

MOTHER-CHILD INTERACTION IN AN OBSERVATIONAL SETTING

by

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## INTRODUCTION

It has been demonstrated that social contact is necessary for normal human development. The interaction that occurs during this social contact has been called socialization, which includes the whole process of narrowing to the standards of a particular society the enormously wide range of behavior of which a child is capable at birth. Socialization is a learning task, but it is a unique process because the adult as teacher and the child as learner are deeply involved in interaction, not simply as teacher and student, but each as respondents and instigators.

Practically all of the socialization of the child before the age of five, in our society, falls to the parents, and the majority of this to the mother, for the mother is the caretaker. She is the one the child observes and imitates, and the one to whom he relates. This study was planned to shed more light on the socialization techniques of the mother as she interacts with her child.

Traditionally, verbal recall, interviews or questionnaires have been the methods used to gather information on child rearing. However, those methods are subject to the ability or desire of the mother to remember, and her ability to communicate accurately what occurs between her child and herself.

More recently, Merrill-Bishop (1951), Maccoby (1961),

Bell (1960), Moustakas (1956), Zunich (1961), Antonovsky (1959), and others have acted on the belief that actual observation of mother and child in interaction was the best approach to gathering information on child rearing. This removes the problem of inaccurate recall and the biases of the mother, even though it does introduce the biases of the observer. The observer's biases should be fewer than the mother's, or at least more identifiable, as he is trained to be objective. In the observation situation, the mere presence of an observer must have some affect on the interaction. The same is true if the observation takes place in a strange room where there are facilities for the observer to watch unnoticed, but most research designs have recognized this fact and have taken this phenomenon into account. Since the observation method seemed to enable the investigator to obtain a more complete view of mother-child interaction, this was the method used in this study.

The objectives for the study were to investigate the amount and kind of interaction that took place between mother and child, and whether those two factors were affected by 1) the sex of the child, 2) the sibling position of the child, 3) the age of the mother, and 4) the educational level of the mother. Since it was believed that a complete picture of the interaction of both mother and child could not be gathered by one observer, data pertaining only to the mother are reported. A later report will present data on the behavior of the child that was collected by another student.

CHAPTER I  
REVIEW OF LITERATURE

The Process of Socialization

"Socialization is the process of helping children to become functioning adult members of their society" (Watson, 1956, p. 74). This process was studied by sociologists interested in the transmission of culture, and by psychologists and psychiatrists who were interested in the effects of socialization methods on personality development.

The duty to socialize a child in our culture falls to the family, and because of the continuous interaction of the family, as it changes in membership and as its environment and opportunities change, there are a great number of variables that affect the process. Child (1954) voiced the opinion of many students in the areas of study concerned with socialization, by saying that a great deal of research must take place before a clear idea of what are the important variables that affect a child's personality and life style.

Child (1954) reported the work of Barry, who, in 1939 came to the conclusion that the role of the mother in socialization was more important than that of the father. The mother does not, however, have a free hand in molding the child into any behavior pattern she deems appropriate. As mentioned above, there are many intervening environmental

and personality variables. Also, the child is not simply "a passive pawn; he may not accept the roles assigned him; he may rebel or evade them, and thus, perform differently from expectation" (Watson, 1956, p. 87).

According to Sears (1963) a child first becomes dependent upon his mother, because she is the one who satisfies his physical and psychological needs. Dinkmeyer (1965) shared this view. A mother "teaches" a child to depend on her and then she uses this dependency to mold behavior. Stendler (1962) mentioned five important ways a mother rewards a child and thereby shapes his personality: 1) physical contact, 2) proximity of the mother, 3) paying attention, 4) verbal praise, and 4) helping the child. Other ways of aiding social development advocated by Dinkmeyer (1965) are: to avoid the rewarding of undesirable behavior, to support good social relationships, to avoid pushing a child into those relationships for which he is unready, to stimulate exploration, to provide leadership responsibilities, to avoid the projection of goals and expectations onto the child, and finally, to value and accept the child as he is.

Discipline is also an important instrument in the process of socialization (Watson, 1965). Dinkmeyer (1965) agreed, if this discipline is democratic.

The family, through the parents, serves the child and society best when the child receives love, and encouragement. The parents provide the child with a set of standards and security. The child should have an opportunity to take on responsibilities and make choices at an early stage in life.

He should also be permitted to experience the natural consequences of inappropriate choices, while the parent still provides support. The child should be permitted to profit from his mistakes. This indicates that there should be minimal interference from adults. If the child is less dependent upon adults and able to experience the consequences of his behavior, he is eventually better able to cope with the realities of living.

### Socialization Variables

There seem to be an infinite number of independent and dependent variables that affect the process of socialization. Most of these are still unknown, at least in regard to the magnitude of their effect. Only for what are now believed to be the most obvious and important variables is work being done to determine the extent and effect these may have on the socialization process.

It is generally accepted that boys behave differently than girls even in similar situations. Some of this seems to be caused by the physical difference between the sexes, but a great deal of it stems from the fact that they are expected to grow into different role patterns, and are therefore treated differently by the parents. Sears, Maccoby, and Bevin (1957) stated that, to teach sex appropriate behavior, the mother must have different expectations for boys than for girls. In their study of childrearing attitudes of parents of kindergarten age children, they found that at this age few mothers believed that boys and girls were exactly alike or should be treated alike. Among

the differences in the treatment of boys and girls they found were: girls in infancy were more warmly treated and took longer to wean; boys were allowed to be more aggressive to playmates but not to brothers and sisters; girls were treated extremely non-permissively concerning the expression of aggression toward their parents; tasks and chores tended to be sex typed; boys were expected to go further in school; boys received more physical punishment than girls, but girls received more praise for good behavior and were subjected to more withdrawal of love for bad behavior; and finally, at the kindergarten age girls were disciplined by the mother, and boys by the father.

In a study using questionnaires from 306 parents, Emmrich (1962) also found that parents acted differently toward their sons and daughters. He reported that parents exerted more power toward their same-sex children than toward their opposite-sex children.

The variable of ordinal position has been studied as important to socialization. In the investigation of the effect of the ordinal position of the child on the parents' behavior, the sex of the child was also considered. An extensive study by Krout (1939) using 648 males and 445 females as subjects looked at 26 ordinal positions and the tendency of the mothers and fathers to reject or favor these positions. Krout found that there were differences in the favoritism and discipline of parents toward their children,

and that there was more consistency between parents concerning discipline than favoritism. The older, oldest, and intermediate ordinal positions tended to be favored by the mother. The types rejected by the mother were favored by the father. There were only eight ordinal types that equally were favored by both parents, and three types tended to equally be rejected. The "filial" value of an individual to his parents was found to be in inverse proportion to the number of children of the same sex in the family. The older the child in the birth order the stronger the possibility of maternal preference. Most boys were disciplined by the father, whereas the girls were punished by the mother.

Sears (1950, Pp. 399-400) reported on a survey of 43 families done by Gerwitz in which he compared their methods of raising first and second children.

The mothers became less anxious about their own skills and less concerned about the health and well-being of their children. Pediatric advice requiring rigorous control of feeding process was more disregarded; the child was allowed more weight in determining the treatment given him... less ritual and ceremonial attention was given the child at bed time; he was taken casually and with less concern.

Through the use of the Fels Parent Behavior Rating Scales, Lasko (1954, Pp. 133-134) sought to find out how 46 pairs of sibs were treated by their parents. She found that the second child was treated less warmly and with more restriction than the first. The same difference in behavior could be seen between the second and third children but not

to the extent of the difference between the first and second child. As the first child grew older there seemed to be a systematic lessening of parent-child interaction. This did not appear to be true of the second child. Lasko stated:

Parents tend to be consistent in their methods of handling children and in their policies of child-rearing as revealed by the correlations between the treatment of the first and second children. It appears that closely spaced children are, in certain respects, more advantageously treated than are widely spaced children. However, comparisons of children displaced when they were three and those displaced when four indicated that the former suffered greater loss of warmth and attentiveness from the mother.

Child (1954) believed that there were other important variables involved in socialization that pertain to the primary socializing agent, the mother, such as her age and her maturity. Baldwin (1955) reported on a study done by himself, Kalhorn and Breese in 1945, in which they looked at the variable of parent education in respect to the democracy of the home. They stated that the democratic philosophy of childrearing was the most prevalent one in use today. It consists of self-demand schedule, lenient toilet training, giving children the reasons of policy, and self-determination where feasible. This philosophy is advocated by educators, psychologists, social workers, pediatricians, and other professionals. These authors (1945) also found that there was a clear relation between parental education and democracy. With training beyond high school, or some college education, parents were found to be more warmly democratic,



less passively-neglectful, and less actively hostile.

Sears, Maccoby, and Levin (1957) reported that the differences seen in the behavior of mothers with some college or post-high school training were similar to the differences found when comparing socioeconomic status. The more educated women used later and less severe toilet training, they allowed more dependency, gave more tasks, used more reasoning in training, required less adherence to "manners" and neatness. They were less insistent on behaving according to appropriate sex roles, permitted more aggression toward parents, were more permissive about sex behavior, did not use as much physical punishment or deprivation of privileges, and praised less when the child behaved well at the table.

Sears, Maccoby, and Levin (1957) also found some differences in the way older mothers treated their children as compared to the treatment received from younger mothers. The younger mothers appeared more irritable, they were quick to punish and more likely to express feeling of hostility toward their children. This variable had less effect than the mother's socio-economic status and her educational level.

#### The Observation Method

Generally, social science research has been conducted by means of questionnaires or interviews of one kind or another. When studying socialization, which is a continuous interaction, it is doubtful how accurately a mother can

remember some of the small details of her behavior. A mother's answers may also be biased by her needs and feelings. According to Radke-Yarrow (1963) the advantages of an observation are that it is first hand data; it enables people to look at behavior that the interview never adequately handled; and the observer can actually witness parent-child interaction.

Merrill (1946) thought the mother-child relationship was best studied as a stimulus-response situation. Since the response of the mother can also serve as a stimulus to the child, as well as those acts the mother initiates, all of the behavior over a chosen period of time must be considered. It is in the intricacies and complexities of this aspect of interpersonal relationships that the nature and effects of certain types of behavior on the part of a mother can be discovered. The preschool period is an important one because it is during this time that parent-child interaction establishes permanent motivational and personality attributes. Merrill (1946), Merrill-Bishop (1951), Moustakas, Sigel and Schalock (1956), Antonovsky (1957), Zunic (1961), and Maccoby (1961) all used the observation method with preschool children and their mothers to develop the method itself, and to see how effective a technique it is for gathering information about the socialization methods used by the mothers observed.

In those experiments, there were several problems to be solved. Moustakas, Sigel, and Schalock (1956, p. 110) began

by making the assumption that "it is possible to construct overt behavior categories that will not only have a wide applicability for various kinds of adult-child interaction but will also be of use and value to those holding different theoretical points of view."

Pease and Hawkes (1959) thought that the principal problem was defining categories that encompass all the verbal and non-verbal interaction. Other problems involved the training of observers, and discovering the appropriate statistical model to help interpret the results.

One of the early studies concerned with mother-child interaction was by Merrill (1946, p. 36). At the time, her four main concerns were whether mother-child interaction could be reliably observed, whether the mother's behavior could be categorized, whether the observed differences in interaction would be large enough to account for the differences in children, and whether the experimental atmosphere would influence the mother's behavior. In her study, the mothers of 18 boys and 12 girls were shown the observation room and the experiment was explained. The room contained an adult's chair, table, magazines and equipment frequently found in nursery schools. The mother was told to go to the nursery school and bring her child to the observation room to play games. The mother was to act as if she were at home playing with her child. The mothers and children were observed for two half-hour periods. There were two groups,

one a control group where the two observation periods were identical, and the other an experimental group where the observer intimated that the child had not realized his capabilities during the first session. This design allowed the experimenter to study "the reliability of the first session as an index of typical behavior, the effect of increased motivation to have the child perform well, and individual differences." The categories included the stimulus properties of the mother's behavior that were easily definable and recognizable. The observer reliability on observation trials was above 80 per cent agreement. The activity of the mother was recorded every five seconds by the appropriate category symbol.

The behavior of the mothers in the control group was consistent. The experimental group showed a significant increase at the second session of "directing," "interfering," "criticizing," and "structurizing-a-change-in-activity" types of behavior. As individuals there was a wide range of behavior patterns.

In a later study Merrill-Bishop (1951) used the same general format. In addition to the two observations of mother and child, the child was observed with a neutral adult for two half-hour sessions. The purpose of this study was to discover, among other things, any possible correlations existing between the behavior of the mother and that of the child, and individual differences among mothers and children.

There were 17 mothers of preschool boys and 17 mothers of preschool girls. The categories were the same as in the earlier study. A rating scale added to some categories helped identify the emotional quality of the response. The mother's behavior was consistent from one session to the next. Mothers who tended to remain out of contact were more highly specific in their control and more unwilling to accept stimulations. There were also some correlations between the mother's degree of control and the behavior of the child.

Moustakas, Sigel and Shalock (1956) mainly were interested in working out a method for observing behavior. They developed 35 categories, on the basis of their comprehensiveness, relevance and meaningfulness, and ease of identification. The categories were grouped under the following headings: "Attention;" "Stimulus;" "Orienting and Directing;" "Criticism, Discipline, Rejection;" and "Approval or Reward." The laboratory was set up for play therapy. The behaviors of child and parent were recorded separately every five seconds. A stop watch was used to time the intervals, and the behavior was recorded by category code letters in or above a box on the coding sheet depending upon whether the behavior was initiated by the mother or was a response to the child's behavior. The manner of recording the behavior was similar to that of the Merrill (1946) and Merrill-Bishop (1951) studies. There was 80 per cent reliability between

observers identifying behavior. The technique was used on a mother and child at home, in an observation room, and in an observation room with the child and a therapist. The behavior seemed to be more consistent between the two mother-child observations than between the mother and child in the observation room and the therapist and child in the observation room.

Antonovsky (1957) compared the results of observations and structured interviews. Her hypothesis was that there would be more similarity between the results of data gathered with two interview schedules than between data from observation and interviews, and more discrepancies for those mothers judged to be anxious. There were also several hypotheses concerning the relationship of the mother's and child's behavior. There were nine mothers with children between the ages of 20 and 23 months. During a 10 day period they were involved in: 1) an hour structured interview, 2) a half-hour observation session, 3) an hour of unstructured interview. The observation room was arranged in the same way as for the other studies mentioned. Low and even negative correlations were found among the three sets of data. The discrepancies were not greater for mothers who were judged to be anxious as compared to non-anxious mothers.

Maccoby (1961) observed mothers who presented an achievement task to the child, and recorded the kind and amount of the mother's involvement. The amount instead of the kind of

involvement best predicted the child's pattern of intellectual skills.

Zunich (1961) used the observation method to study the relationships of childrearing attitudes and maternal behavior. His subjects were 80 mothers and their preschool children, one half of whom were in the lower class and one half of whom were in the middle class. The observation room was similar to those in the studies of Merrill (1946) and Merrill-Bishop (1951). Zurich also administered the Parent Attitude Research Inventory to the 80 mothers. He found a significant difference in behavior of the two groups in 11 categories. The categories used by Zurich will be discussed in the chapter concerning procedure.

## CHAPTER II

## METHOD

The subjects for this study were fourteen pairs of Caucasian mothers and their preschool children from rural Riley County, Kansas. There were nine girls and five boys all between the ages of 52 and 65 months. All of the subjects lived on farms, in small communities, or other rural locations. Five mothers reported their husbands to be full time farmers, whereas one father farmed part time and held another full time job. The other fathers were employed in a nearby town.

None of the mothers was employed full time. Two reported that they were substitute teachers, one sold cosmetics from her home, and another helped her husband in his insurance business. No mothers who worked full time were contacted, because they were not at home when home visits were made by the investigators.

The names of the subjects were acquired through the Riley County Unified School District #378 and were taken from the school population survey as being members of families who would have a child eligible for kindergarten in the fall of 1968. Only one pair of subjects was not obtained from this source. This name was volunteered by a mother who was contacted by use of the school population survey.

A rural population was selected for the sample because the Department of Family and Child Development was beginning



a research project entitled "Factors Affecting Socialization of Children in Disadvantaged Rural Families in Kansas."

Therefore, the demographic information obtained from the families participating in this study, and many of the contacts made in locating the subjects would be of value to the larger study.

Since it was believed that a complete picture of the interaction of both mother and child could not be gathered by one observer, data pertaining only to mothers were collected for this study. Data on the behavior of the children that were collected by another student will be reported later.

The mothers were first contacted by letter (Appendix A), and later were visited in their homes by one of the investigators. During those visits the mothers were told that the observers were interested in seeing how children play when confronted with a new situation. Also, the mothers were informed of the length of time required for the study, how to get to the building and room where the observation would take place, and they were given a parking permit.

During the home visit, each mother was asked to state her age; the age of the child; the number and sex of the children in the family who were older, and those who were younger than the subject; the occupation of the father; the occupation of the mother; and the educational level of both the father and mother. Two open-ended questions were asked:

"what kind of mother do you think you are?" and "what goals do you have for your child?" This information sheet is in Appendix B. Finally, a date was made for the observation.

The main contact with the subjects was made in person. Even though it took a great deal of time, it was believed that the acceptance would be much better than if the entire contact was by mail. Every effort was made on the part of the observers to make participation in the project as simple and as pleasant as possible.

Before and during the time the subjects were being contacted, trial observations were conducted in the observation room with mothers and their preschool children who would not be a part of the study. There were approximately twelve sessions in which each investigator observed with a person previously trained in observation techniques. Observer reliability was calculated by dividing the number of observer agreements by the total number of agreements plus disagreements. Reliability was 67 per cent.

Those sessions provided an opportunity for checking such things as placement of equipment, maximum effectiveness of microphones, and the use of the tape recorder as a timing device.

The observation room, Plates I and II, was equipped with: child-sized tables and chairs; a cupboard with dishes; a plastic washtub and water play toys; two toy telephones; wooden and rubber puzzles; play-dough; scissors, paper, and

PLATE I  
Observation Room  
View 1



PLATE II  
Observation Room  
View 2



crayons; truck and car; small wooden blocks; easel and paints; picture books; doll clothes and bedding; adult chairs, women's magazines; and a coffee table.

The equipment for the children was chosen because it was the kind of equipment found in many nursery schools and kindergartens, and because it could provide meaningful experiences for the children between 52 and 65 months of age. The items were picked so that both boys and girls could find sex-appropriate toys. Some of the toys could be used in a relatively quiet and structured way, and some items suggested freer more exuberant activity. Stimulation of a variety of activities on the part of the child was desirable so that the resulting affect on the mother's behavior could be observed. The adult chair near the table with the women's magazines was placed there as an alternative activity for any mother who did not interact with her child.

The observation session was thirty minutes long, and was divided into one-minute intervals by a tape recording with a voice marking the passage of each 60 second interval.

The categories for recording the mother's behavior were taken directly from Zunich's study of 1961 (Appendix C). Those categories seemed likely to include the range of behavior the mother would exhibit. They were clearly defined, and were not too numerous to remember.

The behavior, both verbal and physical, was recorded on a form (Appendix D) by placing a mark in the appropriate

category and time interval each time it occurred. To be counted as an interactional response, the behavior had to be a complete verbal unit, a decisive action separated by three seconds from another action, or in the case of the categories of "Observing Attentively" and "Remaining Out of Contact" the behavior had to be of greater than three seconds duration.

When the subjects arrived for the observation session, they were met by a hostess who visited with them and tried to put them at ease, while the observers located themselves in the observation booth. As the subjects were guided into the observation room the mother was told that the observers would like to observe the mother and child at play, just as if they were at home. They were invited to enter the observation room and to make themselves comfortable, and told that the observers would come and get them at the end of the observation period. If the mother needed further clarification of her role, she was asked to act as she would at home if she had free time while her child was playing. The observation began at the time the mother and child entered the observation room.

The number of responses and percentages for all fourteen of the mothers were calculated for each category, over the full observation period and for the first and second half of the observation period. The mothers were then grouped into the following categories: mothers of girls or boys; mothers



of oldest, middle, or youngest children; older mothers, 31 to 40 years of age, or younger mothers, 21 to 30 years of age; and whether they had only a high school education or some college training. A chi-square analysis was performed to test the consistency of behavior during the first and second halves of the observation period.

The data were studied by category with two exceptions. The categories of "Being Uncooperative" and "Criticizing" were not used, as none of this behavior was exhibited by the mothers. The categories of "Interfering," "Interfering by Structurizing," and "Restricting" were seldom used to classify the mothers' behavior. Since they all required some effort on the part of the mother to halt, slow down or redirect the ongoing behavior of the child, they were grouped and analyzed as one category. The combined category is referred to as "Interfering."

Although, by definition, the category "Contacting" was not limited to a verbal contact, none of the mothers exhibited any physical contact. The discussion of this category refers only to verbal contact on the part of the mother.

Four case studies are included to describe the wide variety of behavior exhibited. They include the mother with the most interactional responses, the mother with the fewest interactional responses, and two other pairs: one because the child asked the mother not to watch her and another in which the mother dominated the situation to such an extent

that the child scarcely had a chance to initiate activity on his own.

## CHAPTER III

## RESULTS

The total responses of all mothers for the full 30 minute observation period was 2,701. The fewest number of responses by any mother was 102 and the largest number was 301. The most frequently witnessed category of behavior for all 14 mothers was "Observing Attentively" (609 responses) followed by: "Contacting" (544), "Lending Cooperation" (500), "Remaining Out of Contact" (215), "Directing" (192), "Structurizing" (168), "Giving Praise or Affection" (121), "Helping" (111), "Playing Interactively" (65), "Teaching" (64), "Interfering" (55), "Giving Permission" (45), "Reassuring" (12). Figure 1 illustrates the distribution of responses for all 14 mothers for the full observation period. The categories of "Contacting," "Lending Cooperation," and "Observing Attentively" made up 61.20 per cent of the mothers' behavior.

The average number of responses for mothers of girls compared to mothers of boys can be seen in Table 1. The mothers of girls gave permission more frequently, lent cooperation more often, observed more, and remained out of contact more frequently than mothers of boys. Mothers of boys contacted more frequently, gave more praise and affection, played interactively more often, and taught more frequently than mothers of girls.

In comparing the mothers of oldest, middle, and youngest children (Table 2), the largest difference in average number

## Figure 1

Distribution of Responses  
For all 14 Mothers for the Full Observation Period

## Category

1. Contacting
2. Directing
3. Giving Permission
4. Giving Praise or Affection
5. Helping
6. Interfering
7. Lending Cooperation
8. Observing Attentively
9. Playing Interactively
10. Reassuring
11. Remaining Out of Contact
12. Structurizing
13. Teaching

Figure 1

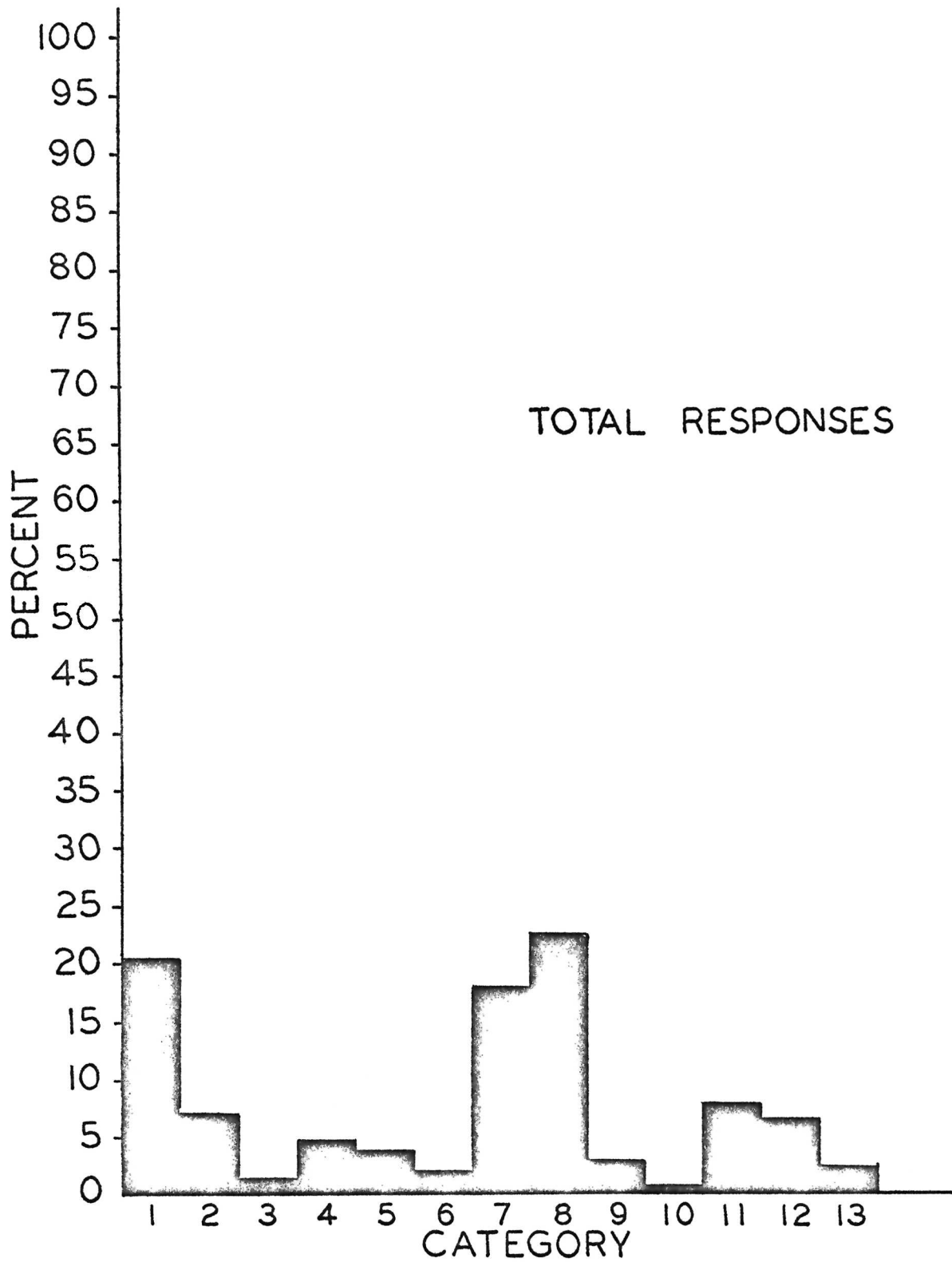


TABLE 1

Average Number of Responses for Mothers of Girls  
and Mothers of Boys

Category	Average Number of Responses	
	Mothers of Girls (N-9)	Boys (N-5)
1. Contacting	33.56	48.40
2. Directing	12.22	16.40
3. Giving Permission	35.56	2.60
4. Giving Praise and Affection	5.89	13.60
5. Helping	7.00	9.60
6. Interfering	3.11	5.40
7. Lending Cooperation	41.11	26.00
8. Observing Attentively	49.11	33.40
9. Playing Interactively	2.00	9.40
10. Reassuring	1.22	0.20
11. Remaining Out of Contact	19.00	8.80
12. Structurizing	11.78	12.40
13. Teaching	2.78	7.80
Total	192.33	194.00

TABLE 2

Average Number of Responses for Oldest, Middle  
and Youngest Children

Category	Average Number of Responses		
	Oldest (N-5)	Mothers of Middle (N-4)	Youngest (N-5)
1. Contacting	36.60	41.50	39.00
2. Directing	9.00	16.50	16.20
3. Giving Permission	3.20	3.50	3.00
4. Giving Praise or Affection	9.60	8.25	8.00
5. Helping	9.00	5.75	8.60
6. Interfering	3.60	3.50	4.60
7. Lending Cooperation	41.60	41.75	25.00
8. Observing Attentively	46.00	49.25	36.40
9. Playing Interactively	3.60	3.50	6.60
10. Reassuring	0.60	2.25	0.00
11. Remaining Out of Contact	18.40	19.25	9.20
12. Structurizing	12.60	15.40	8.60
13. Teaching	3.60	2.25	7.40
Total	197.40	212.75	172.60

of responses was between mothers of middle children and mothers of youngest children. There were five categories where differences were appreciable, and in all of these categories the mothers of middle children had larger average responses: "Lending Cooperation," "Observing Attentively," "Remaining Out of Contact," "Structurizing," and "Teaching." Between mothers of oldest children and mothers of middle children there were three categories containing large differences in average number of responses. The mothers of middle children exhibited the larger average score for the categories of "Contacting," "Directing," and "Structurizing." Between mothers of oldest and youngest children three categories contained appreciable differences in average number of responses. Mothers of oldest children always had the larger average score for "Directing," "Lending Cooperation," and "Remaining Out of Contact." The mothers of middle children had the highest average number of responses, followed by the mothers of oldest children, and then mothers of youngest children.

Older mothers did not interact with their children as frequently as younger mothers (Table 3). There were four categories where this difference was appreciable: "Contacting," "Lending Cooperation," "Observing Attentively," and "Structurizing." The older mothers remained out of contact more than the younger mothers.

There was little difference in the average number of

TABLE 3

## Average Number of Responses for Older and Younger Mothers

Category	Average Number of Responses	
	Older (N-7)	Mothers Younger (N-7)
1. Contacting	35.71	42.00
2. Directing	13.86	13.57
3. Giving Permission	2.71	3.71
4. Giving Praise and Affection	8.71	8.57
5. Helping	7.57	8.29
6. Interfering	2.71	5.14
7. Lending Cooperation	31.43	40.00
8. Observing Attentively	37.00	50.00
9. Playing Interactively	3.29	6.00
10. Reassuring	0.71	1.00
11. Remaining Out of Contact	22.29	8.23
12. Structurizing	9.14	14.86
13. Teaching	6.29	2.86
Total	181.43	204.43

TABLE 4

## Average Number of Responses for Mothers with a High School Education or Some College Education

Category	Average Number of Responses	
	Mothers with High School Education (N-11)	Mothers with College Education (N-3)
1. Contacting	42.27	26.33
2. Directing	13.36	15.00
3. Giving Permission	2.64	5.33
4. Giving Praise and Affection	9.73	4.67
5. Helping	7.09	11.00
6. Interfering	4.36	2.33
7. Lending Cooperation	33.09	45.33
8. Observing Attentively	43.18	44.67
9. Playing Interactively	5.82	0.33
10. Reassuring	0.90	0.67
11. Remaining Out of Contact	12.55	25.67
12. Structurizing	12.54	10.33
13. Teaching	4.91	3.33
Total	192.36	195.00



responses between mothers with a high school education and the mothers with college training. The mothers with a high school education used more "Contacting," "Giving Praise and Affection," and "Playing Interactively," while mothers with some college education lent cooperation and remained out of contact more frequently. The data are shown in Table 4.

The percentage each category contributed to the total number of responses in the observation periods of each group is in Appendix E. The three largest categories for all four groups were "Contacting," "Lending Cooperation," and "Observing Attentively." Together these three categories made up from 55.57 per cent of the behavior of the mothers of boys to 64.57 per cent of the behavior for younger mothers.

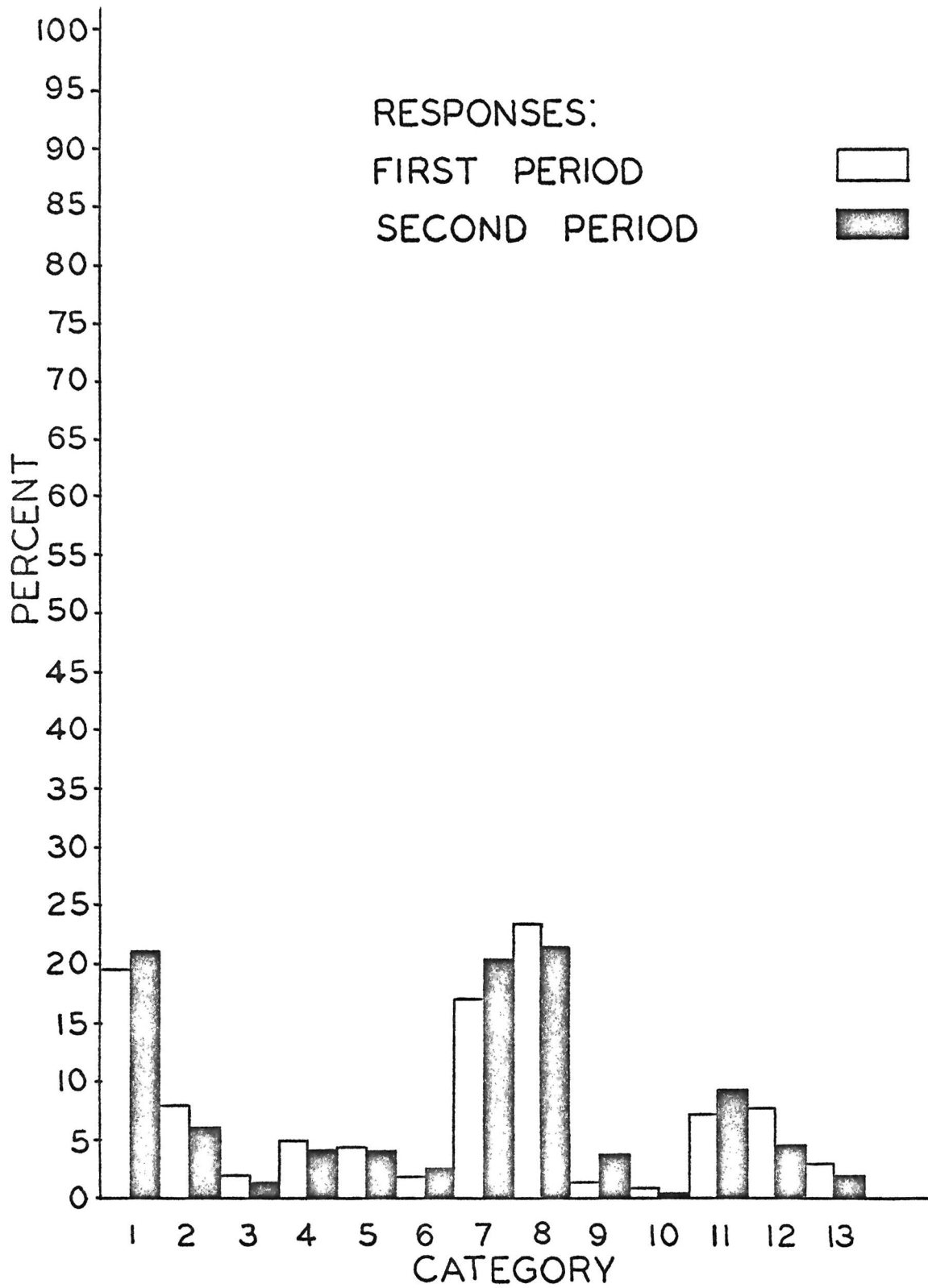
The total number of interactions on the part of the mothers decreased from the first half (1,454 responses) of the observation to the last (1,247 responses). The consistency of all the mothers' behavior can be seen in Figure 2. In comparing the first half of the observation with the last, all of the chi-square values were significant at the 0.01 level. (Those values are in Appendix E.) The behavior of the mothers of middle children seemed most consistent, and the behavior of the mothers of youngest children was least consistent. The categories where the largest changes took place were: "Directing" (116 responses-76 responses), "Giving Permission" (29-16), "Giving Praise or Affection" (72-49), "Lending Cooperation" (341-268), and "Structurizing"

## Figure 2

Distribution of Responses for all 14 Mothers  
for the First and Second Halves of the Observation Period

## Category

1. Contacting
2. Direction
3. Giving Permission
4. Giving Praise or Affection
5. Helping
6. Interfering
7. Lending Cooperation
8. Observing Attentively
9. Playing Interactively
10. Reassuring
11. Remaining Out of Contact
12. Structurizing
13. Teaching



(113-55). "Observing Attentively" contained more responses the second half than the first (20-45).

The decrease in frequency of interaction was spread over all the categories as there were no large decreases in any one category. Moreover, there were no large changes in the distribution of behavior among the categories. Tables giving the exact number of responses and percentages contributed by each category for each group during the first and second halves of the observation period are presented in Appendix E.

#### Case Study 1

The fewest number of interactions, only 102, during the half-hour observation session took place between a mother-son pair. The child was 60 months old and had four older sisters. His mother was 30 years old, a high school graduate and helped in the family insurance business. She also drove the school bus daily. The father had three years of college.

For most mothers the open-ended questions were difficult to answer and many times their answers were unfirm and vague. When this mother was asked the question about what kind of mother she thought she was, she expressed her desire to "have the children mind." Her goals for her son were that he "attend college and have a chosen profession."

During the home visit the mother seemed at ease, and

the child was quiet and sat next to her. When they arrived at the observation room both mother and child appeared ill at ease, perhaps anxious about what was expected of them. The child was holding his mother's hand, and shadowing her movements closely, and was not talkative.

After she entered the observation room the mother still appeared to be ill at ease, but through the duration of the observation it did not appear that the cause of her uneasiness was from a lack of knowing what her role should be. Her son first dumped out a puzzle, but acted as if he were not going to put it together. She gave him some encouragement, and they spent about five minutes putting it back together. The mother used contacting, restricting, and praising behavior during this time. Then the child began coloring; next he painted. The mother observed this with a little directing and structurizing on her part. For about twelve minutes the mother observed the child with a minimum of interaction. With eight minutes left in the observation period, he did not seem interested in doing anything. His attitude appeared somewhat negative. His mother began reading a story book to him, which he said he didn't want to hear. About a third of the way through the book the child seemed to become interested. After that book had been completed the mother asked if he would like to read another book, and he said no. The mother began reading anyway as she didn't seem to have any other idea of how she could

capture his interest. Again, the child became interested in the book about a third of the way through it. Before this book was completed the observation session was over.

After each session it was the custom of the observers to take in a cup of fruit juice and a cookie, and for the author to remain with the child while he finished playing and ate his snack. During this time the other observer interviewed the mother in another room, seeking additional information to be used in another study.

This child did not want the cookie or juice and would not let his mother go. The mother did almost nothing to encourage him to part with her. Finally, the interview was held with the child present and he answered quite a few of the questions meant for the mother to answer about him.

The impression the author received was that the experience was somewhat overwhelming to the child. The mother seemed ill at ease, perhaps even threatened by being observed on the university campus. She seemed not to have the rapport with her son or the technique necessary to put her son at ease so that he could make some use of the environment.

## Case Study 2

The pair that had the most interactions, 301 times during the half-hour observation, was a mother-daughter combination. The girl was 62 months old. She had an older brother and sister and a younger brother. Her mother was

a homemaker, 27 years of age, with a high school education. The father worked for the telephone company and was a high school graduate.

In answer to the question, "what kind of a mother do you think you are?" the mother answered that she "tried her best to be a good mother." Her goals for the children were "college if they wanted it," or "a trade school," as she felt perhaps for one or more of the children college might not be appropriate.

During the home visit the mother was out-going and at ease. She did not appear embarrassed or upset at the vigorous activity and small arguments the children were having while trying to get themselves soft drinks. The home atmosphere appeared to be a lively one.

When the mother came to the university, she appeared at ease before the observation. At the beginning of the observation she oriented herself quickly. During the first two minutes she contacted, directed, praised, helped, cooperated with, observed, reassured and structured for her child. Later in the session she played with her daughter by drying dishes, talking on the phone and playing with the play-dough. She seemed to be actively helping her daughter to participate in the experience.

### Case Study 3

This case was another mother-daughter pair. The daughter

was 56 months old and had two younger sisters whom the mother brought to the campus with her. Both of the younger girls were cared for by a student who had been sought for this service. The mother was 21 years old and a high school graduate who sold cosmetics from her home. The father was a district manager for a chain store and had completed three years of college.

The mother seemed at ease when interviewed in her home and her daughter was not in the least shy of the visitor and asked several questions. The mother felt she was getting more strict as her girls grew older, but that she was not "too strict." She was concerned about the condition of the world for which she was preparing her children. Her goal for the girls was that they "do well in school."

The mother and child seemed at ease when they arrived for the observation, and the mother didn't appear to be concerned about the younger children. Two minutes after the observation began the mother started to read a magazine. She gave verbal cooperation to the child, repeatedly lifted her eyes to observe her activity and contacted her verbally seven times during the first fifteen minutes of the observation. After ten minutes of the observation, the child asked the mother not to watch her. After this the mother's contacting, cooperative and observing behavior dropped, and for five of the last ten minutes the eye contact of the mother was so short that it could not be counted as observing



behavior. During this time the child was working a puzzle.

In the interview following the observation the mother stated that her daughter preferred to play without being watched, so she tried not to watch her, especially after the child asked her not to.

During the observation the child kept wanting to know if her sister would be able to play in the room, so when the mother was interviewed both of the younger children were allowed to play. They were interested in the various toys, and it took the mother about five minutes to persuade them to leave.

#### Case Study 4

This case study concerns a second mother-son pair. The boy was 61 months old, with three older brothers. During the home visit the mother said the child had a speech defect. His mother was 40 years of age and a homemaker with a high school education. The father also had a high school education and was a farmer.

The mother, in answer to the question about how she viewed herself as a mother, said that she "tried to be a good one." Her goals for her child were for him to "be honest, and God-fearing," to "earn a good living," and to "be happily married."

The mother appeared to be at ease upon entering the observation room. She stated to her son that at home they

didn't get much time to play together so this would be a good time to do so. In the first two minutes, she contacted the child nine times, gave six directions, and interfered by structurizing twice. During the course of the thirty minute period, the mother made 85 verbal contacts and gave 41 directions. She was lavish in her praise of the child's ability to solve a puzzle and gave much more praise than any other mother. She helped to wash the doll and while doing so, she demonstrated the proper procedure to her son, talking all the while. She played interactively with her son for five minutes using the blocks, constantly giving directions in the form of suggestions. She also played with the play-dough and during the last two minutes read a story to the child.

The mother seemed to talk almost constantly; therefore, it was difficult to tell what kind of speech defect the child had. She seemed to dominate the situation and was so quick with a new play idea when one was completed that the child did not seem to have a chance to make his own selection.

## CHAPTER IV

### DISCUSSION

The observation room resembled a nursery or kindergarten with regard to the type of equipment available. The mother was told only to act as if she were at home, so that the observer might see what she would do in the unstructured situation.

The categories most frequently used to classify the behavior of all the mothers were "Contacting," "Lending Cooperation," and "Observing Attentively." "Directing" and "Remaining Out of Contact" were the only other categories that for some groups contributed more than 10 per cent of the total behavior.

Perhaps the explanation of the purpose of the study given during the home visit put emphasis on the child's play, and the mothers hesitated to involve themselves too greatly. They exhibited a relatively small amount of interactive play, and for some mothers a great deal of "Remaining Out of Contact" was recorded. In explaining the study to the mothers, the mother's role was not emphasized, because it was believed that she might refuse to be observed, or be very unnatural during the observation. One mother mentioned, after her observation session, that she tried not to do too much with or for her child, because she thought the main interest was the child's behavior. Three other mothers' behavior seemed inhibited, or at least unrelaxed. It is not known whether this

was caused by the emphasis placed on observing the child, or whether the mothers were overly self-conscious about being observed. On the other hand, there was the mother, Case Study 4, who took full advantage of the situation to play with her son because there was not much opportunity for such an occurrence at home.

Another type of behavior that seemed to be affected by the statement of purpose was "Giving Permission." The children came knowing that they could play with all of the equipment in the room, therefore, they seldom asked for permission.

Frequently the mothers were "Cooperative" and never "Uncooperative" or "Critical." There was little "Interfering." Perhaps the fact that the mother was unoccupied allowed her to be available for cooperative behavior more than if she had been given something specific to do. From this standpoint variations on the amount and kind of structure given the observation session merit further study.

"Contacting" was used by the mothers to get their children interested in playing, and to keep them interested. Some of the contacts were made, however, to stimulate thinking on the part of the child. The fourteen mothers more frequently used "Contacting" and "Structurizing" than "Teaching" to promote intellectual growth.

The categories of "Directing" and "Structurizing" did not make up a large proportion of the behavior in the kind of observation used. A study of those types of behavior on the

part of the mother in an observation situation in which she would be asked to teach or "help" her child with some task might have different results. The categories of "Helping" and "Lending Cooperation" could also be included in such a study.

"Helping" was seen most often in connection with putting on and taking off the painting apron, in drying and clothing the doll, and in working puzzles.

It was noted that the category of "Praise and Affection" was not used frequently, although this is considered to be one of the best methods of shaping behavior. It is possible that positive feelings were transmitted from mother to child that were unseen by the observer, as in the case of not stopping ongoing behavior. Some of the activities available in the observation room may not have been permitted at home, but were not objected to in this situation. The child may have interpreted this non-intervention as mild approval. This is a phenomenon, that might play an important role in socialization, but would be difficult to measure.

"Reassuring" was the least used category. Only one child appeared apprehensive, Case Study 1. Most children came to the observation looking forward to the experience, and did not want to leave.

Primarily, the categories used to record the behavior were selected because they included the likely range of behavior. The recording of the behavior was continuous, and

the 30 minute session was divided into 60 second intervals for ease of recording. The problem with continuous recording is especially evident in the categories of "Observing Attentively" and "Remaining Out of Contact." Those two categories were used to count the frequency of a response that persisted for quite a length of time. However, they merited the recording of only one interactional response. Because there was such a large amount of "Observing Attentively" and because it kept being broken into by other categories of behavior, and was therefore, re-recorded after each change in behavior, its actual amount probably was recorded. On the other hand, "Remaining Out of Contact" behavior did not suffer so many interruptions; therefore, a mother could have been out of contact for a full five minutes and only have received one mark recording that fact in each of those minutes. This would seem to skew the results to some degree, because most of the other categories included behavior taking up only a few seconds of time. One solution to the problem would be to record behavior occurring in a five-second interval as was done by Merrill (1946), Merrill-Bishop (1951), and Moustakas, (1965).

The problem of finding the appropriate statistical procedure to analyze the results was complicated by the method of recording behavior. Each different type of behavior was recorded each time it occurred, but in the categories where an act continued for longer than 60 seconds it was re-recorded

in the new time period even though a new act was not initiated. In the Merrill (1946) and Merrill-Bishop (1951) studies where the five second interval was used, the frequency of behavior was recorded and a t-test was used to analyze the data by categories. In this study chi-square was selected because it is appropriate for a small subject population. It required, however, that the assumption be made that one response of the mother was not dependent upon another response. This assumption was made, because for the purpose of this study, the mother's responses were dependent on the child's behavior. Had the mother been given a particular task to do herself, or help her child with, this assumption would have been less valid.

The data may indicate that how the mother felt about the experience, in terms of anxiety, and her ability to "cope" with it had more affect on the interactional situation than any of the variables studied. Those mothers who seemed especially uneasy had only 103, 123, and 146 interactions during the observation and had far fewer contacts than most of the other mothers. By comparison, the two mothers with the most interactional responses, 286 and 301, seemed to be completely at ease and unthreatened by the situation and used "Contacting" quite freely.

Antonovsky (1957) found that anxiety, as she assessed it, did not cause the differences in results among the structured and unstructured interviews and the observation to be

any greater for anxious mothers than for non-anxious mothers. This does not mean, however, that anxiety played no role in the results. She does not report whether, as a whole, the results differed between the anxious and non-anxious groups.

The data gathered by asking the open-ended questions in the questionnaire used at the time of the home visit offered little information. The question concerning the mother's opinion of herself as a mother was especially unfruitful, because answers were undefined. For example, most mothers said that they tried their best, or that they tried to be a good mother. Perhaps more useful information would have been obtained if the mothers were asked for a definition of a good mother, or for several traits of a good mother.



## CHAPTER V

## SUMMARY

Fourteen mothers and their preschool children were observed through a one-way vision mirror in an observation room equipped with small tables and chairs, a cupboard and dishes, tub and water play toys, toy telephones, puzzles, play-dough, scissors, paper, crayons, a truck, a car, blocks, an easel and paints, children's books, and a doll with clothes and bedding. Some women's magazines were provided for the mother at one end of the room away from the toys. The observation session lasted for 30 minutes. The interactions of each mother with her child were classified according to 17 categories, and were recorded on a coding sheet. The mother was told to act as if she were at home.

The effect of the variables of the sex of the child, the ordinal position of the child, age of the mother, and the educational level, the consistency of behavior from the first to the last half of the observation session were investigated. The average number of responses in each category for each group and the chi-square test were used to interpret the data. Four case studies also were presented.

First, mothers were contacted by letter, then visited in their homes. The home visit to invite the mothers to participate proved successful, and helped "set the stage" for the visit to the university observation room. Mothers were told that the observer wished to observe the child in a new

play situation. Mothers were not told that their behavior would be recorded.

The statement of purpose seemed to have an effect on the behavior of a few of the mothers. Some seemed to limit their behavior because they thought that only the child's behavior was of interest. For a majority of mothers, however, the approach seemed to be as adequate as any other, for the observer wished to place as few limits as possible on the mother's behavior.

The equipment used in the observation room seemed adequate as it evoked a variety of responses from the children and, therefore, provided a source of interaction on the part of the mother and child.

All comparisons between groups revealed differences in the behavior of the mothers in those groups. Mothers of girls more frequently gave permission, lent cooperation, observed, and remained out of contact more frequently than mothers of boys. Mothers of boys more frequently contacted, gave praise and affection, played interactively, and taught than mothers of girls. In comparing the mothers of oldest, middle, and youngest children with each other, the largest difference in average number of responses was between mothers of middle children and mothers of youngest children. The mothers of middle children had the highest average number of interactions followed by the mothers of oldest children, and then mothers of youngest children. Older mothers did not

interact with their children as frequently as younger mothers. There was little difference in the average number of responses between mothers with a high school education and the mothers with college training. The difference between the first and second halves of the observation period was highly significant.

In an unstructured observation session, the mothers used more "Contacting," "Lending Cooperation," and "Observing Attentively" than any other type of behavior. Those three categories made up 61 per cent of all mothers' behavior. The case studies indicated the ability of the mother to put herself at ease and to cope with the situation, and seemed to have more effect on the behavioral outcome than did any of the variables suggested.

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APPENDIX A

February 28, 1968

Dear

As a nursery school teacher, I am interested in observing how young children work and play. For my Master's degree, I am planning some observations of children in a nursery setting in our observation room in Justin Hall, the Home Economics Building on campus.

I would like to talk to you about the possibility of having you and your child be a part of this study. Your name was given to me by Mr. Vincent Alstatt, Superintendent of Schools in Riley. I will be in your area one afternoon during the week of March \_\_, and will stop by your home to talk to you.

Sincerely,

Head, Department of  
Family and Child Development

Major Advisor

APPENDIX B



## INFORMATION SHEET

Parents Name \_\_\_\_\_ Phone Number \_\_\_\_\_

Childs Name \_\_\_\_\_

Age of Child \_\_\_\_\_ years \_\_\_\_\_ months

Sex of Child \_\_\_\_\_

Number of brothers older \_\_\_\_\_ sisters older \_\_\_\_\_  
 younger \_\_\_\_\_ younger \_\_\_\_\_

Occupation of father \_\_\_\_\_

Occupation of mother \_\_\_\_\_

Education level of father \_\_\_\_\_

Education level of mother \_\_\_\_\_

Age of Mother \_\_\_\_\_

What kind of mother do you think you are?

What goals do you have for your child?

Need transportation \_\_\_\_\_yes \_\_\_\_\_no

Time when you can come.

APPENDIX C

## ZUNICH'S (1961) 17 CATEGORIES

- BEING UNCOOPERATIVE-- Mother ignores the child's stimulation.  
Ex: Mother continues to read magazine when child addresses her.
- CONTACTING-- Mother is in contact with the child either verbally or physically. "Physically" means sitting or being near the child as he plays, even though she says nothing. "Verbally" means purely social conversation with the child. Ex: "This is a nice doll-house. We'll see if daddy can build one for you like it."
- CRITICIZING-- Mother criticizes, blames, or punishes the child. Ex: "Now pay attention to what you are doing-- you're pouring that water all over the table."
- DIRECTING-- Mother specifically states the course of action which she wants the child to follow. Ex: "Put the doll over there on the table." "I want you to close the door now, Johnny, not later."
- GIVING PERMISSION-- Mother consents to child's proposed activity. Ex: "Yes, you may use the towel."
- GIVING PRAISE OR AFFECTION-- Mother praises or gives encouragement to the child. This category also includes expressions of affection, such as petting or hugging the child. Ex: "That's a very fine boat you've made."
- HELPING-- Mother gives physical help to the child. Ex: Mother pounds a nail for the child or replaces the mast and the sail belonging to the sailboat.
- INTERFERING-- Mother interferes with an activity on the child's part with the intent of stopping it completely. Ex: "Hey there, my boy--no more of that splashing." "No, Johnny, you are not to drink the water from those cups."
- INTERFERING BY STRUCTURIZING-- Mother indicates the undesirability of a certain action and/or the consequences of the act if carried out. Ex: "You know other boys and girls will want to play with those toys and if you mash them together like that they will be spoiled."
- LENDING COOPERATION-- Mother responds to child's comments, suggestions, or requests with apparent interest and willingness. Ex: "I would love to play house with you."
- OBSERVING ATTENTIVELY-- Mother noticeably directs her attention to the child as the child plays with the stove.

PLAYING INTERACTIVELY-- Mother is playing with child within the framework of the child's own conception of play; she plays as though she were another child: Ex: "I'll fix the boat."

REASSURING-- Comfort or encouragement is offered by the mother. Ex: "Don't feel too bad. Most children find it difficult to work that puzzle the first time."

REMAINING OUT OF CONTACT-- Mother is sitting apart from the child, and is either reading magazines or looking away from the child. Ex: Looking out of the window.

RESTRICTING-- Mother modifies child's behavior by reducing intensity, speed, manner of executing, etc., but does not stop activity completely. Ex: "Don't splash the water so high."

STRUCTURIZING-- Mother facilitates activity on the part of the child by method which stimulate independent thinking and relegates the responsibility of decision to the child. Ex: "Do you see something in this room out of which you could make a boat?"

TEACHING-- Mother gives information to the child for the purpose of increasing his knowledge. Ex: "This is a duck and that is a swan--swans have longer and thinner necks than do ducks."

APPENDIX D



APPENDIX E

## FULL OBSERVATION PERIOD

ALL MOTHERS  
(N=14)

Categories	Total Responses	Per Cent
1. Contacting	544	20.14
2. Directing	192	7.11
3. Giving Permission	45	1.67
4. Giving Praise or Affection	121	4.48
5. Helping	111	4.11
6. Interfering	55	2.04
7. Lend Cooperation	500	18.51
8. Observe Attentively	609	22.55
9. Playing Interactively	65	2.41
10. Reassuring	12	0.44
11. Remaining Out of Contact	215	7.96
12. Structurizing	168	6.22
13. Teaching	<u>64</u>	<u>2.37</u>
Total	2,701	100.00

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## FULL OBSERVATION PERIOD

MOTHERS OF GIRLS  
(N=9)MOTHERS OF BOYS  
(N=5)

Categories	Responses	Per Cent	Responses	Per Cent
1.	302	17.45	242	24.95
2.	110	6.35	82	8.45
3.	32	1.85	13	1.34
4.	53	3.06	68	7.01
5.	63	3.64	48	4.95
6.	28	1.62	27	2.78
7.	370	21.37	130	13.40
8.	442	25.53	167	17.22
9.	18	1.04	47	4.84
10.	11	0.64	1	0.10
11.	171	9.88	44	4.54
12.	106	6.12	62	6.39
13.	25	1.44	39	4.02
Total	<u>1,731</u>		<u>970</u>	

MOTHERS OF OLDEST  
CHILDREN  
(N=5)MOTHERS OF MIDDLE  
CHILDREN  
(N=4)MOTHERS OF YOUNGEST  
CHILDREN  
(N=5)

Categories	Responses	Per Cent	Responses	Per Cent	Responses	Per Cent
1.	183	18.54	166	19.51	195	22.60
2.	45	4.54	66	7.76	81	9.38
3.	16	1.62	14	1.64	15	1.74
4.	48	4.86	33	3.88	40	4.63
5.	45	4.56	23	2.70	43	4.98
6.	18	1.82	14	1.64	23	2.66
7.	208	21.30	167	19.62	125	14.48
8.	230	23.30	197	23.15	182	21.09
9.	18	1.82	14	1.64	33	3.82
10.	3	0.30	9	1.06	0	0.00
11.	92	9.32	77	9.05	46	5.33
12.	63	6.38	62	7.28	43	4.98
13.	18	1.82	9	1.06	37	4.29
Total	<u>987</u>		<u>851</u>		<u>863</u>	

## FULL OBSERVATION PERIOD

OLDER MOTHERS  
(N=7)YOUNGER MOTHERS  
(N=7)

Categories	Responses	Per Cent	Responses	Per Cent
1.	250	19.68	294	21.54
2.	97	7.64	95	6.64
3.	19	1.50	26	1.82
4.	61	4.80	60	4.19
5.	53	4.17	58	4.05
6.	19	1.50	36	2.52
7.	220	17.32	280	19.57
8.	259	20.39	350	24.46
9.	23	1.81	42	2.94
10.	5	0.39	7	0.49
11.	156	12.28	59	4.12
12.	64	5.04	104	7.27
13.	44	3.46	20	1.40
Total	<u>1,270</u>		<u>1,431</u>	

MOTHERS WITH SOME  
HIGH SCHOOL EDUCATION  
(N=11)MOTHERS WITH SOME  
COLLEGE EDUCATION  
(N=3)

Categories	Responses	Per Cent	Responses	Per Cent
1.	456	21.98	79	13.50
2.	147	6.95	45	7.69
3.	29	1.37	16	2.74
4.	107	5.06	14	2.39
5.	78	3.69	33	5.64
6.	48	2.27	7	1.20
7.	364	17.20	136	23.25
8.	475	22.45	134	22.90
9.	64	3.02	1	0.17
10.	10	0.47	2	0.34
11.	138	6.52	77	13.61
12.	137	6.47	31	5.30
13.	54	2.55	10	1.71
Total	<u>2,116</u>		<u>585</u>	

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ALL MOTHERS  
(N=14)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	281	19.32	263	21.09
2.	116	7.98	76	6.09
3.	29	1.99	16	1.28
4.	72	4.95	49	3.93
5.	63	4.33	48	3.85
6.	24	1.65	31	2.48
7.	245	16.85	255	20.45
8.	341	23.45	268	21.49
9.	20	1.38	45	3.61
10.	9	0.62	3	0.24
11.	102	7.02	113	9.06
12.	113	7.77	55	4.41
13.	39	2.68	25	2.00
Total	<u>1,454</u>		<u>1,247</u>	

Chi-square value 49.61650\*\*

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\*\*Significant at the 0.01 level

MOTHERS OF GIRLS  
(N=9)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	151	16.27	151	18.80
2.	73	7.87	37	4.61
3.	23	2.48	9	1.12
4.	26	2.80	27	3.36
5.	30	3.23	33	4.11
6.	11	1.18	17	2.12
7.	184	19.83	186	23.16
8.	245	26.40	197	24.53
9.	6	0.65	12	1.49
10.	8	0.85	3	0.37
11.	83	8.94	88	10.96
12.	75	8.08	31	3.86
13.	13	1.40	12	1.49
Total	<u>928</u>		<u>803</u>	

Chi-square value 38.47487\*\*

MOTHERS OF BOYS  
(N=5)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	130	24.71	112	25.22
2.	43	8.17	39	8.78
3.	6	1.14	7	1.58
4.	46	8.74	22	4.95
5.	33	6.27	15	3.38
6.	13	2.47	14	3.15
7.	61	11.60	69	15.54
8.	96	18.25	71	15.99
9.	14	2.66	33	7.43
10.	1	0.19	0	0.00
11.	19	3.61	25	5.63
12.	38	7.22	24	5.40
13.	26	4.94	13	2.93
Total	<u>526</u>		<u>444</u>	

Chi-Square value 31.38935\*\*

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\*\*Significant at the 0.01 level

MOTHERS OF OLDEST CHILDREN  
(N=5)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	99	18.64	84	23.59
2.	32	6.03	13	2.85
3.	11	2.07	5	1.10
4.	24	4.52	24	5.26
5.	22	4.14	23	5.04
6.	3	0.56	15	3.29
7.	110	21.72	98	21.49
8.	134	25.24	96	21.05
9.	1	0.19	17	3.73
10.	1	0.19	2	0.44
11.	41	7.72	51	11.18
12.	43	8.10	20	4.38
13.	10	1.88	8	1.75
Total	<u>531</u>		<u>456</u>	

Chi-square value -45.31867\*\*

MOTHERS OF MIDDLE CHILDREN  
(N=4)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	74	16.05	92	23.59
2.	45	9.76	21	5.38
3.	11	2.39	3	0.77
4.	20	4.34	13	3.33
5.	12	2.60	11	2.82
6.	7	1.52	7	1.79
7.	84	18.22	83	21.28
8.	109	23.64	88	22.56
9.	6	1.30	8	2.05
10.	8	1.74	1	0.26
11.	39	8.46	38	9.74
12.	43	9.33	19	4.87
13.	3	0.65	6	1.54
Total	<u>461</u>		<u>390</u>	

Chi-square value 29.33746\*\*

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\*\*Significant at the 0.01 level

MOTHERS OF YOUNGEST CHILDREN  
(N=5)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	108	23.38	87	21.70
2.	39	8.44	42	10.47
3.	7	1.52	8	2.00
4.	28	6.06	12	2.99
5.	29	6.28	14	3.49
6.	14	3.03	9	2.24
7.	51	11.04	74	18.45
8.	98	21.21	84	20.95
9.	13	2.81	0	0.00
10.	0	0.00	24	5.98
11.	22	4.76	16	3.99
12.	27	5.84	11	2.74
13.	26	5.63	20	5.00
Total	<u>462</u>		<u>401</u>	

Chi-square value 61.93229\*\*

OLDER MOTHERS  
(N=7)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	127	18.57	123	21.00
2.	58	8.48	39	6.66
3.	12	1.75	7	1.19
4.	35	5.12	26	4.44
5.	28	4.09	25	4.27
6.	11	1.61	8	1.36
7.	112	16.37	108	18.43
8.	145	21.20	114	19.45
9.	2	0.29	21	3.58
10.	5	0.73	0	0.00
11.	79	11.55	77	13.14
12.	43	6.29	21	3.58
13.	27	3.95	17	2.90
Total	<u>684</u>		<u>586</u>	

Chi-square value 34.05304\*\*

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\*\*Significant at the 0.01 level

YOUNGER MOTHERS  
(N=7)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	154	20.00	140	21.18
2.	58	7.53	37	5.60
3.	17	2.21	9	1.36
4.	37	4.80	23	3.48
5.	35	4.54	23	3.48
6.	13	1.69	23	3.48
7.	133	17.27	147	22.24
8.	196	25.45	154	23.30
9.	18	2.34	24	3.63
10.	4	0.54	3	0.45
11.	23	2.99	36	5.45
12.	70	9.09	34	5.14
13.	12	1.56	8	1.21
Total	<u>770</u>		<u>661</u>	

Chi-square value 31.04097\*\*

MOTHERS WITH SOME HIGH SCHOOL EDUCATION  
(N=11)

FIRST FIFTEEN MINUTE PERIOD			SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	244	21.48	221	22.55
2.	85	7.48	62	6.33
3.	16	1.41	13	1.33
4.	69	6.07	38	3.88
5.	53	4.66	25	2.55
6.	23	2.02	25	2.55
7.	171	15.05	193	19.69
8.	263	23.15	212	21.63
9.	20	1.76	44	4.49
10.	7	0.62	3	0.31
11.	63	5.54	75	7.65
12.	89	7.83	48	4.90
13.	33	2.90	21	2.14
Total	<u>1,136</u>		<u>980</u>	

Chi-square value 46.29892\*\*

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\*\*Significant at the 0.01 level

MOTHERS WITH SOME COLLEGE EDUCATION  
(N=3)

	FIRST FIFTEEN MINUTE PERIOD		SECOND FIFTEEN MINUTE PERIOD	
Categories	Responses	Per Cent	Responses	Per Cent
1.	37	11.64	42	15.73
2.	31	9.75	14	5.24
3.	13	4.09	3	1.12
4.	3	0.94	11	4.12
5.	10	3.94	23	8.61
6.	1	0.31	6	2.25
7.	74	23.27	62	23.22
8.	78	24.53	56	20.97
9.	0	0.00	1	0.37
10.	2	0.63	0	0.00
11.	39	12.26	38	14.23
12.	24	7.55	7	2.62
13.	6	1.89	4	1.50
Total	<u>318</u>		<u>267</u>	

Chi-square value 39.51324\*\*

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\*\*Significant at the 0.01 level



MOTHER-CHILD INTERACTION IN AN OBSERVATIONAL SETTING

by

JANICE ANN COLLINS BAILEY  
B.A., The Colorado College, 1963

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AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Family and Child Development

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1969

This study obtained information that will aid in the development of the observation method as a research technique for the study of socialization as it occurs during a period of mother-child interaction. The effect of the variables of the child's sex and ordinal position, the mother's age and education also was measured. The first and second halves of the observation period were compared to test the consistency of the mother's behavior.

Fourteen mothers of preschool children were notified by mail of the study, and were subsequently visited in their homes so that the purpose of the study could be explained. At this time the mothers were told only that their child's behavior would be the object of the study. A questionnaire was administered so that the necessary information concerning the variables could be obtained.

The mother-child pairs were observed for 30 minutes in an observation room on the Kansas State University campus equipped with a one-way mirror, toys that are used frequently in nursery schools or kindergartens, and womens' magazines, which were placed away from the toys. The session was unstructured with the mother being told only to act as if she were at home.

Behavior was recorded on a coding sheet using the 17 behavioral categories developed by Zunich (1961). The data were interpreted from the average number of responses by category for each group of mothers, and the chi-square test

of significance, also, four case studies were presented.

All of the comparisons between groups revealed differences in the behavior of the mothers in those groups. The most frequently used categories of behavior for mothers of girls and mothers of boys were not the same. In comparing the mothers of oldest, middle or youngest children, the largest difference in average number of responses was between mothers of middle or youngest children. Older mothers did not interact with their children as frequently as younger mothers. There was little difference in the average number of responses between mothers with a high school education and the mothers with college training. The difference between the first half of the observation period and the last was highly significant.

In an unstructured observation session mothers tended to use "Contacting," "Lending Cooperation," and "Observing Attentively" 61 per cent of the time. The variable of the mother's anxiety seemed to have an effect on her behavior to a greater extent than any of the variables studied. The behavior of the mothers who appeared anxious seemed to be inhibited, whereas those mothers who appeared at ease exhibited more interactional behavior.