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Children's Role-Taking Ability as a Function of Birth Order, Age, Sex, and Mothers' Parenting Style

Richard J. Delaney
Loyola University Chicago

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CHILDREN'S ROLE-TAKING ABILITY AS A FUNCTION
OF BIRTH ORDER, AGE, SEX, AND
MOTHERS' PARENTING STYLE

by
Richard James Delaney

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements of the Degree of
Doctor of Philosophy

January
1973
The present study explored the development of role-taking ability in 60 children (35 boys and 25 girls) at two age levels (7 - 8 years old and 11-12 years old). Role-taking ability as measured by performance on two separate instruments, Password and Persuasive Ability, and adult role-taking as measured by the Adult Role Test were examined in their relationship to children's age, sex, birth order, and intellectual level and to the parental style of the mother. The children's mothers, who were also tested as part of a larger research project, were given the Maryland Parent Attitude Survey, whose four parental scales were examined in their relationship to role-taking ability and adult role-taking. In relating role-taking and adult role-taking to the child and parental variables, the following hypotheses were proposed:

(1) that role-taking ability increased with age;

(2) that there is a birth order effect on role-taking and adult role-taking;
(3) that measures of intellectual functioning are significantly and positively correlated with the measures of role-taking ability;

(4) that children high in adult role-taking score high on the measures of role-taking ability which involved an adult;

(5) that role-taking and adult role-taking relate to the mother's parenting style.

As expected the findings of this study confirmed the age hypothesis i.e., older children showed greater role-taking ability than younger children. On the other hand, the birth order hypothesis was unsupported by comparisons between firstborn and laterborn children on the measures of role-taking ability and adult role-taking. The measures of intellectual functioning generally did not correlate highly with role-taking ability, but poor correlations among the measures of intellectual functioning themselves raised serious questions about the characteristics of the sample and discouraged the drawing of conclusions about the relationship between measures of intellectual functioning and role-taking ability. Also, the hypothesis concerning the relationship between role-taking ability and adult role-taking was unconfirmed. Finally, although specific predictions of the relationship of mothers' parenting style and the child variables were unsupported, the findings showed that occasional relationships did exist between parenting style and the sex and birth order of the child.
The dissertation submitted by Richard J. Delaney has been read and approved by members of the Department of Psychology.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

January 14, 1973

DATE

Jeanne M. Foley

ADVISOR'S SIGNATURE
CHILDREN'S ROLE-TAKING ABILITY AS A FUNCTION
OF BIRTH ORDER, AGE, SEX, AND
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LIFE

Richard Delaney was born on December 30, 1946 in St. Paul, Minnesota. There he attended grade school at St. Leo, high school and two years of college at Nazareth Hall preparatory seminary, and graduated magna cum laude from the College of St. Thomas in January, 1968. The author received his M.A. in Clinical Psychology from Loyola University in June, 1970 and is currently enrolled in the Doctoral Program in Clinical Psychology at Loyola University.
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CHAPTER I

INTRODUCTION AND SURVEY OF LITERATURE

The central variable of the present study, role-taking, has been defined as: "the more covert, more exclusively cognitive process of adopting the perspective or attitude of another, silently 'putting yourself in his shoes' in a given situation (Flavell, Botkin, & Fry, 1968, p. 6)."

Related to role-taking is the generic term social intelligence (Guilford, 1967; Thorndike, 1920); interpersonal competence (Weinstein, 1969), social perception (Bronfenbrenner, Harding, & Galloway, 1958), person perception (Bruner & Tagiuri, 1954), empathy (Dymond, 1950), and role-playing (Flavell et al., 1968) are among other terms also related to role-taking.

Role-taking ability has only recently been joined to the above terms in an attempt to shed light on what has generally been described as "the ability to understand and manage men and women... (Thorndike, 1920, p. 228)." Due to its relatively recent arrival, role-taking lacks studies on its relationship to such organismic variables as sex, age, and birth order, the influence upon its development by parental style, and a distinction between role-taking and general intelligence. The present investigator, in recognizing these shortcomings, considered certain role-taking behaviors and their relationship to the variables
mentioned above by focusing on the following areas: (1) the
development of role-taking ability, (2) role-taking ability and
birth order, (3) role-taking ability and parental style, (4)
role-taking ability and general intelligence, and (5) role-taking
ability and sex.

Development of Role-Taking Ability

The theoretical basis of taking the role of the other is not
a new one (Mead, 1934); however, the exploration of how and when
this ability emerges and develops in children remains relatively
uncharted (Devries, 1970; Feffer, 1966; Flavell et al., 1968;
Looft, 1972).

Flavell et al. (1968) in their research on role-taking
defined that activity as:

...the attempted discrimination of another person's
role attributes, "discrimination" and "role attributes"
taken in a very inclusive sense. In most situations
in which an individual engages in role-taking activity,
this activity serves as a means for some other end. It
may, for example, be instrumental to a full-fledged
enactment of the other person's role or to some kind of
cooperative or competitive endeavor vis-a-vis the other.
A particularly important activity for which it can serve
an instrumental function is that of communication (p. 207-
208).

As will be shown later, the ability to take the role of the
other was found by Flavell et al. to increase with age. The
authors accounted for this by the fact that role-taking ability
has certain prerequisites which the younger child does not yet
possess. Flavell et al. listed these prerequisites:
1. Existence—that there is such a thing as "perspective," that is, that what you perceive, think, or feel in any given situation need not coincide with what I perceive, think, or feel.

2. Need—that an analysis of the other's perspective is called for in this particular situation, that is, that such an analysis would be a useful means to achieving whatever one's goal is here.

3. Prediction—how actually to carry out this analysis, that is, possession of the abilities needed to discriminate with accuracy whatever the relevant role attributes are.

4. Maintenance—how to maintain in awareness the cognitions yielded by this analysis, assuming them to be in active competition with those which define one's own point of view, during the time in which they are to be applied to the goal behavior.

5. Application—how actually to apply these cognitions to the end at hand, for example, how to translate what one knows about the other's listener role attributes into an effective verbal message (p. 208).

In testing his theory of role-taking and its developmental increase, Flavell (1966) introduced research on role-taking in communication situations, focusing on what components of role-taking emerge at various age levels. Although his several investigations were regarded as exploratory, they provide an estimate of the development of role-taking. In one particularly interesting approach, Study I, tasks were given to 160 children at grade levels 2 through 8 and 11, with 10 boys and 10 girls at each level. The tasks were initiated by showing the child a sequence of seven cards arranged to tell a story and by having the child narrate the corresponding story. Next, three cards were withdrawn, and the remaining four cards without the very helpful cues provided by the removed cards were shown by the child to an adult who did not have the benefit of seeing the full seven-card
story. At this point, the child was asked to predict how the adult would tell the story as pictured by only the four cards. The findings showed that children in fourth grade or above had no difficulty in taking into account the fact that the adult had different material from which to compose a story. However 60 per cent of the younger children merely repeated the initially narrated story for their prediction of the adult's version or, when questioned about their prediction, slipped back into their old point of view established during the seven-card story presentation. These results supported Flavell's contention that in role-taking it is essential to first realize that there are other perspectives and then to maintain the other perspectives during the course of the task.

In their discussion of cognitive decentering, Piaget and Inhelder (1956) touched upon the concept of role-taking and its development, particularly in relation to perceptual tasks. In his "mountain experiment" Piaget demonstrated that younger children (age 3 to 5) had not developed role-taking ability necessary to free them from egocentricity. Younger children were locked into seeing things from their own perspective while projecting their own perspectives upon others rather than correctly assessing and taking the other's perspective into account.

The very young child is a prisoner of centration which Furth (1969) defined as "the focusing on a specific part of a
stimulus; in general, a subjective focusing on an aspect of a given situation leading to a deformation of objectivity (p. 260). Piaget (1926) talked about decentering in the child's organization of the physical world. Decentering was explained by Feffer and Suchotliff (1966) in terms of an ability to shift from one view of a situation to another in a flexible and balanced manner. It is the ability to attend to two or more different dimensions simultaneously. For example, a child in the stage of concrete operations learns that although a ball of clay is rolled into a long, thin cylinder, it still has the same amount of clay. He at that point demonstrates his ability to conserve mass, i.e., to decenter and take into account both the changing height and length of the object and, as a result, he realizes that what the clay ball lost in height was made up in length.

With the requisite ability of decentering to build upon, the child is presumed to be able to consider two or more perspectives some of which may reside in other persons. In perceptual role-taking, the child must be able to decenter from his own perceptual perspective so that he can acknowledge that another person may perceive objects and arrangements differently from himself. The way in which a child comes to see that he must at times shift to what another perceives is thought to arise through the press of social interactions.

Feffer and Suchotliff (1966), in particular, extended the impersonal cognitive function of decentering to interpersonal
behavior and social role-taking. He stated:

The dovetailing of responses involved in effective social interaction requires that each participating individual modify his intended behavior in the light of his anticipation of the other's reaction to this behavior. In order to accurately anticipate this reaction, one must be able to view his intended behavior from the perspective of the other. Modifying one's behavior in the light of this anticipation further requires that one must also view the intended action from his own perspective at the same time. The cognitive organization of the individual capable of effective social interaction can, accordingly, be interpreted as one in which different viewpoints are considered simultaneously in relation to each other such that the distortion engendered by a given perspective or centering is equilibrated or corrected by another perspective (p. 415-16).

Feffer (1959), for the purpose of studying decentering in social situations, developed the Role Taking Test (RTT) in which subjects are to shift from one person's perspective to another's in a pictured social situation while maintaining and interrelating the several perspectives in the pictured situation. Using this measure, Feffer and Gourevitch (1960) studied children ages 6 to 13 and their ability to decenter. They found a significant increase on the decentering scores with age.

Addressing similar problems, other authors (Borke, 1971; Looft, 1972; Rothenberg, 1970; Shanley, Foley, & Walker, 1971) have reported similar developmental increases.

Borke (1971) studied interpersonal perception of young children between the ages of 3 and 8 by presenting a series of short stories and by asking the child to select a happy, sad, afraid, or angry face to show how the child in the stories felt.
Borke felt that the young child, contrary to Piaget's contention, is not as locked into egocentrism as the results of earlier studies seemed to show. She criticized those studies for presenting the child with tasks beyond his experience and intellectual ability and she maintained that although the young child may be quite cognizant of the feelings of others, he may be less able to verbally demonstrate that cognizance. In fact, using the tasks prepared for her study, Borke found that identification of the emotions of others was possible for 3-year-olds and that this ability increased with age. Thus, her results challenged Piaget's position that children at age three have no understanding of another's perspective.

In a similar vein, Rothenberg (1970) examined children's social sensitivity or "ability to accurately perceive and comprehend the behavior, feelings, and motives of other individuals (p. 335)," to see whether this sensitivity increased with age. Her comparisons of the performance of third and fifth graders showed that the older children received significantly higher scores than the younger children on a task which required the child to recognize a change in a person's feeling during a tape-recorded social situation.

With an older group of children, 300 students in sixth, ninth and twelfth grades, Shanley et al. (1971) found an increase with age on scores of the six Guilford tests of social intelligence administered in their study. Twelfth graders scored consistently
higher than ninth graders who scored higher than the sixth graders.

While role-taking ability is important in communication (Feffer & Suchotliff, 1966; Flavell et al., 1968; Kerckhoff, 1969), it is thought to be equally important for negotiations (Foote & Cottrell, 1955; Weinstein, 1969) in which one individual desires to shape the responses of another to meet his wants.

Weinstein (1969) considered this facet of role-taking, namely its relationship to interpersonal bargaining or negotiating:

Acquiring the interpersonal skills necessary to engage in such negotiations is central to the socialization process. In a very real sense it is socialization. For, if the process is defined as equipping individuals to function as participating members of society, no set of skills (except for the prerequisite linguistic ones) is as essential to participating in society as the skills enabling people to get others to think, feel, or do what they want them to (p. 753).

In all interpersonal interactions, Weinstein viewed the main task for individual A as enlisting the cooperation of individual B in accomplishing what individual A wants. Enlisting the others' cooperation demands tact in dealing with others and tact functions to keep the other interested and manipulable.

In an earlier study, Wood, Weinstein, and Parker (1967) traced the development of interpersonal tactics used to get one's way from kindergarten age to third grade. They found that the earliest of all tactics, crying and simply asking, did not involve role-taking skills and, although they were attempts at
interpersonal control, they did not involve negotiations. By the second and third grade, only one-fourth of the children were found to resort to simply asking to get their wish. At this age the exchange tactic was employed; older children realized that another's compliance is voluntary and that more complex tactics must be employed to place another's wishes in line with the desired outcomes.

In studying the development of role-taking in communication, Flavell et al. (1968) included persuasion tasks, in which the persuader must move a persuadee to some course of action. Flavell et al. found a developmental progression in the quantity of persuasive arguments a child could propose. These authors believed that persuasive ability demands role-taking ability:

The ability to persuade another person effectively ought to presuppose the ability to identify those of his role attributes which are persuasion relevant, that is, the particular needs in the listener to which appeal might profitably be directed, the sorts of arguments to which he might be susceptible—in general, the "chinks" in his sales resistance which the persuasion message ought to seek out and enter (p.135).

According to Flavell et al. growth in "persuasive repertoire" is one more indication of the role-taking ability. When a person fashions an argument with the intent to persuade, a recognition of the persuadee's needs relevant to the persuasion is implied. In the process of making up an effective persuasive argument, an individual who persuades must take the role of the other to discover what the other feels about the issue and what the other's
possible response will be to each of the potential persuasive tacts.

For the purpose of the present study, a test of persuasive ability was modeled on procedures developed by Flavell et al. (1968). The test provided the children (the persuaders) with two tasks: (1) to persuade an adult and (2) to persuade a child to do something which benefited the persuader. The purpose of this test was to get a measurement of younger and older children's ability to persuade and, thereby, to examine the persuasions by quantity and variety for developmental differences. This test of persuasive ability was also intended to be an indirect measure of role-taking ability.

As a more direct test of role-taking ability, the Password Game (Feffer & Suchotliff, 1966) provided a paradigm of role-taking in communication. In this game, the donor attempts to communicate a word to his partner through one-word clues. The partner tries to guess the word through one-word responses. The present study used Password to study the age differences between children at two age levels (7-8 and 11-12 years of age) in role-taking ability and specifically to examine how mothers and their children perform in communicating a mystery word to one another. Although this approach involved a somewhat artificial interaction between two individuals, Password performance presumably is based on the donor's ability to size up what the recipient knows.
and how he predicts what the recipient will respond to each possible clue. After the recipient attempts to guess the mystery word on the bases of the first clue, the donor must take into account the guess and adapt his next clue to what he suspects the recipient is thinking. Feffer and Suchotliff (1966) paralleled Password to the give and take of social communication:

The donor's relative adequacy in communicating the test word was viewed as being based on his ability to select, from the myriad of association possibilities available to him the association clue with the most information value to the recipient. This selection in turn, was considered to be a function of the donor's ability to modify his intended behavior... in the light of his anticipation of the recipient's possible response as well as the recipient's previous responses (p. 417-418).

The present investigator hypothesized an increase in role-taking ability on Password and Persuasive Ability with age. It was also hypothesized that Password scores correlate positively with Persuasive Ability scores, since they were both assumed to draw upon role-taking ability.

Role-Taking Ability and Birth Order

Studies have shown that a person's level of social intelligence and social skills can be related to his birth order (Patterson & Zeigler, 1941; Sampson, 1965; Schachter, 1959; Singer, 1964; Stotland, 1967, 1971). Various theories have been proposed to explain the fairly common reports of differences in social skills between firstborn and laterborn children (e.g., Mead, 1934; Sampson, 1965).
Stotland (1967) asserted that a person's ordinal position in his family greatly influences the social relationships he will be exposed to and the social schemata he will develop. He contended that different people, when assessing a social situation, attend to different dimensions of the same situation. By a "dimension," Stotland meant a social relationship that exists in a social situation, e.g., dominance-submission. After repeated exposure to a particular dimension in his home situation a child becomes sensitized to that dimension in extrafamilial situations. Gradually the child attends to certain social dimensions and places people (mother, father, siblings, and himself) at points from high to low along the dimension. Stotland (1967) added that after the child has learned at home what dimensions are relevant to him, he then generalizes and applies the dimensions learned there to social situations outside of the home. He will categorize people according to the dimensions he has learned at an earlier age and these generalizations of the dimensions or social schematas endure unless repeated social contacts contradict them.

The theme of people attending to different dimensions of social situations because of birth order was reviewed by Sampson (1965) who suggested that firstborn children may handle themselves differently and with more difficulty in social situations than laterborn children. He cited the work of Patterson and Zeigler (1941), Palmer (1966), Schachter (1959), and Singer
(1964) which considered possible explanations of the social differences.

Singer (1964) found that the firstborn male was not very skillful interpersonally in spite of his concern over affiliation and sociability. In other words, the firstborn child might attempt to be sociable but meets with rejection because of his social awkwardness. This may explain the results which show firstborns as less popular in fraternities and sororities (Schachter, 1959) and as poor mixers (Patterson & Zeigler, 1941). Sampson (1965) concluded that the data strongly indicate that the laterborn child is more sociable and more accepted by his peers than the firstborn.

In attempting to discover why the firstborn gets along less well with his peers than does his laterborn counterpart, Stotland (1967) described the dramatically different milieu into which firstborn and laterborn children are born and the effects that the milieu has on social schemas (i.e., the dimensions they find relevant to them in social situations):

The FBs are born into a situation which is quite hierarchical, in which the differences between himself and his parents, in power, status, independence, knowledge, etc., are constantly emphasized. Even if he later acquires a sibling, he will tend to view the sibling in the light of the schemas that he had acquired earlier, i.e., a hierarchically centered one, rather than those based on similarity.

The argument leads to the proposition that LBs will empathize more with someone similar to themselves than with someone different. That is, if they perceive themselves
as similar to the other in one respect, they will be set to perceive themselves as similar in other respects as well (p. 300).

Elsewhere, Stotland (1971) described the different interpersonal development of only, firstborn, and laterborn children. Since the first interpersonal relationships of only children are with their parents, they are exposed to the differences between themselves and their parents in power and status. Other dimensions which they attend to include nurturance-succorance, relative body size, and relative competence in handling their environment. In each of these dimensions, Stotland hypothesized that the firstborns and their parents are at opposite poles. That is, their parents are nurturant while they are succorant; their parents are large while they are small, and their parents are competent at handling the environment while they are not.

A firstborn child will have a tendency toward perceiving relationships in terms of the schemas developed as an only child. But, since the firstborn is older than his siblings, and since he is often given more responsibility than the other children, he will come to see himself on the high rather than the low end of the dimensions mentioned above. The firstborn has, in his relationship with his parents and later those with his siblings, hierarchically oriented schemas in which he perceives himself as either greater or less than others on a range of dimensions:

This interpretation assumes that firstborns and onlies...
will, for example, tend to react to social situations as if they are either parentlike or childlike, but not as if they are equals (Stotland, 1971, p. 50).

In line with this reasoning, Stotland proposed that later-born children base their schemas on relationships with both parents and siblings. As a result, they will develop hierarchically oriented schemas as well as schemas which include similarities.

In explanation of the fact that laterborn children seem to interact with greater facility in social situations, Stotland's (1971) formulation suggests that the laterborn child has had more practice in dealing with equal as well as unequal others. He has, therefore, a wider range of experience to draw from in social situations. On the other hand, the firstborn, although perhaps skilled in the social interactions of unequal relationships, will show his weakness when relating to peers.

In considering why the firstborn and laterborn children differ socially, Maccoby's (1961) discussion of covert role rehearsal appears relevant. She stated that a child in a home where his parents have rules that he must follow to get desired objects, must fantasize what his parents want and what he must do to get what he wants from them. With respect to why there are differences in interpersonal skills between the firstborn and laterborn children, each of them could be seen as having learned different roles because they have different sources of power to consider in
order to achieve their goals. The firstborn child, for example, might perceive parental control over the things he wants and so has to learn to think of ways to negotiate with the parents to get what he wants. Laterborn children, on the other hand, are born into a different arrangement where they have to negotiate not only with parents but with siblings similar to themselves in age. Thus, they not only have to engage in covert rehearsal of adult roles but child roles in order to fulfill their wishes.

Rather than thinking of firstborn and laterborn children as having learned how to negotiate with different sorts of people, Mead (1934) considered the firstborn and laterborn differences in social behavior as stemming from different developments of the self. In his theory, an individual develops a concept of his social self by taking the role of the other. While the firstborn passes through an initial period without a model of similar age and, as a result, has a self-concept based mainly upon parental reactions, the laterborn has one or more siblings as well as his parents from which his self-concept is reflected back to him. The importance of the development of the self-concept or \"me\" for social interactions is that the \"me\" permits the coordination of social interacting by permitting anticipation of the reactions of other people by taking their role. Since the firstborn child has an underdeveloped \"me\", because he experienced fewer peer reflections than his laterborn siblings, he cannot take the role of
other peers as well because he lacks internal guidelines. Thus, he must turn to affiliation with peers for external support and guidance to direct him in his social interactions. While the laterborn child has developed the ability to take the role of his peers and no longer depends upon more primitive affiliative means of interacting, the firstborn child lacks the fully developed self-concept and the peer developed "me" and thus is less self-reliant socially.

Proposing his own role theory, Sarbin (1950) underscored the importance of role learning for effective social interacting:

...the absence of a number of different standard roles, as well as the absence of skill in taking-the-role-of-the-other, retards socialization and leads to invalid role enactments (p. 226).

Sarbin stated that the learning of roles is accomplished to a great extent by the imaginative process which, similar to Maccoby's (1959, 1961) covert practice, is a silent rehearsing of roles. This forming of roles, or taking the role of the other, is dependent upon the number and types of people available for identification. For an only or firstborn child there are fewer persons in the environment for him to identify with and consequently he learns to take fewer roles:

The number and kinds of persons with whom one may identify, of course, is limited by the number and kinds of persons in the environment and by cultural practices. If a child's social environment is made up principally of the mother, there are fewer opportunities for identification than if the environment contains many persons (Sarbin, 1950, p.22).
It has been found that firstborn children identify more strongly with their parents than do laterborn children (Palmer, 1966). Palmer suggested that it seems possible that firstborn children identify with their parents not only because of their availability as models from the earliest days but also because identification with any subsequent younger models (laterborn siblings) "would elicit preponderantly negative parental sanctions because of its regressive implications (p. 130)." On the other hand, he noted that laterborn children are rewarded for identifying with firstborn children. This view is consistent with Sarbin's (1950) contention that the firstborn child has fewer role models available for identification and thus will have a restricted range of roles at his disposal for taking the role of the other in social interactions.

In summary, the preponderance of theory and some evidence support the notion that laterborn children have greater social skills than firstborn. With this in mind, the present investigator was interested in exploring the differences in role-taking ability relative to a person's ordinal position. The general hypothesis concerning birth order and its relation to role-taking was that ordinal position is associated with a child's role-taking ability as measured by Password and Persuasive Ability. More specifically, it was hypothesized that firstborn children score higher on Password because they could relate to their mothers better hierarchically than laterborn children. Also, it
was hypothesized that firstborn children score higher on the Adult Task of the Persuasive Ability test for the same reason. However, laterborn children score higher on the Child Task of Persuasive Ability because the persuasion involved a peer.

Other related hypotheses were that firstborn children score higher on the adult-oriented scales of the Maccoby Adult Role Test (to be discussed later) than laterborn children. Finally, children who scored high on the adult-oriented scales of this test regardless of their birth order, score higher on the Adult Task of the Persuasive Ability Test and do better on Password than children who score low on the adult-oriented scales.

Role-Taking Ability and Parental Style

Although it seems obvious that a mother's relationship with her child should influence the socialization process, little research has been directed towards the relationship between the social behavior of children and the mother's parenting style. In addressing the topic of social skills acquisition, Sears, Maccoby, and Levin (1957) identified three major types of learning responsible for the acquisition of social and emotional behaviors: (1) trial-and-error, (2) role practice, and (3) direct tuition. There seems to be little doubt of the importance of learning by trial and error (e.g., Bijou & Baer, 1965; Gewirtz, 1961) and of the benefit of direct tuition after age five (Duncan, 1973;
Kerckhoff, 1969; Lichtenberg, 1970). Authors who espouse the trial-and-error learning of social and emotional behavior in children, identified specific maternal and ecological reinforcers which earlier strengthen or weaken the child's social or emotional responses. The direct tuition approach was emphasized by Kerckhoff (1969) in his discussion of maternal styles. He underscored his belief that within a close, nurturant mother-child relationship, the mother can increase her child's growth in social skills by explaining the principles of behavior, the child's motives, and the antecedents and consequences of an act in a social situation.

The remaining type of learning, role practice, may be the major type of social learning, especially in the early period, before the child is five years of age. Sears et al. (1957) stated:

Direct observation of young children, however, has suggested that much of this learning occurs without any specific "teaching" from the parents. A child from his second year, begins to display interests and attitudes similar to theirs; he develops their values, and places their demands on both himself and others. Fantasy, too, shows this. The child acts out the adult role in his play with dolls, making mothers spank babies or requiring children to eat their cereal or hang up their clothes. He tries out adult-role behavior in his play with other children, trying on parents' clothes, pretending to have their occupations and responsibilities (p. 369).

Bandura and Huston (1961) stressed identification as a process of incidental learning by which a child becomes socialized. Although they acknowledged that a part of the child's learning is through direct tuition, a good deal of socialization
occurs through identification with the important adults in a child's life. Rather than emphasizing socialization as the consequence of direct reward and punishment, they advanced the nurturing adult figure as a rewarding model for the child to emulate. In mentioning the rewarding nature of the nurturant model, Bandura and Huston introduced the question: what type of parenting style makes it possible or even fosters role practice on the part of a child? They found that the model's warmth was an important factor in fostering imitation.

In studying the occurrence of adult role-taking in children, Maccoby (1961) examined the difference in percentage of rule-enforcing behavior in boys as a function of the mother's warmth, coldness, restrictiveness, or permissiveness. She hypothesized that the above qualities of the mother's style would govern the amount of covert role practice by the child. With regard to the restrictiveness-permissiveness dimension, she theorized that the more restricting the mother was, the more adult role playing the child would do:

If the child cannot satisfy his needs without getting some mediating behavior from his parents (getting their permission to visit a friend, spend money, etc.), then his "vicarious trial and error" will necessarily involve rehearsing the kinds of controlling phrases his parents would say to him if he asked for their help in getting what he wanted. If he is not required to get parental permission for most of the steps he follows in pursuing his goals, then he will not have to take parental reactions into account in making his plans and will not engage in extensive covert practice of parental phrases and strictures (Maccoby, 1961, p. 494).
In addition to the restrictiveness dimension, there is the warmth-coldness (i.e. nurturance) dimension, which Maccoby believed would also influence role-playing in children. Her specific hypothesis for the relation between nurturance and role playing was that the similarity between parent and child behavior with regard to rule enforcing is the greatest in children whose parents are highly nurturant. This hypothesis was based on the notion that the child's practicing of adult roles would be more frequent if the child is able to conjure up fantasies and recollections of nurturant parents who made him feel good by nurturing him. His covert role practice, then, should give him pleasure and should in a sense be its own reward.

It should be emphasized that the restrictiveness and nurturance dimensions are thought to interact and are meaningless unless conceptualized together in their relationship to adult role practice in children. Maccoby (1959) suggested the following interaction:

We are not saying that warm mothers should have rule enforcing children. We are saying that if a mother is warm, her level of rule enforcing should be closely reflected in that of her child, so that if she is warm and restrictive, the child should be high in rule enforcing, and if she is warm and permissive, her child should be low in rule enforcing. If the mother is cold, on the other hand, we do not expect her degree of restrictiveness to make as much difference in the rule enforcing tendencies of her child (p. 498-499).

Maccoby's (1961) study provided support for this hypothesis. She found that 81 per cent of boys high on rule enforcing had
mothers who were warm and restrictive, 38 per cent had mothers who were warm but permissive, 64 per cent had mothers who were cold and restrictive, and 53 per cent had mothers who were cold and permissive.

Others have related the importance of parental style to sex-role preferences (Mussen & Rutherford, 1963), imitation (Bandura & Huston, 1961; Bandura, Ross & Ross, 1963), and identification (Sears et al., 1957; Stokes, 1954). These theories share the hypothesis that parental power and warmth are relevant to the masculine or feminine sex-role preferences, the adoption or introjection (identification) of characteristics and responses of a parent, and imitation of parental behaviors.

Pumroy (1966) developed a parental attitude survey (Maryland Parent Attitude Survey) which explores dimensions somewhat similar to the ratings of mother interviews reported by Maccoby (1961). This instrument presumably avoids the pitfall of a social desirability response set on the part of the mother. Although Pumroy was not concerned with relating the parental scores obtained on his instrument with anything as specific as adult role-taking behavior, he stated:

It seems obvious that the attitudes parents have toward child rearing is related to the way they interact with their children, and this, in turn, should have an effect on the personality of their children (p. 73).

He categorized the parents on the basis of his survey into four types:
(1) **Indulgent**: These parents are centered on their child and allow the child to have his way in everything he does. There is much warmth and affection given to the child but for no particular reason. Discipline is minimal and can be circumvented by the child.

(2) **Disciplinarian**: These parents demand strict obedience from the child and have specified specific and explicit rules. Punishment is contingent upon certain specified behaviors. Also, these parents constantly push the child to achieve and to grow up early.

(3) **Rejecting**: These parents are hostile towards their children and base their discipline more on their hostile feelings rather than on the behavior of the child.

(4) **Protective**: These parents are mainly worried about defending their child from risk taking and, as a result, they perform services for the child when the child should be capable of doing it.

The present study sought to relate parental style as measured by the Maryland Parent Attitude Survey to the child's role-taking ability and to the child's tendency to assume an adult role. It may be noted that two scales of the Parental Survey appear to tap some aspects of child rearing which are similar to those discussed by Maccoby. That is, Pumroy's Disciplinarian and Rejecting scales seem to reflect behavior which Maccoby terms
restrictive and cold respectively. However, Pumroy's Indulgent scale appears to reflect parental behaviors which are both permissive and warm, while Maccoby considered warmth and nurturance separately from permissiveness. The Protective scale has no clear parallel in Maccoby's dimensions.

These discrepancies between the two approaches made it impossible to investigate the hypothesis suggested by Maccoby that parental warmth and restrictiveness contribute to particularly high levels of role-taking ability. The fact that Maccoby (1961) found the sons of restrictive mothers (regardless of whether they were warm or cold) to have higher levels of rule enforcing (81 and 64 per cent) than sons of permissive mothers (38 and 53 per cent) suggested that restrictiveness is associated with rule enforcing or role-taking. Therefore, it was hypothesized that the mother's parenting style as measured by the Maryland Survey relates to the child's role-taking ability and specifically to his tendency to assume an adult role. That is, high Disciplinarian mothers are expected to have children who (1) do better on Password and Persuasive Ability and (2) have higher scores on adult-oriented scales of the Maccoby Adult Role Test. These hypotheses were justified in terms of the fact that high Disciplinarian mothers might be considered to be restrictive since they have set up rules and guidelines which are firm and consistent, making it necessary for their children to take their role in thinking of ways to satisfy their needs.
Role-Taking, Intellectual Functioning, and Word Association

A major criticism of instruments allegedly measuring social intelligence has been that they correlate highly with general intelligence scores (Cronbach, 1960; Shanley, Walker, & Foley, 1971). While some success has been reported in excluding general intelligence from social intelligence measures (O'Sullivan, Guilford, & deMille, 1965), researchers have sometimes failed to investigate the correlations between their measures of social intelligence and general intelligence (Borke, 1971; Flavell et al., 1968). Other investigations have found that their measures were significantly correlated with general intelligence (Bowers & London, 1965; Feffer & Gurevitch, 1960; Rothenberg, 1970; Shanley et al., 1971). Indeed, the carefully prepared Guilford measures of social intelligence (O'Sullivan et al., 1965), although developed with the aid of factor analysis and composed of a minimum of verbal presentation, have been found to correlate significantly with general intelligence (Guilford & Hoepfner, 1966).

Bowers and London (1965) found correlations of .77 and .51 between their measure of role-playing ability i.e., the Dramatic Acting Test, and scores on the Vocabulary subtest of the Wechsler Intelligence Scale for Children (WISC) and the Porteus Maze Test respectively.

Similarly, Rothenberg (1970) found that as social sensitivity increased so did intelligence. For her total sample, correlations
between scores on social sensitivity and the Peabody Picture Vocabulary Test and WISC Block Design were .24 ($p < .05$) and .28 ($p < .01$) respectively.

In studies with adults and children (Feffer, 1959; Feffer & Gourevitch, 1960), the relationship of the Role Taking Test (RTT) to general intelligence was examined. In the first study, Feffer (1959) found no statistically significant correlations between the RTT and the Wechsler Adult Intelligence Scale Vocabulary scores. However, Feffer and Gourevitch (1960) found that WISC Vocabulary scores were positively related to the RTT decentering score.

Recognizing the need to further explore the relationship between role-taking ability and intelligence, the present study included two subtests from the Wechsler Intelligence Scale for Children and a test of verbal fluency. It was hypothesized that the correlations between role-taking as measured by Password and Persuasive Ability and intellectual functioning as measured by the WISC subtests and Word Fluency are positive and significant.

Besides exploring the relationship between role-taking ability and intellectual functioning, this study explored the relationship between role-taking ability and shared associations, i.e., associations common to a mother and child, on a word association test. Feffer and Suchotliff (1966) administered a word association test as a control measure in their experiment.
relating Password performance to the RTT. They intended to show that high Password performance between subjects was not merely a function of a high number of shared associations. However, their results showed a positive relationship between the number of shared associations and Password performance. This led them to suggest that a pool of shared associations between subjects may facilitate the decentering process as tapped by Password.

The present study hypothesized that the number of shared associations on the Word Association Test (O'Connor, 1945) would correlate with the role-taking measures, i.e. Password and Persuasive Ability.

**Role-Taking Ability and Sex**

The common notion that females are more emotionally sensitive has been argued with sophistication by Bronfenbrenner et al. (1958) who contended that females should exhibit a higher level of social intelligence than males. However, few studies have actually reported or even examined sex differences in social intelligence.

While few investigators of social intelligence in children have reported sex differences on their measures (Feshbach & Roe, 1968; Shanley et al., 1971), others have reported no sex differences (Rothenberg, 1970; Selman, 1971). In addition, the data for males and females were not analyzed separately in several studies (Bowers & London, 1965; Devries, 1970; Flavell et al., 1968).
Of the investigators who did report sex differences, some reported females scoring more highly than the males, while others reported the opposite. While Shanley et al. (1971) found that girls received significantly higher scores on two of the six Guilford tests of social intelligence, Selman (1971), in studying the Role Taking Test and its relationship to sex and other variables, found no significant sex differences on Role Taking performance.

Rothenberg (1970) discussed the lack of consistence cited in the literature regarding sex differences in social sensitivity skills, pointing out that some findings (Taft, 1955) indicated that there were no differences due to sex in the ability to judge others, while others (Gollin, 1958; Dimitrovsky, 1964) found significantly greater social sensitivity in schoolage females.

In spite of the inconsistencies, Rothenberg hypothesized female superiority in social sensitivity and suggested that female superiority in social sensitivity may result from the play activities of girls which permit them to discuss and consider people's feelings more than boys' play activities do. However, her sex-difference hypothesis was not supported by her data.

For the present study, there were no specific hypotheses about sex differences in role-taking ability although the data were analyzed separately for boys and girls to check for possible effects associated with sex.
CHAPTER II

METHOD

Subjects

A total of 60 white children from a middle-class, metropolitan area participated in this study with their mothers. All were recruited by the investigators as volunteers for the study.

The sample consisted of children of two ages (33 children between 7-0 and 8-11 years of age and 27 children between 11-0 and 12-11 years of age), where 35 were boys and 25 were girls, and 20 were firstborns and 40 were laterborns. The children and mothers in this study were subjects in a larger investigation involving assessment of mothers' social intelligence, child-rearing practices, and mother-child interactions. This investigator focused on the children while the other investigator (Duncan, 1973) studied the maternal parameters.

Apparatus and Materials

The following tests were administered individually to each child: the Adult Role Test (Maccoby, 1961); two subtests from the Wechsler Intelligence Scale for Children, the Persuasive Ability Test, a Word Fluency test; and the Word Association test
(O'Connor, 1945). Each child also was scored on Password performance (Feffer & Suchotliff, 1966) with his mother.

Of the several tests which were administered to the mother (Duncan, 1973), the Maryland Parent Attitude Survey was relevant to this study.

**Adult Role Test (ART).** This instrument consists of 45 forced-choice items which attempt to tap a child's tendency to take an adult role when another child seeks help or breaks a rule. The eight scales: Enforce Rules; Accept Rule Enforcement; Choice of Adult (over child) Roles; Accept Nurturance, Comfort; Accept Nurturance, Material Help; Give Nurturance; Occupational Adult Role; and Beg for Return of Nurturance. The score for each scale was the sum of the items on which the child selected the option scored for that scale. There were both boy's and girl's forms of this test. (See Appendix A for the test and scoring key.)

**Persuasive Ability Test.** The two persuasion tasks which made up this test were taken from Flavell et al. (1968) and modified somewhat for the present study. The tasks permit the child a relatively open-ended opportunity to show his skills in persuading two imaginary persons. In the first condition, the child is asked to convince his father to buy him a television set for his own personal use. The second condition required the child to persuade a peer to pay his way into a movie theatre. The administration of this test included the examiner reading instructions
to the child and then recording the subject's responses verbatim. There was a 10-minute time limit for each task. (See Appendix B for the Adult and Child Tasks and scoring manual for the Persuasive Ability Test.) Each child received three scores on this test: a Child Task score, an Adult Task score, and a Combined score, i.e. the total of the two task scores. The interrater reliabilities for these scores were calculated on the basis of the scores obtained by two raters (the investigator and a graduate student in psychology) for the Adult, Child, and Combined Tasks on 20 randomly selected protocols. The Pearson product-moment correlations were .78, .93, and .91 for Adult, Child and Combined scores respectively.

Maryland Parent Attitude Survey (MPAS). The MPAS was developed by Pumroy (1966) for research purposes in the area of parental attitudes toward child rearing. The instrument presumably has advantages over other similar measures because it was designed to avoid a social-desirability response set on the part of the parent. Its 95 forced-choice items fall into four categories: Disciplinarian, Indulgent, Protective, and Rejecting. The parent's score on each of these categories is the total of the statements she selected that are scored under each category. (See Appendix C for the Survey and its scoring key.)
Password Interaction. This mother-child interaction involved a total of 16 words, 6 of which were selected from Feffer and Suchotliff's (1966) list and 10 which were added by the present investigator to enable younger children to meet with some success on this task. The instructions specified that the mother initiate the interaction by attempting to communicate each of her 8 words to her child by giving one-word clues. The child was instructed to guess the mystery word by responding with one-word guesses. The interaction was continued for each word until the child was successful at guessing it or until a 2-minute time limit was reached. The mother was the sender (or donor) and the child was the receiver (recipient) for the first 8 words. For the second 8 words, the roles of mother and child were reversed. The scoring of this task for each subject included the median time to successfully communicate the mystery words, the median number of clues to attain the mystery word, and the total number of words successfully transmitted. Appendix D shows the Password word lists and instructions.

Wechsler Intelligence Scale for Children (WISC). From the WISC the Digit Symbol and Vocabulary subtests were administered in the standardized manner. Scoring was from the WISC manual, and a scaled score on each subtest was given to each subject.
Word Fluency. A measure of word fluency was obtained by recording the number of words beginning with the letter $p$ which each subject could produce in 1 minute.

Word Association Test. This test, developed by O'Connor (1945) was scored for each mother-child pair in terms of the number of associations they had in common with one another, i.e. shared associations. The Word Association Test is shown in Appendix E.

Procedure

Each mother-child pair came to the Loyola University Guidance Center together for two approximately one-and-onc-half hour sessions. The two sessions were separated by a week. During the first session they were welcomed and led to separate testing rooms for individual testing. Later, they were brought together to play Password. In the second session, they were again tested separately. The order of testing for the Child was as follows:

(1) First session
   (a) Adult Role Test
   (b) WISC Vocabulary
   (c) Password Interaction (with mother)

(2) Second session
   (a) Persuasive Ability Test
(b) WISC Digit Symbol
(c) Word Fluency
(d) Word Association Test

The Adult Role Test was, in the case of younger children, read aloud to the child and answers were recorded for the child. The WISC Vocabulary was administered in the standard fashion, except in the case of several older children who were permitted to write their response down on the Vocabulary sheet and who were later questioned about unclear answers. Password was administered to the mother and child together by one experimenter. The Persuasive Ability Task, Digit Symbol, Fluency, and Word Association Test were each administered individually to each child.

All test administrations were done by this investigator, the graduate student collaborating in the mother-child study, or by an assistant (an undergraduate psychology student trained on the test administrations for this study).
CHAPTER III

RESULTS

Out of the extensive data accumulated, results on the child variables will be presented first followed by the relationships between maternal variables and child variables.

Child Variables

Role-Taking Ability. The two child measures which were conceptualized as being related to role-taking were Persuasive Ability and Password. Considering the Password measure first, it was hypothesized that there would be an increase with age in role-taking ability as measured by Password. It was also hypothesized that birth order would relate to role-taking ability. Specifically, it was hypothesized that firstborns would score higher on Password because they could relate to the mother hierarchically.

Table 1 shows the means and standard deviations of scores on Password by age and birth order.

For the purpose of economy in presenting the results, all Password means and standard deviations presented here are based on the Success score on that test, i.e. the number of words correctly transmitted by the child to the mother. This approach appeared justified because examination of the hypothesized
Table 1

Password Success Scores: Means and Standard Deviations by Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th></th>
<th>Younger</th>
<th>Older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firstborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6.64</td>
<td>7.67</td>
<td>7.10</td>
</tr>
<tr>
<td>SD</td>
<td>1.50</td>
<td>0.50</td>
<td>0.93</td>
</tr>
<tr>
<td><strong>Laterborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6.48</td>
<td>7.56</td>
<td>6.97</td>
</tr>
<tr>
<td>SD</td>
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<td>0.51</td>
<td>1.17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6.53</td>
<td>7.59</td>
<td>7.02</td>
</tr>
<tr>
<td>SD</td>
<td>1.22</td>
<td>0.54</td>
<td>1.08</td>
</tr>
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</table>
relationships and other data for two additional Password scores (Time, i.e., median time to transmit words and Clues) indicated that the results were similar for the three measures. This simplification also appeared justified due to the significant correlations of Success scores with Time and Clues ($r = -.67$ and -.37, $p < .05$ respectively). As might be anticipated, the negative correlations indicated that higher Success score levels were associated with shorter times and fewer clues.

Table 2 shows the results of a two-way analysis of variance for age (7-8 years vs. 11-12 years) and birth order (first vs. laterborns) for the Success scores. Only the main effect for age was significant. As hypothesized, the development of this type of role-taking skill showed an increase with age; the younger group transmitted significantly ($F = 14.13, p < .001$) fewer words (Mean = 6.53) to their mothers than the older group (Mean = 7.59). However, differences due to birth order were nonsignificant and failed to support the hypothesized superiority of firstborns.

No specific hypothesis was entertained for sex differences in role-taking as measured by Password, but sex differences were examined for significance for both the younger and older age groups. Table 3 presents the means and standard deviations by age and sex for the Success scores. An analysis of variance by age and sex (Table 4) showed no significant main effect for sex although the interaction was significant ($F = 4.65, p < .05$).
Table 2

Analysis of Variance for Password Based on Children's Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>16.50</td>
<td>14.13 **</td>
</tr>
<tr>
<td>Birth Order</td>
<td>1</td>
<td>.21</td>
<td>.18</td>
</tr>
<tr>
<td>Age x Birth Order</td>
<td>1</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01
Table 3

Password Success Scores: Means and Standard Deviations by Age and Sex (N = 60)

<table>
<thead>
<tr>
<th></th>
<th>Younger</th>
<th>Older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>M</td>
<td>6.81</td>
<td>7.46</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.29</td>
<td>0.52</td>
</tr>
<tr>
<td>Female</td>
<td>M</td>
<td>6.00</td>
<td>7.71</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.41</td>
<td>0.47</td>
</tr>
<tr>
<td>Total</td>
<td>M</td>
<td>6.53</td>
<td>7.59</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.22</td>
<td>0.54</td>
</tr>
</tbody>
</table>
Table 4

Analysis of Variance for Password Based on Children's Age and Sex (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
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<td>16.50</td>
<td>15.29 **</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.14</td>
<td>.13</td>
</tr>
<tr>
<td>Age x Sex</td>
<td>1</td>
<td>5.02</td>
<td>4.65 *</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

** p < .01
This significant interaction appeared to be attributable to the fact that younger boys achieved more successes than younger girls while this relationship was reversed for the older children.

With regard to Persuasive Ability, it was hypothesized that scores would increase with age. Also, it was hypothesized that birth order would relate to Persuasive Ability scores in that firstborns would score higher on the Adult Task because of their adult orientation and laterborns would score higher on the Child Task because of their peer orientation. Table 5 shows the descriptive statistics for the Persuasive Ability scores for the Adult and Child Tasks and the Combined scores by age and birth order. As indicated by the three 2 (age) x 2 (birth order) analyses of variance (Table 6) the main effect for age was consistently significant. As hypothesized, older children scored significantly higher \( p < .01 \) on the Adult, Child, and Combined scores of the Persuasive Ability measure. Similar to Password, the birth order hypothesis received no support.

As with Password, no specific hypothesis was proposed for sex differences on Persuasive Ability, but here again the possibility of a sex difference was examined. Table 7 presents the means and standard deviations by age and sex on the Combined scores of the Persuasive Ability tasks. Only the Combined scores were used in order to simplify the presentation of the age by sex analysis since performance on the Adult and Child Tasks was similar and the Combined scores appeared representative of both
Table 5
Persuasive Ability Child, Adult, and Combined Score Means and Standard Deviations by Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th></th>
<th>Younger</th>
<th>Older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firstborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Task M</td>
<td>1.50</td>
<td>3.56</td>
<td>2.65</td>
</tr>
<tr>
<td>SD</td>
<td>.76</td>
<td>1.59</td>
<td>1.53</td>
</tr>
<tr>
<td>Adult Task M</td>
<td>1.17</td>
<td>3.00</td>
<td>2.29</td>
</tr>
<tr>
<td>SD</td>
<td>.41</td>
<td>2.00</td>
<td>1.68</td>
</tr>
<tr>
<td>Combined M</td>
<td>2.38</td>
<td>6.22</td>
<td>4.41</td>
</tr>
<tr>
<td>SD</td>
<td>1.19</td>
<td>3.31</td>
<td>3.07</td>
</tr>
<tr>
<td><strong>Laterborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Task M</td>
<td>2.67</td>
<td>3.37</td>
<td>3.11</td>
</tr>
<tr>
<td>SD</td>
<td>1.67</td>
<td>1.67</td>
<td>1.62</td>
</tr>
<tr>
<td>Adult Task M</td>
<td>2.07</td>
<td>3.47</td>
<td>2.80</td>
</tr>
<tr>
<td>SD</td>
<td>1.22</td>
<td>1.81</td>
<td>1.63</td>
</tr>
<tr>
<td>Combined M</td>
<td>3.94</td>
<td>5.89</td>
<td>4.97</td>
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<tr>
<td>SD</td>
<td>2.84</td>
<td>3.29</td>
<td>5.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Task M</td>
<td>2.25</td>
<td>3.48</td>
<td>2.91</td>
</tr>
<tr>
<td>SD</td>
<td>1.02</td>
<td>1.53</td>
<td>1.62</td>
</tr>
<tr>
<td>Adult Task M</td>
<td>1.85</td>
<td>3.34</td>
<td>2.61</td>
</tr>
<tr>
<td>SD</td>
<td>1.14</td>
<td>1.77</td>
<td>1.67</td>
</tr>
<tr>
<td>Combined M</td>
<td>3.45</td>
<td>6.03</td>
<td>4.80</td>
</tr>
<tr>
<td>SD</td>
<td>2.44</td>
<td>3.17</td>
<td>3.14</td>
</tr>
</tbody>
</table>
Table 6

Analysis of Variance for Persuasive Ability Child, Adult, and Combined Scores Based on Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Child</th>
<th></th>
<th></th>
<th>Adult</th>
<th></th>
<th></th>
<th>Combined</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>df</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>17.08</td>
<td>7.25**</td>
<td>1</td>
<td>24.53</td>
<td>10.27**</td>
<td>1</td>
<td>84.79</td>
<td>9.91**</td>
</tr>
<tr>
<td>Birth Order</td>
<td>1</td>
<td>2.47</td>
<td>1.05</td>
<td>1</td>
<td>2.91</td>
<td>1.22</td>
<td>1</td>
<td>3.54</td>
<td>0.41</td>
</tr>
<tr>
<td>Age x Birth Order</td>
<td>1</td>
<td>4.25</td>
<td>1.80</td>
<td>1</td>
<td>1.69</td>
<td>0.71</td>
<td>1</td>
<td>10.15</td>
<td>1.19</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>2.35</td>
<td></td>
<td>56</td>
<td>2.39</td>
<td></td>
<td>56</td>
<td>8.56</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
<td>59</td>
<td></td>
<td></td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01
Table 7

Persuasive Ability: Combined Score Means and Standard Deviations By Sex and Birth Order (N = 60)

<table>
<thead>
<tr>
<th></th>
<th>Younger</th>
<th>Older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.50</td>
<td>2.68</td>
<td>4.48</td>
</tr>
<tr>
<td>Female</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.25</td>
<td>2.25</td>
<td>5.18</td>
</tr>
<tr>
<td>Total</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.45</td>
<td>2.44</td>
<td>4.80</td>
</tr>
</tbody>
</table>
tasks. Therefore, from this point forward, comparisons of Persuasive Ability with other measures are based on the Combined scores unless otherwise specified.

The 2 x 2 analysis of variance by age and sex for Persuasive Ability (Table 8) revealed no significant main effect for sex or its interactions with age.

It was hypothesized that Password and Persuasive Ability would be correlated significantly and positively because it was assumed that they were both measures of role-taking ability. Table 9 shows the Pearson product-moment correlations between Child, Adult, and Combined Persuasive Ability scores. Seven of the nine correlations were significant (2-tailed test).

Clues, which represented the median number of clues required to elicit the mystery word from the mother in Password, correlated negatively (and in the expected direction) with Persuasive Ability, but only with the Child Task did this reach significance. A way of stating this finding is that clue parsimony related positively to Persuasive Ability.

Time, which represented the median amount of time each child required to send the mystery words, also correlated negatively with Persuasive Ability, as was expected. All correlations of Time with Persuasive Ability were significant at the .05 level. In other words, greater speed of word sending (low scores) was consistently associated with higher scores on Persuasive Ability.
Table 8

Analysis of Variance for Persuasive Ability Combined Scores Based on Children's Age and Sex (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>84.79</td>
<td>9.65 **</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.59</td>
<td>.06</td>
</tr>
<tr>
<td>Age x Sex</td>
<td>1</td>
<td>2.12</td>
<td>.24</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>8.79</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01
Table 9

Correlations of Password Clues, Time, and Success with Persuasive Ability on Adult, Child and Combined Scores (N = 60)

<table>
<thead>
<tr>
<th>Persuasive Ability</th>
<th>Clues</th>
<th>Time</th>
<th>Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>-.14</td>
<td>-.25*</td>
<td>.37**</td>
</tr>
<tr>
<td>Child</td>
<td>-.25*</td>
<td>-.27*</td>
<td>.34**</td>
</tr>
<tr>
<td>Combined</td>
<td>-.22</td>
<td>-.29*</td>
<td>.39**</td>
</tr>
</tbody>
</table>

* \( p < .05 \) (2-tailed test)

** \( p < .01 \) (2-tailed test)
Success scores, representing the number of successful sendings of words by the child to the mother, correlated positively and significantly at the .01 level with Adult, Child, and Combined Persuasive Ability scores. Thus, in general, the hypothesis that Password and Persuasive Ability would be correlated was supported, and the relationship was especially evident for the Success scores.

**Role-Taking, Intellectual Functioning, and Word Association.** Prior to examining the relationships between the measures of role-taking, intellectual functioning, and word association, it appeared desirable to obtain a picture of the performance of the various subgroups on these variables. Table 10 presents the means and standard deviations for the two estimations of intelligence (WISC scaled scores for Vocabulary and Digit Symbol) and Word Fluency in terms of age and birth order. Table 11 shows the same descriptive statistics for age and sex.

Since the scores for the two WISC subtests were standard scores and thus were corrected for age and since no birth order differences were hypothesized, no significant effect for age or birth order was anticipated. The fact that the WISC was constructed to minimize sex differences in intellectual functioning further suggested that the scores for boys and girls in the present sample would be comparable. However, the 2 x 2 analyses of variance for the Vocabulary and Digit Symbol scores by age and
Table 10

Means and Standard Deviations of Word Fluency, Digit Symbol, and Vocabulary by Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th></th>
<th>Younger</th>
<th>Older</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firstborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Fluency</td>
<td>8.55</td>
<td>13.67</td>
<td>10.85</td>
</tr>
<tr>
<td>SD</td>
<td>1.97</td>
<td>2.83</td>
<td>3.34</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>8.91</td>
<td>10.44</td>
<td>9.60</td>
</tr>
<tr>
<td>SD</td>
<td>2.91</td>
<td>2.65</td>
<td>2.66</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>11.73</td>
<td>9.78</td>
<td>10.85</td>
</tr>
<tr>
<td>SD</td>
<td>1.68</td>
<td>3.11</td>
<td>2.34</td>
</tr>
<tr>
<td><strong>Laterborn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Fluency</td>
<td>9.00</td>
<td>12.94</td>
<td>10.92</td>
</tr>
<tr>
<td>SD</td>
<td>3.48</td>
<td>4.18</td>
<td>4.20</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>8.81</td>
<td>10.22</td>
<td>9.46</td>
</tr>
<tr>
<td>SD</td>
<td>3.61</td>
<td>2.82</td>
<td>3.24</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>10.95</td>
<td>9.22</td>
<td>10.18</td>
</tr>
<tr>
<td>SD</td>
<td>2.10</td>
<td>2.71</td>
<td>1.79</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Fluency</td>
<td>8.87</td>
<td>13.10</td>
<td>10.85</td>
</tr>
<tr>
<td>SD</td>
<td>2.93</td>
<td>3.61</td>
<td>3.94</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>8.84</td>
<td>10.29</td>
<td>9.52</td>
</tr>
<tr>
<td>SD</td>
<td>3.35</td>
<td>2.57</td>
<td>3.08</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>11.21</td>
<td>9.41</td>
<td>10.42</td>
</tr>
<tr>
<td>SD</td>
<td>1.80</td>
<td>2.68</td>
<td>2.46</td>
</tr>
<tr>
<td></td>
<td>Younger</td>
<td>Older</td>
<td>Total</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Fluency</td>
<td>8.50</td>
<td>12.69</td>
<td>10.06</td>
</tr>
<tr>
<td>M</td>
<td>2.91</td>
<td>4.91</td>
<td>4.17</td>
</tr>
<tr>
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<td>9.85</td>
<td>8.68</td>
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<td>3.04</td>
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<td>10.77</td>
</tr>
<tr>
<td>M</td>
<td>1.93</td>
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<td>2.85</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Word Fluency</td>
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<td>13.64</td>
<td>11.97</td>
</tr>
<tr>
<td>M</td>
<td>3.27</td>
<td>2.27</td>
<td>3.20</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>10.70</td>
<td>10.71</td>
<td>10.71</td>
</tr>
<tr>
<td>M</td>
<td>3.53</td>
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</tr>
<tr>
<td>Vocabulary</td>
<td>9.91</td>
<td>9.86</td>
<td>9.88</td>
</tr>
<tr>
<td>M</td>
<td>1.38</td>
<td>1.99</td>
<td>1.47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Fluency</td>
<td>8.87</td>
<td>13.10</td>
<td>10.85</td>
</tr>
<tr>
<td>M</td>
<td>2.93</td>
<td>3.61</td>
<td>3.94</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>8.84</td>
<td>10.29</td>
<td>9.52</td>
</tr>
<tr>
<td>M</td>
<td>3.35</td>
<td>2.57</td>
<td>3.08</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>11.21</td>
<td>9.41</td>
<td>10.41</td>
</tr>
<tr>
<td>M</td>
<td>1.80</td>
<td>2.68</td>
<td>2.46</td>
</tr>
</tbody>
</table>
birth order (Table 12) revealed a significant ($F = 8.36, p < .01$) main effect for age on Vocabulary. Inspection of the means for age (Tables 10 and 11) indicated that the younger subjects consistently scored higher on Vocabulary than the older subjects. Further, the analysis of variance for these measures for age and sex (Table 13) showed a significant main effect for sex on Digit Symbol ($F = 4.99, p < .05$) and a significant interaction for age and sex on Vocabulary ($F = 4.22, p < .05$). Inspection of the means for sex (Table 11) indicated that the girls scored consistently higher on Digit Symbol than the boys. The significant interaction of age and sex for Vocabulary suggested that the previous finding of a significant main effect for age for Vocabulary was largely attributable to the scores for the boys ($M = 11.86$ for younger, $8.92$ for older) while the girls' scores were similar for each age group ($M = 10.70$ and $10.71$).

Regarding Word Fluency, no hypotheses were formulated with respect to differences associated with age, sex, or birth order. As indicated by the results of the analysis of variance for this variable (Tables 12 and 13), only the main effect for age was significant ($p < .01$).

It seems appropriate at this point to relate the role-taking measures (Password and Persuasive Ability) to the measures of intellectual functioning (Word Fluency, Vocabulary, and Digit Symbol). It was hypothesized that role-taking measures would
Table 12

Analysis of Variance for Word Fluency, Digit Symbol, and Vocabulary Based on Children's Age and Birth Order (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Word Fluency</th>
<th>Digit Symbol</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>276.02</td>
<td>23.66**</td>
</tr>
<tr>
<td>Birth Order</td>
<td>1</td>
<td>.01</td>
<td>.001</td>
</tr>
<tr>
<td>Age x Birth Order</td>
<td>1</td>
<td>4.61</td>
<td>.39</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>11.67</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < .01
Table 13

Analysis of Variance for Word Fluency, Digit Symbol, and Vocabulary Based on Children's Age and Sex (N = 60)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Word Fluency</th>
<th>Digit Symbol</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>276.00</td>
<td>24.02**</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>14.33</td>
<td>1.25</td>
</tr>
<tr>
<td>Age x Sex</td>
<td>1</td>
<td>.07</td>
<td>.01</td>
</tr>
<tr>
<td>Within Cells</td>
<td>56</td>
<td>11.49</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

** p < .01
correlate significantly with the measures of intellectual functioning. It was also anticipated that scores on the WISC subtests would be positively and significantly correlated in line with the correlation reported by Wechsler (1949) between Digit Symbol and Vocabulary ($r = .37$). It also seemed likely that scores on Word Fluency show similar positive correlations with scores on the WISC subtests.

The findings (Table 14) were that the correlations between Password and Word Fluency, Vocabulary, and Digit Symbol were all nonsignificant. For Persuasive Ability only three of the nine correlations with the intellectual functioning measures were significant i.e., the $r$s for Word Fluency with the Adult, Child, and Combined scores. Thus the hypothesized significant relationships between the role-taking measures and those for intellectual functioning received only limited confirmation. The fact that only the correlation between Word Fluency and Digit Symbol was positive and significant ($r = .27, \ p < .05$) while the other correlations between these measures were actually negative was unanticipated.

To explore whether scores on Password were, in part, a product of shared associations between mother and child to the stimulus words, the Word Association protocols of each mother-child pair were scored for shared associations. These shared association scores were correlated with Password and also Persuasive
Table 14

Correlations of Password and Persuasive Ability with Word Fluency, Digit Symbol, and Vocabulary (N = 60)

<table>
<thead>
<tr>
<th>Password</th>
<th>Persuasive Ability</th>
<th>Digit Symbol</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult</td>
<td>Child</td>
<td>Combined</td>
</tr>
<tr>
<td>Word Fluency</td>
<td>.21</td>
<td>.36**</td>
<td>.30*</td>
</tr>
<tr>
<td>Digit Symbol</td>
<td>.18</td>
<td>.23</td>
<td>.05</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>.02</td>
<td>.10</td>
<td>-.04</td>
</tr>
</tbody>
</table>

* p < .05  
** p < .01
Ability scores to examine the relationship between shared associations and the role-taking scores. These correlations (Table 15) were all nonsignificant and thus indicated that role-taking ability was not facilitated by shared associations.

**Adult Role.** In considering the variables which may be related to role-taking ability in children, one relationship was hypothesized to exist between role-taking as measured by Persuasive Ability and Password and adult role-taking as measured by Maccoby's Adult Role Test. All eight scales of the Maccoby Test were considered in their relationship to Password and Persuasive Ability, although the hypothesis was considered relevant for only three of the scales (Enforce Rules, Accept Rule Enforcement, and Adult Choice). It was believed that children scoring high on those three scales would be high on adult role-taking, and it was hypothesized that high scorers on adult role-taking would score higher on Password and the Adult Task of Persuasive Ability. Table 16 shows the correlations between the Maccoby scales and the scores for Persuasive Ability and Password. For brevity's sake the correlations were reduced to those with the Password Success score and the Persuasive Ability Combined score since these correlations were representative of all the possible correlations between these measures and the Maccoby scales.

There were no significant correlations of the Maccoby scales with either Persuasive Ability or Password. Thus, the hypothesis
Table 15

Correlations Between Password and Persuasive Ability and Number of Shared Associations on the Word Association Test (N = 60)

<table>
<thead>
<tr>
<th>Password</th>
<th>Persuasive Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clues</td>
<td>Time</td>
</tr>
<tr>
<td>Shared Associations</td>
<td>-0.06</td>
</tr>
</tbody>
</table>
Table 16

Correlations of the Maccoby Adult Role Test Scales with Persuasive Ability and Password (N = 60)

<table>
<thead>
<tr>
<th>Maccoby Scales</th>
<th>Password</th>
<th>Persuasive Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforce Rules</td>
<td>-.19</td>
<td>-.03</td>
</tr>
<tr>
<td>Accept Rule Enforcement</td>
<td>-.28</td>
<td>.22</td>
</tr>
<tr>
<td>Adult Choice</td>
<td>-.01</td>
<td>.00</td>
</tr>
<tr>
<td>Accept Nurturance--Comfort</td>
<td>-.04</td>
<td>.09</td>
</tr>
<tr>
<td>Accept Nurturance--Material</td>
<td>.02</td>
<td>-.09</td>
</tr>
<tr>
<td>Give Nurturance</td>
<td>-.05</td>
<td>-.01</td>
</tr>
<tr>
<td>Occupational Choice</td>
<td>.13</td>
<td>.03</td>
</tr>
<tr>
<td>Beg for Return of Nurturance</td>
<td>-.07</td>
<td>-.34</td>
</tr>
</tbody>
</table>
that high scorers on the three scales (Enforce Rules, Accept Rule Enforcement, and Adult Choice) would score higher on Password and Persuasive Ability was unsupported.

A related hypothesis concerning adult role-taking was that birth order should be related to scores on the Maccoby scales. It was hypothesized that firstborns would have higher scores on Enforce Rules, Accept Rule Enforcement, and Adult Choice than laterborns. Table 17 shows the means and standard deviations for firstborn and laterborn children on each Maccoby scale. Table 17 also shows the F values of a 2 x 2 analysis of variance done by age and birth order for each of the Maccoby scales. Since there were no significant differences between the scores due to birth order, the birth order hypothesis was not confirmed.

**Maternal Variables**

Having reported the child variables above, this presentation turns to the maternal variables which were hypothesized to influence role-taking ability as measured by Password and Persuasive Ability.

The present study used scores on the Maryland Parent Attitude Survey (MPAS) to obtain mother scores on four parental scales: Disciplinarian, Indulgent, Protective, and Rejecting. The means and standard deviations for the four MPAS scales are shown in Table 18.
Table 17

Means, Standard Deviations, and F Values for Firstborn and Laterborn Children on the Maccoby Adult Role Test (N = 60)

<table>
<thead>
<tr>
<th>Maccoby Scale</th>
<th>Birth Order</th>
<th>M</th>
<th>SD</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforce Rules</td>
<td>First</td>
<td>4.26</td>
<td>1.29</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>4.38</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Accept Rule Enforcement</td>
<td>First</td>
<td>4.42</td>
<td>1.61</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>4.45</td>
<td>1.39</td>
<td></td>
</tr>
<tr>
<td>Adult Choice</td>
<td>First</td>
<td>6.30</td>
<td>2.20</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>7.00</td>
<td>2.45</td>
<td></td>
</tr>
<tr>
<td>Accept Nurturance--Comfort</td>
<td>First</td>
<td>2.74</td>
<td>.71</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>2.64</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Accept Nurturance--Material</td>
<td>First</td>
<td>2.56</td>
<td>1.02</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>2.56</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Give Nurturance</td>
<td>First</td>
<td>2.84</td>
<td>1.19</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>3.33</td>
<td>1.33</td>
<td></td>
</tr>
<tr>
<td>Occupational Choice</td>
<td>First</td>
<td>3.05</td>
<td>.91</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>2.98</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td>Beg for Return of Nurturance</td>
<td>First</td>
<td>2.40</td>
<td>.83</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>Later</td>
<td>2.73</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

\( F \) values for the main effect for birth order
Table 18

Mothers' Means and Standard Deviations on the Four Maryland Parent Attitude Survey Scales (N = 60)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinarian</td>
<td>22.15</td>
<td>6.07</td>
</tr>
<tr>
<td>Indulgent</td>
<td>22.88</td>
<td>6.34</td>
</tr>
<tr>
<td>Protective</td>
<td>24.60</td>
<td>5.32</td>
</tr>
<tr>
<td>Rejecting</td>
<td>19.22</td>
<td>6.41</td>
</tr>
</tbody>
</table>
It was hypothesized that the mother's childrearing approach as represented by the MPAS scales would relate to role-taking ability. Specifically, it was hypothesized that mothers who scored high on the Disciplinarian scale would have children who scored high on Password and Persuasive Ability. However, as indicated in Table 19 there was no significant correlation between any of the MPAS scales and scores for Password and Persuasive Ability.

Although no evidence of significant rs between role-taking and the mother scales existed, it seemed worthwhile to consider further the relationship between the MPAS and role-taking with age held constant. Therefore, to explore the relationship between mothers' scores on the MPAS scales and the children's scores on Password and Persuasive Ability, three-way analyses of variance were done. The three dimensions of the analyses were age, sex, and high-low status on the role-taking measure (either Password or Persuasive Ability). For high-low status, younger and older children were divided separately into high and low status groups, and then the younger and older high scorers and the younger and older low scorers were regrouped into one high and one low status group. Scores of all four MPAS scales were included in the following analyses to check for interesting relationships between each of the MPAS scales and the child variables.

First, the relationship between MPAS scores and Password scores were considered. Table 20 shows results of the analyses
Table 19

Correlations Between the Maryland Parent Attitude Survey Scales and Password and Persuasive Ability (N = 60)

<table>
<thead>
<tr>
<th>MPAS Scale</th>
<th>Password</th>
<th>Persuasive Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinarian</td>
<td>.13</td>
<td>-.00</td>
</tr>
<tr>
<td>Indulgent</td>
<td>-.21</td>
<td>-.06</td>
</tr>
<tr>
<td>Protective</td>
<td>-.13</td>
<td>.06</td>
</tr>
<tr>
<td>Rejecting</td>
<td>.18</td>
<td>.04</td>
</tr>
</tbody>
</table>
### Table 20

Analysis of Variance for MPAS Scores Based on Children's Age, Sex, and High-Low Status on Password (N = 60)

<table>
<thead>
<tr>
<th>Source</th>
<th>Disciplinarian</th>
<th></th>
<th></th>
<th>Indulgent</th>
<th></th>
<th></th>
<th>Protective</th>
<th></th>
<th></th>
<th>Rejecting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>df</td>
<td>MS</td>
</tr>
<tr>
<td>High-Low</td>
<td>1</td>
<td>65.19</td>
<td>1.64</td>
<td>1</td>
<td>74.11</td>
<td>1.83</td>
<td>1</td>
<td>.40</td>
<td>.02</td>
<td>1</td>
<td>64.63</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1.11</td>
<td>.03</td>
<td></td>
<td>.23</td>
<td>.01</td>
<td>1</td>
<td>36.80</td>
<td>1.37</td>
<td>1</td>
<td>5.27</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>5.25</td>
<td>.13</td>
<td></td>
<td>20.01</td>
<td>.49</td>
<td>1</td>
<td>43.66</td>
<td>1.63</td>
<td>1</td>
<td>59.34</td>
</tr>
<tr>
<td>HL x Age</td>
<td>1</td>
<td>24.72</td>
<td>.62</td>
<td></td>
<td>50.53</td>
<td>1.25</td>
<td>1</td>
<td>17.31</td>
<td>.65</td>
<td>1</td>
<td>24.05</td>
</tr>
<tr>
<td>HL x Sex</td>
<td>1</td>
<td>2.31</td>
<td>.06</td>
<td></td>
<td>31.98</td>
<td>.79</td>
<td>1</td>
<td>141.20</td>
<td>5.27*</td>
<td>1</td>
<td>26.07</td>
</tr>
<tr>
<td>Age x Sex</td>
<td>1</td>
<td>5.93</td>
<td>.15</td>
<td></td>
<td>1.84</td>
<td>.05</td>
<td>1</td>
<td>.51</td>
<td>.02</td>
<td>1</td>
<td>52.42</td>
</tr>
<tr>
<td>HL x Age x Sex</td>
<td>1</td>
<td>1.90</td>
<td>.05</td>
<td></td>
<td>85.30</td>
<td>2.10</td>
<td>1</td>
<td>61.74</td>
<td>2.30</td>
<td>1</td>
<td>95.75</td>
</tr>
<tr>
<td>Within Cells</td>
<td>52</td>
<td>39.72</td>
<td></td>
<td>1</td>
<td>40.58</td>
<td></td>
<td>1</td>
<td>26.79</td>
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<td>1</td>
<td>40.32</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01
of variance for MPAS scores based on children's age, sex, and high-low status on Password. It is apparent that none of the four mother scales yielded significant main effects of age or sex for Password. Thus the hypothesized relationship between children's role-taking and mothers' Disciplinarian score again received no support. Consideration of the interactions revealed that only the sex x Password status interaction for the Protective scale has significant ($F = 5.53, p < .05$). That is, mothers of girls in this study had significantly higher Protective scores than mothers of the boys.

Next, the relationship between mothers' MPAS scores and the children's Persuasive Ability scores were considered. Similar to the previous analyses, three-way analyses of variance were done with age, sex and high-low status on Persuasive Ability as the dimensions and scores on the four MPAS scales as the dependent variables. The hypothesis was that Disciplinarian mothers would have children who scored high on Persuasive Ability. Table 21 presents results of these analysis.

No significant main effects were associated with mothers' scores on the Disciplinarian scale or on any of the other scales. However, there were two other significant and interesting findings. On the Protective scale the interaction for High-Low status on Persuasive Ability with sex was significant. Inspection of the means indicated that girls who scored high on Persuasive Ability had mothers who scored higher on the Protective
Table 21

Analysis of Variance for MPAS Scores Based on Children's Sex, Birth Order, and High-Low Status on Persuasive Ability (N = 60)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>MS</th>
<th>F</th>
<th>MS</th>
<th>F</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Low</td>
<td>1</td>
<td>72.04</td>
<td>1.96</td>
<td>21.06</td>
<td>.49</td>
<td>4.19</td>
<td>.15</td>
<td>52.75</td>
<td>1.37</td>
</tr>
<tr>
<td>Birth Order</td>
<td>1</td>
<td>91.88</td>
<td>2.50</td>
<td>60.20</td>
<td>1.40</td>
<td>4.47</td>
<td>.16</td>
<td>4.03</td>
<td>.11</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>5.25</td>
<td>.14</td>
<td>20.01</td>
<td>.47</td>
<td>44.38</td>
<td>1.58</td>
<td>59.34</td>
<td>1.55</td>
</tr>
<tr>
<td>HL x BO</td>
<td>1</td>
<td>38.41</td>
<td>1.05</td>
<td>23.14</td>
<td>.54</td>
<td>11.68</td>
<td>.42</td>
<td>4.90</td>
<td>.13</td>
</tr>
<tr>
<td>HL x Sex</td>
<td>1</td>
<td>19.52</td>
<td>.53</td>
<td>11.00</td>
<td>.26</td>
<td>15.51</td>
<td>5.53*</td>
<td>99.61</td>
<td>2.60</td>
</tr>
<tr>
<td>BO x Sex</td>
<td>1</td>
<td>16.19</td>
<td>.44</td>
<td>3.33</td>
<td>.08</td>
<td>.83</td>
<td>.03</td>
<td>165.84</td>
<td>4.32*</td>
</tr>
<tr>
<td>HL x BO x Sex</td>
<td>1</td>
<td>18.27</td>
<td>.50</td>
<td>2.47</td>
<td>.06</td>
<td>16.21</td>
<td>.58</td>
<td>41.44</td>
<td>1.08</td>
</tr>
<tr>
<td>Within Cells</td>
<td>52</td>
<td>36.73</td>
<td></td>
<td>42.94</td>
<td></td>
<td>28.06</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
scale. The second finding is that the interaction of birth order and sex was a significant source of variance on the Rejecting scale. This reflected a tendency for mothers of firstborn girls to score lower on the Rejecting scale.

This study also investigated the relationship between the MPAS and the child's adult role-taking on the Maccoby. First, it was hypothesized that high Disciplinarian mothers would rear children high on adult role-taking as evidenced by their scores on the scales for Enforce Rules and Acceptance of Rule Enforcement. Only two of the three adult role-taking scales were included here for the sake of brevity.

Table 22 presents the three-way analyses of variance for each of the four MPAS scales with the dimensions of sex, birth order, and High-Low status on the Enforce Rules scale. As with the role-taking measures, age was controlled for by dividing younger and older children separately into high and low status groups on Enforce Rules and then grouping the younger and older high and the younger and older low members into one high status and one low status group.

The main effect for high-low status was not significant for the Disciplinarian scores nor for the other three Maccoby scales. It may be noted, however, that the main effect for sex was significant for the Protective and Rejecting scales. Inspection of the means indicated that the mothers of girls had higher Protective scores and lower scores on Rejecting than the mothers of
Table 22

Analysis of Variance for MPAS Scores Based on Children's Sex, Birth Order, and High-Low Status on Enforce Rules (N = 60)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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</thead>
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<td></td>
<td></td>
</tr>
<tr>
<td>Disciplinarian</td>
<td></td>
<td></td>
<td></td>
<td>Indulgent</td>
<td></td>
<td></td>
<td></td>
<td>Protective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>Rejecting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Low</td>
<td>1</td>
<td>2.02</td>
<td>.06</td>
<td>46.42</td>
<td>1.15</td>
<td>1.65</td>
<td>.06</td>
<td>43.28</td>
<td>1.08</td>
<td>3.66</td>
<td>.09</td>
</tr>
<tr>
<td>Birth Order</td>
<td>1</td>
<td>91.88</td>
<td>2.58</td>
<td>60.20</td>
<td>1.49</td>
<td>9.07</td>
<td>.33</td>
<td>3.66</td>
<td>.09</td>
<td>5.34</td>
<td>.13</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>5.25</td>
<td>.15</td>
<td>20.01</td>
<td>.49</td>
<td>164.64</td>
<td>6.07*</td>
<td>161.00</td>
<td>4.03*</td>
<td>50.38</td>
<td>1.26</td>
</tr>
<tr>
<td>HL x BO</td>
<td>1</td>
<td>24.52</td>
<td>.69</td>
<td>8.55</td>
<td>.21</td>
<td>1.38</td>
<td>.05</td>
<td>5.34</td>
<td>.13</td>
<td>7.13</td>
<td>.18</td>
</tr>
<tr>
<td>HL x Sex</td>
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<td>14.71</td>
<td>.41</td>
<td>12.12</td>
<td>.30</td>
<td>.88</td>
<td>.03</td>
<td>50.38</td>
<td>1.26</td>
<td>102.70</td>
<td>2.57</td>
</tr>
<tr>
<td>BO x Sex</td>
<td>1</td>
<td>16.19</td>
<td>.45</td>
<td>3.34</td>
<td>.08</td>
<td>43.54</td>
<td>1.61</td>
<td>102.70</td>
<td>2.57</td>
<td>39.92</td>
<td></td>
</tr>
<tr>
<td>HL x BO x Sex</td>
<td>1</td>
<td>163.68</td>
<td>4.59*</td>
<td>116.83</td>
<td>2.88</td>
<td>39.30</td>
<td>1.45</td>
<td>39.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Cells</td>
<td>52</td>
<td>35.64</td>
<td></td>
<td>40.51</td>
<td></td>
<td>27.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*p < .05
boys. There was also a significant three-way interaction on the mothers' Disciplinarian score.

Table 23 presents the comparable three-way analyses of variance (sex by birth order by High-Low status on Acceptance of Rule Enforcement) with MPAS scores as the dependent variables. Although the specifically hypothesized main effect for High-Low status on the Disciplinarian scale was not confirmed, there were two significant findings. Sex was again a significant source of variance on the Protective scores and indicated that mothers of girls had higher Protective scores. Also, there is a significant three-way interaction on the MPAS Rejecting score.
Table 23

Analysis of Variance for MPAS Scores Based on Children's Sex, Birth Order, and High-Low Status on Acceptance of Rule Enforcement (N = 60)

<table>
<thead>
<tr>
<th>Source</th>
<th>Disciplinarian</th>
<th>Indulgent</th>
<th>Protective</th>
<th>Rejecting</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>df</td>
<td>MS</td>
<td>F</td>
<td>MS</td>
</tr>
<tr>
<td>High-Low</td>
<td>1</td>
<td>48.91</td>
<td>1.35</td>
<td>17.27</td>
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<td>Birth Order</td>
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<td>91.88</td>
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<td>10.52</td>
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<tr>
<td>Sex</td>
<td>1</td>
<td>5.25</td>
<td>.14</td>
<td>6.23</td>
</tr>
<tr>
<td>HL x BO</td>
<td>1</td>
<td>.75</td>
<td>.02</td>
<td>45.12</td>
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<tr>
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<td>1</td>
<td>42.75</td>
<td>1.18</td>
<td>25.83</td>
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<tr>
<td>BO x Sex</td>
<td>1</td>
<td>16.19</td>
<td>.45</td>
<td>11.57</td>
</tr>
<tr>
<td>HL x BO x Sex</td>
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<td>79.26</td>
<td>2.18</td>
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<tr>
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<td>36.28</td>
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<td>42.99</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td></td>
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</tbody>
</table>

* p < .05
CHAPTER IV

DISCUSSION

The most basic hypothesis of this investigation, that role-taking ability improves with age, was supported in terms of both measures of this ability. Children who were 7 to 8 years of age consistently scored significantly lower on Persuasive Ability and Password than children who were 11 or 12 years of age.

The higher scores for older children on the Persuasive Ability Tasks suggested that those children were better able to find appealing arguments to convince another to do what they wished than were younger children. For example, one seven-year-old child with a short and straightforward attempt typical of many responses of the younger group, said: "Please buy me a television set, daddy, please; I want one." On the other hand, from the older group, one bright and very persuasive twelve-year-old came up with the following winning appeals to convince her father to her way of thinking:

Are you busy, dad? Listen, I'd like to ask you for something which I want a lot but I know you may not agree, at first. Well, you know how much I like to watch television, especially the late shows. You also know that you like to sleep, go to sleep early. I know that the television noise keeps you up and if I could have a small, inexpensive one for my bedroom, it would be more quiet for you and mom, and everyone would be happy. If the set is too much, I will let you take all my allowance and put it with the television money
to help pay. We could let all the kids use it and that would stop all, well not all, the arguments about television shows. At least then everyone could choose from two television shows, and us kids wouldn't argue as much over the shows we want.

With younger children there was a greater incidence of begging or simply asking for something rather than a more subtle negotiating approach. This seemed to indicate that the younger child knew what he wanted, but did not escape his egocentrism to discover what the other wanted and use that discovery in persuading the other to the desired course of action.

Although Persuasive Ability was investigated through two tasks involving the persuasion of an adult and a peer, it appeared that scores on both tasks were very similar. Thus, children did not show greater facility in their approach to another child than to an adult or vice versa.

For Password, three approaches to scoring were investigated: Successes, Clues, and Time. In general, the performances of the older children were characterized by greater success in having the recipient guess the words and this was accomplished with fewer clues given more quickly than for the younger children. The fact that the correlations between the measures were consistently significant (ranging from moderate to fairly high) and that each type of score showed the anticipated increase with age suggested that the scores were, to some extent, interchangeable. However, inspection of all of the results associated with the
three scores suggested that the Success scores produced the most clear-cut findings and should be used as the major indicator of performance unless one is concerned with how the child transmits the words. The Success score was, of course, the most direct measure of what the child accomplished. The Time and Clues measures, on the other hand, sometimes reflected approaches which did not conform to the expectation of Success being associated with greater speed and fewer clues. That is, a child might be successful by giving a number of "poor" clues very quickly or by taking a great deal of time to produce one or two "good" clues.

Considering role-taking ability and its relationship to birth order, the results of this study did not support the hypothesis that firstborn children would score significantly higher on Password and the Adult Task of Persuasive Ability. A possible explanation of this finding may be that firstborn and laterborn children do not differ in their ability to relate to adults. Although it was reasoned that the firstborn's relationship with adults would lead to better performance on Password and on the Adult Task, it might be argued that laterborn children have the benefit of both adult and peer interactions in their early environment and thus could develop role-taking ability relative to adults which would equal that of firstborn children. Perhaps more fitting comparisons to make between
the role-taking ability of firstborn and laterborn children would lie in their differential role-taking ability with regard to peers. Indeed, most of the research relevant to interpersonal relationship of first- and laterborns has dealt with relationships between peers rather than those between adults and children (Sampson, 1965). The only possibility for checking this alternative hypothesis in the present study involved the Child Task of the Persuasive Ability measure. Since the analysis of variance for this task (Table 6) failed to indicate any significant difference for birth order, the prospect for finding that role-taking skills of laterborns are superior to those of firstborns in interacting with peers is not particularly encouraging. However, the fact that this conclusion is based on a single score from a brief and somewhat limited measure of role-taking ability suggests that no conclusions concerning birth order effects (or lack of them) should be made on the basis of these data.

Another possible reason for the lack of support of the birth order hypothesis is that the Persuasive Ability measure did not provide ample opportunity for variation between groups to manifest itself. For example, the children in the younger group were typically found to produce very few persuasive arguments. Thus, the performance for the younger group was too homogenous and limited to bring out any potential birth order differences in role-taking ability on this measure. Even for the older group,
it might have been advantageous to present a series of imaginary situations involving the persuasion of another person to allow for a greater range of responses within this age group.

As for the possible explanation of the lack of birth order differences on the other role-taking measure, namely Password, the above statement that firstborn children need not be better than laterborn children at role-taking with an adult may help explain the lack of discrimination between firstborn and laterborn children. Similar to Persuasive Ability, it may be a more fitting comparison to measure Password performance of firstborn children with peers against performance of laterborn children with peers. For, although the firstborn child need not be superior to the laterborn in Password with an adult, the laterborn child might be superior in doing Password with a peer.

The possibility that performance on the role-taking measures would differ for boys and girls received no confirmation in terms of scores on Password and Persuasive Ability. This finding is consistent with the findings of other investigators who obtained no sex differences (Rothenberg, 1970; Selman, 1971). The fact that some investigators of interpersonal behavior have obtained differences (Dimitrovsky, 1964; Gollin, 1958; Shanley et al, 1971) may be accounted for by the nature of the measures and the particular skills being studied. Role-taking as measured here does not perhaps represent the common notion of greater sensitivity to other people's feelings which is attributed to females.
Role-taking does not seem to be the equivalent to such things as empathy, which may be closer to what is commonly thought to be the female's superior ability.

In addition, Rothenberg's (1970) suggestion that her failure to find differences in social sensitivity might be attributable to a relative absence of childrearing approaches which would produce these differences could also apply to the present sample. In both studies the children largely came from middle-class homes.

Turning to the results of the relationships among the measures of intellectual functioning and their relationship to the role-taking measures, most of the findings were unanticipated and raised questions about the nature of the sample. One predictable (although not hypothesized) finding was that Word Fluency increased significantly with age. Also, the obtained sex difference on Word Fluency was in line with past reports of greater verbal facility in females.

One surprising finding involved the age and sex differences on the Vocabulary and Digit Symbol subtests of the Wechsler Intelligence Scale for Children (WISC). The scores used on those subtests were scaled scores which were developed to control for age differences. Thus, had the samples been comparable, the means for the younger and older groups should have been approximately the same. With respect to sex of the subjects, the
selection of items for the WISC was designed to eliminate sex differences in performance. In contrast to these expectations, the obtained differences for Vocabulary indicated that the younger group scored significantly higher than the older group ($p < .01$) with this difference attributable to the fact that younger boys obtained higher scaled scores than either the older boys or the two groups of girls. In addition, older boys scored the lowest of these groups. Secondly, the age difference for Digit Symbol approached significance ($p < .10$) with the younger group scoring lower than the older group. For this measure, the unanticipated main effect for sex also indicated that the girls scored higher than the boys.

The correlations between the scores on the measures of cognitive functioning, and particularly, the correlations between the scores on the WISC subtests, were also lower than anticipated (Table 15). Only the scores on Word Fluency and Digit Symbol were correlated significantly ($r = .27, p < .05$). The low (and actually negative) correlation between Vocabulary and Digit Symbol ($r = -.13$) bore little resemblance to the correlations of .22 and .41 reported by Wechsler (1949) for those subtests for children at 7 1/2 and 10 1/2 years of age.

Finally, the hypothesized positive and significant relationships between the measures of role-taking ability and intellectual functioning were unsupported except for the significant
correlations between the scores of Word Fluency and Persuasive Ability. These significant correlations may be explained by the common demand of the two tasks on the subject to creatively produce verbal output in a very open-ended task.

That is, the significant correlations between the two measures may have been due to the fact that both measures may reflected the energy and effort which the subject was willing to expend on the task and the cooperation which the subject exhibited in the study, i.e., how willing and how motivated he was to perform the tasks. It was a common observation in the study that children were somewhat inhibited when dealing with the experimenter, especially in the open-ended measures, among which were Persuasive Ability and Word Fluency. In contrast, on Digit Symbol and Vocabulary the child could keep answers brief without penalty to his scores. The significant correlation also suggested the possibility that scores on Persuasive Ability may be as much a reflection of general verbal facility as of role-taking ability. It may be noted that the correlations between the two measures of role-taking ability were of similar magnitude with a correlation between Password Success scores and Persuasive Ability (Combined scores) of .39 while the correlations between the same Persuasive Ability score and Word Fluency was .37.

Consideration of the various findings for the measures of
role-taking ability in conjunction with the estimates of intellectual functioning suggests that conclusions about the age and birth-order related differences in role-taking ability and the relationships among the measures must be tentative. It is apparent that the various subgroups of the sample (defined in terms of age and sex) were not comparable. The fact that the younger group surpassed the older group on the scaled scores of the Vocabulary subtest while the opposite trend was observed for Digit Symbol makes generalizations difficult. The consistently low correlations between WISC scores and the scores on the role-taking measures may suggest that within the limits of the present sample, these aspects of intellectual functioning were simply not important in role-taking performance. It may also be noted, that the performance of the younger group on Vocabulary was not higher than that of the older group if raw scores were considered. While this does not assist in clarifying the obtained correlations, it does suggest that the basic knowledge of words as assessed by the Vocabulary subtest was less for the younger group. To the extent that Vocabulary might contribute to role-taking ability (although not indicated here), the younger group, consistent with its age, did achieve less than the older group on this measure.

In concluding the considerations involving intellectual functioning, it seems especially important to emphasize the
desirability of obtaining data of these types and using them in the ways suggested in this investigation, that is, to use them in investigating the characteristics of the sample. It is apparent that this approach leads to a better (if not clearer) understanding of the sample and may reveal unexpected deviations from the generally accepted relationships among measures.

Turning to the relationship of the mother variables to role-taking ability and adult role-taking, the findings provided no support to the hypotheses. Although it is still a tenable position that maternal style influences role-taking ability and adult role-taking, the specific hypotheses proposed in this study were unconfirmed. The reason for this lack of confirmation may lie in the fact that the Maryland Parent Attitude Survey (MPAS) scales are unidimensional. That is, the MPAS scales are focused on the restrictiveness-permissiveness dimension of parenting style without the inclusion of the warmth-coldness dimension. It is possible that the absence of this warmth-coldness dimension may account for the lack of relationship shown between maternal style and child variables.

As other authors have stated (Maccoby, 1961; Sears et al., 1957) there is an interaction between the two dimensions. Warmth binds the child in a relationship with the parent and restrictiveness demands that the child learn the rules of the relationship. It appears that a probable reason for the lack of support for
the hypotheses relating the Disciplinarian scale to role-taking and adult role-taking may be attributed to the absence of the warmth dimension and the consequent impossibility of simultaneously considering the warm-cold restrictive-permissive dimensions.

In spite of the lack of confirmation of the specific hypotheses, some additional remarks are in order concerning the relationship of maternal style to child variables. It is interesting to note that mothers of the girls in the study had higher scores on the Protective scale. This was a consistent finding across all analyses. Also, mothers who were more protective had girls who scored higher on both Persuasive Ability and Password. Sex also interacted with birth order, in that mothers of firstborn girls scored significantly lower on the Rejecting scale.

The above findings suggest that there is some general relation between maternal style even as incompletely measured (i.e. without the warmth-coldness dimension) by the MPAS and the child variables, notably sex in interaction with birth order.

Having seen the results, some supportive and some unsupportive of the hypotheses of this study, and having discussed some of the shortcomings of the study, it may be profitable to close with suggestions for future research in this area.

First, research in the area of role-taking ability might be
directed at refining a measure which would have greater discriminative ability than did the Persuasive Ability and Password measures. The present measures, although able to discriminate younger from older groups on role-taking ability, may not have been adequate for finer comparisons within age groups.

Secondly, with regard to birth order and its relationship to role-taking ability, it appears that the firstborn-laterborn dichotomy may oversimplify the important structure of the family. The simple categorizing of children into two groups does not allow for the spacing which exists in families, wherein later-born children with five or more years separating them from the next oldest sibling may in effect be in a similar position to that of the firstborn who is born into a world of larger and more powerful persons. Other family variables such as the boy to girl ratio and the ordering of boys and girls in the family may also influence each child's development of role-taking.

Finally, in relating maternal style to role-taking ability, it may be advantageous to include the warmth dimension with the restrictiveness dimension. This would be especially essential if warmth is as important in establishing the bond between mother and child as many authors have suggested.
CHAPTER V

SUMMARY

The present study explored the development of role-taking ability in 60 children (35 boys and 25 girls) at two age levels (7-8 years old and 11-12 years old). Role-taking ability as measured by performance on two separate instruments, Password and Persuasive Ability, and adult role-taking as measured by the Adult Role Test were examined in their relationship to children's age, sex, birth order, and intellectual level and to the parental style of the mother. The children's mothers, who were also tested as part of a larger research project, were given the Maryland Parent Attitude Survey, whose four parental scales were examined in their relationship to role-taking ability and adult role-taking. In relating role-taking and adult role-taking to the child and parental variables, the following hypotheses were proposed.

(1) that role-taking ability increased with age;
(2) that there is a birth order effect on role-taking and adult role-taking;
(3) that measures of intellectual functioning are significantly and positively correlated with the measures of role-taking ability;
(4) that children high in adult role-taking score high on the measures of role-taking ability which involved an adult;

(5) that role-taking and adult role-taking relate to the mother's parenting style.

As expected the findings of this study confirmed the age hypothesis i.e., older children showed greater role-taking ability than younger children. On the other hand, the birth order hypothesis was unsupported by comparisons between firstborn and laterborn children on the measures of role-taking ability and adult role-taking. The measures of intellectual functioning generally did not correlate highly with role-taking ability, but poor correlations among the measures of intellectual functioning themselves raised serious questions about the characteristics of the sample and discouraged the drawing of conclusions about the relationship between measures of intellectual functioning and role-taking ability. Also, the hypothesis concerning the relationship between role-taking ability and adult role-taking was unconfirmed. Finally, although specific predictions of the relationship of mothers' parenting style and the child variables were unsupported, the findings showed that occasional relationships did exist between parenting style and the sex and birth order of the child.
REFERENCES


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APPENDIX A
NOTE: The girls' form of the test is found below. For most items the only difference between the boys' and girls' forms of the test is a difference in the gender of nouns or pronouns. In only a few cases has the entire item on the boys' form been worded differently from the girls' form. In these cases the boys' item follows the girls' item in parentheses.

Instructions to Subjects:

Here are some stories about things that might happen to a girl your age. Put an X beside the answer that tells what you would do if this happened to you. THIS IS NOT A TEST. THERE ARE NO RIGHT OR WRONG ANSWERS. JUST WRITE DOWN WHAT YOU THINK YOU WOULD REALLY DO.

1. You and your friend have each bought a small bag of candy. You finish yours first, and you are still hungry. She offers you one of the pieces of candy she has left. What would you do?

   - [ ] Thank her and take one.
   - [ ] Say, "No, thanks."

2. You are on your way to school. A girl in your class is talking in front of you. She drops a bottle on the sidewalk, and it breaks into many pieces. The girl walks on. What would you do?

   - [ ] Say nothing; it's her business, not mine.
   - [ ] Tell the girl to pick up the pieces.

3. You invite your friend into the kitchen to have a piece of cake. Both of you have been playing and your hands are dirty. You wash your hands before you eat your cake, but your friend doesn't. What would you do?

   - [ ] Say nothing. It's her business.
   - [ ] Ask her to wash her hands.

4. Suppose you are playing softball. As you run to second base your team calls you safe, but you know you were tagged out so you walk off the diamond to your bench. After the game, your teammates are angry and say you lost the game for them. What would you do?
0 Say nothing; they'll cool off after a while.

VIII 1 Tell them I didn't mean to make them angry.

0 Tell them I won't play any more if they expect me to cheat.

5. A girl asks you to help her clean the kitchen. You are in a hurry to meet your friends, and you know that this girl is always trying to get other people to do her work for her. What do you do?

0 Tell her I haven't got time.

VI 1 Help her.

(5. A boy asks you to help him fix his bicycle tire. You are in a hurry to meet your friends, and you know that this boy is always trying to get other people to do his work for him. What do you do?

0 Tell him I haven't got time.

VI 1 Help him.)

6. By accident, you knocked down a bunch of coats in the coat room. Another girl said to you, "Hey, you better pick those up." What would you say?

0 "Don't worry; I was just going to."

II 1 "O.K., thanks for telling me."

7. You see one of your good friends and another girl in an argument. They are about to start fighting. Would you do anything? What?

1 Leave them alone; let them settle it themselves.

III 0 Help my friend if she needs it.

2 Try to stop the fight.

8. If you had a cold and stayed home from school, would you like to have your breakfast in bed?

1 Yes, it's nice to be waited on a little when you don't feel well.

IV 0 No, I like to be up and dressed even when I don't feel well.
9. There is a new girl in class—you don't know her very well. She brought gum to school and chewed it right in class. The teacher caught her. How do you feel?

   0 Sorry for her because she got caught.
   III 2 Ashamed for her; she shouldn't have done it.
   1 Not sorry for her; it's her own fault if she gets into trouble.

(9. There is a new boy in class—you don't know him very well. He throws a spit ball at another boy and accidentally hits the teacher. The teacher saw who did it. How do you feel?

   0 Sorry for him because he got caught.
   III 2 Ashamed for him; he shouldn't have done it.
   1 Not sorry for him; it's his own fault if he gets into trouble.)

10. Suppose there was a girl who had been quite a good friend of yours. She starts acting less friendly. She doesn't wait for you after school as often as she used to. What do you do?

   0 Tell her I think she's being unfair.
   VIII 1 Ask her to wait after school the way she used to.
   0 Don't do anything—it will blow over.

11. You are playing tennis at some good tennis courts. There is a sign that says, "All players must wear tennis shoes." Some girls your own age come onto the next court and start to play in their street shoes. Would you do anything about it? What?

   0 I wouldn't do anything; it's not my business.
   I 1 Say, "You're supposed to have tennis shoes to play here."
   1 Point to the sign and say, "Can't you read?"

12. In your school it's against the rules to slide down the banisters. One day, a girl you know slides down, and at the bottom she is met by a teacher. You are watching. How do you feel?

   0 Sorry for her, because she got caught.
   III
1. Not sorry for her; it's her own fault for breaking the rules.

13. You are dressed in your best clothes for a party and have about half an hour to wait. You go next door and ask your friend if you can borrow her jump rope for a while. She says, "No, you'll get your clothes all dirty." What would you do?

   0 Say, "That's my problem. Come on, let me have the jump rope.

   II 1 Say, "I guess that's right."

(13. You are dressed in your best clothes for a party and have about half an hour to wait. You go next door and ask your friend if you can borrow his basketball for a few shots. He says, "No, you'll get your clothes all dirty." What would you do?

   0 Say, "That's my problem. Come on, let me have the ball."

   II 1 Say, "I guess that's right."

14. There is a short-cut from your house to school if you go through an apple orchard. The owner has told you and your friends that it is all right to go through the orchard if you promise not to eat any of the apples. One day one of your friends picks an apple and starts to eat it. She doesn't see the owner, who is coming through the orchard toward you. What do you do?

   1 Walk on quickly; think it's your friend's own fault if she gets caught.

   III 0 Tell your friend "Drop it! Here comes the owner!"

15. You and your friend were walking home from school, and you both bought a small bag of candy. Your friend finished hers first, and then asked you for some of yours. What would you do?

   0 Tell her she's already had her share.

   VI 1 Give her some.

16. A girl who lives near you asks to borrow your new red scarf. The last time she borrowed it she left it outdoors all night and it got soaking wet. What would you do?

   0 Tell her no; she didn't take care of it last time so she can't have it again.
VI  1 Lend it to her if she'll promise to take care of it this time.

(16. A boy who lives near you asks to borrow your baseball glove. The last time he borrowed it he left it outdoors all night and it got soaking wet. What would you do?

0  Tell him no, he didn't take care of it last time so he can't have it again.

VI  1 Lend it to him if he'll promise to take care of it this time.)

17. You have been given the job of safety patrol on one of the crossings near the school. You make some of your friends wait one day, and they are sore at you about it. What do you do?

0  Nothing, it will blow over.

VIII  1 Apologize; tell them I didn't mean anything by it.

0  Tell them it's just too bad if they don't like it.

18. A girl you know has been bothering you all day, giving you a push every so often. You have told her to cut it out. When you are taking a drink at the fountain, someone shoves you, and you turn around fast and hit her. It turns out to be your best friend. You try to explain, but she won't listen. What would you do?

1  Wait for her after school, and try to explain again on the way home.

VIII  0 Ignore her for a while till she cools off.

0  Tell her she's being unfair.

19. A first grade girl who lives near you falls down and starts to cry; you can see she isn't really hurt, just scared a little. What do you do?

0  Tell her not to be a cry-baby.

VI  1 Comfort her.

20. You are in school. The teacher has left the room. Some of the children start making noise. Would you do anything?

1  Tell them to be quiet.
21. Suppose the teacher has given you the job of writing down the names of the children who are absent from school, and taking the list down to the principal's office. Your friend is absent and you know that she is playing hockey. In fact, she asked you not to turn in her name. If you do, she will probably get into trouble. The teacher does not look at the list which you take to the office. What would you do?

   0 Leave her name off.
   1 Put down her name.

22. You are trying to put a puzzle together, and you are having trouble with a hard part. A friend of yours says, "Here, let me help you." What do you do?

      0 Say, "No thanks; I'd rather see if I can do it myself."
      1 Let her do it for you.

23. The teacher has stepped out of the classroom and left one of the girls in charge. You turn around, thinking you might speak to your friend. Before you have a chance to say anything, the girl in charge looks at you and says sharply, "No talking!" What do you do?

      0 Say, "I wasn't talking.
      1 Say, "O.K.," and go back to your work.

24. It's the first cold spell of the winter. You are in a hurry to join your friends at the skating pond. You can't find your ice skates--your mother had put them away somewhere for the summer, and she isn't home to tell you where they are. A friend of yours who can't go skating that day offers to lend you her new skates. What would you do?

      0 Keep on looking for my own skates.
      1 Borrow hers.

25. Suppose you know about a meeting of a new club you'd like to belong to. Nobody has asked you to join yet. You think maybe they are leaving you out because of something you said about some of the girls, but you aren't sure. What would you do?

      0 Nothing, just wait a while and see if they'll ask me.
VIII 1 Ask them, "May I join your club?"

0 Tell them I think it's mean of them to leave me out.

(25. Suppose you know about a meeting of a new sports club you'd like to belong to. Nobody has asked you to join yet. You think maybe they are leaving you out because of something you said about some of the boys, but you aren't sure. What would you do?

VIII 0 Nothing, just wait a while and see if they'll ask me.

VIII 1 Ask them, "May I join your club?"

26. Suppose you fall down and hurt yourself. You know you aren't hurt badly but you've skinned your arm and leg, and you feel shaky. One of the other girls offers to stay with you till you feel better. Would you rather someone would stay with you, or would you rather they'd leave you alone?

IV 1 I'd like someone to stay with me.

IV 0 I'd rather they'd leave me alone.

27. You've been losing at marbles. Finally, you don't have any marbles left, and your friend has lots. She offers to give you some to start over with. What would you do?

5 1 Accept them with thanks.

5 0 Say, "No thanks; I'll buy some when I get some money."

28. You are playing out-doors with your friend, and having lots of fun. You hear your mother calling you to come in to supper. You think you'll play just a few more minutes before you go in. One of your friends says, "Didn't you hear your mother calling you? You better go in." What would you do?

II 1 Say, "I guess you're right" and go in.

II 0 Say, "I heard her; I'm going in a minute."

29. You are a good swimmer. You are at a beach where swimmers are not supposed to go beyond the rope barrier. You wish you could have a little more room to try your strokes, and the lifeguard is away for a while. You start to put your leg over the rope barrier. A girl you don't know says: "You're not supposed to go past the ropes." What do you say?

1 "O.K., I'll stay on this side".
II 0 "Don't worry, I can watch out for myself."

30. Your class is going to take a boat trip that will be a lot of fun. Every student is supposed to have a note from her parents giving permission for her to go. One of your friends forgot to bring the note her mother wrote for her. She decides to write one for herself so that she can go. Just as she has finished and has signed her mother's name to it, the teacher comes in and sees her. You are watching. How do you feel?

0 Sorry for her, because she got caught.

III 2 Ashamed for her--she shouldn't have done it.

1 Not sorry for her--it's her own fault if she gets into trouble.

31. Suppose you were riding your bike fast around a corner, and you fell down and skinned your hand badly and sat there holding it. An eight grade girl you knew came over to look at your hand, and asked if she could help. What would you say to her?

1 "Can you get something to put on it?"

IV 1 "Could you help me home with my bike?"

0 "I'm all right."

32. You are in a hurry, and you take a shortcut across a weedy part of a lawn even though you see a sign that says, "Keep off the grass." A girl your own age sees you and calls. "Hey! Can't you read the sign?" What do you say?

0 "I'm in a hurry."

II 1 "I'm sorry, I guess I should have gone around around".

0 "Don't worry, I can read all right."

33. Suppose something has happened to hurt your feelings, and it wasn't your fault. Would you tell your best friend about it so she could help to cheer you up, or would you rather keep it to yourself?

1 Tell my friend.

IV 0 Keep it to myself.
34. Everyone is supposed to clean up their used papers and cups after eating lunch. One day you see some girls talking and laughing in the lunchroom. They get up and leave and forget their papers and cups on the table. What do you do?

   0 Say nothing; it's not my business.

   I 1 Remind them to pick up their papers and cups.

35. A girl in your class asks you to help her with her homework. You think this girl could do her homework by herself if she really tried. What do you do?

   0 Tell her I haven't time.

   VI 0 Tell her to do her own homework and stop bothering me.

   1 Help her.

36. You are with some friends at a swimming pool. It is a rule that before going into the pool everyone must take a shower. One of your friends has come late, and starts to come into the pool without taking her shower. What would you do?

   0 I wouldn't do anything; it's not my business.

   I 1 Say, "You forgot to take your shower."

37. You are at a school movie. You can either sit with your friends and watch the movie, or be an usher and show people to their seats. Which would you rather do?

   0 Sit with my friends and watch the movie.

   III 1 Be an usher, and show people to their seats.

38. The school needs some Safety Patrol girls during recess, to protect the younger children. What would you rather do?

   0 Play with my friends during recess.

   III 1 Be a Safety Patrol girl during recess.

39. The school needs people to sell milk during lunch period. What would you rather do?

   1 Sell milk during lunch period.

   III 0 Play with my friends during lunch period.
40. If you were in the Army, which would you rather be?
   VII 1  a military policeman, who enforces military law.
   0  an artilleryman, who fires a large cannon.

41. If you lived in a kingdom of olden times, which would you rather be?
   VII 0  the prince.
   1  the king.

42. If you were working in a play, which would you rather be?
   VII 0  the hero of the play.
   1  the director of the play.

43. If you were working on a newspaper, which would you rather be?
   VII 0  an ace reporter.
   1  the editor.

44. If you were in the horse-racing business, which would you rather be?
   VII 1  the horse trainer, who trains the race horses.
   0  the jockey, who rides the horses in races.

45. If you were asked to work for a baseball team, as either the coach or the pitcher, which would you rather be?
   VII 1  the coach
   0  the pitcher
Scoring Instructions.

Each test item alternative which has been checked by the subject is assigned the number found on the scoring key. The Roman numerals to the left of each item are the numbers of the scales under which the items fall. The score for a scale is calculated by adding the item scores under each scale. The scales are as follows:

I  Enforce Rules
II  Accept Rule-Enforcement
III  Choice of Adult Roles
IV  Accept Nurturance, Comfort
V  Accept Nurturance, Material Help
VI  Give Nurturance
VII  Occupational Adult Role
VIII  Beg for Return of Nurturance
APPENDIX B
Persuasion of Adult Task

Instructions to Subject:

Now suppose you really wanted a TV set for your room and you are trying to get your father to buy one for you. So you try to talk him into buying one, and you use every argument you can think of to talk him into buying you the TV. Go ahead now and say what you would tell your father and I will write it down.

(After the subject seems to have stopped, add: Is there anything else you can think of to say to your father which might help to make him buy it?)

Persuasion of Child Task

Instructions to Subject:

This time you would like to go to a movie with your friend but you don't have enough money with you. But, you know that your friend has enough to buy movie tickets for both of you. So, you try to talk him into buying your tickets, and you say everything you can think of to convince him to buy your ticket too. What would you say to him/her?

(After S stops, add: Is there anything else you can think of to say to your friend which might help convince him/her to buy your movie ticket?)

Persuasion Scoring for Adult and Child Tasks

1. Total Number of Persuasive Arguments:

The scoring in general follows that used by Flavell et al. (1968). One point is given for each different argument in the subject's persuasive passage. Arguments which are repeated are not scored, unless at least some small alterations in the argument are present to change its appearance (if not its content) to some degree. For example, "Everyone else gets to have a TV. Come on, I'll help pay. Gee, everyone else gets to have a TV," would merit only two persuasive argument points because the first and third arguments are identical. However, "If you pay my way to the movie, I'll let you ride my new bike. Come on pay my way, please. You know how much you like my ten speed, and you could ride it home,"
merits scores for both arguments referring to the bicycle because the argument has been re-stated to make it sound different and more appealing.

2. Scorable Persuasive Arguments:

(a) personalization--the persuader directs the appeal to the persuadee's particular attributes, e.g. in the TV arguments he might say, "You always wanted a second TV for the family." Also, in the movie arguments the persuader might say, "You said you wanted to go to the movie with me." Any responses which place the persuadee into a role also fall into this category, e.g., "You say you are my friend, well, take me to the movie then," or "Come on be a good dad and buy me the TV." This includes the fairness dimension, e.g., I did something for you once, now you owe me a favor.

(b) prestige--an argument which emphasizes the prestige involved in going along with the persuader's way of thinking. For example, in the TV problem the child might say, "The used TV is really in good shape and would last a long time." In the movie problems, the child might assert, "It's really a good movie, and you could tell everyone you saw it," or "I would tell everyone that you paid my way in and helped me out."

(c) advantage to others--underscores that altruistic side of the persuadee's intentions and mentions the advantages a course of action will have for others beside himself. In the TV problem he might say, "I won't have to argue with you and mom over what shows to watch." In the movie problem he might say, "You won't have to go alone," or "I'll let you ride my bike home if you pay my way."

(d) economic objections--the persuader deals with resistance to his persuasion due to financial cost. Anything which acknowledges that there is an expense (e.g., "I know it's expensive....") and/or adds a qualifying message to override the cost factor (e.g., "But, I'll pay you back with my allowance.") falls into this category.

(e) bandwagon--to appeal to the persuadee's tendency to conform to some social norm, i.e., something everyone is doing. For example, in the TV problem, the persuader says, "All the other kids have one, why can't I." In the movie problem, he might say, "My other friends would buy me a ticket to the movie."
APPENDIX C
Instructions to Subject:

This survey is concerned with parents' attitudes toward childrearing. At first, you will probably find it difficult; but as you proceed, it will go more rapidly.

Below are presented 95 pairs of statements on attitudes toward child rearing. Your task is to choose one of the pair (A or B) that MOST represents your attitude, and place a circle around the letter (A or B) that precedes that statement. Thus:

(A) Parents should like their children.
B Parents frequently find children a burden.

Note that in some cases it will seem that both represent the way you feel: while, on other occasions, neither represents your point of view. In both cases, however, you are to choose the one that MOST represents your point of view. As this is sometimes difficult to do, the best way to proceed is to put down your first reaction. Please pick one from each of the pairs.

1. A. Parents know what is good for their children.
   B. A good leather strap makes children respect parents.

2. A. Parents should give some explanations for rules and restrictions.
   B. Children should never be allowed to break a rule without being punished.

3. A. Parents do much for their children with no thanks in return.
   B. Children should have tasks that they do without being reminded.

4. A. Parents should sacrifice everything for their children.
   B. Children should obey their parents.

5. A. Children should follow the rules their parents put down.
   B. Children should not interfere with their parents' night out.

6. A. Parents should watch their children all the time to keep them from getting hurt.
   B. Children who always obey grow up to be the best adults.

7. A. Children should never be allowed to talk back to their parents.
   B. Parents should accompany their children to the place they want to go.
8. A. Children should learn to keep their place.
   B. Children should be required to consult their parents before making any important decisions.

9. A. Quiet, well behaved children will develop into the best type of grown-up.
   B. Parents should pick up their child's toys if he doesn't want to do it himself.

10. A. Parents should do things for their children.
     B. A child's life should be as pleasant as possible.

11. A. Watching television keeps children out of the way.
      B. Children should never be allowed to talk back to their parents.

12. A. Personal untidiness is a revolt against authority so parents should take the matter in hand.
      B. A good child always ask permission before he does anything so he doesn't get into trouble.

13. A. Sometimes children make a parent so mad they see red.
      B. Parents should do things for their children.

14. A. Children should be taught to follow the rules of the game.
      B. A child's life should be as pleasant as possible.

15. A. Parents should cater to their children's appetites.
      B. Many parents wonder if parenthood is worthwhile.

16. A. A child's life should be as pleasant as possible.
      B. Sometimes children make their parents so mad they see red.

17. A. Children should not tell anyone their problems except their parents.
      B. Children should play whenever they feel like in the house.

18. A. A good form of discipline is to deprive a child of the things that he really wants.
      B. Children should do what they are told without arguing.

19. A. Children should be taken to and from school to make sure there are no accidents.
      B. Children who always obey grow up to be the best adults.

20. A. Many parents wonder if parenthood is worthwhile.
      B. Children should be required to consult their parents before making any decisions.
21. A. If a child doesn't like a particular food, he should be made to eat it.  
   B. Children should have lots of gifts and toys.

22. A. Children should play whenever they feel like in the house.  
   B. Good children are generally those who keep out of their parents' way.

23. A. Children never volunteer to do anything around the house.  
   B. Parents should pick up their child's toys if he doesn't want to do it himself.

24. A. Good children are generally those who keep out of their parents' way.  
   B. Children should not be allowed to play in the living room.

25. A. Modern children talk back to their parents too much.  
   B. Children should be required to consult their parents before making any decisions.

26. A. Parents should make it their business to know everything their children are thinking.  
   B. Children never volunteer to do any work around the house.

27. A. Children should come immediately when their parents call.  
   B. Parents should give surprise parties for their children.

28. A. Good parents overlook their children's shortcomings.  
   B. Watching television keeps children out of the way.

29. A. Parents should watch their children all the time to keep them from getting hurt.  
   B. A child should never be forced to do anything he doesn't want to do.

30. A. Television keeps children out of the way.  
   B. The most important thing to teach children is discipline.

31. A. Children should do what they are told without arguing.  
   B. Parents know how much a child needs to eat to stay healthy.

32. A. Television keeps children out of the way.  
   B. A child needs someone to make judgments for him.

33. A. Modern children talk back to their parents too much.  
   B. Parents should amuse their children if no playmates are around to amuse them.
34. A. Good children are generally those who keep out of their parents' way.
    B. Parents should pick up their child's toys if he doesn't want to do it himself.

35. A. Parents should see to it that their children do not learn bad habits from others.
    B. Good parents lavish their children with warmth and affection.

36. A. Parents shouldn't let their children tie them down.
    B. Modern children talk back to their parents too much.

37. A. Children who destroy any property should be severely punished.
    B. Children cannot make judgments very well for themselves.

38. A. Most parents are relieved when their children finally go to sleep.
    B. Parents should hide dangerous objects from their children.

39. A. Children should not be allowed to play in the living room.
    B. Children should play whenever they feel like in the house.

40. A. Parents should give surprise parties for their children.
    B. Most parents are relieved when their children finally go to sleep.

41. A. Children should be taken to and from school to make sure there are no accidents.
    B. Parents should clean up after their children.

42. A. Children are best when they are asleep.
    B. Personal untidiness is a revolt against authority so parents should take the matter in hand.

43. A. The earlier the child is toilet trained the better.
    B. A child needs someone to make judgments for him.

44. A. Watching television keeps children out of the way.
    B. Parents should accompany their children to the places they go.

45. A. The earlier the child is toilet trained the better.
    B. Good parents overlook their children's shortcomings.

46. A. Parents should clean up after their children.
    B. Children need their natural meanness taken out of them.
47. A. Parents should give surprise parties for their children.  
  B. Parents should hide dangerous objects from their children.

48. A. Most parents are relieved when their children finally go to sleep. 
  B. Children should come immediately when their parents call.

49. A. Children who lie should always be spanked.  
  B. Children should be required to consult their parents before making any decisions.

50. A. Sometimes children just seem mean.  
  B. Parents should see to it that their children do not learn bad habits from others.

51. A. Punishment should be fair and fit the crime. 
  B. Parents should feel great love for their children.

52. A. Parents should buy the best things for their children. 
  B. Children are best when they are asleep.

53. A. Children should be required to consult their parents before making any decisions.  
  B. Parents should cater to their children's appetites.

54. A. Parents should have time for outside activities.  
  B. Punishment should be fair and fit the crime.

55. A. Children should not be allowed to play in the living room. 
  B. Children should not tell anyone their problems except their parents.

56. A. It seems that children get great pleasure out of disobeying their elders.  
  B. Parents should watch their children all the time to keep them from getting hurt.

57. A. Personal untidiness is a revolt against authority so parents should take the matter in hand.  
  B. Parents should buy the best things for their children.

58. A. Children should learn to keep their place. 
  B. Good parents overlook their children's shortcomings.

59. A. Parents should accompany their children to the places that they want to go.  
  B. Good parents overlook their children's shortcomings.
60. A. Children do many things just to torment their parents.
B. Parents should insist that everyone of their commands be obeyed.

61. A. Children should come immediately when their parents call.
B. Parents should hide dangerous objects from their children.

62. A. Children do many things just to torment a parent.
B. Children should be protected from upsetting experiences.

63. A. Children who lie should always be spanked.
B. Parents should cater to their children's appetites.

64. A. A child should never be forced to do anything he does not want to do."
B. It seems that children get great pleasure out of disobeying their elders.

65. A. Parents should keep a night light on for their children.
B. Parents live again in their children.

66. A. Sometimes children make parents so mad they see red.
B. Children should be taught to follow the rules of the game.

67. A. Parents should insist that everyone of their commands be obeyed.
B. Children should be protected from upsetting experiences.

68. A. Good children are generally those who keep out of their parents way.
B. Children should not tell anyone their problems except their parents.

69. A. Children who destroy property should be severely punished.
B. Children's meals should always be ready for them when they come home from play or school.

70. A. Parents should frequently surprise their children with gifts.
B. A good form of discipline is to deprive children of things they really want.

71. A. Children should depend on their parents.
B. Parents should amuse their children if no playmates are around to amuse them.

72. A. Many parents wonder if parenthood is worthwhile.
B. Children who lie should always be spanked.
73. A. Quiet, well behave children will develop into the best type of grownup.
   B. Children never volunteer to do anything around the house.

74. A. Children need their natural meanness taken out of them.
   B. Children should be taken to and from school to be sure there are no accidents.

75. A. Children should never be allowed to talk back to their parents.
   B. Good parents overlook their children's shortcomings.

76. A. Parents should give their children all that they can afford.
   B. Television keeps children out of the way.

77. A. Children cannot make judgments very well for themselves.
   B. Children's meals should always be ready for them when they come home from play or school.

78. A. Children are inconvenient.
   B. Children should be reprimanded for breaking things.

79. A. If children misbehave they should be punished.
   B. Parents should see to it that their children do not learn bad habits from others.

80. A. Children are often in one's way around the house.
   B. Children seven years old are too young to spend summers away from home.

81. A. Children should do what they are told without arguing.
   B. Parents should frequently surprise their children with gifts.

82. A. Parents should feel great love for their children.
   B. Parents should have time for outside activities.

83. A. A child needs someone to make judgments for him.
   B. Good parents overlook their children's shortcomings.

84. A. Parents should make it their business to know everything their children are thinking.
   B. Quiet, well behaved children will develop into the best type of grownup.

85. A. Children who destroy any property should be severely punished.
   B. A good child always asks permission before he does anything so that he does not get into trouble.
86. A. A good form of discipline is to deprive a child of things that he really wants.
   B. Parents know how much a child needs to eat to stay healthy.

87. A. The most important thing to teach a child is discipline.
   B. Parents should give their children all that they can afford.

88. A. Parents should amuse their children if no playmates are around to amuse them.
   B. Parents shouldn't let children tie them down.

89. A. Parents know how much a child needs to eat to stay healthy.
   B. Parents should frequently surprise their children with gifts.

90. A. Sometimes children just seem mean.
   B. If children misbehave they should be punished.

91. A. Children should be taught to follow the rules of the game.
   B. Parents should do things for their children.

92. A. Parents shouldn't let their children tie them down.
   B. Children should depend on their parents.

93. A. Children who always obey grow up to be the best adults.
   B. Parents should clean up after their children.

94. A. Children's meals should always be ready for them when they come home from play or school.
   B. Children do many things just to torment parents.

95. A. A good child always asks permission before he does anything, so that he doesn't get into trouble.
   B. Parents should buy the best things for their children.
Scoring Keys for the Maryland Parent Attitude Survey:

The first choice for an item is "A" and the second is "B". The numbers represent the item numbers. The scoring of the items for the different types of parents is as follows:


APPENDIX D
Password

Instructions:

Are you familiar with the Password Game on T.V.? The next thing I'm going to ask you to do is to play Password together. The idea is that I will give you, Mrs. X, some cards with one mystery word on each card. Taking one card at a time, I want you to help your child guess the word correctly by giving a one-word clue and waiting for his one-word guess and giving a second clue and waiting for his second guess, etc., until he either gets the word or until two minutes have passed. For example, if the word were "chair," you might say, "table" and if your child guessed, "dinner" you could give him the clue, "sit" and hope that he/she might guess, "chair". Remember to continue giving clues until the exact form of the word is guessed. Do you have any questions? Let's try a couple words for practice. (The mother is given two practice words, and she may ask questions about the procedure.) (After the mother has been the donor of eight words, the child takes his turn in giving clues and the mother does the guessing. He is also given two practice words.)

<table>
<thead>
<tr>
<th>Word List--Mother:</th>
<th>Word List--Child:</th>
</tr>
</thead>
<tbody>
<tr>
<td>take</td>
<td>kite</td>
</tr>
<tr>
<td>earth</td>
<td>happy</td>
</tr>
<tr>
<td>mad</td>
<td>moon</td>
</tr>
<tr>
<td>red</td>
<td>chalk</td>
</tr>
<tr>
<td>juicy</td>
<td>street</td>
</tr>
<tr>
<td>bird</td>
<td>girl</td>
</tr>
<tr>
<td>eye</td>
<td>rain</td>
</tr>
<tr>
<td>argue</td>
<td>bible</td>
</tr>
</tbody>
</table>
Word Association Test

Instructions: I have a list of words here. I am going to read them to you one at a time, and I want you to tell me the first word that comes to mind after each word I read. There are no right or wrong answers, so just quickly tell me your first association to each word I read.

Lamp
Umbrella
Eagle
Cap
Burglar
Tobacco
Blossom
Gift
Cedar
Bible
Rich
Cottage
Slow
Baker
Bitter
Omelet
Soft
Bed
Black
Scissors
Sister
Hard
Costume
Long
Tough
Wicked
Tank
Dark
City
Square
Drink
Sour
Seed
High
Railroad
Grocery
Tiger
River

Heavy
Fruit
Cabbage
Ocean
King
Girl
Age
Hammer
Thick
Afraid
Smooth
Man
Roof
Whiskey
Yellow

Rough
Trap
Unseen
Ride
Death
Butter
Hand
Butterfly
Drift
Follow
Memory
Ham
Tooth
Athlete
Sailor
Cry
Health
Crime
Crush
Music
Trouble
Fade
Thief
Delicate
The dissertation submitted by Richard J. Delaney has been read and approved by members of the Department of Psychology.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

January 14, 1973
DATE

[Signature]
ADVISOR'S SIGNATURE