when left outside in bad weather. The following are some of their comments.

You haven't really lived until you've seen a child's room with two tricycles, a wagon, a sled, a spring horse, and a doll buggy lined up.

Out-of-season toys should have a storage place.

In winter it is difficult to store bikes in the apartment.

So the large toys will not rust or corrode.

Out of season equipment is really in the way in the apartment.

Seven women wanted more storage for their family belongings.

Not only the children's equipment but things like outside furniture.

Yes, and parents trunks. There is no place at all to store anything but under the stairs and then things get rusty.

"Shelves or cupboards within child's reach for storage of toys" ranked thirty-first in the study. Thirty-six per cent of the mothers rated it "very important" and seventeen of them commented. They all saw this criterion as a teaching aid to train children to put away their own belongings. Below are some of their comments.

In a small apartment toys are a problem in knowing where to put them.

The child will learn sometimes even without always being told to put his toys away if he had a place to put them himself within his own reach.

The other criterion in this category was on storage of clothing. "Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach" ranked thirty-seventh and five-tenths. Twenty-four per cent of the women rated it "very important" and fourteen of those commented. Four women mentioned that they had provided their own aids for the children. All of those who commented recognized that this helps children's independence. The following are some of their comments.

Promotes independence.

I use bottom drawers or those that are low enough. I have plenty of space. Extension bars can be purchased for young children that extend down as far as needed and raised as child grows.

Learning to hang up his own clothes is an excellent training for a small child and saves me work.

Three women who rated the criterion of little or no importance commented. They did not see this as important for their children and did not want the clothes within the child's reach.

Summary

1. The two criteria on storage of toys were considered important by the mothers for various reasons. They recognized a need for storage outside the apartment for children's toys that were seasonal. Without this feature their apartments became overcrowded with all outdoor toys both seasonal and those used every day. A few women mentioned concern for their children's toys as well as extra storage space to store their family belongings.

2. The importance of the criteria on inside storage of toys and storage of children's clothing was concerned with the independence such provisions could stimulate in the children. The women saw both these criteria as contributing to learning experiences for the children and several described arrangements they had worked out to help their children in this area.

Although these criteria were not given a high rating, many families had adapted their living quarters to include these features. Apparently they did not feel it necessary to have these included in the architectural planning of their housing as long as they themselves were able to make such space available.

Privacy

Table 14. "Moderately (high) important" criteria on privacy.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|----|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| A place to study in the apartment. | 26 | 2.23 | 42 | 43 | 11 | 4 | 0 | 100 |
| Bedroom space for each child shared by only one other child near the same age. | 32.5 | 2.13 | 39 | 40 | 16 | 2 | 3 | 97 |
| A quiet place where children sleep. | 35 | 2.11 | 30 | 54 | 13 | 3 | 0 | 100 |

The category of privacy in the "moderately (high) important" group included three criteria. "A place to study in the apartment" ranked twenty-sixth in the study. Forty-two per cent of the women rated it "very important" and twenty-two of those commented. They expressed a desire to have their husbands closer to home but they realized that study was a problem when children were around. They seemed to feel that their husbands would stay at home more if they had a place to study there. Below are some of their comments.

Would lend more togetherness in the family.

My husband could spend more time here rather than studying in the library.

Important so husband will not develop pattern of spending too much time away from family.

My husband has an office at school but doesn't like to go there every night.

Six of the fifteen women who rated the criterion of little or no importance gave their reasons. They expressed the idea that children

will disrupt study no matter what you do. They believed this could be solved if one studied after children were in bed. Two of these women had husbands with offices and they were satisfied with their studying away from home.

The other two criteria in this category were concerned with privacy when sleeping. "Bedroom space for each child shared by only one other child near the same age" ranked thirty-second and five-tenths in the study. Thirty-nine per cent of the women considered this criterion "very important" and fourteen of those commented. They all seemed to agree that more than two children in a bedroom was not desirable. The following are some of their comments.

Soon I must put my third in with the other two and I feel this is too many in one room.

I feel this is important but if we had eight kids, couldn't expect it.

Three women who rated this criterion of little or no importance commented. They felt that for such a short term the space was most adequate. It was only temporary.

"A quiet place where children sleep, " ranked thirty-fifth in the study. Thirty per cent of the mothers rated it "very important" and eleven of those commented. These mothers felt that their children were light sleepers and noises did disturb their sleep. Thus they would be in favor of improved conditions. The women mentioned noises in end apartments close to the stairs as a problem. The following are some of their statements.

Anyone who has spent the day with three tots who haven't slept at naptime will consider this important.

The stairs are quite noisy.

Five of the twenty-six women who rated this criterion of little or no importance commented. They seemed to feel that they wanted their children exposed to noise so they could adjust to it. Their children were not greatly bothered by most noises in the apartments.

Seven women who rated this criterion of moderate importance commented. They could see the importance of the statement but also believed that their children had adjusted to most noises in the housing.

Summary

1. Privacy while studying was important to the families since they all had a student. The women thought that more provision in the apartment for study would keep the husbands home. They indicated that it was healthier for the family in general to have husbands closer to home.

Another group whose husbands had office space had no problem since they used that space away from home. Still another group saw no problem because their children went to sleep early and studying could be done in the apartment.

2. The criterion on bedroom space for each child shared by only one other child was important to the women who recognized the overcrowding. They seemed to feel that more than two children in a room was too stimulating. Another group indicated that this criterion was not very important since the housing was only temporary.

3. The criterion on a quiet place where children sleep was rated very important to families of children who were light sleepers. There were also statements from women who lived in apartments close to stairways. The noises in the area were annoying.

Another group saw no importance in this criterion because they felt their children should adjust to the noises in the buildings.

Still another group thought the criterion moderately important but indicated that their children had adjusted to the noises.

Ease in Cleaning and General Statements about Housing

Table 15. "Moderately (high) important" criteria on ease in cleaning and general statements about housing.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|---|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Ease in Cleaning</u> | | | | | | | | |
| Doors, sills, window frames and like surfaces easy to clean and durable. | 21 | 2.34 | 42 | 52 | 4 | 0 | 2 | 98 |
| Paint furnished by the university to freshen walls periodically. | 23 | 2.28 | 37 | 55 | 7 | 0 | 1 | 99 |
| <u>General Statements About Housing</u> | | | | | | | | |
| A partially furnished apartment having essential furniture, stove and refrigerator. | 24.5 | 2.25 | 50 | 32 | 11 | 7 | 0 | 100 |

Ease in Cleaning

This category included two criteria. "Doors, sills, window frames and like surfaces easy to clean and durable" ranked twenty-first in the study. Forty-two per cent of the women rated it very important and eight of them commented. They felt their apartments did not have this feature and cleaning took too much of their time. Below are some of their comments.

Very important if one is to maintain good housekeeping standards.

Ease in housekeeping and a happier mother.

These take so much time when they are hard to clean and when one is working.

"Paint furnished by the university to freshen walls periodically ranked twenty-third in the study. Thirty-seven per cent of the mothers rated it "very important" and twenty-two of those commented. They thought this was a money saver and a good idea. They also believed it helped their morale. The following are some of their comments.

Financially, we would be unable to paint as often as needed.

Boosts morale by having things look cleaner.

Summary

1. These two criterion ranked high in the moderately (high) important group.

2. The reasons of importance did not directly concern children in the housing but rather were concerned with mother's time and morale.

3. The criterion on ease in cleaning surfaces seemed most important because this would save time and make housekeeping easier.

4. The criterion on paint furnished to freshen walls seemed important because the families could not afford this feature. They indicated that this would serve as a "morale booster."

General Statements About Housing

One criterion in this category, "A partially furnished apartment having essential furniture, stove and refrigerator," received a rank of twenty-four and five-tenths in this study. Fifty per cent of the women rated this criterion "very important" and thirty-seven of those commented. The women felt this arrangement was what they had and liked it. It was less expensive for them and at the same time they could have a few of their own things to make it more personal. Even those who had their own belongings stated they preferred bringing only a few and leaving the rest stored. The following are their own comments.

Having some of our own things makes our apartment more homey without going into a great deal of expense.

For financial reasons, larger appliances should be provided.

Being able to supplement the basic furniture, with ideas of your own, if financially possible, makes multiple dwelling living more personally identifiable.

Summary

The criterion concerning a partially furnished apartment with essential furniture rated high in this group. A large number of women who rated it "very important" commented. They considered this criterion was important to them because it helped financially. They also liked to be able to include some of their own belongings. This seemed very important because it allowed some individuality in their group living.

Moderately (low) Important Criteria

The criteria in the "moderately (low) important" group numbered eleven. They included the following categories: children's play needs, storage needs, ease in caring for children while doing household tasks, general statements about housing, and privacy.

Children's Play Needs

There were four criteria in this category. "Indoor play space where child can play actively and noisily within the building" ranked forty-first in the study. Twenty-six per cent of the mothers rated it "very important." Eleven of those gave their reasons. Their main reasons seemed to be the children's need for active play indoors on winter days when they could not go outdoors. The apartments were small and the children restless. The following are their own comments.

Table 16. "Moderately (low) important" criteria on children's play needs and storage needs.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Children's Play Needs</u> | | | | | | | | |
| Indoor play space where child can play actively and noisily within the building. | 41 | 1.90 | 26 | 46 | 20 | 6 | 2 | 98 |
| At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out. | 42 | 1.83 | 23 | 49 | 16 | 12 | 0 | 100 |
| Arrangements for outdoor water play in summer. | 49.5 | 1.64 | 19 | 43 | 21 | 17 | 0 | 100 |
| Picnic area and playground for family activities close to housing development. | 49.5 | 1.64 | 16 | 45 | 26 | 13 | 0 | 100 |
| <u>Storage Needs</u> | | | | | | | | |
| Low hooks or low rods near outside entrances for children to hang outdoor clothing. | 44 | 1.76 | 19 | 50 | 19 | 9 | 3 | 97 |

It is difficult to live in a small apartment with small children when they have no outlet for their energy.

The children got so sick of our apartment in the winter and it's just bedlam if other kinds come in to play with them.

Five women who rated this criterion of little or no importance commented. They could not accept the idea unless proper supervision

for the children was provided. The following are some of their statements.

I assume this means in his own house. I would not be in favor of it unless it was supervised.

That can be controlled in the home as part of growing up.

"At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out" ranked forty-second in the study. Twenty-three per cent of the women rated it "very important." Eleven of those commented. They recognized the use their children could make of such a feature. They mentioned that at present the storm door window was the only window that could be used this way. Below are some of their comments.

Looking out the window provides hours of enjoyment for a child during bad weather.

This would provide many entertaining hours for my children without the draft of the door.

Six mothers who rated the criterion of little or no importance indicated that the storm door window was sufficient. They also stated their children stood on the furniture to see out and were satisfied with this arrangement.

"Arrangements for outdoor water play in summer" as a children's play need ranked forty-ninth and five-tenths. Nineteen per cent of the mothers rated it "very important" and nine of them commented. There was some misunderstanding about the term "water play." The women indicated that to them it meant a swimming pool for young children. The investigator meant only an outside faucet or arrangement so children could get to water to use in their play. The following are some of the mother's statements.

Most children love water and there is no place near by for them.

Necessary. Each of us has a little plastic pool. It looks messy on the porches and then we dump the water down on the poor people below as we finish. It would be much easier if there were a community pool.

Eleven of the thirty-eight women who rated this criterion of little or no importance commented. They also assumed the investigator meant a swimming pool of some kind. They did not approve because of sanitary reasons and because they did not think it would be properly supervised. Some indicated that they provided some "water play" activities of their own for their children. The following are their statements.

Requires too much supervision and unsanitary.

I would rather have a tub right outside my door for my children only.

The fourth criterion in this category "Picnic area and playground for family activities close to housing development" ranked the same as the one on water play (49.5). However, only sixteen per cent of the mothers rated it "very important" and ten of those commented. They liked this idea because they liked picnics but could not go very far. This feature would make picnics possible and save time. Below are some of their comments.

This would be very good because when going on a picnic with children we do not like to go a long distance.

Wonderful for family life together.

Eight of the thirty-nine women who rated this criterion of little or no importance commented. They indicated that there were parks close to the housing area and when they picniced, they wanted to get completely away from the uniform housing. Following are some of their comments.

I think most people enjoy getting away for a picnic.

We're confined to the village enough as it is. Picnics are a good chance for an outing.

Summary

1. Some of the reasons the criteria on play needs were rated important were definitely related to the children in the families.

2. The women who commented on an indoor play space for their children and arrangements for water play indicated that they recognized their importance for the children's enjoyment and experimentation.

3. The mothers who saw the importance of a window at the children's level were aware of the time their children spent looking out the storm door window. They did not think that arrangement was adequate since it caused drafts in the apartment.

4. The picnic area close to the housing was important to these families because it was a time saver. They would not have to go far to enjoy a picnic together as a family.

5. The women who did not rate these criteria very important seemed concerned about their supervision. Water play and indoor play areas were recognized as areas which would have to be supervised if used. They did not want this responsibility. These women were satisfied that their children used the storm door window or stood on the furniture to see outside.

6. They expressed the desire to get away from the housing area to picnic instead of having a near-by arrangement. They did not believe the picnic areas in the city parks were too far away for their families.

Storage Needs

"Low hooks or low rods near outside entrances for children to hang outdoor clothing" ranked close (44) to the criteria on children's play needs. Nineteen per cent of the mothers rated it "very important" and nine of them commented. They could see that this would save their time. One woman had made provisions like this on her own. The following are some of their comments.

I have straightened a clothes hanger so that this can be used as a hook. My son hangs his hanger on this.

Promotes independence, orderliness.

Summary

The importance of this criterion did not seem to be connected with provisions made in the structural fixtures of housing. The families who thought this important for their children could do something about it on their own. Therefore, they felt this criterion was a provision any family could make if they thought it important.

Safety

Table 17. "Moderately (low) important" criteria on safety.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| A place for parking immediately adjacent to entrance to apartment. | 47 | 1.66 | 24 | 37 | 20 | 18 | 1 | 99 |
| Adjacent parking areas, fenced and gated, to protect small children. | 48 | 1.65 | 29 | 25 | 28 | 17 | 1 | 99 |

Two criteria in the "moderately (low) important" group were concerned with safety while parking. "A place for parking immediately adjacent to entrance to the apartment" ranked forty-seventh in the study. Twenty-four per cent of the mothers rated it "very important" and eleven of them commented. Their attitude was that the children can be taught to watch out for cars and the convenience to the adults was most important. The following are their comments.

Children can be taught to stay away from the street and not to play with the cars.

Children have to learn to watch for cars no matter where they live. If the parking area is too far away, you wear yourself out carrying groceries, laundry etc.

"Adjacent parking areas, fenced and gated, to protect small children ranked forty-eighth in the study. Twenty-nine per cent of the mothers rated it "very important" and fifteen of those commented. They all expressed fear for the safety of their children with so many cars close to the play areas. The following comments were made.

I often worry about my children getting behind a car backing up. Also, some people are very careless drivers, driving with excessive speed, don't slow down etc.

There is no safe place for small children here.

Six of the forty-five women who rated the criterion of little or no importance gave their reasons. They believed that this was unnecessary since children could be taught to stay away from cars. They also felt this would be too costly.

Summary

1. The comments made by the women on these two statements indicate two main reasons for their ratings. Those who thought the parking area should be immediately adjacent to their housing were concerned with the convenience of loading and unloading supplies and children. They believed they could control their children and teach them to stay away from the cars.

2. The mothers who rated the fenced and gated parking areas very important were concerned about their children's safety and felt they needed this protection to insure the safety of their children. The mothers who commented on their low rating of this statement believed that they could handle their children's safety by training and supervision.

Ease in Caring for Children While Doing Household Tasks

"Room arrangement and entries which avoid cross-room traffic as much as possible" ranked forty-third in the study. Seventeen per cent of the women rated it "very important" and eight of these commented.

Table 18. "Moderately (low) important" criteria on ease in caring for children while doing household tasks, general statements about housing and privacy.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|--|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Ease in Caring for Children while doing Household Tasks</u> | | | | | | | | |
| Room arrangement and entries which avoid cross-room traffic as much as possible. | 43 | 1.81 | 17 | 51 | 28 | 3 | 1 | 99 |
| Telephone attached to the wall out of child's reach. | 51 | 1.58 | 16 | 38 | 34 | 12 | 0 | 100 |
| <u>General Statements About Housing</u> | | | | | | | | |
| A modern apartment with more space and planning for small children at correspondingly higher rent. | 45 | 1.70 | 24 | 36 | 26 | 13 | 1 | 99 |
| <u>Privacy</u> | | | | | | | | |
| Some private yard space for every family which they can use as their own. | 46 | 1.67 | 27 | 30 | 26 | 16 | 1 | 99 |

They stated that this was important in preserving the carpeting and making it easier to clean. Two women mentioned a need for two exits from the apartments. The kitchen traffic was mentioned as being very heavy in the apartments. Some stated that the present arrangement was adequate.

"A telephone attached to the wall out of child's reach ranked fifty-first in the study. It was rated "very important" by sixteen per

cent of the mothers. Twelve of those gave their reasons. They recognized the difficulty they had keeping their children away from the telephone. The following are their comments.

This is one of my main headaches at this time with a toddler.

It is very difficult to keep the children away from the phone. It would be so much easier for me if it were on the wall.

Five mothers rated this criterion of little or no importance.

They stated that children could be trained not to touch the telephone and that this would cost too much to install.

Summary

1. The room arrangement to avoid cross-room traffic was important to the women for their convenience. They pointed out that the kitchen often became crowded with traffic to the bedrooms. Some thought two exits in the apartment would be helpful.

2. The comments concerning the telephone attached to the wall out of the child's reach tended to include references to toddlers. This particular age child seemed to be the one that the mothers had difficulty keeping away from the telephone. Another group of mothers who commented on this criterion believed that their children could be taught not to bother the telephone and also that this feature would be much too expensive.

General Statements About Housing

Only one criterion in the "moderately (low) important" group was in the category of general statements about housing. "A modern apartment with more space and planning for small children at correspondingly higher rent" ranked forty-fifth in the study. Twenty-four per cent of the mothers rated it "very important" and fourteen of those commented. Nine mothers in this group stated they would gladly pay higher rent

for more space for their children. The other five were interested mainly in more storage space. Below are some of their comments.

More space is needed for storage.

This is a home for some children for periods as much as six years. There should be more thought and planning for children.

Although financing an education and living is expensive, so is the comfort of parents and children important. Children are crowded. Mother is always busy "picking up."

Five of the thirty-nine women who rated this criterion of little or no importance commented. They thought it would be nice but were sure they could not afford it.

Summary

The women who considered this criterion "very important" seemed to have two main reasons. They were concerned about the crowded conditions their children had to live in and they needed more space for storage. Some of them indicated that they were willing to pay more rent to have more space. The women who rated this criterion of little or no importance seemed to feel they could not afford any more expense no matter how much they needed the additional space.

Privacy

"Some private yard space for every family which they can use as their own" was the only criterion in the category of privacy in the "moderately (low) important" group. It ranked forty-sixth in the study. Twenty-seven per cent of the mothers rated it "very important" and nineteen of those commented. They mentioned this criterion would strengthen their family's activities together. This facility would take away the impersonal feeling they had about their housing. It would make care of children easier. Below are listed some of their comments.

A plot of earth to call your own takes away some of that impersonal detached feeling that often accompanies living in a multiple family unit.

Of prime importance to the child who cannot understand why nothing belongs to him and everything must be public property.

Summary

The mothers who rated this criterion on private yard space for every family considered it "very important" for their families to help reduce the impersonal feeling created by the uniform housing. They also saw this feature as a help in teaching children responsibility for their own belongings outside. It would provide a place they could "call their own."

Least Important Criteria

The group of "least important criteria" included nine criteria. They were placed in the following categories: general statements about housing, ease in caring for children while doing household tasks, privacy, children's play needs and adult companionship.

General Statements About Housing

The category of general statements about housing included four criteria. "The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment" ranked fifty-fourth in the study. Twenty-one per cent of the women rated it "very important" and thirteen commented on their rating. Six of the mothers mentioned that they had some furniture stored and would appreciate being able to use it in a partially furnished apartment instead of paying to store it. They expressed the need for certain types of furniture they could not find, such as bunk beds and tables, while they

Table 19. "Least important" criteria on general statements about housing.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment. | 54 | 1.44 | 21 | 29 | 23 | 27 | 0 | 100 |
| A completely furnished apartment. | 55 | 1.40 | 19 | 24 | 35 | 22 | 0 | 100 |
| A small apartment, less modern, with very low rent. | 58 | 1.03 | 10 | 17 | 39 | 34 | 0 | 100 |
| A completely unfurnished apartment. | 60 | 0.59 | 4 | 12 | 23 | 60 | 1 | 99 |

had duplicates in other areas. The following are some of their comments.

Most people with children have at least some furnishings. Not being able to use them causes added cost in storage. Coming from a home, we pay ten dollars monthly to store furniture.

Some people prefer to have a few personal things but also cannot afford to furnish an apartment entirely.

"A completely furnished apartment" ranked fifty-fifth in the study. Nineteen per cent of the women rated it "very important" and sixteen of those commented. They preferred this because transporting their furniture was expensive and hard on the furniture. Those who had no money to buy furniture were very pleased with a completely furnished apartment. Listed below are a few of their statements.

We have no furnishings and at present are in no position to buy any, therefore this choice. I do feel that these furnishings were chosen on the main with children in mind. We want good furniture

eventually and feel moving it from place to place ruins it so are pleased with complete furnishings.

For temporary residence this is most helpful. Transporting furnishings for a short period is bothersome and expensive.

"A small apartment, less modern, with very low rent" ranked fifty-eighth in the study. Ten per cent of the mothers considered this criterion "very important" and four of those commented. They expressed a desire for the same space or even more space with less modern facilities and lower rent.

Several mothers who rated it "moderately important" commented. One had this to say.

My choice would be a less modern apartment with more space and planning for small children, with very low rent.

"A completely unfurnished apartment" was ranked lowest of all the criteria (60). Four women rated it "very important." Three of those women commented. All of the three mentioned that they owned their own furniture and preferred using it. Therefore, an unfurnished apartment would satisfy their needs.

Summary

1. The women who owned furniture and had it stored rated the criterion concerning a partially furnished apartment "very important." Some of them had most of the furniture they needed and welcomed the idea of a store or college source to supplement items they might need.

2. "A completely furnished apartment" was rated important by those who had no furnishings at all or those who felt that transporting their belongings was too expensive.

3. Very few women rated the criterion concerning a small, less modern apartment with very low rent as important. Some of them mentioned a desire for less modern facilities with lower rent but they did not feel they could get along with less space.

4. A completely unfurnished apartment was rated "very important" by only four women who had their own belongings and preferred using them.

Ease in Caring for Children While Doing Household Tasks

Table 20. "Least important" criteria on ease in caring for children while doing household tasks.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| Community laundry facilities provided to serve several buildings. | 56 | 1.37 | 7 | 41 | 34 | 17 | 1 | 99 |
| A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc., with adjacent play space for children. | 59 | 1.02 | 3 | 25 | 43 | 29 | 0 | 100 |

The "least important" group included two criteria concerning convenience while caring for children and doing the laundry. "Community laundry facilities provided to serve several buildings" ranked fifty-sixth in the study. Seven per cent of the mothers rated it "very important" and two of those commented. These women used the time at the laundry for planning menus, writing letters and visiting. They did not take their children and enjoyed the time away from home. Four of the fifty-one mothers who rated this criterion of little or no importance described the inconvenience with children. One person wished for a place to hang clothes outside.

"A community work room where adults can have companionship while doing laundry, ironing, mending, sewing etc. with adjacent play space for children" ranked fifty-ninth in the study. Three women rated it "very important" and only one of them commented. She felt it would allow more space and equipment for the children while she did her work. Eight women commented with ratings of little or no importance. Their reasons were against group gatherings of this kind. The following are some of their comments.

I see people enough without having to get together while working.

This is enough of a community as it is.

We live close enough now.

Summary

The two criteria in this category, ease in caring for children while doing household tasks, were concerned with the laundry situation in the housing. The reaction to both statements seemed to be toward not taking the children when doing the laundry. The women who rated this "very important" seemed to be those who could make some arrangement to leave the children with husbands or a babysitter. Those who had to take the children were not in favor of any arrangement for group care of the children. They saw too many people most of the time and did not desire getting together while working. Only a few women rated the criterion suggesting a community work room as "very important." The one mother who did comment thought this criterion important because it would allow more space for her to work in and would keep the children away from the laundry equipment. The advantages of working with other women in a group situation were not mentioned.

Privacy, Children's Play Needs and Adult Companionship

Table 21. "Least important" criteria on privacy, children's play needs and adult companionship.

| Criteria | Rank | Weighted Average | f of Ratings | | | | No Answer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|--------------|-------------------------|
| | | | 3 | 2 | 1 | 0 | | |
| <u>Privacy</u> | | | | | | | | |
| A study area provided within easy walking distance of the apartment. | 52 | 1.50 | 19 | 32 | 29 | 19 | 1 | 99 |
| <u>Children's Play Needs</u> | | | | | | | | |
| A place for parking which is close but not adjacent to the housing. | 53 | 1.46 | 12 | 40 | 30 | 18 | 0 | 100 |
| <u>Adult Companionship</u> | | | | | | | | |
| Larger rooms for recreation and group gatherings located convenient to the individual apartments. | 57 | 1.26 | 5 | 40 | 31 | 23 | 1 | 99 |

Privacy

One criterion concerning privacy, "A study area provided within easy walking distance of the apartment," fell into the least important group with a rank of fifty-two. Nineteen per cent of the women rated this criterion "very important." Ten of those gave their reasons. They seemed to feel that it was difficult for their husbands to study at home and this would be a helpful solution. The following are their comments.

My husband can't study in the apartment because of T.V. and the children. He always goes to the library where others are studying also.

This I think would be wonderful. If study rooms were provided, I'm sure they would be used.

Six of the forty-eight respondents who rated this criterion of little or no importance commented. They expressed feelings that group places do not work and some of their husbands already had office space provided. They felt that once you had to go out, distance didn't make too much difference.

Summary

The mothers who rated this criterion important seemed to be those where the noise and confusion of the small apartment did conflict with study. Those who thought it less important either considered the library adequate or had another space provided on the campus for study.

Children's Play Needs

"A place for parking which is close but not adjacent to the housing" ranked fifty-third in the study. Twelve per cent of the women rated it "very important" and seven of those gave their reasons. Their main reasons for having parking close but not adjacent seemed to be the need for a convenient play space for their children. The following are some of their comments.

Parking should be close, but it should also be away from yard play areas.

Children can be taught to play away from the parking area, if it is not under their noses.

Summary

The mothers who rated this criterion "very important" were aware of the need for convenient, adjacent play space for their children.

Adult Companionship

The only criterion in the category of adult companionship, "Larger rooms for recreation and group gatherings located convenient to the individual apartments, " was in the "least important" group and ranked fifty-seventh in the study. Five mothers rated it "very important." Three of them gave their reasons. They thought this would be a way of getting away from husbands who were studying and it would also not disturb sleeping children.

Four women out of fifty-four gave their reasons for rating this criterion of little or no importance. Their comments included the following.

Our friends like to come to our home and we like to visit in their homes. We would not use any such rooms. The Union provides any such rooms we'd use.

Who has time for anything but coffee with a few friends?

Summary

The mothers who considered this criterion "very important" saw it as a way of getting away from their children so they wouldn't disturb their studying husbands and their sleeping children. Those who considered it less important were not interested in getting away from their homes to entertain.

Criteria on Social Interaction

This group of five criteria included statements that were less tangible than those in the rest of the study. For these criteria it was necessary to determine whether the respondents considered them desirable or undesirable. The responses recorded by the mothers were fewer than for the other criteria. The average ratings indicated that the criteria ranged from generally desirable to generally undesirable. The average rating on one criterion was negative.

Social Interaction

Table 22. Criteria on social interaction.

| Criteria | Rank | Weighted Average | f of Ratings | | | | | No Ans- wer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|----|-------------------|-------------------------|
| | | | +2 | +1 | 0 | -1 | -2 | | |
| Many playmates for the children. | 1 | 1.07 | 34 | 47 | 11 | 8 | 0 | 0 | 100 |
| Neighbors who are living on approximately the same income and daily schedule. | 2 | 0.86 | 24 | 39 | 35 | 1 | 0 | 1 | 99 |
| Opportunity to live close to people of different races and nationalities. | 3 | 0.80 | 24 | 38 | 33 | 4 | 1 | 0 | 100 |
| A variety in ages of children's playmates. | 4 | 0.71 | 17 | 49 | 22 | 12 | 0 | 0 | 100 |
| Close proximity of neighbors. | 5 | -0.11 | 5 | 25 | 34 | 26 | 10 | 0 | 100 |

"Many playmates for the children" received the highest rank in this group of criteria. Thirty-four per cent of the mothers rated it "very desirable." Six mothers from the entire study commented. Their responses varied from "very desirable" to "moderately undesirable." Listed below are their statements.

Gives children experience with other children (very desirable).

Some but not necessarily many (very desirable).

This is inevitable in a housing area (moderately desirable).

Has good and bad points (neutral).

Often there are too, too many (neutral).

I prefer a few playmates for the children which are in the same age group and are of both sexes (moderately undesirable).

The next criterion, "Neighbors who are living on approximately the same income and daily schedule," ranked second in this group. Twenty-four per cent of the mothers rated it "very desirable." Five mothers from the entire study commented on this criterion. Their responses varied from "very desirable" to "very undesirable." Their statements included the following.

Because I feel that if everyone is in the same boat as we are it's easier and besides I don't have to feel inferior to my neighbors either (very desirable).

Income not so important but at least a little of the same daily schedule. Children who eat at different times and snack all day are undesirable (moderately desirable).

Income is not the same. Some students are here on scholarships, some under the GI Bill, some are paying their own expenses. Those doing it the hard way indicate resentment (very undesirable).

Not necessarily the same schedule (very undesirable).

I think the same daily schedule very undesirable (very undesirable).

The responses seemed to be divided between those who felt strongly about "daily schedules" or "living on approximately the same income." This statement was not well-phrased in that respect. It should have been two separate statements. Consequently it is difficult to interpret the results.

"Opportunity to live close to people of different races and nationalities," ranked third in this group. Twenty-four per cent of the women rated this criterion "very desirable." Two mothers from the entire study commented.

For the sake of all that's good (very desirable).

This is one of the advantages in a housing unit, although sometimes it has the opposite result (moderately desirable).

The criterion, "A variety in ages of children's playmates," ranked fourth in the group. Seventeen per cent of the women rated it "very desirable." Three mothers from the entire study commented.

I think this gives a child a challenge and something to try a little harder for (very desirable).

Has good and bad points (neutral).

This becomes a problem sometimes with the very small and the school kids (neutral).

The last criterion in this group, "Close proximity of neighbors," was the only one with a negative average. It ranked far below the other criteria indicating its undesirability with the families. Five per cent of the mothers rated this criterion "very desirable." Six mothers from the entire study commented.

I can't see any other way under the circumstances (neutral).

How close is close? Or better still, how much closer could we be than we are now. Don't get me wrong, I like my neighbors but everyone needs more privacy than we have now (moderately undesirable).

No privacy, too many social gatherings (moderately undesirable).

I would rather not live quite so close to other families. Trying to be considerate becomes a strain. I wouldn't care to be under pressure definitely. I prefer to let the children go roller-skating when they choose etc. (moderately undesirable).

Just friends; one needs many contacts (moderately undesirable).

They are too close here (very undesirable).

Summary

The mothers did not respond fully to the criteria on social interaction. They included very few statements when they rated these criteria. Most of their ratings were in the "moderately desirable" and the "neutral" group. The mothers ratings do show that they desire many playmates for their children and that they feel there is greater proximity to neighbors than is desirable.

Summary of Criteria According to Level of Importance

Most Important Criteria

The twenty "most important" criteria were from seven different categories; three in health, four in ease in cleaning, seven in safety, one in storage needs, one in privacy, two in children's play needs and two in general statements about housing. The criteria in order of their importance were as follows:

Table 23. Rank, weighted average, frequency of ratings of the most important criteria.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|---|---|
| | | | 3 | 2 | 1 | 0 |
| Spaces between the railings too small to permit a child to slip through. | 1 | 2.77 | 80 | 18 | 0 | 0 |
| Both sides of stairs enclosed enough to prevent a child falling through. | 2 | 2.75 | 78 | 20 | 1 | 1 |
| Walls painted with washable paint and resistant to marking. | 3 | 2.73 | 75 | 23 | 2 | 0 |
| Glass in doors and windows strong enough to withstand small children leaning or pushing against it. | 4 | 2.68 | 73 | 24 | 1 | 1 |
| Outdoor play areas for preschool children which can be readily seen and reached from indoors. | 5 | 2.65 | 68 | 30 | 1 | 1 |
| A place to store children's outside toys. | 6 | 2.61 | 66 | 31 | 1 | 2 |
| Outdoor play areas equipped for preschool children. | 7 | 2.60 | 63 | 34 | 3 | 0 |

continued

Table 23 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|---|---|
| | | | 3 | 2 | 1 | 0 |
| A compact, modern, apartment with reasonable rent. | 8.5 | 2.59 | 64 | 32 | 3 | 1 |
| Warm floors where children play. | 8.5 | 2.59 | 64 | 31 | 5 | 0 |
| Temperature regulation within each apartment. | 10 | 2.58 | 66 | 26 | 8 | 0 |
| Stairs with hand rail within reach of small children. | 11 | 2.57 | 63 | 32 | 4 | 1 |
| Maintenance provided by the university. | 12 | 2.49 | 56 | 38 | 5 | 0 |
| Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections. | 14 | 2.48 | 58 | 36 | 2 | 3 |
| Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms. | 14 | 2.48 | 55 | 39 | 5 | 1 |
| Incinerator convenient to apartment. | 14 | 2.48 | 54 | 41 | 4 | 1 |
| A floor surface in the entire apartment which is easy to clean. | 16.5 | 2.47 | 55 | 40 | 2 | 2 |
| Windowscreens strong enough to withstand small children leaning or pushing against them. | 16.5 | 2.47 | 53 | 42 | 4 | 1 |
| Electrical outlets having shock-proof device for children's safety. | 18 | 2.44 | 53 | 38 | 9 | 0 |
| Stairs with closed risers between the treads. | 19 | 2.41 | 55 | 34 | 8 | 3 |
| A variety of apartments to choose from with one, two or three bedrooms | 20 | 2.40 | 46 | 48 | 6 | 0 |

Moderately (High) Important Criteria

The twenty "moderately (high) important" criteria were from seven different categories; two in ease in cleaning, four in safety, three in storage needs, three in privacy, two in children's play needs, five in ease in caring for children while doing household tasks, and one in general statements about housing. The criteria in order of their importance were as follows:

Table 24. Rank, weighted average, frequency of ratings of the moderately (high) important criteria.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|---|
| | | | 3 | 2 | 1 | 0 |
| Doors, sills, window frames and like surfaces easy to clean and durable. | 21 | 2.34 | 42 | 52 | 4 | 0 |
| Windows high enough so a child cannot fall out. | 22 | 2.33 | 48 | 40 | 9 | 2 |
| Paint furnished by the university to freshen walls periodically. | 23 | 2.28 | 37 | 55 | 7 | 0 |
| A partially furnished apartment having essential furniture, stove and refrigerator. | 24.5 | 2.25 | 50 | 32 | 11 | 7 |
| Areas where children can dig in the ground. | 24.5 | 2.25 | 43 | 44 | 8 | 4 |
| A place to study in the apartment. | 26 | 2.23 | 42 | 43 | 11 | 4 |
| Laundry space inside the apartment where you may install your own laundry equipment. | 27 | 2.22 | 52 | 27 | 12 | 7 |
| Vertical rather than horizontal bars to discourage climbing on railings. | 28 | 2.21 | 37 | 49 | 12 | 1 |

continued

Table 24 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| Community laundry facilities provided within each building. | 29 | 2.20 | 38 | 48 | 10 | 4 |
| Additional storage space outside the apartment for children's large equipment that is not currently in use. | 30 | 2.16 | 45 | 35 | 11 | 9 |
| Shelves or cupboards within child's reach for storage of toys. | 31 | 2.15 | 36 | 48 | 11 | 5 |
| Bedroom space for each child shared by only one other child near the same age. | 32.5 | 2.13 | 39 | 40 | 16 | 2 |
| Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children. | 32.5 | 2.13 | 33 | 51 | 12 | 3 |
| Conveniently located dining table to seat at least six people. | 34 | 2.12 | 28 | 58 | 12 | 2 |
| A quiet place where children sleep | 35 | 2.11 | 30 | 54 | 13 | 3 |
| Outdoor and indoor play space easily seen and reached from the laundry area. | 36 | 2.02 | 31 | 48 | 13 | 8 |
| At the top and bottom of the stairs, a gate or a door that could only be operated by adults. | 37.5 | 1.98 | 40 | 29 | 20 | 11 |
| Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach. | 37.5 | 1.98 | 24 | 56 | 14 | 4 |
| Apartments for families with small children are on the ground floor. | 39 | 1.95 | 29 | 46 | 16 | 8 |
| A covered outside play area where children can spend part of each day outside regardless of the weather. | 40 | 1.94 | 31 | 42 | 17 | 10 |

Moderately (Low) Important Criteria

The eleven "moderately (low) important" criteria were from six different categories; two in safety, one in storage needs, one in privacy, four in children's play needs, two in ease in caring for children while doing household tasks and one in general statements about housing. The criteria in order of their importance were as follows:

Table 25. Rank, weighted average, frequency of ratings of the moderately (low) important criteria.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| Indoor play space where child can play actively and noisily within the building. | 41 | 1.90 | 26 | 46 | 20 | 6 |
| At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out. | 42 | 1.83 | 23 | 49 | 16 | 12 |
| Room arrangement and entries which avoid cross-room traffic as much as possible. | 43 | 1.81 | 17 | 51 | 28 | 3 |
| Low hooks or low rods near outside entrances for children to hang outdoor clothing. | 44 | 1.76 | 19 | 50 | 19 | 9 |
| A modern apartment with more space and planning for small children at correspondingly higher rent. | 45 | 1.70 | 24 | 36 | 26 | 13 |
| Some private yard space for every family which they can use as their own. | 46 | 1.67 | 27 | 30 | 26 | 16 |
| A place for parking immediately adjacent to entrance to apartment. | 47 | 1.66 | 24 | 37 | 20 | 18 |

Table 25 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| Adjacent parking areas, fenced and gated, to protect small children. | 48 | 1.65 | 29 | 25 | 28 | 17 |
| Arrangements for outdoor water play in summer. | 49.5 | 1.64 | 19 | 43 | 21 | 17 |
| Picnic area and playground for family activities close to housing development. | 49.5 | 1.64 | 16 | 45 | 26 | 13 |
| Telephone attached to the wall out of child's reach. | 51 | 1.58 | 16 | 38 | 34 | 12 |

Least Important Criteria

The nine "least important" criteria were from five different categories; one in privacy, one in children's play needs, two in ease in caring for children while doing household tasks, four in general statements about housing and one in adult companionship. The criteria in order of their importance were as follows:

Table 26. Rank, weighted average, frequency of ratings of the least important criteria.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| A study area provided within easy walking distance of the apartment. | 52 | 1.50 | 19 | 32 | 29 | 19 |
| A place for parking which is close but not adjacent to the housing. | 53 | 1.46 | 12 | 40 | 30 | 18 |

continued

Table 26 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment. | 54 | 1.44 | 21 | 29 | 23 | 27 |
| A completely furnished apartment. | 55 | 1.40 | 19 | 24 | 35 | 22 |
| Community laundry facilities provided to serve several buildings. | 56 | 1.37 | 7 | 41 | 34 | 17 |
| Larger rooms for recreation and group gatherings located convenient to the individual apartments. | 57 | 1.26 | 5 | 40 | 31 | 23 |
| A small apartment, less modern, with very low rent. | 58 | 1.03 | 10 | 17 | 39 | 34 |
| A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc. with adjacent play space for children. | 59 | 1.02 | 3 | 25 | 43 | 29 |
| A completely unfurnished apartment. | 60 | 0.59 | 4 | 12 | 23 | 60 |

Summary of Criteria by Category

The criteria were organized into the ten categories: health, ease in cleaning, safety, storage needs, privacy, children's play needs, ease in caring for children while doing household tasks, general statements about housing, adult companionship and social interaction.

The mean score for each category was computed and the categories were arranged for discussion according to the mean scores (See Table 27).

Table 27. Categories of criteria and their mean scores.

| Category | Number of Criteria in Category | Mean score for all criteria within category on the basis of 3-0 rating. |
|--|--------------------------------------|---|
| Health | 3 | 2.55 |
| Ease in Cleaning | 6 | 2.46 |
| Safety | 13 | 2.29 |
| Storage Needs | 5 | 2.13 |
| Privacy | 6 | 2.02 |
| Children's Play Needs | 9 | 1.99 |
| Ease in Caring for Children While Doing Household Tasks | 9 | 1.93 |
| General Statements About Housing | 8 | 1.67 |
| Adult Companionship | 1 | 1.26 |
| | | On the basis of +2 to -2 rating. |
| Social Interaction | 5 | 0.66 |

Within each category the criteria were arranged in the groups of "most important," "moderately (high) important," "moderately (low) important" and "least important."

Health

Table 28. Criteria, rank, weighted average and frequency of ratings in category of health.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|---|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| Warm floors where children play. | 8.5 | 2.59 | 64 | 31 | 5 | 0 |
| Temperature regulation within each apartment. | 10 | 2.58 | 66 | 26 | 8 | 0 |
| Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections. | 14 | 2.48 | 58 | 36 | 2 | 3 |

The entire category of health consisted of three statements in the "most important" group. The mean score or weighted average of this category (2.55) was the highest in the study. Therefore, as a total category, the mothers rated this higher than any other category. Concern for the health of their children as well as their own health was mentioned in their responses as a reason for their high rating. The mothers recognized the importance of warm floors where small children play and mentioned concern about drafts that might be conducive to colds. The arid conditions in the apartments appeared to be conducive to many respiratory infections in the small children of these families. The regulation of temperature in the apartments was a concern to the whole family. Drafts created in an attempt to cool overheated apartments increased the family's susceptibility to colds, the mothers believed.

Ease in Cleaning

Table 29. Criteria, rank, weighted average and frequency of ratings in category of ease in cleaning.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|---|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| Walls painted with washable paint and resistant to marking. | 3 | 2.73 | 75 | 23 | 2 | 0 |
| Maintenance provided by the university. | 12 | 2.49 | 56 | 38 | 5 | 0 |
| Incinerator convenient to apartment. | 14 | 2.48 | 54 | 41 | 4 | 1 |
| A floor surface in the entire apartment which is easy to clean. | 16.5 | 2.47 | 55 | 40 | 2 | 2 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| Doors, sills, window frames and like surfaces easy to clean and durable. | 21 | 2.34 | 42 | 52 | 4 | 0 |
| Paint furnished by the university to freshen walls periodically. | 23 | 2.28 | 37 | 55 | 7 | 0 |

The category ease in cleaning had a mean score (2.46) that was second in the study. It consisted of six criteria; four in the "most important" group and two in the "moderately (high) important" group. One criterion, "walls painted with washable paint and resistant to marking," ranked much higher (3) than the other five. The mothers' responses indicated that they considered this criterion important because of their small children. They were concerned about keeping the

apartments clean by their standards and indicated that the presence of small children increased the need for frequent cleaning. Another criterion, "Floor surface that is easy to clean," was rated important because children played on the floor. The small floor space they had to keep clean was a problem because of its heavy use both by children and adults.

The other four criteria in this category were rated important by the mothers for various reasons which did not directly include their children. Maintenance and incinerators which were provided by the university were rated high because of the time and money these conveniences saved the families. The mothers seemed to agree that the physical surroundings were more sanitary and received better care, if provided by the university. "Doors, sills, window frames and like surfaces easy to clean and durable" was considered important because it was a time saver and would make housekeeping easier. The criterion on paint furnished to freshen walls was rated important because it saved money and served as a "morale booster."

Safety

Table 30. Criteria, rank, weighted average and frequency of ratings in category of safety.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|---|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| Spaces between the railings too small to permit a child to slip through. | 1 | 2.77 | 80 | 18 | 0 | 0 |
| Both sides of stairs enclosed enough to prevent a child falling through. | 2 | 2.75 | 78 | 20 | 1 | 1 |

continued

Table 30 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| Glass in doors and windows strong enough to withstand small children leaning or pushing against it. | 4 | 2.68 | 73 | 24 | 1 | 1 |
| Stairs with hand rail within reach of small children. | 11 | 2.57 | 63 | 32 | 4 | 1 |
| Windowscreens strong enough to withstand small children leaning or pushing against them. | 16.5 | 2.47 | 53 | 42 | 4 | 1 |
| Electrical outlets having shock-proof device for children's safety. | 18 | 2.44 | 53 | 38 | 9 | 0 |
| Stairs with closed risers between the treads. | 19 | 2.41 | 55 | 34 | 8 | 3 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| Windows high enough so a child cannot fall out. | 22 | 2.33 | 48 | 40 | 9 | 2 |
| Vertical rather than horizontal bars to discourage climbing on railings. | 28 | 2.21 | 37 | 49 | 12 | 1 |
| At the top and bottom of the stairs, a gate or a door that could only be operated by adults. | 37.5 | 1.98 | 40 | 29 | 20 | 11 |
| Apartments for families with small children are on the ground floor. | 39 | 1.95 | 29 | 46 | 16 | 8 |
| <u>Moderately (Low) Important Criteria</u> | | | | | | |
| A place for parking immediately adjacent to entrance to apartment. | 47 | 1.66 | 24 | 37 | 20 | 18 |
| Adjacent parking areas, fenced and gated, to protect small children. | 48 | 1.65 | 29 | 25 | 28 | 17 |

The category of safety, on the basis of its mean score (2.29), was third in importance in the entire study. The criteria in this category numbered thirteen. Seven of those were included in the "most important" group, four in the "moderately (high) important" group and two were in the "moderately (low) important" group. There were no criteria on safety in the "least important" group.

The serious accidents that could occur with the absence of these criteria seemed to explain part of the reasons for their high importance. Fear of young children falling from the stairs or landings was mentioned as a serious concern by most of the mothers. Accidents in which children were cut by broken glass in storm doors were also mentioned. Electrical outlets with safety devices were rated important because of the serious results an accident could inflict on children (especially toddlers). The mothers thought a hand rail within reach of small children was helpful not only for safety but because it encouraged independence. "Stairs with closed risers between the treads" was an important safety criterion not only to protect small children from falling or getting caught, but to help fearful adults in their use of the stairs.

"Windows high enough so a child cannot fall out" was important to families living on the second floor. "Vertical rather than horizontal bars to discourage climbing on railings" was recognized as a possible way to discourage climbing. The mothers were aware of the danger involved when their children climbed on second floor railings. "At the top and bottom of the stairs, a gate or a door that could only be operated by adults" received a high rating by some women while others considered it a false security. They did not believe it could be supervised so as to be effective. The mothers were quite divided as to preference for upstairs or downstairs apartments. Some preferred living downstairs to avoid the use of the stairs as much as possible. Others preferred living upstairs because they felt they could better supervise

their children and could be less concerned about the safety of their children in the parking area below.

The two criteria that ranked lowest in this category, "A place for parking immediately adjacent to entrance to apartment," and "Adjacent parking areas, fenced and gated, to protect small children," were rated very important by thirty-seven and twenty-five mothers, respectively but for different reasons. The women who considered the first criterion, "parking immediately adjacent," important were concerned about their own convenience. They believed they could train their children to stay out of the street and that they needed adjacent parking for loading and unloading groceries, laundry etc. The other criterion, "parking areas fenced and gated," was important to some mothers because they were concerned about the safety of their preschoolers while playing near the parking area.

Storage Needs

Table 31. Criteria, rank, weighted average and frequency of ratings in category of storage needs.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| A place to store children's outside toys. | 6 | 2.61 | 66 | 31 | 1 | 2 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| Additional storage space outside the apartment for children's large equipment that is not currently in use. | 30 | 2.16 | 45 | 35 | 11 | 9 |

continued

Table 31 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|---|
| | | | 3 | 2 | 1 | 0 |
| Shelves or cupboards within child's reach for storage of toys. | 31 | 2.15 | 36 | 48 | 11 | 5 |
| Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach. | 37.5 | 1.98 | 24 | 56 | 14 | 4 |
| <u>Moderately (Low) Important Criteria</u> | | | | | | |
| Low hooks or low rods near outside entrances for children to hang outdoor clothing. | 44 | 1.76 | 19 | 50 | 19 | 9 |

The mean score (2.13) for storage needs placed this category fourth in the list of categories. Five criteria were included. One was in the "very important" group, three in the "moderately (high) important" group and one in the "moderately (low) important" group.

"A place to store children's outside toys" was the only criterion in the "very important" group. The mothers recognized the difficulties created when toys were left outside and carried away or destroyed by other children. Most of their concerns for the toy storage were related to the crowded, cluttered conditions created by many large toys both inside and outside the apartments and accidents caused by tripping over toys at night.

The next three criteria, in the "moderately (high) important" group were less important to the mothers. Outside storage for seasonal toys was a concern because the seasonal toys added to the clutter of the every-day toys stored within the apartment. A place to store the

seasonal toys would help reduce the clutter. The mothers also responded to this statement in terms of their own needs. They mentioned a desire for general storage space where they could store trunks, seasonal furniture etc. Storage space provided for inside toys and for children's clothing within the child's reach was considered important to stimulate the children toward greater independence. The mothers indicated that these provisions could be made by the individual family and did not see them as important in the structural planning of housing for student families with young children.

The criterion which ranked lowest in the category of storage needs was concerned with provisions for children's outside clothing within the child's reach. The mothers commented in much the same way as they had for indoor toy storage and the care of children's clothing in general. They believed that this criterion could be handled within the family, if considered important.

Privacy

Table 32. Criteria, rank, weighted average and frequency of ratings in category of privacy.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms. | 14 | 2.48 | 55 | 39 | 5 | 1 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| A place to study in the apartment. | 26 | 2.23 | 42 | 43 | 11 | 4 |

continued

Table 32 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| Bedroom space for each child shared by only one other child near the same age. | 32.5 | 2.13 | 39 | 40 | 16 | 2 |
| A quiet place where children sleep. | 35 | 2.11 | 30 | 54 | 13 | 3 |
| <u>Moderately (Low) Important Criteria</u> | | | | | | |
| Some private yard space for every family which they can use as their own. | 46 | 1.67 | 27 | 30 | 26 | 16 |
| <u>Least Important Criteria</u> | | | | | | |
| A study area provided within easy walking distance of the apartment. | 52 | 1.50 | 19 | 32 | 29 | 19 |

The mean score (2.02) of privacy was fifth in the list of mean scores of categories. Six criteria were included in this category; one in the "most important" group, three in the "moderately (high) important" group and one in the "least important" group.

"Construction features which would reduce noises from the outside and within individual apartments" was considered very important by the mothers. They indicated a general need for more family privacy as well as individual privacy. Quiet study time for the student member of the family was an important factor. The mothers also expressed concern for the need to keep children more quiet than normal during study times.

The women seemed to prefer having their husbands study in the apartment rather than have provisions for study in an area close to the

apartment. They indicated that having the husbands at home was healthier for the family. Bedroom space for each child shared by only one other child was considered important to those mothers who recognized overcrowding. They indicated that their children needed a quiet place to sleep but at the same time, most of the mothers believed their children could learn to adjust to noise.

Private yard space for each family was recognized by some mothers as a way of reducing the "impersonal feeling" of the housing. They believed this criterion would aid them in teaching their children responsibility for their own belongings outside. Some mothers indicated that they rated this low because they could see no possibility of it ever existing in this type of housing.

Children's Play Needs

Table 33. Criteria, rank, weighted average and frequency of ratings in category of children's play needs.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| Outdoor play areas for preschool children which can be readily seen and reached from indoors. | 5 | 2.65 | 68 | 30 | 1 | 1 |
| Outdoor play areas equipped for preschool children. | 7 | 2.60 | 63 | 34 | 3 | 0 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| Areas where children can dig in the ground. | 24.5 | 2.25 | 43 | 44 | 8 | 4 |
| A covered outside play area where children can spend part of each day outside regardless of the weather. | 40 | 1.94 | 31 | 42 | 17 | 10 |

continued

Table 33 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Moderately (Low) Important Criteria</u> | | | | | | |
| Indoor play space where child can play actively and noisily within the building. | 41 | 1.90 | 26 | 46 | 20 | 6 |
| At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out. | 42 | 1.83 | 23 | 49 | 16 | 12 |
| Arrangements for outdoor water play in summer. | 49.5 | 1.64 | 19 | 43 | 21 | 17 |
| Picnic area and playground for family activities close to hous- ing development. | 49.5 | 1.64 | 16 | 45 | 26 | 13 |
| <u>Least Important Criteria</u> | | | | | | |
| A place for parking which is close but not adjacent to the housing. | 53 | 1.46 | 12 | 40 | 30 | 18 |

The mean score (1.99) for children's play needs was sixth in the list of mean scores by categories. There were nine criteria in this category of children's play needs; two were in the "most important" group, two were in the "moderately (high) important" group, four were in the "moderately (low) important" group and one was in the "least important" group.

"Outdoor play areas for preschool children which are readily seen and reached from indoors" and "are equipped for preschool children" were rated much higher than the other criteria on children's play needs.

The mothers definitely recognized the need for play areas that were equipped for young children and easily accessible. They complained of much time and energy spent in supervision of play areas that were not convenient and of children who had nothing to do outside because play areas were not equipped for their age level.

The mothers also indicated they thought their children needed a place to dig. This criterion ranked high (24.5) in the "moderately (high) important" group.

The other criteria concerning a covered outside play area, indoor space for active play, a window low enough for children to see out, arrangements for water play and a picnic area for family activities all ranked close together and were of less importance to the mothers. Some mothers indicated that they thought the criteria important because children need to be outside as much as possible, to have space provided inside for active play, to see out a window without having to climb on chairs etc., to have water accessible when playing outside in warm weather and to participate in family activities such as picnics. Other mothers felt that the covered outside play area and the indoor play area for active play would require much supervision and they did not want this responsibility. They felt that their children could stand on furniture and other things and therefore did not need a low window. Outdoor water play was seen only as a pool for wading or swimming. The mothers considered this unsanitary. They indicated that when picnicing, they preferred to go some distance from the housing area and would not be interested in a picnic area near the housing.

The criterion of least importance in this category was concerned with parking area close but not adjacent to the housing. A few mothers indicated that they would prefer an adjacent play area and parking close but not adjacent. They did feel the children could be taught to stay away from cars if the cars were not immediately near the apartments.

Ease in Caring for Children While Doing Household Tasks

Table 34. Criteria, rank, weighted average and frequency of ratings in category of ease in caring for children while doing household tasks.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Moderately (High) Important</u> | | | | | | |
| <u>Criteria</u> | | | | | | |
| Laundry space inside the apartment where you may install your own laundry equipment. | 27 | 2.22 | 52 | 27 | 12 | 7 |
| Community laundry facilities provided within each building. | 29 | 2.20 | 38 | 48 | 10 | 4 |
| Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children. | 32.5 | 2.13 | 33 | 51 | 12 | 3 |
| Conveniently located dining table to seat at least six people. | 34 | 2.12 | 28 | 58 | 12 | 2 |
| Outdoor and indoor play space easily seen and reached from the laundry area. | 36 | 2.02 | 31 | 48 | 13 | 8 |
| <u>Moderately (Low) Important</u> | | | | | | |
| <u>Criteria</u> | | | | | | |
| Room arrangement and entries which avoid cross-room traffic as much as possible. | 43 | 1.81 | 17 | 51 | 28 | 3 |
| Telephone attached to the wall out of child's reach. | 51 | 1.58 | 16 | 38 | 34 | 12 |

continued

Table 34 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|--|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Least Important Criteria</u> | | | | | | |
| Community laundry facilities provided to serve several buildings. | 56 | 1.37 | 7 | 41 | 34 | 17 |
| A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc. with adjacent play space for children. | 59 | 1.02 | 3 | 25 | 43 | 29 |

The mean score (1.93) for, ease in caring for children while doing household tasks, was seventh in the list of mean scores by categories. Nine criteria were included in this category. There were no criteria in the "very important" group in this category. Five criteria were in the "moderately (high) important" group, two in the "moderately (low) important" group and two in the "least important" group. Therefore, this category was not considered by mothers as among the most important in the study.

The mothers placed slightly more importance on having their own laundry equipment than on using community equipment provided in each living unit. They regarded their laundry situation as time-consuming and tiring. The mothers indicated that they preferred doing their laundry without their children present. The importance of having easily reached and supervised indoor and outdoor play space convenient to the kitchen rated slightly higher than for the laundry. Dining space for at least six people was considered particularly important to families with more than two children.

The mothers recognized the need to avoid cross-room traffic. They commented that the kitchen often became crowded with traffic to the bathroom. A telephone attached to the wall out of child's reach was recognized by the mothers of toddlers as being convenient. Some of the women indicated they could train their children not to bother the telephone. These did not rate this criterion important.

The two criteria in the "least important" group concerned community laundry facilities and a community workroom. The mothers indicated they were not interested in taking their children to the laundry or into any group situation. They were too close together in many ways and did not desire getting together to work.

General Statements About Housing

Table 35. Criteria, rank, weighted average and frequency of ratings in category in general statements about housing.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|---|
| | | | 3 | 2 | 1 | 0 |
| <u>Most Important Criteria</u> | | | | | | |
| A compact, modern, apartment with reasonable rent. | 8.5 | 2.59 | 64 | 32 | 3 | 1 |
| A variety of apartments to choose from with one, two, or three bedrooms. | 20 | 2.40 | 46 | 48 | 6 | 0 |
| <u>Moderately (High) Important Criteria</u> | | | | | | |
| A partially furnished apartment having essential furniture, stove and refrigerator. | 24.5 | 2.25 | 50 | 32 | 11 | 7 |

continued

Table 35 - Continued

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Moderately (Low) Important</u> | | | | | | |
| <u>Criteria</u> | | | | | | |
| A modern apartment with more space and planning for small children at correspondingly higher rent. | 45 | 1.70 | 24 | 36 | 26 | 13 |
| <u>Least Important Criteria</u> | | | | | | |
| The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment. | 54 | 1.44 | 21 | 29 | 23 | 27 |
| A completely furnished apartment. | 55 | 1.40 | 19 | 24 | 35 | 22 |
| A small apartment, less modern, with very low rent. | 58 | 1.03 | 10 | 17 | 39 | 34 |
| A completely unfurnished apartment. | 60 | 0.59 | 4 | 12 | 23 | 60 |

The mean score (1.67) on general statements about housing was eighth in the list of mean scores by categories. Eight criteria were included in this category. Two were in the "very important" group, one in the "moderately (high) important" group, one in the "moderately (low) important" group and four in the "least important" group.

The women indicated that two criteria, a modern apartment with reasonable rent and a variety of apartments to choose from with one, two, or three bedrooms, were most important. They recognized that their present facilities fit this description. The number of bedrooms

needed was related to the number of children in the family. Conserving money by paying low rent was most important. They recognized the need for more space for their children but considered their housing temporary and felt they could sacrifice space temporarily.

Another criterion, "A partially furnished apartment having essential furniture, stove and refrigerator," ranked rather high (24.5) in the study. The mothers felt they had this arrangement and liked it. They indicated that this arrangement helped them financially. It made it possible for them to have essential furniture without too much expense. For some it meant freedom to move without having to move all their furniture with them. The mothers liked to be able to supplement this arrangement with a few of their own belongings.

"A modern apartment with more space and planning for small children at correspondingly higher rent," ranked low (45) in the study. The mothers who did consider it important were interested in providing more space for their children and indicated they needed more storage space. They were willing to pay the extra cost for this arrangement. Others indicated they recognized the importance of this criterion but did not believe they could afford the extra expense.

The last four criteria in this category were rated relatively low. The women who owned furniture and had it stored rated the criterion concerning a partially furnished apartment "very important." Some of them had most of the furniture they needed and welcomed the idea of a store or college source to supplement items they might need. "A completely furnished apartment" was rated important by those who had no furnishings at all or those who felt that transporting their furniture was too expensive. Very few women rated the criterion concerning a small, less modern apartment with very low rent as important. Some of them mentioned a desire for less modern facilities with lower rent but they did not feel that could get along with less space. "A completely

unfurnished apartment" was rated "very important" by only four women who had their own furnishings and preferred using them.

Adult Companionship

Table 36. Criteria, rank, weighted average, and frequency of ratings in category of adult companionship.

| Criteria | Rank | Weighted Average | f of Ratings | | | |
|---|------|---------------------|--------------|----|----|----|
| | | | 3 | 2 | 1 | 0 |
| <u>Least Important Criteria</u> | | | | | | |
| Larger rooms for recreation and group gatherings located convenient to the individual apartments. | 57 | 1.26 | 5 | 40 | 31 | 23 |

There was only one criterion in this category and its score (1.26) was lowest in the entire study in the group of criteria based on three to zero rating. "Larger rooms for recreation and group gatherings located convenient to the individual apartments" was in the "least important" group. The mothers indicated that they did not want to get together for any group activities. They preferred the privacy of their own apartments with a few friends and they also indicated that they did not have time for such socializing. A few mothers rated this criterion "very important." They thought this would be a way of getting away from husbands who were studying and it would also not disturb sleeping children.

Social Interaction

Table 37. Criteria, rank, weighted average, and frequency of ratings in category of social interaction.

| Criteria | Rank | Weighted Average | f of Ratings | | | | | No Ans- wer | Total Re- sponses |
|---|------|---------------------|--------------|----|----|----|----|-------------------|-------------------------|
| | | | +2 | +1 | 0 | -1 | -2 | | |
| Many playmates for the children. | 1 | 1.07 | 34 | 47 | 11 | 8 | 0 | 0 | 100 |
| Neighbors who are living on approximately the same income and daily schedule. | 2 | 0.86 | 24 | 39 | 35 | 1 | 0 | 1 | 99 |
| Opportunity to live close to people of different races and nationalities. | 3 | 0.80 | 24 | 38 | 33 | 4 | 1 | 0 | 100 |
| A variety in ages of children's playmates. | 4 | 0.71 | 17 | 49 | 22 | 12 | 0 | 0 | 100 |
| Close proximity of neighbors. | 5 | -0.11 | 5 | 25 | 34 | 26 | 10 | 0 | 100 |

The mean score (.66) of this category was based on a rating scale (+2 to -2) different from that used for the other criteria in the study. It has been mentioned before that these criteria were included because of the importance placed upon them by the participants in the exploratory study. These statements were less tangible in subject than those in the main part of the study. The respondents made very few comments when rating these criteria, therefore, it was difficult to interpret their ratings. Most of the ratings for these criteria were toward the upper middle portion of the scale. The ratings tended to fall within the "moderately desirable" and "neutral" ratings.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Today many young couples find themselves beginning their families in the atmosphere of a college or university while one or both are still students. Often in the larger universities their housing will consist of a type of multiple-unit dwelling provided by the university. The question arises as to the extent to which young children have been considered as parts of the families occupying this housing.

Investigation of the literature provided information on the characteristics of the married student, housing for married students, and housing needs of young children. No specific information was discovered on multiple-unit housing for married students with young children. Since Michigan State University has one of the largest married student housing developments in America, it seemed an appropriate place to begin.

The purposes of this study were to determine what student families with young children consider important in their housing, and to discover relationships between important criteria of multiple-unit housing and aspects of family living in families with young children.

Developing the Questionnaire

After many conversations with students living in married housing units and informal observations made in the housing area, an exploratory questionnaire was devised. Its purpose was to gain preliminary information identifying areas of concern to the married students regarding

housing. Two open-ended questions asking the participants to describe the assets and difficulties they experienced in their housing were submitted to seventy-eight student families. Forty-eight families responded.

The results of the exploratory questionnaire along with material from the literature and suggestions from professional persons, were reviewed and a list of statements concerning housing for student families with young children was compiled.

This list of sixty-eight criteria in nine categories was presented to a panel of seven judges for their ratings of relative importance. The judges were asked to use the following scale. The panel's ratings

| | |
|----------------------|-----|
| Very Important | (3) |
| Moderately Important | (2) |
| Little Importance | (1) |
| No Importance | (0) |

were averaged. All those criteria with an average below 2.0 were either eliminated from the study or rephrased to improve their clarity and validity.

The revised list of sixty-seven criteria was pretested with eleven families having preschool children and living in the married student housing on the Michigan State University campus. The same rating scale as that used by the judges was included. Only the mothers were asked to respond to the statements since they spent more time living with and planning for their children than did student fathers.

On the basis of the results of the first pretest, statements were revised and clarified. A total of sixty-five criteria emerged as a result of the second revision. The following rating scale was developed for five criteria in the questionnaire, the category of social interaction, to improve validity of results.

| | |
|------------------------|------|
| Very Desirable | (+2) |
| Moderately Desirable | (+1) |
| Neutral | (0) |
| Moderately Undesirable | (-1) |
| Very Undesirable | (-2) |

The revised questionnaire (second revision) was pretested again with four families having preschool children who lived in the Michigan State University married housing units. The results of this pretest were examined and the final revision was made.

Collection and Treatment of Data

The questionnaire was submitted to one hundred seventy-three families living in the married student housing on the Michigan State University campus who fit the following criteria.

1. One or both parents were students.
2. There must be two or more children of preschool age in the family. Five-year-olds were included if they had not attended school.
3. Families must have lived in the housing at least six months and planned to remain one or more terms beyond the time of data collection.

The names of families fitting this description were acquired from the mailing list in the Michigan State University Office of Married Housing. Again, only the mother was asked to respond in terms of her total family's needs.

There were one hundred nineteen questionnaires returned to the investigator. Nineteen of these were eliminated. The returns, then, consisted of one hundred questionnaires.

The one hundred families in the study included twenty-seven who had lived in other large multiple-unit dwellings similar to their present situation. The remaining seventy-three per cent had not lived previously in anything similar to their present situation. Exactly one-half of the one hundred families lived on the first floor and one-half lived on the second floor. Twenty-seven mothers were gainfully employed. The parent's ages ranged from a nineteen-year-old father to a thirty-eight-year-old mother. The mothers, as a group, were slightly older than the fathers. The fathers' mean age was 24.58 years while the mother's ages averaged 25.42 years. All but one of the mothers in the study had received their high school diploma, thirty-five had completed some college work and twenty-three were college graduates. Four of the college graduates had received Master's degrees. All of the fathers represented had received high school diplomas. There were thirty-three university undergraduates and sixty-seven university graduate students. The number of children in these families averaged 2.49 children per family. The families had a total of two hundred forty-nine children. Two hundred thirty-eight of these children were preschoolers. The mean age of the children was 2.46 years or almost two and one-half years.

The responses of the subjects were tabulated and the frequency of the rating for each criterion as "very important, moderately important, of little importance or no importance," was totaled. The weighted average of each criterion was calculated. The criteria were ranked according to the weighted averages. The criteria were then divided into groups of relative importance on basis of the weighted averages. The first twenty criteria in the system of ranking were designated as "very important." The next thirty-one criteria were designated as "moderately important." The group of moderately important criteria was further divided into a "moderately (high) important" group consisting of twenty criteria and a "moderately (low) important" group consisting of eleven

criteria. The remaining group of nine criteria was designated as "least important." The five criteria with a rating scale (+2 to -2) that was different than the main body of the study were treated in the same manner as the other criteria using their own scale and ranking them separately.

Findings

The criteria which the student wives living in multiple-unit housing for married students provided by the university and having at least two preschool children rated most important were the following. The criteria were arranged in rank order, the first ranking one and down to the last ranking twenty.

Rank

- 1 Spaces between the railings too small to permit a child to slip through.
- 2 Both sides of stairs enclosed enough to prevent a child falling through.
- 3 Walls painted with washable paint and resistant to marking.
- 4 Glass in doors and windows strong enough to withstand small children leaning or pushing against it.
- 5 Outdoor play areas for preschool children which can be readily seen and reached from indoors.
- 6 A place to store children's outside toys.
- 7 Outdoor play areas equipped for preschool children.
- 8.5 Warm floors where children play.
- 8.5 A compact, modern, apartment with reasonable rent.
- 10 Temperature regulation within each apartment.

Rank

- 11 Stairs with hand rail within reach of small children.
- 12 Maintenance provided by the university.
- 14 Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.
- 14 Incinerator convenient to apartment.
- 14 Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.
- 16.5 Windowscreens strong enough to withstand small children leaning or pushing against them.
- 16.5 A floor surface in the entire apartment which is easy to clean.
- 18 Electrical outlets having shockproof device for children's safety.
- 19 Stairs with closed risers between the treads.
- 20 A variety of apartments to choose from with one, two, or three bedrooms.

The criteria were organized for discussion after examination of the responses made by the mothers indicated the general categories their statements might fit. The discussion attempted to determine why the mothers rated these criteria "very important."

Concerns for the safety of their children on the stairs, the health of their children in apartments with uneven temperatures and problems with humidity, play space for young children convenient to the apartment for easy supervision, storage space for children's toys that had to be left outside all the time, surfaces easy to clean throughout the apartment and privacy while studying were mentioned as reasons for the high rating of the "very important" criteria.

The moderately (high) important criteria included twenty statements (See Table 24), the "moderately (low) important" criteria included eleven statements (See Table 25), and the "least important" criteria included nine statements (See Table 26).

A summary of the criteria according to category was included. The weighted average for each category was computed. The criteria were arranged for discussion according to the weighted average of the category in which they belonged. Below is a list of the categories according to the weighted average. The criteria from the "very important" group that fit into each category were included.

Health

Rank

- 8.5 Warm floors where children play.
- 10 Temperature regulation within each apartment.
- 14 Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.

Ease in Cleaning

- 3 Walls painted with washable paint and resistant to marking.
- 12 Maintenance provided by the university.
- 14 Incinerator convenient to apartment.
- 16.5 A floor surface in the entire apartment which is easy to clean.

Safety

- 1 Spaces between the railings too small to permit a child to slip through.
- 2 Both sides of stairs enclosed enough to prevent a child falling through.

Safety (cont'd)

Rank

- 4 Glass in doors and windows strong enough to withstand small children leaning or pushing against it.
- 11 Stairs with hand rail within reach of small children.
- 16.5 Windowscreens strong enough to withstand small children leaning or pushing against them.
- 18 Electrical outlets having shockproof device for children's safety.
- 19 Stairs with closed risers between the treads.

Storage Needs

- 6 A place to store children's outside toys.

Privacy

- 14 Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.

Children's Play Needs

- 5 Outdoor play areas for preschool children which can be readily seen and reached from indoors.
- 7 Outdoor play areas equipped for preschool children.

Ease in Caring for Children While Doing Household Tasks

There were no criteria in the "very important" group in this category.

General Statements About Housing

Rank

- 8.5 A compact, modern, apartment with reasonable rent.
- 20 A variety of apartments to choose from with one, two, or three bedrooms.

Adult Companionship

There were no criteria in the "very important" group in this category.

Conclusions

The participants in this study were able in most instances to recognize what was important to them in their housing. It was apparent, however, that they responded in terms of their present housing. A study conducted with student families living in another type of multiple-unit housing might have given different results. (The conclusions drawn are within the limits of the data of this study.)

The families indicated a high level of interest and some knowledge about what was important and necessary in housing for their families. Their comments appeared to be honest and straightforward and in some cases indicated a real concern for the young child living in the multiple-unit housing. Occasionally mothers responded to some criteria in terms of adults' needs only and failed to take into account the needs of their children in such instances.

The housing features which families considered very important tended to be those which were inherent in the structural features and plan of the housing. These were things which they could not control for themselves or their children. The criteria that were concerned with

areas in which they could exercise some control, such as inside storage of toys and clothing for their children, were not rated as high. Yet they indicated that they valued these features by the fact that in some instances they had adapted their space to include them (Perhaps the lower ratings did not indicate that such features were unimportant to them but rather that they considered it unimportant whether or not these criteria had been included in the building since they could make their own adaptations to provide these needs.) This would seem to indicate ingenuity and adaptability among this group of student families.

Safety for family members, especially children, was considered important by mothers. Several criteria in this category were concerned with safety on the stairs. Prall (1958) stated that housing for young children should be on the ground floor. Yet student families in this study did not think it very important that "apartments for families with young children be on ground floor." Did they not realize that some of their concern over safety on stairs might have been eliminated if they lived on the ground floor? Some mothers preferred apartments on second floor where children might play on the balcony and thus avoid the dangers of the parking areas adjacent to ground floor apartments. It appeared that the families were torn between two dangers to their young children: stairs and automobiles. If limited building space necessitates structures of more than one-story and if parking lots immediately adjacent to the apartments are desired, it appears necessary that some arrangements be made to eliminate the fear and constant anxiety expressed for the safety of preschool children in relation to stairs and parking lots. Other safety features which mothers considered very important were "window-screens and glass in doors and windows strong enough to withstand small children leaning or pushing against them," and "electrical outlets having shockproof device."

Features of housing which contributed to or detracted from the health of the children were of concern to mothers, as indicated by the high ratings given the criteria in this category. The mothers indicated that they had tried to solve the problems relating to "overheated apartments" and "arid conditions in the apartments." They mentioned the use of humidifiers in the children's rooms at night. Their solution to overheating, namely, opening doors and windows, created drafts which only increased the danger to the children's health. Beyer, Mackesey and Montgomery (1955, p. 42) discovered that in the group of renter families "one out of eight women, considerably higher than among owner families, felt more attention should be given to heating and ventilating." It may be true that renters, annoyed that they cannot control this feature, are inclined to give it undue emphasis. However, the reasons given by the student families for rating this health criterion very important indicated concern for their children's health in spite of the fact that they had tried to handle the problem. This suggests genuine concern for health and comfort of the family rather than irritation over lack of control.

The ease of cleaning the home seemed to be related to the presence of small children and little space. The mothers mentioned that with small children the walls get dirty easily and that because the children played on the floor constantly, it was necessary to keep the small floor space cleared and fairly clean for the children's play. The mothers considered cleaning time-consuming and tiring. Wiegand and Gross (1958) suggested that women with preschool children need much help in their homemaking activities since the presence of young children uses much of a mother's energy. Walls, floors and other surfaces easy to clean undoubtedly would help the homemaker. The student mothers valued the incinerator and the maintenance of buildings and grounds by the university.

The storage needs appeared to be only moderately important to the families, except for one criterion which was considered very important, "A place to store children's outside toys." Prall (1958) points out that children between the ages of three and six years spend much time in active play with tricycles, wagons, scooters, etc. If children are to be allowed to express themselves at this developmental level, provisions for their equipment are necessary. In a housing area where many children of this age are living the problem of storage of toys would be multiplied. Parents showed concern because this was a feature they themselves could not provide. (Other storage needs, although not rated high, appeared important inasmuch as families had made the necessary provisions within their limited space. Indoor storage of toys and of clothing they could provide.) Wiegand and Gross (1958, p. 23) discovered "moderate linkages between amount of fatigue of home-makers and adequacy of space for the children's play and storage of their toys and wraps.) Although not a new concept, these areas could be given more consideration by architects and builders."

(Families wanted quiet and privacy, as indicated by the high evaluation they placed on the criterion, "Construction features to reduce noise" and the moderately high value on quiet places to study and to sleep. They indicated the need for a quiet place to study) and mothers indicated a desire to have the husband study at home. Unless privacy and quiet could be arranged, children in the home could create much disturbance for the student members. (The families in this study did not feel they had enough privacy.) Beyer, Mackesey and Montgomery (1955, p. 11) remarked, "The importance of provisions for privacy may not generally be recognized by builders. Privacy from people and distracting conditions when one wants it is a common, if not universal, desire."

"On the other hand," they continue, "both adults and children in all families want to make friends and to live in a way that makes the

development of friendships most possible. Thus we see the location of a house must satisfy two opposing needs--the need for privacy and the need for sociability--in different degrees for different groups of people."

Beyer, Mackesey and Montgomery (1955) indicated that renters of modern apartments had and desired more social gatherings. In contrast, the families in the writer's study were not interested in social gatherings, as indicated by the low rating of the criteria, "Larger rooms for recreation and group gatherings located convenient to individual apartments." Beyer and his associates felt that their findings "seemed to weaken the commonly accepted generalization that middle-income apartment dwellers are likely to live in social isolation." At first thought it might seem that the families in this study tended to strengthen the generalization. However, quite the contrary appeared to be true when one examined the reasons for their low rating of the above criterion. They felt that the close proximity of many neighbors necessitated much group activity in their daily living and they did not feel it desirable to further perpetuate this "togetherness" through the provision of a place for group gatherings.

The mothers recognized the need to supervise the outdoor play of preschool children as evidenced by their high rating of the criterion, "Outdoor play areas for preschool children which can be readily seen and reached from indoors." This clearly is related to the building plan of the housing units and hence a provision over which the families have no control. Prall (1958) substantiates the importance of play areas easily seen and reached so supervision is possible. Although the mothers were well aware of the children's need for a safe place to play near the apartment, they did not seem willing to sacrifice the parking space adjacent to the apartments for this purpose. They rated low a compromise suggestion, "Parking areas close but not adjacent to the housing," because they wished to have the parking adjacent to the apartment for

ease in loading and unloading the car when transporting groceries, laundry etc. Apparently, mothers were not willing to sacrifice this convenience for the sake of a safer place for their children to play which could be conveniently supervised. Suitably equipped outdoor play areas for preschoolers were considered important. Some of the other criteria in the category of children's play needs, "covered outdoor play space," "indoor play space for active play," "arrangements for water play" were recognized as of some importance but enthusiasm for these group activities was lessened because mothers were unwilling to assume responsibility for supervision of these areas. Furthermore, they expressed a practical point of view in that they believed these features to be too expensive and hence were not practical suggestions.

(Apparently mothers placed health, safety and some play needs of their children above their own convenience in doing household tasks while caring for children. Most of the criteria in the last category were ranked moderate by the mothers. The mothers preferred laundry space in their own apartment, but if this could not be provided, laundry space within the building of residence was still considered helpful. Other criteria in this category, "kitchen convenient to play areas," "laundry convenient to play areas," "dining space for the family," "room arrangement which avoids cross-room traffic" and "telephone attached to the wall," were discussed only briefly by the mothers. Some of these criteria they had and appreciated; others they lacked and appeared to have adjusted to perhaps without awareness of their significance as causes of strain and fatigue. It has already been mentioned that Wiegand and Gross (1958) suggested that mothers with young preschool children need help with their homemaking activities to avoid fatigue as much as possible. Perhaps they could use help in learning how to more efficiently use their time and energy and how structural adjustments or changes in the housing might ease the mothers' work load.

A compact apartment with reasonable rent was the mothers' choice in type of housing. They ranked the criterion, "A compact, modern apartment with reasonable rent highest in the category of general statements about housing. The need to save money with low, reasonable rent seemed to be more important than having more space for their children at greater cost. However, the families did indicate need for additional bedrooms as their families increased. A partially furnished apartment having essential furniture, stove and refrigerator was of moderately high importance. Most of the families indicated they had some belongings of their own to make their housing more individualistic.

(The general attitude toward the housing for married students was that their present living was of a temporary nature. ' This may be true for a mature adult who is able to work for remote goals but is this true for immature children who live very much in the present? If a child lives here two or three years, is the housing considered temporary by the child's standards? It would seem that the first few years of life are too important a phase in his development to be lightly dismissed as only temporary.

The subject of social interaction was discussed only slightly by the mothers. The reasons for their moderately low rating of this group of criteria were difficult to determine by their responses.

The mothers in this study rated, "Many playmates for their children," highest in the category of social interaction. This agreed with the findings in Beyer, Mackesey and Montgomery (1955) which attempted to determine how much families were concerned with social relationships. They questioned young families in a new subdivision and discovered that the families placed the importance of the social relationships of their children above their own.

The mothers did not rate the criterion, "A variety in ages of children's playmates," high. It would seem that they agreed with Prall (1958) who mentioned that a variety of ages for small children was not very desirable.

The women in this study indicated that they did not like living close together. "Close proximity of neighbors," received the lowest mean score in the category.

A study reported by Dean (1958) indicates that, "The physical layout of a housing development is clearly related to the patterns of group formation and the social pressures they exert on the residents." It is possible, then, that the housing arrangement does affect the residents attitude toward his family, neighbors and community.)

Recommendations

Some recommendations for multiple-unit housing for student families with young children are made on the basis of the student mothers' ratings of very important criteria and their responses as to why the criteria were important. It is recommended that their housing meet the following criteria.

If the space available for building necessitates more than a one-story structure:

- (a) Stairs enclosed on both sides of stairwell and between treads.
- (b) Gates at top and bottom of the stairs that can be opened only by adults or older children.
- (c) Hand rail provided within reach of small children.
- (d) Open spaces in balcony railings so small that children will not be caught or fall through.

Walls and floor surfaces in the entire apartment which are easy to clean.

Outdoor play areas equipped for preschool children which can be readily seen and reached from indoors.

For the mothers in this study this need conflicted with the need for parking adjacent to the apartment entrance because in their situation there was only one entrance to the apartment. The author suggests that a rear door to the area behind the apartment building where children's play areas could be provided would enable families to have both a convenient parking place and an area for children to play which could be easily supervised from indoors.

Outside storage space for children's large toys, such as, tricycles, wagons etc.

Construction, heating and ventilation which allow for degree of humidity and warmth that are not conducive to respiratory infections.

Provision for temperature regulation within each apartment.

Glass in windows and doors strong enough to prevent easy breaking when children are playing in the area.

Windowscreens strong enough to withstand small children leaning or pushing against them.

Electrical outlets having shockproof device for children's safety.

Maintenance of building and grounds and an incinerator are provided.

Construction features which reduce noises from the outside, other apartments and other rooms.

A compact, modern apartment with reasonable rent and the possibility of one, two, or three bedrooms as the family increases.

The author also suggests that the one, two and three-bedroom apartments be alternated throughout the housing to avoid buildings with all two-bedroom apartments or all three-bedroom apartments. Scattering sizes of

with specific conditions

apartments would tend to scatter sizes of families thus avoiding a large concentration of children in one building. Efforts to reduce crowded conditions and unnecessary strain on the families seem advisable.

Implications for Further Study

This study attempted to determine what student families with young children living in multiple-unit dwellings considered important in their housing by going directly to the mothers of families for the information. Since the fathers in these families indicated interest in this subject and the literature revealed that they do spend considerable amounts of time with their children, future investigations in which families are asked to consider their housing might well include fathers' evaluations.

The study might be repeated using student families with young children living in other types of multiple-unit dwellings on campuses of similar size in various areas of the country to give more complete information on the housing needs of married students in multiple-unit housing.

The study might also be repeated using non-student families with young children living in multiple-unit dwellings to see whether there are differences in the housing needs of student families with young children and non-student families with young children.

Married students with young children living in housing which is not of multiple-unit type might be studied to compare their needs and satisfactions in housing with those of married students having young children and living in multiple-unit housing.

Although the families in this study showed interest and knowledge of some of the needs of children, there were indications that some mothers were more concerned about their own convenience than their children's needs, when actually through a suitable arrangement in their

housing both the mothers and the children's needs might have been met. Would knowledge and attitudes change if mothers were given an opportunity to study and discuss the child's needs with specialists in the field of child development? An interesting study would be to measure change in a group of mothers by administering the questionnaire before and after some type of a parent education experience.

Investigation might be made of building codes and problems faced by builders which tend to interfere with the incorporation of features desired by renters.

A comparison between what the builders of the housing developments for student families with young children consider important and what the families themselves consider important might reveal discrepancies between what builders provide and renters desire. Such information might suggest that certain provisions usually incorporated by builders but unimportant to renters be eliminated in planning housing whereas some features usually lacking but desired by renters be added.

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APPENDICES

APPENDIX A
EXPLORATORY QUESTIONNAIRE

EXPLORATORY QUESTIONNAIRE

Dear Parents:

I am interested in securing some information about married student housing. Would you help me by filling in the questionnaire below concerning your family and housing? Since it is nearing the end of the quarter, I would appreciate its return to the Spartan Nursery office as quickly as possible.

Thank you.

Sue Torrey
Graduate Assistant
Spartan Nursery

QUESTIONNAIRE

Where do you live? Check one of the following:

- | | |
|-------------------------------------|-----|
| (a) University Village | () |
| (b) Spartan Village | () |
| (c) Cherry Lane Apartments | () |
| (d) Other married housing on campus | () |
| (e) Off campus house | () |
| (f) Off campus apartment | () |

Do you have:

- | | | | |
|--------------|-----|-------------|-----|
| Two bedrooms | () | One bedroom | () |
|--------------|-----|-------------|-----|

Do you live:

- | | | | |
|----------|-----|------------|-----|
| Upstairs | () | Downstairs | () |
|----------|-----|------------|-----|

Do you have your own yard?

- | | | | |
|-----|-----|----|-----|
| Yes | () | No | () |
|-----|-----|----|-----|

How many children are there in your family? ()

List their ages: _____

Do you regularly care for other children in your home? ()

How many? ()

List their ages: _____

How long have you lived in your present home? _____

How long do you plan to stay in this housing? _____

How well does your present housing meet your family's needs:

- | | | | |
|---------------------|-----|------------------|-----|
| (a) Very well | () | (c) Adequately | () |
| (b) Moderately well | () | (d) Inadequately | () |
| (e) Very poorly | () | | |

What are some of the difficulties your family has experienced in your present living arrangement?

What does your family see as some of the assets?

APPENDIX B
INFORMATION FOR JUDGES
TENTATIVE LIST OF STATEMENTS FOR INSTRUMENT

INFORMATION FOR JUDGES

An Introduction to the Study

The title of my study is "Relative Importance of Selected Criteria for Multiple-unit Housing as Seen by Student Families with Young Children."

Today many young couples find themselves beginning their families in the atmosphere of a college or university while one or both are still students. Often in the larger universities, their housing will consist of a type of multiple-unit dwelling provided by the university. The question arises as to the extent to which young children have been considered as parts of families occupying this housing.

Fritz Redl comments that "It is amazing how sensitive even otherwise defensive children are to the 'atmosphere' which the very location, the architectural design, the space distribution of the house, the arrangement and type of furnishings, the equipment, the style of housekeeping suggest. This alone is a subject on which research is badly needed."

The importance of this 'atmosphere' is also recognized by William A. Koppe who points out that children spend most of their preschool life in the home, and over a third of their waking time at home during most of the school years. He states that "Furnishing and housing must be brought in line with patterns of family behavior."

Therefore, this study is concerned with the housing of student families with young children and how it reflects upon their daily living. It will attempt to determine what student families with young children consider important in their housing and to see relationships between important criteria of multiple-unit housing and aspects of family living in families with young children. It is also hoped that it will provide useful information for future planning of multiple-unit dwellings for families with young children.

I am compiling a series of criteria of housing developed from statements made by mothers of young children, from the criteria listed by various authors, and from opinions of professional persons in the field of child development. I wish to submit these criteria for criticisms and suggestions to a group of judges consisting of parents of young children and of professional persons in the fields of child development, social work, and housing. The criteria will be revised to incorporate the suggestions of the judges. The questionnaire that is formulated from the criteria will be pretested with a group of families attending Spartan Cooperative Nursery School.

The families used to furnish the data for the study will be those living in multiple-unit housing on the campus. One or both parents will be students who have two or more children under school age. They will be families who have lived in multiple-unit housing at least one year and plan to remain one or more terms beyond the time of data collection.

For each of the criteria, the respondents will be asked to check on a graduated scale, the relative importance to their families. For each criterion which the respondents consider very important, they will be asked to tell why that criterion is important to their family.

Because of your knowledge of families' housing needs, I will greatly appreciate your evaluation and comments concerning these statements.

Will you please respond in the following way:

- (1) Rate each statement, as you see it, according to its importance to student families with young children living in multiple-unit housing. Please rate 3, 2, 1, 0 according to the following scheme:
(3) Very Important, (2) Moderately Important, (1) Little Importance, (0) No Importance.

- (2) Space has been provided at the end of each area for your comments and especially any additional statements you feel should be included in the questionnaire for that area. If you wish to add statements that do not fall into any one of the areas, you may state them at the end.

TENTATIVE LIST OF STATEMENTS FOR INSTRUMENT

- (3) Very Important
 (2) Moderately Important
 (1) Little Importance
 (0) No Importance

General Statements About Housing

Please respond by placing an (X) in the appropriate square.

| | 3 | 2 | 1 | 0 |
|--|---|---|---|---|
| A compact, modern, apartment with reasonable rent. _____ | | | | |
| A modern apartment with more space and planning for small children at higher rent. _____ | | | | |
| A small apartment, less modern, with very low rent. _____ | | | | |
| Apartments for families with small children are on the ground floor. _____ | | | | |
| Maintenance provided by the university. _____ | | | | |
| A completely furnished apartment. _____ | | | | |
| An unfurnished apartment. _____ | | | | |
| A partially furnished apartment having stove and refrigerator. _____ | | | | |
| <u>Health and Safety</u> | | | | |
| Warm floors where children play. _____ | | | | |
| Temperature can be regulated within each apartment. _____ | | | | |
| Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections. _____ | | | | |
| Glass in doors and windows strong enough to withstand small children leaning or pushing against it. _____ | | | | |
| Windows on the second floor with strong screens. _____ | | | | |
| Windows on the second floor at least 24 inches from the floor. _____ | | | | |
| Firm catches placed on low cupboard doors so small children cannot open them. _____ | | | | |
| Locks on drawers used for knives or other dangerous equipment. _____ | | | | |

| | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
| A medicine cabinet equipped with a lock. _____ | | | | |
| Bathroom fixtures arranged so child cannot climb from one to another. _____ | | | | |
| The telephone with a sufficiently long cord so it can be placed on a high shelf out of the child's reach. _____ | | | | |
| Stairs with closed risers between the treads. _____ | | | | |
| Stairs have hand rail within reach of small children. _____ | | | | |
| Stairs closed on both sides. _____ | | | | |
| Small spaces between the railings to insure the safety of small children. _____ | | | | |
| Vertical rather than horizontal bars are used in gates and railings. _____ | | | | |
| At the top and bottom of the stairs, a gate or a door, that could only be operated by adults. _____ | | | | |
| Fenced in, gated, parking areas to protect small children. _____ | | | | |
| A place for parking immediately adjacent to housing. _____ | | | | |
| A place for parking which is close but not adjacent to the housing. _____ | | | | |
| <u>Privacy</u> | | | | |
| Construction features such as soundproof walls, which reduce noises from the outside. _____ | | | | |
| A place to study in the apartment. _____ | | | | |
| A place to study in a room provided near the apartment. _____ | | | | |
| Some private yard space for every family, which they can use as their own. _____ | | | | |
| A quiet place where children sleep. _____ | | | | |
| Bedroom space for each child shared by only one other child near the same age. _____ | | | | |

| | 3 | 2 | 1 | 0 |
|--|---|---|---|---|
| Arrangements for outdoor water play in summer. _____ | | | | |
| A suitable place where a child can have a small pet, other than a cat or dog. _____ | | | | |
| Indoor play space where child can play actively and noisily. _____ | | | | |
| Bedroom space which doubles as play space for children. _____ | | | | |
| Windows on the first floor low enough so the preschool child can see out of them when standing on the floor. _____ | | | | |
| Picnic area and playground for family activities close to housing development. _____ | | | | |

Storage Needs

| | | | | |
|---|--|--|--|--|
| Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach. _____ | | | | |
| Low hooks or low rods near outside entrances for children to hang outdoor clothing. _____ | | | | |
| Shelves or cupboards within child's reach for storage of toys. _____ | | | | |
| A place to store children's outside toys. _____ | | | | |
| Additional storage space outside the apartment for children's large equipment that is not currently in use. _____ | | | | |

Adult Companionship

| | | | | |
|---|--|--|--|--|
| Larger rooms for recreation and group gatherings located convenient to the individual apartments. _____ | | | | |
|---|--|--|--|--|

Social Interaction

The following are some characteristics of social interaction in multiple-unit student housing. Please indicate the importance of these to your family.

| | 3 | 2 | 1 | 0 |
|--|---|---|---|---|
| Many playmates for the children. _____ | | | | |
| A variety in ages of children's playmates. _____ | | | | |

| | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
| Neighbors who are living on approximately the same income and daily schedule. _____ | | | | |
| Opportunity to live close to people of different races and nationalities. _____ | | | | |
| Close proximity of neighbors makes it difficult to disregard their influences on your family. _____ | | | | |

APPENDIX C
FIRST REVISION OF INSTRUMENT,
USED IN FIRST PRETEST

First Revision--Used for First Pretest

This questionnaire is to be filled out by the mother in each family.
Please complete the following information for your whole family.

Use an (X) in the appropriate space.

University Housing you are living in at the present time.

University Village ()

Cherry Lane Apartments ()

Cherry Lane Quonsets or
Flat Tops ()

Spartan Village ()

Ages of Parents:

Mother's Age ()

Father's Age ()

Number of Children in your family ()

List their ages: _____.

Parent's Education:

List Years Completed: MOTHER

High School _____.

College Undergraduate _____.

Masters _____.

Doctorate _____.

Last Degree Attained _____.

List Years Completed: FATHER

High School _____.

College Undergraduate _____.

Masters _____.

Doctorate _____.

Last Degree Attained _____.

How long have you lived in university housing? _____.

How long do you plan to remain in university housing? _____.

QUESTIONNAIRE
HOUSING FOR STUDENT FAMILIES

DIRECTIONS:

1. We are asking you, as the mother, to be the spokesman for your family. On the scale provided, please rate each statement in terms of your family's needs.
2. For those statements you rate as Very Important, write in briefly the reason why.
3. If a statement is not clear, or is difficult to rate, please raise questions with the investigator.

RATING SCALE

- (3) Very Important
(2) Moderately Imp.
(1) Little Importance
(0) No Importance

Please respond by placing an (X) in the appropriate square.

General Statements About Housing

A variety of apartments to choose from with one, two, or three bedrooms.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

A compact, modern, apartment with reasonable rent.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A modern apartment with more space and planning for small children at higher rent.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A small apartment, less modern, with very low rent.

| | | | |
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| | | | |
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Apartments for families with small children are on the ground floor.

| | | | |
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Maintenance provided by the university.

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A completely furnished apartment.

| | | | |
|--|--|--|--|
| | | | |
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A partially furnished apartment having essential furniture, stove, and refrigerator.

| | | | |
|--|--|--|--|
| | | | |
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The possibility of selecting needed furnishings from college source (store) to supplement and meet individual needs.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

A completely unfurnished apartment.

| | | | |
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Health and Safety

Warm floors where children play.

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Temperature can be regulated within each apartment.

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Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.

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Glass in doors and windows strong enough to withstand small children leaning or pushing against it.

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Windows on the second floor with strong screens.

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Windows on the second floor at least 24 inches from the floor.

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A medicine cabinet equipped with a lock.

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Telephone is attached to the wall.

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Electrical outlets having shockproof device for children's safety.

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Stairs with closed risers between the treads.

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Stairs have hand rail within reach of small children.

| | | | |
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Stairs closed on both sides.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | C |
| | | | |

Spaces between the railings too small to permit a child to slip through.

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Vertical rather than horizontal bars to discourage climbing on railings.

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At the top and bottom of the stairs, a gate or a door, that could only be operated by adults.

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A place for parking which is close but not adjacent to the housing.

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Adjacent parking areas, fenced and gated, to protect small children.

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A place for parking immediately adjacent to entrance to apartment.

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Privacy

Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.

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A place to study in the apartment.

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A study area provided near the apartment.

| | | | |
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Some private yard space for every family, which they can use as their own.

| | | | |
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| | | | |
|--|--|--|--|

A quiet place where children sleep.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Bedroom space for each child shared by only one other child near the same age.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

Ease in Cleaning

A floor surface in the entire apartment which is easy to clean.

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Paint furnished by the university to freshen walls periodically.

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Walls are painted with washable paint and are resistant to marking.

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Incinerator convenient to apartment.

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Doors, sills, window frames and like surfaces easy to clean and durable.

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East in Caring for Children While Doing Household Tasks

Laundry facilities located inside the apartment.

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Community laundry facilities provided.

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A place to hang clothes outside on good drying days.

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Outdoor and indoor play space easily seen and reached from the laundry area.

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A community work room where adults can work together at laundry, ironing, mending, sewing, etc., with adjacent play space for children.

| | | | |
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Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children.

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Outdoor play areas for preschool children which can be readily seen from indoors.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

Outdoor play areas for preschool children which are easily reached from indoors.

| | | | |
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Room arrangement and entries which avoid cross-room traffic as much as possible.

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Conveniently located dining space for at least six people.

| | | | |
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Children's Play Needs

A covered outside play area where children can spend part of each day outside regardless of the weather.

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Areas where children can dig in the ground.

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Outdoor play areas equipped for preschool children.

| | | | |
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Arrangements for outdoor water play in summer.

| | | | |
|--|--|--|--|
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Indoor play space where child can play actively and noisily.

| | | | |
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| | | | |
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At least one window on the first floor low enough so the pre-school child can see out when standing on the floor.

| | | | |
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| | | | |
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Picnic area and playground for family activities close to housing development.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Storage Needs

Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

Low hooks or low rods near outside entrances for children to hang outdoor clothing.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Shelves or cupboards within child's reach for storage of toys.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A place to store children's outside toys.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Additional storage space outside the apartment for children's large equipment that is not currently in use.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Adult Companionship

Larger rooms for recreation and group gatherings located convenient to the individual apartments.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Social Interaction

The following are some characteristics of social interaction in multiple-unit student housing. Please indicate the importance of these to your family.

Many playmates for the children.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A variety in ages of children's playmates.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Neighbors who are living on approximately the same income and daily schedule.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Opportunity to live close to people of different races and nationalities.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Close proximity of neighbors.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

APPENDIX D

COVER LETTER USED IN SECOND PRETEST

SECOND REVISION OF INSTRUMENT,
USED IN SECOND PRETEST

COVER LETTER USED IN SECOND PRETEST

I would like your help in discovering what student families with small children think is important in multiple-unit housing. Since Michigan State University has the largest number of such housing units for married students of any American campus, it seems to be a particularly good area for securing the desired information.

My interest in children has led me to choose housing needs of student families with young children as the subject for my Master's Thesis in Child Development. I am at present a graduate assistant in the Spartan Cooperative Nursery School where I am in daily contact with young children and their families.

Enclosed please find a questionnaire which includes a variety of statements about housing which could be important to student families with small children. Some of these statements may seem very important to you, others may have little meaning for your family. They may or may not describe housing already in existence.

Your cooperation in this study will add to the knowledge of housing needs of families. We need your opinion of what your family's needs are in your present situation as a student family. Keep your own family's needs in mind rather than the needs of other student families. The results of the entire study will describe to anyone who is interested what student families with small children think is important in their housing and why they feel this way. Such information could be helpful in evaluating present housing and in future planning of housing for families with young children.

Thank you,

Sue Torrey

SECOND REVISION OF INSTRUMENT,
USED IN SECOND PRETEST

This questionnaire is to be filled out by the mother in each family.
Please complete the following information for your whole family.

Use an (X) in the appropriate space.

University Housing you are living in at the present time:

University Village ()
Cherry Lane Apartments ()
Cherry Lane Quonsets or
Flat Tops ()
Spartan Village ()

Ages of Parents: Mother's Age () Father's Age ()

Number of children in your family: ()

List their ages: _____.

Parent's Education:

List Years Completed: MOTHER
High School _____.
College Undergraduate _____.
Masters _____.
Doctorate _____.
Last Degree Attained _____.

List Years Completed: FATHER
High School _____.
College Undergraduate _____.
Masters _____.
Doctorate _____.
Last Degree Attained _____.

How long have you lived in university housing? _____.

How long do you plan to remain in university housing? _____.

QUESTIONNAIRE

HOUSING FOR STUDENT FAMILIES

DIRECTIONS:

1. We are asking you, as the mother, to be the spokesman for your family. On the scale provided, please rate each statement in terms of your family's needs, in your present situation. Please rate every statement.
2. For those statements you rate as Very Important, write in briefly the reason why. Comment on any others that you want to.
3. If a statement is not clear, or is difficult to rate, please raise questions with the investigator.

- RATING SCALE
 (3) Very Important
 (2) Moderately Imp.
 (1) Little Importance
 (0) No Importance

Please respond by placing an (X) in the appropriate square.

General Statements About Housing

A variety of apartments to choose from with one, two, or three bedrooms.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

Apartments for families with small children are on the ground floor.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Maintenance provided by the university.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Read the next three statements as a unit before checking them.

A compact, modern, apartment with reasonable rent.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A modern apartment with more space and planning for small children at correspondingly higher rent.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A small apartment, less modern, with very low rent.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Read the next four statements as a unit before checking them.

A completely furnished apartment.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

A partially furnished apartment having essential furniture, stove, and refrigerator.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

The possibility of selecting needed furnishings from college source (store) to supplement and meet individual needs.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

A completely unfurnished apartment.

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Health and Safety

Warm floors where children play.

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Temperature can be regulated within each apartment.

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Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.

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Glass in doors and windows strong enough to withstand small children leaning or pushing against it.

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Window screens strong enough to withstand small children leaning or pushing against them.

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Windows on the second floor high enough so a child cannot fall out but low enough for a child to see out.

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Telephone is attached to the wall out of child's reach.

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Electrical outlets having shockproof device for children's safety.

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Stairs with closed risers between the treads.

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| 3 | 2 | 1 | 0 |
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Stairs have hand rail within reach of small children.

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Both sides of stairs enclosed enough to prevent a child falling through.

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Spaces between the railings too small to permit a child to slip through.

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Vertical rather than horizontal bars to discourage climbing on railings.

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At the top and bottom of the stairs, a gate or a door, that could only be operated by adults.

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Read the next three statements as a unit before checking them.

A place for parking which is close but not adjacent to the housing.

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A place for parking immediately adjacent to entrance to apartment.

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Adjacent parking areas, fenced and gated, to protect small children.

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Privacy

Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.

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A place to study in the apartment.

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A study area provided within easy walking distance of the apartment.

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| 3 | 2 | 1 | 0 |
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Some private yard space for every family, which they can use as their own.

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A quiet place where children sleep.

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Bedroom space for each child shared by only one other child near the same age.

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Ease in Cleaning

A floor surface in the entire apartment which is easy to clean.

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Paint furnished by the university to freshen walls periodically.

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Walls are painted with washable paint and are resistant to marking.

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Incinerator convenient to apartment.

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Doors, sills, window frames and like surfaces easy to clean and durable.

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Ease in Caring for Children While Doing Household Tasks

Laundry space inside the apartment where you may install your own laundry equipment.

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Community laundry facilities provided within each building.

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Community laundry facilities provided to serve several buildings.

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Outdoor and indoor play space easily seen and reached from the laundry area.

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| 3 | 2 | 1 | 0 |
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A community work room where adults can work together at laundry, ironing, mending, sewing, etc., with adjacent play space for children.

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Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children.

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Outdoor play areas for preschool children which can be readily seen and reached from indoors.

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Room arrangement and entries which avoid cross-room traffic as much as possible.

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Conveniently located dining table to seat at least six people.

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Children's Play Needs

A covered outside play area where children can spend part of each day outside regardless of the weather.

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Areas where children can dig in the ground.

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Outdoor play areas equipped for preschool children.

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Arrangements for outdoor water play in summer.

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Indoor play space where child can play actively and noisily within the building.

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At least one window on the first floor low enough so the preschool child can see out when standing on the floor.

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Picnic area and playground for family activities close to housing development.

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Storage Needs

Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach.

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Low hooks or low rods near outside entrances for children to hang outdoor clothing.

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Shelves or cupboards within child's reach for storage of toys.

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A place to store children's outside toys.

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Additional storage space outside the apartment for children's large equipment that is not currently in use.

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Adult Companionship

Larger rooms for recreation and group gatherings located convenient to the individual apartments.

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Social Interaction

The following are some characteristics of social interaction in multiple-unit student housing. Some you may regard as desirable and some undesirable. Please indicate the desirableness of these to your family.

RATING SCALE

(+2) Very desirable
 (+1) Moderately Des.
 (0) Neutral
 (-1) Moderately Unde.
 (-2) Very Undesir-
 able

Many playmates for the children.

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| +2 | +1 | 0 | -1 | -2 |
| | | | | |

A variety in ages of children's playmates.

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Neighbors who are living on approximately the same income and daily schedule.

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Opportunity to live close to people of different races and nationalities.

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Close proximity of neighbors.

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APPENDIX E

COVER LETTER USED IN COLLECTION OF DATA

FINAL REVISION OF INSTRUMENT, USED IN
COLLECTION OF DATA

COVER LETTER USED IN COLLECTION OF DATA

April 17, 1961

Dear Mrs.

I would like your help in discovering what student families with small children think is important in multiple-unit housing. Since Michigan State University has the largest number of such housing units for married students of any American campus, it seems to be a particularly good area for securing the desired information.

My interest in children has led me to choose housing needs of student families with young children as the subject for my Master's Thesis in Child Development. I am at present a graduate assistant in the Spartan Cooperative Nursery School where I am in daily contact with young children and their families.

Enclosed please find a questionnaire which includes a variety of statements about housing which could be important to student families with small children. Some of these statements may seem very important to you, others may have little meaning for your family. They may or may not describe your housing. We would like to know the importance to you of the things you do have in your housing as well as those you do not have.

Your cooperation in this study will add to the knowledge of housing needs of families. We need your opinion of what your family's needs are in your present situation as a student family. Keep your own family's needs in mind rather than the needs of other student families. The results of the entire study will describe to anyone who is interested what student families with small children think is important in their housing and why they feel this way. Such information could be helpful in evaluating present housing and in future planning of housing for families with young children.

Please complete the questionnaire and return in the enclosed self-addressed envelope by April . If you have further questions, I can be reached at Spartan Cooperative Nursery School X3240, Tuesday through Friday mornings. Your cooperation will be greatly appreciated. Thank you.

Sincerely,

Faculty Advisor,
Dr. Bernice Borgman

Sue Torrey
Graduate Assistant
Spartan Cooperative
Nursery School

The names of the families selected for this study were secured in the files of the married housing office with the approval of Ray D. Lamphear the manager of married housing.

FINAL REVISION OF INSTRUMENT, USED IN
COLLECTION OF DATA

This questionnaire is to be filled out by the mother in each family. Please complete the following information for your whole family.

Use an (X) in the appropriate space.

Has your family lived elsewhere before coming to university married housing?
Yes () No ().

Has your family lived in any other large multiple-unit dwellings similar to your present situation? Yes (;) No ().

University housing you are living in at the present time:

University Village ()
Cherry Lane Apartments ()
Cherry Lane Quonsets or
Flat Tops ()
Spartan Village ()

Do you live on: First Floor () Second Floor ()

How long have you lived in university housing? _____.

How long do you plan to remain in university housing? _____.

Is the mother working outside the home? Yes () No ().

If yes, please check whether: Full Time () Part Time ().
Regularly () Irregularly ().

Ages of Parents: Mother's Age () Father's Age ()

Number of children in your family: ()

List their ages: _____.

Parent's Education:

MOTHER

List Years Completed:
High School _____.
College Undergraduate _____.
Masters _____.
Doctorate _____.
Last Degree Attained _____.

FATHER

List Years Completed:
High School _____.
College Undergraduate _____.
Masters _____.
Doctorate _____.
Last Degree Attained _____.

QUESTIONNAIREHOUSING FOR STUDENT FAMILIES

DIRECTIONS:

1. We are asking you, as the mother, to be the spokesman for your family. On the scale provided, please rate each statement in terms of your family's needs in your present situation. Please rate every statement.
2. For those statements you rate as Very Important, write in briefly the reason why. Comment on any others that you want to.

Please respond by placing an (X) in the appropriate square.

RATING SCALE

- (3) Very Important
 (2) Moderately Imp.
 (1) Little Importance
 (0) No Importance

General Statements About Housing

A variety of apartments to choose from with one, two, or three bedrooms.

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Apartments for families with small children are on the ground floor.

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Maintenance provided by the university.

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(Read the next three statements as a unit before checking them)

A compact, modern, apartment with reasonable rent.

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A modern apartment with more space and planning for small children at correspondingly higher rent.

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A small apartment, less modern, with very low rent.

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(Read the next four statements as a unit before checking them.)

A completely furnished apartment.

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A partially furnished apartment having essential furniture, stove, and refrigerator.

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| 3 | 2 | 1 | 0 |
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The possibility of selecting needed furnishings from college source (store) to supplement in a partially furnished apartment.

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A completely unfurnished apartment.

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Health and Safety

Warm floors where children play.

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Temperature regulation within each apartment.

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Construction which allows for degree of humidity which is not conducive to colds and other respiratory infections.

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Glass in doors and windows strong enough to withstand small children leaning or pushing against it.

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Windowscreens strong enough to withstand small children leaning or pushing against them.

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Windows high enough so a child cannot fall out.

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Telephone attached to the wall out of child's reach.

| | | | |
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Electrical outlets having shockproof device for children's safety.

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Stairs with closed risers between the treads.

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Stairs with hand rail within reach of small children.

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Both sides of stairs enclosed enough to prevent a child falling through.

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|--------------------------|--------------------------|--------------------------|--------------------------|
| 3 | 2 | 1 | 0 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Spaces between the railings too small to permit a child to slip through.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|

Vertical rather than horizontal bars to discourage climbing on railings.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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At the top and bottom of the stairs, a gate or a door that could only be operated by adults.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|

(Read the next three statements as a unit before checking them.)

A place for parking which is close but not adjacent to the housing.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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A place for parking immediately adjacent to entrance to apartment.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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Adjacent parking areas, fenced and gated, to protect small children.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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Privacy

Construction features such as soundproof walls, which reduce noises from the outside, other apartments and other rooms.

| | | | |
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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A place to study in the apartment.

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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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A study area provided within easy walking distance of the apartment.

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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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Some private yard space for every family, which they can use as their own.

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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A quiet place where children sleep.

| | | | |
|---|---|---|---|
| 3 | 2 | 1 | 0 |
| | | | |

Bedroom space for each child shared by only one other child near the same age.

| | | | |
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Ease in Cleaning

A floor surface in the entire apartment which is easy to clean.

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Paint furnished by the university to freshen walls periodically.

| | | | |
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Walls painted with washable paint and resistant to marking.

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Incinerator convenient to apartment.

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Doors, sills, window frames and like surfaces easy to clean and durable.

| | | | |
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Ease in Caring for Children While Doing Household Tasks

Laundry space inside the apartment where you may install your own laundry equipment.

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Community laundry facilities provided within each building.

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Community laundry facilities provided to serve several buildings.

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Outdoor and indoor play space easily seen and reached from the laundry area.

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A community work room where adults can have companionship while doing laundry, ironing, mending, sewing, etc., with adjacent play space for children.

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Kitchen conveniently located to indoor and outdoor play areas for easy supervision and care of small children.

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|---|---|---|---|
| 3 | 2 | 1 | 0 |
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Outdoor play areas for preschool children which can be readily seen and reached from indoors.

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Room arrangement and entries which avoid cross-room traffic as much as possible.

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Conveniently located dining table to seat at least six people.

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Children's Play Needs

A covered outside play area where children can spend part of each day outside regardless of the weather.

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Areas where children can dig in the ground.

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Outdoor play areas equipped for preschool children.

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Arrangements for outdoor water play in summer.

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Indoor play space where child can play actively and noisily within the building.

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At least one window low enough so the preschool child can see out when standing on the floor yet high enough so he cannot fall out.

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Picnic area and playground for family activities close to housing development.

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Storage Needs

Storage space in the dressing area for children's clothing with a low bar for hanging and drawers within his reach.

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| 3 | 2 | 1 | 0 |
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Low hooks or low rods near outside entrances for children to hang outdoor clothing.

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Shelves or cupboards within child's reach for storage of toys.

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A place to store children's outside toys.

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Additional storage space outside the apartment for children's large equipment that is not currently in use.

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Adult Companionship

Larger rooms for recreation and group gatherings located convenient to the individual apartments.

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The following are some characteristics of Social Interaction in multiple-unit student housing. Some you may regard as desirable and some undesirable. Please indicate the desirableness of these to your family.

RATING SCALE

(+2) Very Desirable

(+1) Moderately Desirable

(0) Neutral

(-1) Moderately Undesirable

(-2) Very Undesirable

Many playmates for the children.

| | | | | |
|----|----|---|----|----|
| +2 | +1 | 0 | -1 | -2 |
| | | | | |

A variety in ages of children's playmates.

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Neighbors who are living on approximately the same income and daily schedule.

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Opportunity to live close to people of different races and nationalities.

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Close proximity of neighbors.

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ROOM USE ONLY

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