

AN EXPLORATORY STUDY OF THE RELATIONSHIP BETWEEN MATERNAL
ATTITUDES AND PRESCHOOL CHILDREN'S
REACTIONS TO DISORDER

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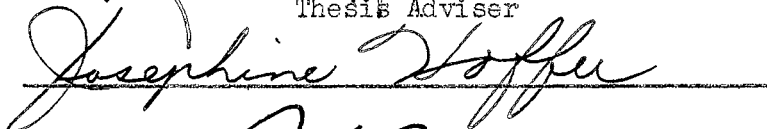
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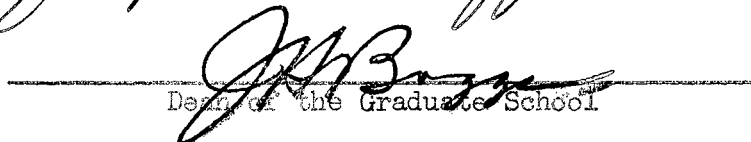
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CHAPTER I

INTRODUCTION

Purpose

The purpose of the present research is to explore the possible relationship between maternal attitudes and preschool children's reactions to disorder. This study is part of a larger research project dealing with creative ability in young children.

Scope

This study will be limited to a small group of preschool children and their mothers. The children's reactions to disorder will be measured by a form board task; and the maternal attitudes will be measured by the Budner Attitude Scale, which is designed to measure tolerance-intolerance of ambiguity. The relationship between the maternal attitudes and the children's reactions to disorder will be explored. Statistical analyses will be used where possible.

Problem

Creative ability has long been under surveillance. In the last twenty years researchers have attempted to describe the creative process and to identify some of the personality traits possessed by the creative individual.

Haimowitz and Haimowitz (1960) reviewed the literature and compiled the following list of traits believed to be possessed by the creative person:

"Basic security, intelligence, flexibility, spontaneity, humor, originality, ability to perceive a variety of essential features of an object or situation, playfulness, radicalness, eccentricity; we would add freedom, marginality, and secularity to this list. Conversely, characteristics which would hypothetically correlate negatively with creativity would be neatness, rigidity, control, thoroughness, reason, logic, respect for tradition and authority, and a tendency to routinize and organize tasks."

In a similar manner, Anderson (1959) summarized the characteristics of the creative person and concluded his list with "gust for temporary chaos, security in uncertainty, tolerance of ambiguity." These characteristics are the ones with which the present study is concerned.

In the literature tolerance of ambiguity has frequently been used as synonymous with tolerance for disorder and has been accepted as a characteristic necessary for the expression of creative ability. Barron (1958) believed that there was little doubt that most people disliked being confronted with disorder. However, in his research he found a reversal of this usual attitude in individuals who did original work in science or in art. He theorized that creative people strive to integrate the diverse phenomena into "an elegant new order more satisfying than any that could be evoked by a simpler configuration."

In the broader study of creativity the ultimate goal would be to determine and identify factors which encourage or discourage the development of creative traits. One possible approach to this problem would be to study specific characteristics in young children and to search for factors which influence the development of these characteristics. In the present research young children's tolerance of disorder was studied

and the possible relationship of this characteristic to maternal attitudes toward ambiguity explored.

Procedure

The following steps were involved in the present research:

1. A review of the literature to gain an understanding of tolerance for ambiguity and disorder and of its theoretical relationship to creativity, and to identify the ways in which this characteristic might be measured.
2. Construction of a form board instrument for use with preschool children.
3. Pilot work with the form boards.
4. Selection of a questionnaire for use with mothers in the measurement of tolerance of ambiguity.
5. Administration of the form board instrument and the questionnaire to 30 children and their mothers.
6. Analysis of data.
7. Interpretation of the results and recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

Research articles on intolerance of ambiguity seem to have at least one thing in common --- a reference to the work done by Else Frenkel-Brunswick. Hers is a classic in this field.

Frenkel-Brunswick theorized that intolerance of ambiguity (rigidity) was an underlying personality trait extending to emotional, social, perceptual, and cognitive aspects of the individual. In order to test for this basic personality trend, personality studies of children done in a project on ethnic prejudice were used along with measures of social beliefs and perceptual reactions. For example, in one experiment, the influence of social and emotional values on memory was studied. The children were to recall a story, told only once and deliberately made confusing because of the many characters involved. Children low in ethnic prejudice more faithfully recalled the story and were able to approximate more correctly the actual configuration of the stimuli. The high-prejudice children had a more restricted approach concentrating on descriptive details or else telling stories showing no relation to the material presented.

Several perceptual tasks were designed by Frenkel-Brunswick and her colleagues. Among these were a disk-shaped reversible figure-ground pattern, a picture of a dog followed by a number of transitional pictures leading finally to a picture of a cat, a progressive series of color

hues, and a series of pictures in which one number gradually changed to another number. In these tests, intolerant subjects exhibited a prolonged clinging to their first impressions. Similarly, Frenkel-Brunswick's colleagues found that intolerant subjects were unable to break an established mental set in order to solve problems in a more simple manner than the one in which they were trained.

The behavioral tendencies identified by Frenkel-Brunswick in personalities intolerant of ambiguity include the following:

- (1) a tendency to resort to black-white solutions,
- (2) a tendency to arrive at premature closure,
- (3) a tendency to reduce ambiguous patterns to certainty.

Measures of Intolerance of Ambiguity

Many methods which have been devised for measuring tolerance-intolerance of ambiguity have been based on the behavioral tendencies described by Frenkel-Brunswick. Here the various methods used in the research will be grouped according to these tendencies.

A Tendency to Resort

to Black-White Solutions

Frenkel-Brunswick described this tendency to resort to black-white solutions by saying that the individual who is intolerant of ambiguity will endorse statements designed to reveal a dichotomizing attitude, a rejection of the different, or an avoidance of ambiguities in general. This individual is also unable to allow for the possibility of good and bad traits in the same person. In other words he tends to oversimplify

and make things either too general or too concrete with no allowance for a middle ground.

In a study of ethnocentrism, O'Connor (1952) used the Walk Ambiguity Scale, an eight item scale based on dichotomizing tendencies (e.g., Nobody can have feelings of love and hate toward the same person.) For each item the subject checked one of four response categories: (1) Agree; (2) Undecided: Probably Agree; (3) Undecided: Probably Disagree; (4) Disagree. Strong agreement with the items was interpreted as indicating intolerance. This scale has been used by O'Connor (1952), Kenny and Ginsberg (1958), and Budner (1962).

Budner (1962) defined intolerance of ambiguity as the tendency to perceive ambiguous situations as sources of threat. He elaborated on this definition by stating that ambiguous situations are characterized by (1) novelty, (2) complexity, or (3) insolubility. He listed the responses to threat in four categories: (1) repression and denial, (2) anxiety and discomfort, (3) destructive or reconstructive behavior, and (4) avoidance behavior. Budner then designed a 16 item scale which would tap all seven of these components of response and ambiguous situations. Eight of the items were stated negatively and eight positively. A copy of this scale which was ultimately chosen for use in the present research is presented in the Appendix.

Steiner (1954) developed a Trait Discrepancy Scale based on the assumption that intolerant persons cannot accept the coexistence of an undesirable trait and a socially desirable trait in the same person. In this test subjects chose between two sets of paired traits, such as Obedient-Economical and Obedient-Leisurely. The subjects were instructed to cross out the discrepant pair of traits, those less likely to occur

in the same persons. Kenny and Ginsberg (1958) also developed a similar scale.

A Tendency to Arrive
at Premature Closure

The person intolerant of ambiguity is made anxious by an unstructured situation and so is prompt in establishing an anchoring point, often at the cost of reality. In everyday language, the phrase "jump to conclusions" might well describe this tendency. The belief that the intolerant person tends to arrive at premature closure has been the assumption underlying the development of several research tests.

The Decision Location Test, developed for use with children, consists of two series of straight line drawings. In each series the first drawing is a single line. In each successive drawing there are additional lines, until on the last a picture of a simple object can be recognized. Instructions to identify the pictures are deliberately ambiguous, and it is assumed that the child who is intolerant of ambiguities will interpret the instructions as a requirement to guess. This test has been used by Muuss (1960), Smock (1955) and Levitt (1953). A Figure Recognition Test, similar to the Decision Location Test, was developed for use with adults by Messick and Hills (1960).

A Verbal Reasoning Test was also developed by Messick and Hills (1960). The subjects were told that it was a test of their ability to determine the meaning of a difficult word by reasoning from its use in sentences. The sentences used in the test were partially structured and very difficult. The subjects who read few of the sentences before

defining the word were judged as being more intolerant because of their greater willingness to generalize from specific clues.

McCandless and Holloway (1955) designed a weight judging task. In this task the children were presented with three pairs of equal weights and were asked to decide which was heavier or whether the weights were equal. The time required for making the judgment was the measure of intolerance. This scoring was based on the assumption that those intolerant of ambiguity will make a speedy decision, i.e., seek premature closure.

A Tendency to Reduce

Ambiguous Patterns to Certainty

Persons who are intolerant of ambiguity have a tendency to reduce ambiguous cognitive patterns to certainty. They are unable to change their previously developed response patterns when objective conditions warrant such change and are also unable to react in an objectively pertinent manner to tasks which are ambiguous or choice forcing. They tend to deny external ambiguity as long as such denial can be maintained.

This tendency to reduce ambiguous cognitive patterns to certainty has been the assumption underlying the development of several research instruments, such as those involving perceptual illusions. One task was developed using reversible figures, such as a cube or a staircase. The subjects were instructed to see if they could make the rate of fluctuation increase or hold the fluctuation rate down. In both attempts it was expected that the intolerant person would experience the fewest number of fluctuations. This task was first used by Frenkel-Brunswick (1949) and later by Jones (1956) and Kenny and Ginsberg (1958).

Another task utilizing illusory effects was one in which the subjects, in a darkened room, were shown a motionless pinpoint of light and heard a whirring motor. They were asked to tell the direction and distance the light appeared to move. It was hypothesized that the intolerant person would stabilize his judgment quickly and see the light move very little and always in the same direction. This task was used by Block and Block (1951), Taft (1956), and Kenny and Ginsberg (1958).

Rokeach (1948) devised a task in which the subjects were given a series of problems, solvable only by a long complicated process. Then they were asked to work another series which could be either worked by the first method or by a short cut. Intolerant persons, unable to change their previously developed response patterns, could not see the short cut and worked the problems by the longer method. Eriksen and Eisenstein (1953) also used this task.

Martin (1954) worked out interpersonal situations in which he tested the degree of intolerance. In one situation the subject was shown some blocks with nonsense syllables on them and was told to work out a solution. In another situation the subject was asked to write a paper about the kind of person he was. In both tests the measure of intolerance was derived from the number of questions asked before the subject was willing to impose his own interpretation or structure upon the task. The subjects who asked the most questions were considered the most intolerant. This task was also used by Kenny and Ginsberg (1958).

Relation of Tolerance of Ambiguity to Creativity

Tolerance of ambiguity or tolerance of disorder has been listed as being necessary for the expression of creative ability.

Barron (1958) found in working with creative artists and scientists that these persons showed a definite preference for apparent disorder. Calvin and Holland (1964) studied Air Force scientists and found that those who were identified as creative were tolerant of ambiguity and showed a preference for complex order. MacKinnon (1962) found that creative persons are especially disposed to admit complexity and even disorder into their perceptions without being made anxious by the resulting chaos. Guilford (1957) found that tolerance of ambiguity and less need for discipline and orderliness are related positively to originality. Golann (1961) and French (1956) used tests involving art preferences and found that the more creative individuals preferred the ambiguous while those with a lower degree of creativity preferred the structured.

The characteristic tolerance of ambiguity, or tolerance of disorder, seems to be linked very closely with flexibility and preference for the complex; and at the opposite extreme one might expect intolerance of ambiguity or need for order, to be related to rigidity and a preference for the simple.

Implications for the Present Research

The behavioral tendencies listed by Frenkel-Brunswick in personalities intolerant of ambiguity provide a possible basis for operationalizing this characteristic in the present research. A task developed for children should provide an opportunity for behavior which will clearly indicate a choice between two extremes. Such a task could be designed to measure the tendency to resort to black-white solutions, the tendency to arrive at premature closure, or the tendency to reduce ambiguous pat-

terms to certainty. Reliance on verbal contributions of the child should be avoided.

The Budner Attitude Scale was most appropriate for use in the present research as a measure of the mothers' tolerance of ambiguity. A high score on this scale indicates intolerance of ambiguity.

Tolerance of ambiguity or disorder is a complex characteristic and the present research should be considered only exploratory in nature.

CHAPTER III

METHOD AND PROCEDURE

This chapter will include (1) a description of the subjects who participated in the research; (2) a description of the research instruments, the form board instrument for the children and the questionnaire for the mother; (3) a description of the pilot work with the form board instrument; and (4) recommendations for analysis of the data.

Subjects

The subjects were 30 children of preschool age and their mothers. There were 15 boys and 15 girls, ranging in age from four years, zero months, to four years, eleven months. Most of the children were in attendance at day care centers or nursery schools. No child who participated in the pilot work was included in the final study.

Instrument

The instrument to test the children's reactions to disorder was a set of 20 form boards. Each form board was designed to hold 16 blocks, all the same shape. For the series of form boards, blocks in five different shapes were used: circles, semi-circles, diamonds, squares, and triangles. The 20 form boards were designed as two series of paired boards, one series painted red and the other painted blue. Each pair of form boards consisted of one with the holes arranged in an orderly

manner and the other with the holes in a disorderly manner. (See Figure 1). Except for the orderly and disorderly arrangement of holes each pair of form boards was identical in every way.

For each pair of form boards there was one set of 16 blocks; thus, the child could be given a choice between an orderly and a disorderly board when he was ready to put the blocks away. The hope was that this choice between the orderly and disorderly would reveal the child's tolerance for disorder.

Pilot Study

A pilot study was done with ten girls, four years old. These were children who were in attendance at a university nursery school.

This test was administered in two sessions, first using one color and then using the other. In each session, each child played with all of the blocks and then made a series of choices while putting them away.

The children's reactions to the disorderly form boards ranged from delight to distress. One child said she could see faces in the boards and her enthusiasm was evident. One little girl, after choosing the orderly boards consistently, was finally brave enough to choose a disorderly pattern. This was not a happy choice, for all the while she wiped her hands on her dress, and after finishing, she insisted upon washing her hands. Other children avoided making a choice of their own, but used a device such as choosing the board nearest their right hand each time.

The children's behavior did show their reactions to disorder; however, some children tired during the task. Another method of administration should be devised.

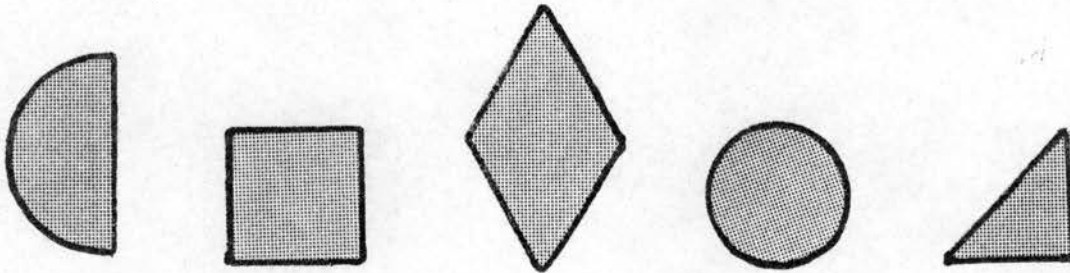


Figure 1. Shapes of the Blocks Used in the Form Board Instrument

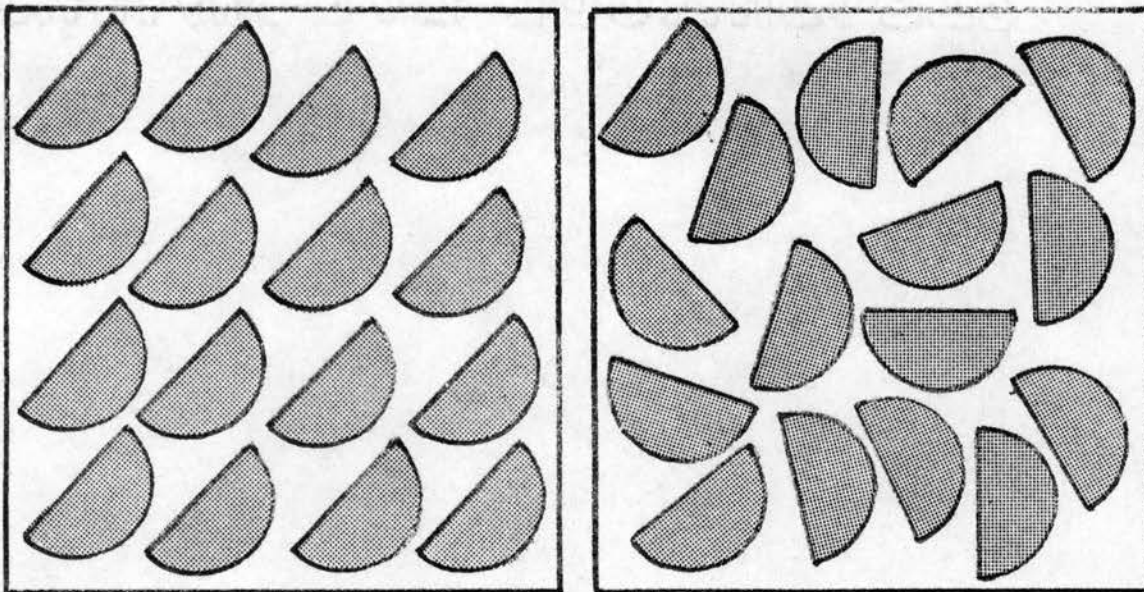


Figure 2. Illustration of Paired Form Boards: Orderly and Disorderly

Procedure

A change in procedure was planned in light of the findings in the pilot study. The children were given all the red and blue blocks of one shape with which to play. After a few minutes they put these blocks away, making two choices as they did so, i.e., a choice between paired red form boards and a choice between paired blue form boards. Then another set of blocks was given to the child and the procedure was repeated.

In the process of showing the paired form boards to the child, the order of presentation was such that the board with the disorderly pattern was alternately presented on the left and on the right.

A record was kept of the children's choices between the orderly and disorderly boards; and notes were made of their behavioral and verbal responses.

Mother's Questionnaire

The Budner Attitude Scale was chosen as the instrument to measure the mothers' attitudes toward ambiguity. A copy of this scale appears in the Appendix. As the questionnaire was a brief one (16 items), the length of time for completion was from 10 to 20 minutes. The questionnaire was administered individually, sometimes at the nursery school and sometimes in their homes.

Recommendations for Analysis of Data

The analysis of the data will include (1) a study of the children's responses to determine whether sex differences occur; (2) a study of the mothers' scores on the questionnaire; and (3) an analysis of the relationship between the children's responses and their mothers' scores.

CHAPTER IV

RESULTS

The purpose of this research was to explore the possible relationship between maternal attitudes toward ambiguity and children's reactions to disorder. The maternal attitudes were measured by the Budner Attitude Scale and the children's reactions to disorder were measured by a form board task developed specifically for this research.

This chapter includes an evaluation of the scores obtained by the children on the form board task and the scores obtained by the mothers on the questionnaire, an analysis of the relationship between the two, and a discussion of the children's observed responses to the form boards.

Form Board Task

The most objective way of describing the children's responses to the form board task is in terms of the number of times each child chose a form board which was disorderly. The frequency scores for each child are presented in Tables I and II.

The range of scores for both boys and girls was from one to nine, indicating that each child chose at least one form board that was orderly and one that was disorderly.

No sex differences were apparent. A median score of five for both boys and girls indicates that half the children tended to choose the orderly and that half tended to choose the disorderly.

TABLE I

DATA FOR INDIVIDUAL GIRLS WHO PARTICIPATED IN A STUDY OF
INTOLERANCE OF AMBIGUITY: AGE, CHILD'S FREQUENCY
SCORE, AND MOTHER'S AMBIGUITY SCORE

(N = 15)

Child	Age	Child's Frequency of Choice		Mother's Ambiguity Score
		Orderly	Disorderly	
F-13	4:0	1	9	69
*F-12	4:2	6	4	57
*F-10	4:4	5	5	54
F-2	4:4	6	4	52
F-7	4:5	2	8	42
**F-15	4:6	5	5	41
**F-14	4:7	3	7	46
F-5	4:7	4	6	45
F-1	4:7	5	5	52
*F-9	4:8	1	9	57
F-6	4:9	9	1	33
F-3	4:10	2	8	65
F-4	4:10	6	4	32
F-8	4:11	6	4	43
*F-11	4:11	3	7	60

*These girls used an obvious system for choosing.

**These girls expressed a verbal preference for the orderly and used an obvious pattern of choice.

TABLE II

DATA FOR INDIVIDUAL BOYS WHO PARTICIPATED IN A STUDY OF
INTOLERANCE OF AMBIGUITY: AGE, CHILD'S FREQUENCY
SCORE, AND MOTHER'S AMBIGUITY SCORE

(N = 15)

Child	Age	Child's Frequency of Choice		Mother's Ambiguity Score
		Orderly	Disorderly	
M-14	4:2	5	5	59
M-15	4:4	2	8	50
M-6	4:4	2	8	30
M-5	4:4	5	5	45
M-2	4:4	4	6	29
M-4	4:5	7	3	45
**M-11	4:6	8	2	55
M-12	4:7	4	6	47
M-3	4:7	3	7	57
M-13	4:8	5	5	59
M-9	4:9	7	3	71
*M-7	4:9	1	9	42
M-8	4:10	7	3	50
M-10	4:10	3	7	53
M-1	4:11	9	1	44

*This boy used an obvious "system" for choosing.

**This boy expressed a verbal preference for the orderly.

Further evidence of the fact that there were no sex differences in the children's responses to the form boards is found in the frequency with which the disorderly form boards were chosen. An equal number of boys and girls were free to choose either the orderly or the disorderly.

Budner's Attitude Scale

Mothers' scores on the Budner Attitude Scale ranged from 29 to 71, out of a possible range of 16 to 112. The range for the mothers of the boys (29 - 71) and the range for the mothers of the girls (32 - 69) were approximately the same. With the exception of the four lowest scores, these results indicate that the mothers were a rather homogeneous and moderate group from the standpoint of tolerance of ambiguity.

Scores for the individual mothers are presented in Tables I and II.

The Relationship between the Mothers' Attitudes and the Children's Reactions to Disorder

The purpose of this study was to determine whether a relationship existed between the mothers' tolerance of ambiguity (as measured by the Budner Attitude Scale) and their children's tolerance of disorder (as measured by the frequency with which they chose the disorderly form boards).

Statistical analysis (Spearman rank correlation coefficient) showed a significant negative relationship between the mothers' scores and those of the girls, ($\rho = -0.649$; $p < .01$). The mothers who were the least tolerant of ambiguity had four year old daughters who chose the disorderly form boards most frequently.

There was no significant relationship between the mothers' scores and the scores of all the children ($\rho = -0.144$; n.s.); and similarly, there was no significant relationship between the mothers' scores and those of the boys ($\rho = +0.271$; n.s.).

Children's Observed Behavior

In view of the limited statistical data available in this study, a report of the children's behavior as they made their choices between the paired form boards may be of value to those interested in further exploration of children's reactions to disorder.

Some children showed that they did not like the disorderly boards by calling them "messy" or "crowdy." One little girl stated that she liked the "pretty lined ones."

Some children found it difficult to make any choice and resorted to a "system" of choosing. One little girl chose every board by her left hand. Two children chose by alternating between the left and the right. One little boy used the "eenie, meenie, miney, moe" system. One child who had difficulty making choices remarked about the form boards, "Let's not buy any more puzzles like this; they're too hard."

Some children would not mix the red and blue blocks as they put them in the form boards. A few had imaginative remarks about the way the blocks looked in the boards they had chosen. The triangles were called "sharks' tails," and "cut up radishes." The diamonds were likened to rabbits' ears. One little boy sang, "Roll, roll like a wheel," as he put the circles in their form board.

These varied responses did not lend themselves to analysis in the present study; however, many of the girls who chose the disorderly board

most frequently were girls who resorted to a system of choosing or expressed verbal preference for the orderly. This suggests that the negative relationship between the girls' scores and their mothers' scores may be invalid.

Summary

An exploratory study to determine the relationship between preschool children's reactions to disorder and maternal attitudes toward ambiguity was done in this research. A form board task to measure the children's reactions to disorder was administered to 30 preschool children, 15 boys and 15 girls, all four years of age. There were no observable sex differences in the children's scores on this task. The mothers' attitudes towards ambiguity were measured by the Budner Attitude Scale. The mothers' scores on this scale revealed that they were a homogeneous, moderate group in regard to their tolerance of ambiguity. There was no statistically significant relationship between the scores of the children and the scores of their mothers, nor between the scores of the boys and their mothers. However, a significant negative relationship was found between the scores of the girls and their mothers and indicated that the mothers who were intolerant of ambiguity had daughters who chose the disorderly form boards most frequently. The children's behavior and their remarks while choosing between the paired form boards suggest that this statistical relationship may be invalid. Some of the children resorted to systematic choosing between the form boards and some stated explicitly that they preferred the orderly boards even though they chose the disorderly.

CHAPTER V

SUMMARY AND CONCLUSIONS

This research was an exploratory study of the relationship between maternal attitudes toward ambiguity and preschool children's reactions to disorder. The subjects were 30 four year old children, 15 boys and 15 girls, and their mothers.

The instrument designed to measure the children's reactions to disorder was a set of 20 form boards. The boards were designed as two series of paired form boards, with holes for 16 blocks. The paired form boards were identical except that one had a disorderly arrangement of the holes and the other an orderly arrangement. The children played with the blocks and chose between the orderly and disorderly form boards when putting the blocks away. A record was kept of their choices and also of their verbal and behavioral responses while making their choices.

The instrument used to measure the mothers attitude toward ambiguity was the Budner Attitude Scale.

Implications for Future Research

1. More extensive use of the form board instrument should make it possible to categorize the verbal and behavioral responses of the children so that they could be used in the research analyses and thus contribute to our understanding of this characteristic tolerance of disorder. The types of reactions noticed in the present research were (1)

reluctance to make a choice which frequently resulted in a system for choosing; (2) verbal comments indicating a definite preference for the orderly or disorderly; (3) imaginative comments showing the child's pleasure in handling the materials; (4) reluctance to put blocks of more than one color in a single form board and physical reactions such as hand washing after playing with a disorderly board.

2. A specific recommendation for future research would be the development of a quickly and easily administered screening device which could detect children showing strong preference for either the orderly or the disorderly; then intensive study of these children with the form boards might result in ideas for the modification of this instrument or the development of other instruments for use with preschool children in studying intolerance of disorder.

3. The negative relationship found between the mothers' attitude scores and the girls' scores on the form board task was statistically significant, but may be invalid in view of the verbal and behavioral responses of these children. A study of the relationship between mothers' attitudes and their children's tolerance of disorder should be repeated when a more refined instrument has been developed for use with the children.

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A P P E N D I X

NAME _____ DATE _____

27

ADDRESS _____ PHONE _____

OCCUPATION _____ HUSBAND'S OCCUPATION _____

CHILD'S NAME (4 yr. old) _____ CHILD'S BIRTHDAY _____

OTHER CHILDREN? (BIRTHDATES AND SEX) _____

PLEASE CHECK THE SPACE UNDER EACH STATEMENT THAT WILL MOST NEARLY EXPRESS YOUR OWN OPINION.

1. An expert who doesn't come up with a definite answer probably doesn't know too much.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

2. There is really no such thing as a problem that can't be solved.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

3. A good job is one where what is to be done and how it is to be done are always clear.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

4. In the long run it is possible to get more done by tackling small, simple problems rather than large complicated ones.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

5. What we are used to is always preferable to what is unfamiliar.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

6. A person who leads an even, regular life in which few surprises or unexpected happenings arise, really has a lot to be grateful for.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

7. I like parties where I know most of the people more than ones where all or most of the people are complete strangers.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

8. The sooner we all acquire similar values and ideals the better.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

9. I would like to live in a foreign country for a while.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

10. People who fit their lives to a schedule probably miss most of the joy of living.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

11. It is more fun to tackle a complicated problem than to solve a simple one.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

12. Often the most interesting and stimulating people are those who don't mind being different and original

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

13. People who insist upon a yes or no answer just don't know how complicated things really are.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

14. Many of our most important decisions are based upon insufficient information.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

15. Teachers or supervisors who hand out vague assignments give a chance for one to show initiative and originality.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

16. A good teacher is one who makes you wonder about your way of looking at things.

strongly agree moderately agree slightly agree slightly disagree moderately disagree strongly disagree

VITA

Mary Ann Mooney Whorton

Candidate for the Degree of

Master of Science

Thesis: AN EXPLORATORY STUDY OF THE RELATIONSHIP BETWEEN MATERNAL ATTITUDES AND PRESCHOOL CHILDREN'S REACTIONS TO DISORDER

Major Field: Family Relations and Child Development

Biographical:

Personal Data: Born in Cushing, Oklahoma, June 5, 1933, the daughter of Earl and Sara Ann Mooney. Married Dwight E. Whorton, March 14, 1964.

Education: Attended grade school in Shawnee, Oklahoma; graduated from Bethel High School, Shawnee, Oklahoma, 1950; received a Bachelor of Science degree from Oklahoma State University in 1954 with a major in Elementary Education; completed requirements for a Master of Science degree in August, 1965.

Professional Experience: Second Grade teacher, Perry Elementary School, Perry, Oklahoma, 1954-56; Second Grade teacher, Robert E. Lee Elementary School, Shawnee, Oklahoma, 1956-57; Graduate Assistant, University Nurseries, Department of Family Relations and Child Development, Oklahoma State University, 1959-60; Third Grade teacher, Forgan Public Schools, Forgan, Oklahoma, 1962-63; Second Grade teacher, Lincoln Elementary School, Norman, Oklahoma, 1963-64.

Professional Organizations: Southern Association on Children Under Six.