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AN INVESTIGATION OF PRIMITIVE AND
AUTHORITY BELIEFS IN CHILDREN

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY

Edward J. Lessin

1965

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ABSTRACT

AN INVESTIGATION OF PRIMITIVE AND AUTHORITY BELIEFS IN CHILDREN

by Edward J. Lessin

This research was concerned with exploring changes with age in both children's beliefs about authority and the universality of their authority beliefs. The theoretical framework for the research was Piaget's theory of moral development and Rokeach's descriptions of belief systems.

There were four groups of 20 boys each in kindergarten, second, fourth, and sixth grade. Each boy was tested individually.

The hypotheses tested were:

- I. The percentage of primitive beliefs decreases as children increase in age.
- II. The ratio of children's beliefs in the positive authority of adults to beliefs in the positive authority of peers decreases with age.
 - IIa. The ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of peers decreases with age.
 - IIb. The ratio of children's beliefs in the positive authority of non-parental adults to beliefs in the positive authority of peers decreases with age.

- III. The ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of non-parental adults decreases with age.

In order partially to objectify Piaget's clinical method, six semi-projective stories were written. In two of the stories, the subject had to choose between parents and peers, in two between non-parental adults and peers, and in two between parents and non-parental adults. The subjects were questioned about each story in a prescribed manner. The three primary questions were: "What would you have done if you were (name of boy in story) ?," "How come ?," and "Would everybody have done the same thing ?" The first question provides data for hypotheses II, IIa, IIb, and III while the third question provides data for hypothesis I. The responses to the second question were scored on the basis of 20 content categories in order to help explain why the child chose the authority he did.

The results showed that hypothesis II, beliefs in adult authority decrease with age, and hypothesis IIb, beliefs in non-parental adult authority decrease with age, were partially supported--for the kindergarten to fourth grade age range, but not for the sixth grade. The other three hypotheses were not supported, but the results were in the predicted direction for kindergarten, second, and fourth grade (except for hypothesis III) .

The study has shown that Rokeach's belief system can be applied to child developmental research. The implication for Piaget's

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theory is that the transition from adult constraint to autonomous morality is not a simple manner. It was suggested that although the sixth grade subjects showed greater reliance on adult authority, they were more selective and discriminating in their acceptance of adult authority than younger boys. It was found that small differences in the stories and questions differentially effected different age groups. The investigation also suggests that age trends are not necessarily linear.

Milton Rakach

Nov 27, 1965

AN INVESTIGATION OF PRIMITIVE AND AUTHORITY
BELIEFS IN CHILDREN

by

Edward J. Lessin

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

1965

ACKNOWLEDGMENTS

The author wishes to sincerely thank all those who helped him with this research. In particular he would like to thank the members of his committee: Dr. Milton Rokeach, Dr. Lucy Rau, and Dr. Bertram Karon. Dr. Milton Rokeach, his chairman, gave continued encouragement, support, and help. Dr. Lucy Rau was especially helpful for showing me the 'ropes' of child developmental research and for helping me get subjects. Dr. Bertram Karon was especially helpful in the area of statistics.

Thanks also to Mr. Burt Alperson for assisting in rating responses and for many critical suggestions and to the staff and students of Kendon Street school who made my visit a pleasant one.

Finally, and most important, I want to thank my wife, Sheri, for her encouragement, help and understanding through the entire project.

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INTRODUCTION

This thesis is primarily concerned with exploring the changes in the child's beliefs about authority and is secondarily concerned with exploring the child's beliefs about the universality of moral judgments.

The theoretical framework for the thesis is an integration of Piaget's (1932) theory of moral development and Rokeach's belief system (1960, 1963, 1964).

Since Piaget (1932) has been the basis for much research on the child's attitudes toward authority and his moral judgments, the investigator will relate the present study to the work of Piaget. He was primarily concerned with the development of the child's conception of rules, punishment, and justice. Subsequent research has maintained this emphasis. The investigator will be primarily concerned with the changes in authority references with age because this topic has not been as thoroughly studied.

Piaget's (1932) primary concept for studying changes in attitudes toward authority is moral realism. He defines moral realism as the childish tendency to regard duties as obligatory--regardless of circumstances. Moral realism has three primary features. First,

duty is heteronomous, that is, the child is not a free agent, but subject to adult whims. Second, the child demands that the letter instead of the spirit of the law be followed. For example, a boy's mother told him never to get very close to the stove because it is dangerous. One day when the mother was at the store, the boy noticed that something was burning on the stove. He let it burn instead of removing it or turning it off because of what his mother previously said. Third, moral realism is associated with objective responsibility. It means that the child judges guilt or naughtiness by the absolute amount of damage done rather than by intention or by extenuating circumstances. Breaking a dozen eggs by accident is thought to be 12 times as bad as breaking one egg whether unintentionally or on purpose.

Moral realism is a result of the combination of egocentrism with adult constraint.

Over the past 40 years, Piaget has modified his conception of egocentrism. Piaget states that egocentric language "consists of remarks that are not addressed to anyone, or not to anyone in particular, and that they evoke no reaction adapted to them on the part of anyone to whom they may chance to be addressed" (Piaget, 1923, p. 55). He uses as an example of egocentrism a group of children who are busy drawing the same picture. Each child talks about his drawing and is aware of the drawings of the other children, but none of them make any attempt at cooperation:

Lev (5; 11): "It begins with Goldylocks. I'm writing the story of the three bears. The daddy bear is dead. Only the daddy was too ill."

Gen (5; 11): "I used to live at Saleve. I lived in a little house and you had to take the funicular railway to go and buy things."

Geo (6; 0): "I can't do the bear."

Li (6; 10): "That's not Goldylocks."

Lev: "I haven't got curls." (Piaget, 1923, p. 77)

In short, egocentrism refers to remarks not specifically intended for communication. In this sense, egocentric speech is non-social. Recently Piaget has identified egocentrism with decentring. He writes that "...the only valid meaning of egocentrism: (is) the lack of decentring, of the ability to shift mental perspective, in social relationships as well as in others" (Piaget, 1962, p. 8). Then, the egocentric child cannot take the view of others since he has not clearly differentiated his point of view from those of others. Egocentrism is a cognitive defect of the young child.

Adult constraint, the second factor causing moral realism, refers to the fact that the young child views the commands and wishes of the adult as moral imperatives. The child adapts his thought to the significant adults in his life. He loves his parents and does not want to lose their love, hence he follows and identifies himself with their constraints. Adults limit the development of the child in so far as they force their standards on the child (Neill, 1961). The young child doesn't know, and can't understand, that it is "wrong" to make

mudpies with the applesauce. Adult commands are external to the child's understanding. He does understand, however, that mommy will take her love away if he makes mudpies.

The stage of constraint, and hence moral realism, is followed by an intermediate stage in which the child internalizes adult rules without evaluating them. The third stage appears about the age of ten when heteronomous morality is replaced by an autonomous morality which is based on subjective responsibility and on mutual respect among peers. The child now takes intentions into account and tries to follow the spirit of the rules. He begins to socially communicate and cooperate with other children. Moral realism is supplanted by cooperation.

Kohlberg (1963a) states that moral realism implies the following five dimensions:

1. Objective responsibility (as opposed to intentionalism) .
2. Unchangeability of the rules (as opposed to flexibility) .
3. Absolutism of value (as opposed to relativism) .
4. Moral wrongness defined by sanctions (as opposed to moral judgments made independently of sanctions) .
5. Duty defined as obedience to authority (as opposed to duty being in terms of conformity expectations of peers or equals) .

A great deal of research has been inspired by Piaget's work on moral realism, moral judgments, and authority.

Several studies (Bobroff, 1960; Kohlberg, 1963b; Lerner, 1937a; MacRae, 1954; Ugurel-Seurin, 1952) have shown a

decrease with age in the universality of moral judgments.¹ No contradictory studies were found although some of the above investigators gave different interpretations than Piaget. Kohlberg (1963b) has said that the young child shares the adult's conception of what is wrong due to a realistic-hedonistic desire to avoid punishment while Piaget asserts that the child's acceptance of adult standards is due to a deep reverence for the adult world.

Several investigators (Bobroff, 1960; Boehm, 1957; Boehm, 1962a, 1962b; Johnson, 1962; Lerner, 1937a; Mac Rae, 1954; Morris, 1958) noted a shift from an emphasis on adult references to an emphasis on peer references with an increase in chronological age. Many of them do not accept Piaget's interpretation of the shift as due to a lessening of adult constraint and an increase in subjective responsibility and mutual respect among peers. Bobroff (1960) found with the TAT administered to ten year olds a wish for independence from adult authority and an attempt to modify feelings to conform to peer demands. Johnson reviewed the very early literature, around the 1890's, and found that it supports Piaget's view that as the child grows older he becomes more concerned with an authority's motives. Lerner (1937a) found a shift to peer references with increases in age but contended that the shift to peer authority from

¹ A universal moral judgment refers to the child's belief that everyone who knows shares his judgment.

adult constraint does not bring cooperation but social constraints from peers. Although Mac Rae (1954) noted an increase in peer references with age, he asserted that the relevant variable related to maturity of moral judgment is the process of cognitive indoctrination instead of a de-emphasis of adult constraint. Morris (1958) found that adolescents changed in the direction of greater autonomy and equity with increasing age. He also noted that the autonomy was not complete since the adolescent still bore traces of adhering to a rigid behavior code. Using Piaget's clinical method and stories, Boehm (1962a) did not find that maturity of moral judgments increased as the child became independent and achieved peer reciprocity. Boehm and Nass (1962) concluded that the "morality of cooperation" is not based on independence from authority. Havighurst and Taba (1949) de-emphasize the importance of age as an explanation for changes in a child's conception of rules. They explain the child's belief in the unchangeability of rules by social learning of specific cultural attitudes. In sum, studies generally support Piaget's contention of an increase in the number of peer references with age but several investigators differ on the interpretation of the phenomenon.

Regarding justice, Durkin (1959a, 1959b) was unable to substantiate Piaget's finding that the acceptance of reciprocity as a justice principle increases with age. Durkin found that between

grades two and five reciprocity increased, but between grades five and eight it decreased.

Piaget made his investigations on French speaking children in Geneva. Most of his results on moral realism have been replicated in various cultures. Recent studies (Bobroff, 1960; Boehm, 1957, Boehm, 1962a; Boehm, 1962b; Boehm and Nass, 1962; Johnson, 1962; Kohlberg, 1963b; Lerner, 1937b; Mac Rae, 1954) have provided support for age trends on several of Piaget's dimensions of moral realism² in American cultures. Morris (1958) provided support for Piaget with English subjects. Lerner (1937a) replicated some of Piaget's work on French speaking Genevan children. Ugurel-Seurin (1952) validated Piaget's findings on moral realism on a Turkish population. Boehm (1957) noted that American children seem to transfer from parental dependence to peer dependence at an earlier age than Swiss children. Her explanation for the difference is that the United States is an "other directed" society with emphasis on social adjustment while Switzerland is an "inner directed" society with emphasis on character improvement.

One investigator (Boehm, 1962b) predicted that Catholic parochial school students would be guided by a heteronomous morality to a greater degree than public school students since the

²Piaget's dimensions of moral realism refer to the five dimensions as listed by Kohlberg (p. 4 above).

former function in a more authoritarian atmosphere. Instead, she found that the parochial school students were somewhat more independent of adults and showed more peer reciprocity.

Most investigators noted some relationship between intelligence and moral development. Boehm (1962a; 1962b) found that with social class held constant, gifted children gave more mature responses than children of average intelligence. Bobroff (1960) noted that mildly retarded children without emotional problems between the ages of 8 and 14 were two years behind normal children on the practice of and consciousness of the rules of a game of marbles. Durkin (1959a, 1959b) found no relationship between acceptance of reciprocity and intelligence in children between the ages of 7 and 13. He stated that no definite conclusion can be drawn concerning the function of intelligence in the development of moral judgment. Havighurst and Taba (1949) found a low positive relationship between IQ scores and maturity of moral beliefs. Lerner (1937b) contends that intelligence is unrelated to the decrease in moral realism with age.

Social class is another important variable related to moral development. A recent study (Boehm, 1962a) has shown that upper middle class children develop moral judgments concerning distinctions between intention and outcome of an action earlier than do working class children. However, the same investigator in

another study (Boehm and Nass, 1962) did not find socio-economic class to be a relevant variable in moral development. Another investigator (Lerner, 1937b) found that low status children of foreign born (Italian) parents, between the ages of 6 and 12, have a greater tendency than high status children to evaluate their parents as authoritarian, while high status children have a greater tendency to evaluate their parents as affectionate. Mac Rae (1954) found that high status children gave more mature answers. He suggested that high status children are more rapid in cognitive moral development since their parents expect them to live up to cultural expectations; low status children develop more rapidly emotionally, in the sense of being emancipated from their parents sooner, due to permissive child training techniques. Morris (1958) has found social class differences in moral realism. Ugurel-Seurin (1952) has noted that children from poor homes are more generous, more equalitarian, and less selfish than children from rich homes.

Recent studies (Boehm and Nass, 1962; Morris, 1958; Ugurel-Seurin, 1952) have not shown sex to be a relevant variable in moral development.

According to Rokeach (1960, 1963, 1964), beliefs are organized into a total belief-disbelief system. Beliefs and disbeliefs can be viewed along a central-peripheral dimension. Central or primitive beliefs are most basic since the individual believes that

virtually everyone in a position to know also shares the belief.

Intermediate or authority beliefs are beliefs about who or what can be trusted or relied on as an authority and to what extent they can be trusted. Peripheral beliefs are beliefs derived from authority.

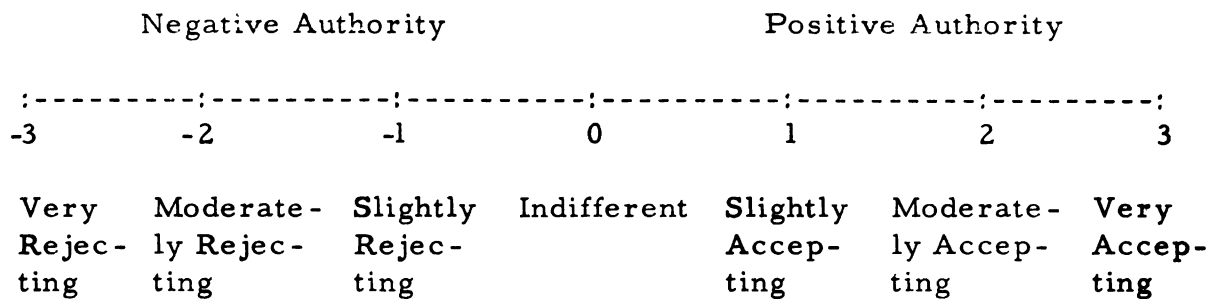
Some examples of primitive beliefs are: I believe this is a piece of paper, I believe this woman is my mother, and I believe I am a human being. The first belief is a belief about the physical world, the second about the social world, and the third about the self. An example of an authority belief is: I believe mother is always right. Examples of peripheral beliefs are: I believe all men are created equal and I believe "niggers" are different from us.

Authorities can be either positive or negative. One accepts the belief of a positive authority while one rejects the belief of a negative authority or accepts the contrary belief. For example, a stepmother may become a negative authority for a child, especially if she is very different from the child's real mother. If a child responds to his stepmother's command not to shout by continuing to shout or by shouting louder, then the stepmother is a negative authority. It is important to note that a belief in a negative authority implies more than just indifference to his wishes. If a boy is indifferent to a famous baseball player's appeal to eat X brand of breakfast cereal, the baseball player is neither a positive nor a negative

authority on cereal for the boy. In short, an authority must have some influence on the person's beliefs or his behavior.

Further, a person may accept the opposite of a belief of a positive authority without his losing his status as a positive authority. If Johnny accepts his mother's belief that there is a Santa Claus instead of his father's belief that there is not a Santa Claus, it is probably because the mother is a stronger positive authority than the father. If Johnny concluded that there is a Santa Claus only from his father's belief that there isn't any Santa Claus, then the father would be a negative authority. There is a continuum of authority from positive or accepting, to indifferent, and to negative or rejecting, for example:

ATTITUDES TOWARD THE BELIEFS OF:



The child's first beliefs are probably primitive since it is unlikely that he is capable of understanding that some beliefs are not shared by everyone. As the child grows older, his parent's become positive referents. Next, the child probably views other adults--

grandparents, aunts, uncles, neighbors, teachers--as persons who can be trusted. Finally, other children become positive authorities.

If the child's parents always provided satisfactory answers to his questions, would he look to other authorities? Probably, since his parents are not always present when he has questions. But according to Rokeach, "...as the child deals with other people, he exposes his expanding repertoire of primitive beliefs to them and at the same time is exposed to the repertoire of their beliefs" (Rokeach, 1964, p. 291). In other words, as the child intellectually develops, he becomes more discriminating and seeks new authorities.

Each of Piaget's dimensions of moral realism can be expressed by a parallel statement based on Rokeach's system. Although Piaget talks about judgments and Rokeach talks about beliefs, they are both referring to the same thought processes of the child. This investigation is only concerned with two of Piaget's dimensions. Below are two parallel statements based on Piaget and Rokeach:

Period of Moral Realism³

Piaget	Rokeach
P1. The child exhibits absolutism of value.	R1. The child's beliefs about right and wrong are primitive.
P2. The child shows obedience to adult authority.	R2. The child has beliefs in adults as positive authorities.

In regard to P1, Kohlberg states, "According to Piaget, the judgment of an act as either right or wrong is believed by the child to be shared by everyone, since only one perspective is taken toward the act" (Kohlberg, 1963a, p. 314). Regarding R1, Rokeach writes, "In the beginning, all his (the child's) beliefs are primitive ones; he is not capable of understanding that some beliefs are not shared by everybody" (Rokeach, 1964, p. 190). P2 and R2 are essentially equivalent since both assert that the child views adults as authorities.

Moral realism is followed by cooperation which is based on autonomy and mutual respect. In the period of cooperation, as in the period of moral realism, there are two statements based on Rokeach's system which parallel Piaget's two dimensions:

³The two dimensions P1 and P2, which span both the period of moral realism and cooperation, respectively refer to dimensions three and five listed by Kohlberg on page four.

Period of Cooperation

Piaget	Rokeach
P1. The child exhibits relativism of value.	R1. The child's beliefs about right and wrong are no longer primitive.
P2. The child shows conformity to peer expectations.	R2. The child has beliefs in peers, as well as adults, as positive authorities.

P1 and R1 are essentially equivalent since both state that the child no longer expects everyone to share his value judgments. P2 and R2 are essentially equivalent since both state that the child views his peers as social referents.

Since the investigation is concerned with changes in the child's beliefs over the periods of moral realism and cooperation, the statements derived from Piaget and Rokeach can be expressed by the following two developmental hypotheses:

- I. The percentage of primitive beliefs decreases as children increase in age.
- II. The ratio of children's beliefs in the positive authority of adults to beliefs in the positive authority of peers decreases with age.

Adults can be divided into the subclasses of parents and non-parental adults. Two corollary developmental hypotheses are:

- IIa. The ratio of children's beliefs in the positive authority of

parents to beliefs in the positive authority of peers decreases with age.

- I**IIb.** The ratio of children's beliefs in the positive authority of non-parental adults to beliefs in the positive authority of peers decreases with age.

Rokeach suggested that as the child intellectually develops, he seeks new authorities; hence a third developmental hypothesis:

- I**III.** The ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of non-parental adult decreases with age.

It is to noted that although only hypotheses I and II are derived from Piaget, they, like the others, are expressed in terms of Rokeach's system.

The above hypotheses have not been directly tested although, as the review of the literature indicates, several studies have touched on these topics. This thesis is directly concerned with testing the above three hypotheses by a series of semi-projective stories.

Generally studies on the development of children's moral judgments have followed Piaget's use of the clinical method. In the clinical method, the investigator does not follow a set pattern of questioning but asks questions, often about stories, on the basis of previous responses until he feels that he has an adequate picture of both the content and the structure of the child's thoughts. Claparede says that the clinical method is "...that method of observation which consists in letting the child talk and in noting the manner in which his thought unfolds itself" (Claparede, 1923, p. 15).

One advantage of the clinical method is that it enables the investigator to go beyond superficial observation--to capture the child's thoughts behind his observed verbal responses. Another advantage of Piaget's method is that the stories and experiments are usually very interesting to children. Since Piaget is fairly non-directive in his questioning, the child does not usually feel threatened.

Yarrow (1960) has criticized the clinical method for its lack of standardization of questions. Knowing what questions to ask and when to pursue further questioning is an art, not a science. Variations in wording of questions may have different meanings for different children. A recent study on physical causality (Nass, 1956) has shown that variations in the form of the questions affects the child's responses.

In this study, a set of specific questions is asked of each child for each of the stories. If the child's answer is not clear, the interviewer continues to probe in a prescribed manner for each story. The child's responses are classified according to the hypotheses they are designed to test.

At the beginning of the interview, the child is told that he is to say anything he wishes and that there are no right or wrong answers. The approach is moderately non-directive. The interviewing procedure follows a definite pattern. The stories are structured, but the child is free to respond to the structure as he wishes

instead of being presented with a set of possible responses as on a multiple choice test.

With the above technique, the investigator hopes to overcome a major objection to Piaget's method without thereby giving up all the advantages of his method.

METHOD

Subjects

The subjects of the experiment were 80 boys enrolled in Kendon School, a public elementary school in Lansing, Michigan. There were 20 subjects each from kindergarten, second grade, fourth grade, and sixth grade. The mean age of each group (in years and months) was 6-0, 7-10, 10-0, and 12-1. According to the school's records, none of the children was below average in intelligence, as measured by group intelligence tests. The school is in a middle class area of Lansing and most of the homes are privately owned. All of the children were white.

Procedure

The stories were read to each subject by the investigator. The subject's oral responses to questions about the story situations were recorded on tape and later transcribed. For each interview, only the investigator and one subject were present in the teacher's lounge. When the interview was finished, the investigator thanked the subject and played back part of his recording. The subject returned to his room and asked the next boy to come to the

interview room. The teachers were informed of the project and knew ahead of time which children would leave to be interviewed. The subjects were interviewed alphabetically by grade (kindergarten, first, sixth grade last), except for a few changes due to teachers' requests and to absences.

Most of the children appeared relatively relaxed. If a child seemed very tense, the interviewer would talk with him before beginning the interview. The investigator tried to answer any questions the subjects had concerning the investigation.

The instructions to the subjects were:

I'm interested in finding out what children really think about certain things. I will read you some unfinished stories about boys like yourself. I'll then ask you a few questions about each story. You are to answer the questions in any way that you wish. There are no right or wrong answers. What you tell me is just between us. You should try to pretend that you are the boy in the story. Do you have any questions?

The stories were written by the investigator and revised on the basis of a pilot study on 14 boys in kindergarten through the sixth grade.

The first story read to each child was the same and was not scored. Its purpose was to acquaint the subject with the tasks involved. The order of presentation of the scored stories for the first subject was A, B, C, D, E, F, for the second, B, C, D, E, F, A, for the third, C, D, E, F, A, B, etc. Below are the unscored practice story and the six scored stories. (The investigator's

questions are in capitals. The statements and questions in parentheses were used to probe when the subject did not give a scorable response):

PRACTICE STORY (unscored). --Marv was watching his favorite television program. His little sister began playing with her dolls right in front of the television set. Marv asked her to move but she continued to play. WHAT WOULD YOU HAVE DONE IF YOU WERE MARV?... (What do you think Marv did?) ...HOW COME?...DO YOU THINK EVERYBODY WOULD HAVE DONE THE SAME THING?

A. A boy named Philip, about your age, was playing with some new children on the block. Philip liked the new children and had fun playing with them. They became good friends. One day Philip's father (daddy) saw them all playing together. That evening he told Philip that the new children were bad. The following day the new children asked Philip to play. WHAT WOULD YOU HAVE DONE IF YOU WERE PHILIP?... (Philip's father said they were bad...The new children asked Philip to play... The new children were Philip's friends...What do you think Philip did?) ...HOW COME?...WOULD EVERYBODY HAVE DONE THE SAME THING?

B. Mike is in Mr. Jones' room at school. The boys like to play ball in the playground after school. He won't let the children in his room play there. One day Mr. Jones was sick and did not come to school. Some of Mike's friends, who had a different teacher, decided to play ball after school in the playground. Mike's friends wanted him to play. They said, "Mike, come and play ball with us." Mike thought it would be fun. WHAT WOULD YOU HAVE DONE IF YOU WERE MIKE?... (Mike's teacher, Mr. Jones, won't let his children play ball in the playground. He is not at school because he is sick... Mike's friends, from another room, want him to play ball with them...What do you think Mike did?) ...HOW COME?...If he would play, say: WOULD EVERYBODY HAVE DONE THE SAME THING?...if he would not play, say: WOULD EVERYBODY HAVE DONE WHAT THEIR TEACHER SAID?

C. Robert's mother told him that he should never ride double on his bicycle. One day his teacher, Mrs. Smith, talked to

to the class about bike safety. She said that it was safe to ride double if your bike has a rear passenger carrier. Mrs. Smith added that this was the only place where it is safe to ride double. Robert's bike has a rear passenger carrier. On the way home from school, Robert's friend, Greg, asked him for a ride on his bike. WHAT WOULD YOU HAVE DONE IF YOU WERE ROBERT?... (Robert's mother told him that he should never ride double. His teacher, Mrs. Smith, said it was safe to ride double only if your bike has a rear passenger carrier. A rear passenger carrier is a place where a passenger can sit behind the bicycle driver. Robert's bike has a rear passenger carrier. Robert's friend, Greg, asked for a ride. What do you think Robert did?)... HOW COME?... WOULD EVERYBODY HAVE DONE THE SAME THING?

D. Billy went to the zoo with his mother, father, and best friend, John. They were all having a good time looking at the animals. Billy's father told them not to feed the animals. While Billy's parents rested, the two boys went to look at the ducks. They noticed that other children were feeding the ducks. John said, "Why don't we feed them. It'll be fun." WHAT WOULD YOU HAVE DONE IF YOU WERE BILLY?... (Billy's father said not to feed the animals... John saw other children feeding the ducks and said, "Why don't we feed them. It'll be fun."... What do you think Billy did?)... HOW COME?... If subject would feed say: WOULD EVERYBODY HAVE DONE THE SAME THING?... If subject would not feed, say: WOULD EVERYBODY HAVE DONE WHAT THEIR FATHER SAID?

E. Pete was staying with his grandmother since his mother and father were on a vacation. Grandmother asked Pete to watch his baby brother while she went to the store. Grandmother told him not to let the baby out of his sight. Susan, Pete's older sister, came home soon after grandmother left. After a while Pete was tired of watching the baby. Jim, Pete's friend, came running up and said, "A man is giving away free ice cream down the block. Let's hurry and go get some!" Susan said she would watch the baby. WHAT WOULD YOU HAVE DONE IF YOU WERE PETE?... (Pete's grandmother told him to stay and watch the baby... Jim wanted Pete to come and get free ice cream... Susan said she would watch the baby... What do you think Pete did?)... HOW COME?... WOULD EVERYBODY HAVE DONE THE SAME THING?

F. Jimmy lived on Woods Ave. He has many friends on the block. His father told him never to cross the street unless he or Jimmy's mother was with him. Mr. Williams is a neighbor who lives across the street. From his porch, Mr. Williams called to Jimmy, "Come over here. I have a surprise for you." WHAT WOULD YOU HAVE DONE IF YOU WERE JIMMY?... (Jimmy's father told him never to cross the street unless he or Jimmy's mother was with him...Mr. Williams, a neighbor who lives across the street, asked Jimmy to come over since he had a surprise for him...What do you think Jimmy did?) ...HOW COME?...WOULD EVERYBODY HAVE DONE THE SAME THING?

Rokeach (1964) stated that the first authorities for a child are his parents; later other adults become authorities and finally peers. When two authorities are presented to a subject, the developmentally earliest authority is considered primary while the other authority is considered secondary. In stories A and D, the parents are primary authorities and the peers are secondary authorities. In stories B and E, the non-parental adults are primary authorities and the peers are secondary authorities. In stories C and F, parents are primary authorities and the non-parental adults are secondary authorities. In other words, parents are always primary authorities, peers are always secondary authorities, and non-parental adults are both, depending on the story.

The adult authorities in the stories were evenly divided between males and females. Like the subjects, all the peer authorities were males. In stories C and F, the parents gave no reason for their commands and the requests of the other adults seem to

appear more reasonable to the child. In the four other stories, no reason was given for the adult's commands; thus the child is directly faced with a choice between adult authority and his wishes to conform to peer expectations. The investigator is assuming that it is most likely that the child's own desires are to do what the secondary authorities wish.

During each interview, the three main questions, "What would you have done if you were _____?", "How come?", "Would everybody have done the same thing?" were asked in this order. If the subject's responses to any question was not clear, the investigator either asked him to clarify his statement, repeated the question, read the restatement of the story, or occasionally reread the story in the original form.

The question, "What would you have done if you were _____?" provides data for hypotheses II, IIa, IIb, and III. By presenting a conflict between parents and peers, stories A and D provide data for hypothesis IIa. By presenting a conflict between non-parental adults and peers, stories B and E provide data for hypothesis IIb. These four stories (A, B, D, E,) also provide data for hypothesis II since each story presents a conflict between an adult and peers. Stories C and F provide data for hypothesis III by presenting a conflict between parents and other adults.

The investigator noted that the kindergarten subjects readily took the role of the boy in the story. They would often use "he" and "I" interchangeably. The first three second graders did not appear to take the role of the boy in the story. These boys replied to the question, "What would you have done if you were _____?" with statements such as, "I wouldn't do it cause my mother said not to..." They were trying to give the impression that they were always good boys. The investigator then asked, "Well, what did (name of boy in the story) do?" Often the reply was, "Oh, he'd probably do it." The question, "What would you have done if you were _____?" elicited what the child thought he ought to do while the question, "What did _____ do?," following the former question, more often elicited what the boy presumably would have done. Since a purpose of the investigation is to ascertain how behavior regarding different authorities varies with age, the procedure was modified beginning with the fourth second grade subject even though this change may contaminate the results. If the subject replied to the question, "What would you have done if you were _____?" by a response in the form of, "I would have done what my mother (or other primary authority) said," the investigator then asked, "What did _____ do?" In many cases, a subject would reply that the boy in the story would do what the secondary authority wanted (although he would not). In these cases, the subject was scored as acting on the belief of the

secondary authority. The subject was also scored to indicate that he was hesitant over disobeying primary authority.

The question, "Would everybody have done the same thing?" provides data for hypothesis I. The subject's response is only considered to be primitive if it appears that he is 100% sure that any other boy would do the same thing in the same situation. Answers qualified by "probably, " "mostly, " "maybe, " "should have, " "hope so, " "don't know" etc. are scored nonprimitive.

Since stories B and D state that some children act contrary to parental or teacher demands, everybody doesn't do the same thing as the primary authority commands. The question, "Would everybody have done the same thing?" is only appropriate to these two stories if the child said that the boy in the story acted on the belief of peers. If the child states that the boy in the story acts according to adult commands, he may have a primitive belief that everybody acts as their own parents and teachers command, but realizes that not all parents and teachers command the same thing. Hence, if the child stated that the boy in the story acted upon the belief of a primary authority, the investigator asked, "Would everybody have done what their parent (teacher) said?" If the child answered "Yes, " it was inferred that he had a primitive belief that everybody did what their own parent (teacher) said.

The question, "How come?" does not provide data for any hypothesis. The original intent of this question was to help clarify the child's response to the question, "What would you have done if you were _____?" During the interviews, the investigator noted a large variety of responses to the "How come?" question and that the responses seem different for the different grades. After the interviews were over, the investigator devised twenty exhaustive content categories for the responses to the question, "How come?" Content categories one through nine apply when the child chooses a primary authority and categories ten through twenty apply when the child chooses a secondary authority. The content categories are:

1. Unquestioned acceptance of primary authority, e.g.-- Father said so, To obey the teacher, She's boss, He's supposed to, Can't cross without mommy or daddy, Mommy said they were bad.
2. Acceptance of primary authority due to a negative evaluation of the environmental situation, e.g.--It isn't safe, Father wasn't there, Bike is not strong enough, Nobody to go across the street with.
3. Acceptance of primary authority due to a negative evaluation of disobedience, e.g.--He'd get spanked, They would end up in trouble, The ball would pop, His father might see him, Would get into a fight.
4. Acceptance of primary authority due to a negative evaluation of a secondary authority, e.g.--The children were bad, Mr. Williams would trick them, They did naughty things.
5. Acceptance of primary authority due to a negative evaluation of self for disobedience (or positive evaluation for obedience), e.g.--He didn't want to be naughty, To be good, He's a good boy, He wasn't a sneaky guy.

6. Acceptance of primary authority due to a desire to please or obey the primary authority, e.g.--To please the teacher, He wanted to obey his mother.
7. Acceptance of primary authority due to a moral reason or to a generalizable principle, e.g.--It wouldn't be nice, He probably thought it was wrong because his father said he shouldn't, So he wouldn't break his mother's rule, He goes to church, He was honest.
8. Acceptance of primary authority due to a lack of interest in the behavior suggested by the secondary authority, e.g.--He didn't really want an ice cream. It's no more fun to feed them than to watch them.
9. Acceptance of primary authority for a miscellaneous reasons, e.g.--To please Susan, He was tired.
10. Acceptance of secondary authority due to own desires or interests (direct or implied), e.g.--Because he wanted to, It was fun, He had a surprise, He did it and he got spanked, He was tired of watching the baby, There was nothing else to do.
11. Acceptance of secondary authority due to a liking for or a desire to please peers (a positive evaluation of peers), e.g.--They were friends, He wanted to give him a ride, That would be friendly, Make up with them.
12. Acceptance of secondary authority due to peer behavior, e.g.--They asked him, He met up with the boys, The others were.
13. Acceptance of secondary authority due to reliance on a non-parental adult, e.g.--The teacher said it was safe, Mr. Williams asked me to come over, The substitute was there.
14. Acceptance of secondary authority while following the spirit, but not the letter, of the primary authority's command, e.g.--Susan was there, Mr. Williams was watching, A teacher was on the playground.
15. Acceptance of secondary authority due to a relative rational reason (not included in the above categories), e.g.--The ducks are hungry, It has a passenger carrier, It was free, Ice cream is good.

16. Acceptance of secondary authority due to a rejection of the validity of the primary authority's command, e.g.--My father wouldn't know if they're bad, I don't see anything the matter with it, The teacher can't tell you what to do after school lets out, They are not bad children, They were nice children, It was all right.
17. Acceptance of secondary authority due to inability of primary authority to enforce his command, e.g.--The teacher wasn't there, Feed them until they wake up, If my father didn't see me.
18. Acceptance of secondary authority due to a moral reason or principle, e.g.--That's the right thing to do, Be polite with them, It's better, He thought it was right.
19. Acceptance of secondary authority but S states that he is bad, negligent, or has done wrong, e.g.--He wasn't thinking of others, He did it but it was wrong, He didn't think about it.
20. Acceptance of secondary authority for a miscellaneous reason, e.g.--Tempted by evil.

When a child gave more than one answer to the question, "How come?", each answer was separately scored.

Answers to the question, "How come?", often suggested a fear of punishment, e.g., "He'd get spanked.," and were scored in category 3. In addition, some subjects mentioned a fear of punishment in passing, stated that although they would not obey the primary authority, they would be punished for their disobedience or stated that those who do not obey will get punished. If a subject, at any time during the questioning of a story, mentioned or implied a fear of punishment, "fear of punishment" was scored. Some examples are: They'll end up in trouble, They might see us doing it, His dad would get after him.

In summary, there are eight different frequency scores for each subject and for each of the four grade-age groups based on the following classification:

A. Authority beliefs.

1. Parents vs. peers.--The subject states or implies that the boy in the story acted upon a command of a parent when pitted against peers (stories A and D).
2. Non-parental adults vs. peers.--The subject states or implies that the boy in the story acted upon a command of a non-parental adult when pitted against peers (stories B and E).
3. Parents vs. non-parental adults.--The subject states or implies that the boy in the story acted upon a command of a parent when pitted against a non-parental adult (stories C and F).
4. Adults vs. peers.--The subject states or implies that the boy in the story acted upon a command of an adult when pitted against peers (stories A, B, D, E).

B. Primitive beliefs.--The subject implies that the belief acted upon is primitive (stories A, B, C, D, E, F).

C. Content categories.--The subject states his reasons for acting upon the beliefs of different authorities (stories A, B, C, D, E, F). The twenty content categories are listed on pages 26, 27, 28.

D. Miscellaneous categories.

1. The subject implies a fear of punishment (stories A, B, C, D, E, F).
2. The subject implies a hesitancy over disobeying primary authority (stories A, B, C, D, E, F).

In order to establish the reliability of the scoring of the categories used to test the five hypotheses, the transcript was scored by another rater. The percentage of agreement for A1 is 100%, A2 is 100%, A3 is 100%, A4 is 100%, and B is 97.5%.

RESULTS

Since it was not known whether responses to the questions, "What would you have done if you were _____?" and "Would everybody have done the same thing?" were independent, chi-square tests of independence were run for each story within each grade (see Table 1). No test was significant ($p < .10$). Belief in a particular authority and the primitiveness or non-primitiveness of the belief appear to be separate dimensions.

Authority Beliefs

The means and variances of beliefs in the authority of parents vs. peers, non-parental adults vs. peers, parents vs. non-parental adults, and adults vs. peers are given in Table 2. Each subject's score is the frequency with which he chose the primary authorities. For example, since parents vs. peers is based on two stories, a subject who did not choose any primary authorities has a score of zero. If he chose only one primary authority, his score is one. The maximum score on parents vs. peers, non-parental adults vs. peers, and parents vs. non-parental adults is two, while the maximum score on adults vs. peers is four.

Each comparison of primary vs. secondary authorities was treated by an analysis of variance. For each analysis, and $F_{\max}$ test was run to test the reasonableness of the assumption of homogeneity of variance. Since none of the $F_{\max}$ tests reached significance ($p < .05$), the assumption of homogeneity of variance was not unduly violated. Although some of the distributions are skewed, Norton (1952) has shown that violation of the assumption of normality is insignificant with equality of samples of twenty subjects. All individual comparisons were made using the Newman-Keuls method.⁴

Table 1. -- X^2 tests for independence of beliefs in authority and the primitiveness of the beliefs.

Stories	Kindergarten	Second Grade	Fourth Grade	Sixth Grade
A	.208	.375	.012	.008
B	.141	.312	.417	1.579
C	.078	2.679	.672	.014
D	.278	.013	.619	.377
E	1.270	.800	.024	.303
F	.010	.082	1.684	.114

Note: $X^2_{.90} = 2.7$, $X^2_{.75} = 1.33$, $X^2_{.50} = .46$, $X^2_{.25} = .10$, $X^2_{10} = .02$.
Df = 1.

⁴The analysis of variance by the F statistic and the Newman-Keuls method are different statistical tests. It is possible to have a significant F without any significant individual comparisons.

Table 2. -- Means and variances for choosing primary authorities by grades.

	Parents vs. Peers	Non-parental Adults vs. Peers	Parents vs. Non- parental Adults	Adults vs. Peers
Kindergarten				
$\bar{x}$	1.35	1.10	1.20	2.45
s^2	.555	.410	.484	1.523
Second Grade				
$\bar{x}$	1.05	.45	.65	1.50
s^2	.681	.471	.765	1.631
Fourth Grade				
$\bar{x}$	.75	.45	.75	1.20
s^2	.618	.576	.407	1.852
Sixth Grade				
$\bar{x}$	1.10	.55	1.15	1.65
s^2	.515	.471	.45	1.607

Note: N = 20 for each grade. Parents vs. peers, non-parental adults vs. peers, and parents vs. non-parental adults are based on two stories each per subject. Adults vs. peers is based on four stories per subject.

For a hypothesis to be fully supported, the overall F test must be significant, the means for the grades must decrease with age, and at least one of the individual comparisons must be significant. If the means only decrease for some of the grades, the hypothesis is partially supported. For example, if the F test is significant, the means decrease only from kindergarten, to second, to fourth grade, and the comparison between kindergarten and fourth grade is significant, then the hypothesis is partially supported.

Parents vs. peers was not significant (see Table 3). The mean score for choosing parents decreased from kindergarten to second grade to fourth grade but it increased in the sixth grade to a higher mean than that of the second grade. None of the individual comparisons was significant although the difference between kindergarten and fourth grade was almost significant. Hypothesis IIa, the ratio of children's beliefs in the positive authority of adults to beliefs in the positive authority of peers decreases with age, is not supported.

There was a significant difference ($p < .05$) among grades in choosing non-parental adult vs. peer authorities (see Table 4). Individual comparisons showed that kindergarten subjects chose to act on the authority of non-parental adults significantly ($p < .05$) more often than second graders, fourth graders, and sixth graders, but comparisons among the latter three grades

were not significant. This difference between kindergarten and other subjects should be conservatively interpreted since the questioning of kindergarten subjects differed slightly from that of the other subjects.⁵ Since the mean for the sixth grade is larger than that for the fourth grade, hypothesis IIb, the ratio of children's beliefs in the positive authority of non-parental adults to beliefs in the positive authority of peers decreases with age, is only partially supported.

Table 3. --Analysis of variance for choosing parental vs. peer authorities.

Source	df	SS	MS	F	p
Grades	3	3.64	1.21	2.043	NS
Error	76	45.05	.592	--	--
Total	79	48.69	--	--	--

Note: $F_{\max} = 1.32$ NS

⁵ See page 24.

Table 4. --Analysis of variance for choosing non-parental vs. peer authorities.

Source	df	SS	MS	F	p
Grades	3	5.84	1.946	4.037	<.05
Error	76	36.65	.482	--	--
Total	79	42.29	--	--	--

Note: $F_{\max} = 1.40$

NS

There was a significant difference ($p < .05$) among grades in choosing parental vs. non-parental adult authorities (see Table 5). But none of the individual comparisons was significant although the decrease between kindergarten and second grade and the increase between second and sixth grade approached significance. Hypothesis III, the ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of non-parental adults decreases with age, is not supported since none of the individual comparisons was significant.

There was a significant difference ($p < .05$) among grades in choosing adult vs. peer authorities (see Table 6). Individual comparisons showed that kindergarten subjects chose to act on the authority of adults significantly ($p < .05$) more often than fourth graders.

Due to a slightly modified procedure for kindergarten subjects, this result should be conservatively interpreted.⁶ The decrease between kindergarten and both second and sixth grade was almost significant. Hypothesis II, the ratio of children's beliefs in the positive authority of adults to beliefs in the positive authority of peers decreases with age, is only partially supported since the mean for the sixth grade is higher than that for the fourth grade.

Table 5.--Analysis of variance for choosing parental vs. non-parental adult authorities.

Source	df	SS	MS	F	p
Grades	3	4.64	1.546	2.939	<.05
Error	76	40.05	.526	--	--
Total	79	44.69	--	--	--

Note: $F_{\max} = 1.879$

NS

⁶See page 24.

Table 6.--Analysis of variance for choosing adults vs. peer authorities.

Source	df	SS	MS	F	p
Grades	3	17.1	5.7	3.448	<.05
Error	76	125.7	1.653	--	--
Total	79	142.8	--	--	--

Note: $F_{\max} = 1.216$

NS

Primitiveness of Beliefs

The means and variances of primitive beliefs by grade are given in Table 7. Hypothesis I, the percentage of primitive beliefs decreases as children increase in age, was not supported when tested by an analysis of variance (see Table 8). None of the individual comparisons among grades was significant.

Two possible explanations for the lack of significance are: (1) that the different types of stories (e.g. parents vs. peers) have a differential effect on primitiveness of beliefs, and (2) that there is an interaction between types of stories and primitiveness of beliefs. Both explanations were tested by an analysis of variance and both effects were significant ($p < .05$) (see Table 8). Individual comparisons on the types of stories showed significant ($p < .05$) differences between the effects on primitiveness of beliefs of parent vs. peer

stories and both non-parental adult vs. peer stories and parent vs. non-parental adult stories. The primary effect of the interaction seems to be between the sixth grade and parent vs. peer stories (see Figure 1).

Table 7. --Means and variances of primitive beliefs by grades.

Primitive vs. Nonprimitive	Kindergarten	Second Grade	Fourth Grade	Sixth Grade
$\bar{x}$	2.55	2.10	1.2	1.5
s^2	6.115	4.094	3.431	2.684

Note: N = 20 for each grade. Each measurement is based on six stories per subject.

Table 8. --Analysis of variance for asserting primitive vs. nonprimitive beliefs.

Source	df	SS	MS	F	p
Between Ss	79	110.96			
A (grades)	3	7.31	2.43	1.78	NS
Ss within grades	76	103.65	1.36	--	--
Within Ss	160	34			
B (types of stories)	2	1.52	.76	4.00	<.05
AB (grades x types of stories)	6	2.98	.49	2.57	<.05
B x Ss within grades	152	29.50	.19	--	--

Note: Ss within grades $F_{\max} = 2.29$
 B x Ss within $F_{\max} = 2.01$

NS

NS

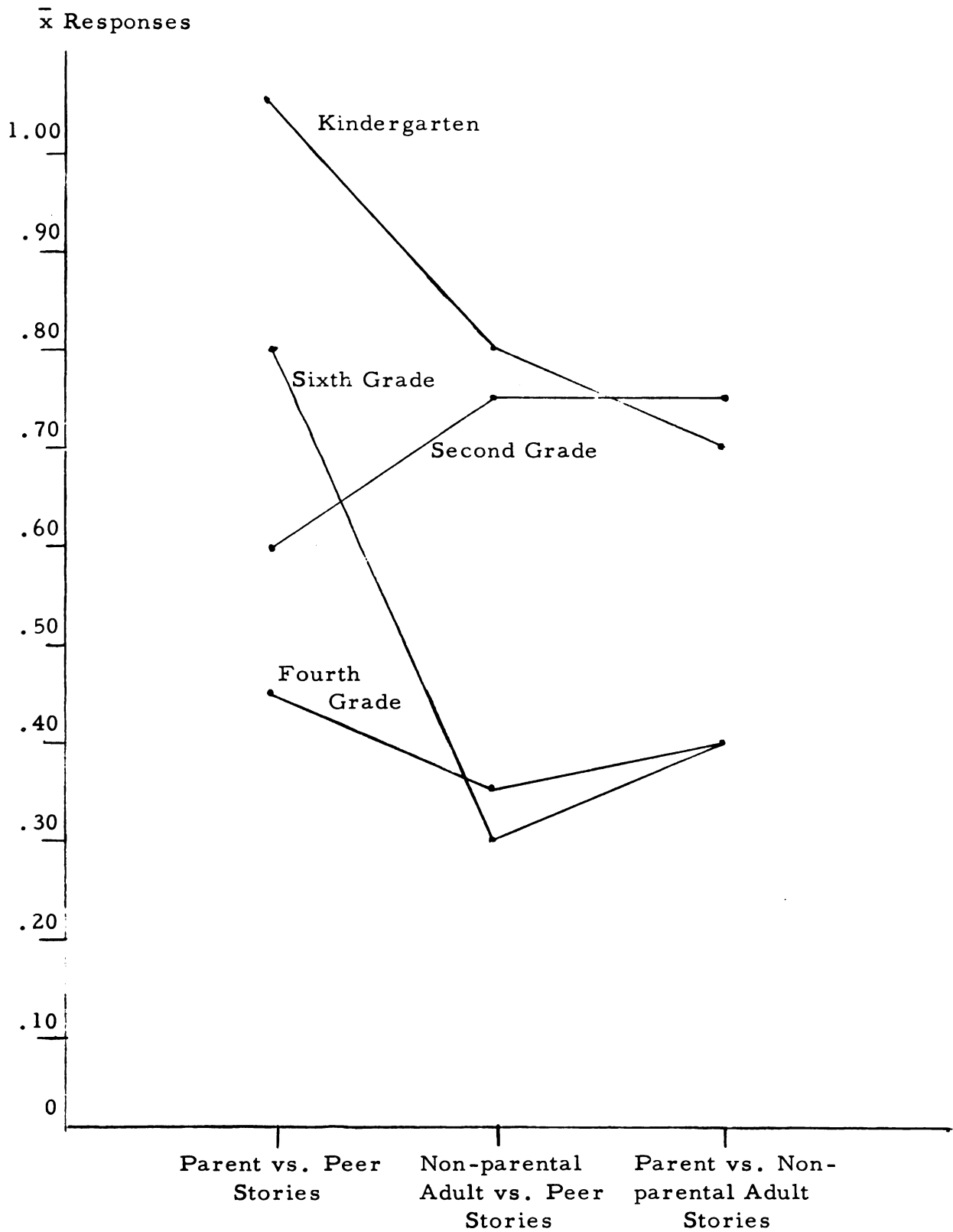


Figure 1.--Interaction of types of stories and grades on primitiveness of belief.

Content Categories

The frequencies for the twenty content categories are given in Table 9. The frequencies in several of the categories are too small for meaningful statistical comparisons and the frequencies in some other categories do not appear to show significant differences between grades. Statistical tests were made on content categories 1 (Unquestioned acceptance of primary authority), 3 (Acceptance of primary authority due to a negative evaluation of disobedience), 7 (Acceptance of primary authority due to a moral reason or to a generalizable principle), 14 (Acceptance of secondary authority while following the spirit, but not the letter, of the primary authority's command), and 16 (Acceptance of secondary authority due to a rejection of the validity of the primary authority's command). Except for category 1, where the variance was homogeneous, tests were made using the Kruskal-Wallis H test, a non-parametric analog (based on ranks) to a single classification analysis of variance.

Although the responses to category 1 nonsignificantly decrease with age from kindergarten to second to fourth grade, the overall F was not significant (see Table 10) probably because of the sharp increase from fourth to sixth grade. Responses to category 3 also decreased up to the fourth grade and the differences between grades were also not significant (see Table 11). Differences between

grades in responses to content categories 7, 14, and 16 each significantly ($p < .025$, $p < .001$, $p < .05$) increased with age from kindergarten through sixth grade (see Table 11).

Table 9.--Frequencies of content categories by grade.

Categories	Kindergarten	Second Grade	Fourth Grade	Sixth Grade
1.	34	29	22	31
2.	7	3	2	5
3.	24	10	7	14
4.	7	8	3	1
5.	2	2	4	2
6.	0	0	5	2
7.	0	4	4	13
8.	5	0	0	1
9.	1	0	2	0
10.	30	42	36	27
11.	3	5	8	5
12.	8	11	8	8
13.	3	4	6	2
14.	3	3	13	20
15.	4	11	10	9
16.	1	1	5	11
17.	1	1	4	2
18.	0	1	0	1
19.	1	2	8	1
20.	1	0	3	0

Table 10. --Analysis of variance of responses to content category 1.

Source	df	SS	MS	F	p
Grades	3	3.90	1.30	.62	NS
Error	76	157.90	2.07	--	--
Total	79	161.80	--	--	--
Note: $F_{\max} = 1.84$					NS

Miscellaneous Categories

The frequencies for fear of punishment and for hesitancy over disobeying primary authority are given in Table 12. While kindergarten subjects and sixth grade subjects showed the greatest fear of punishment, the differences between the grades were not significant (see Table 13) as tested by the Kruskal-Wallis H test. Hesitancy over disobeying primary authority decreases slightly from the second to the fourth grade but drops for the sixth grade (see Table 12). The differences were not significant (see Table 13) as tested by the Kruskal-Wallis H test.

Table 11. --Kruskal-Wallis H test on content categories 3, 7, 14, and 16.

Category	df	H	p
3.	3	5.30*	NS
7.	3	9.66*	<.025
14.	3	16.3	<.001
16.	3	9.10*	<.05

* Corrected for tied ranks.

Table 12. --Frequencies of miscellaneous categories by grade.

Categories	Kindergarten	Second Grade	Fourth Grade	Sixth Grade
Fear of Punishment	13	6	9	13
Hesitancy over Disobeying Primary Authority	*	41**	39	22

* Kindergarten subjects were not scored on this variable.

** Scored on only 17 of the 20 second grade subjects.

See Page 24.

Table 13. --Kruskal-Wallis H test on miscellaneous categories.

Category	df	H	p
Fear of Punishment	3	1.98*	NS
Hesitance over Disobeying Primary Authority	2	3.04*	NS

*Corrected for tied ranks.

DISCUSSION

The results are not clear cut. Hypothesis IIb, the proportion of beliefs in non-parental as opposed to peer authority decreases with age, and hypothesis II, the proportion of beliefs in adult (parents and non-parental adults) as opposed to peer authority decreases with age, were partially supported. Hypothesis IIa, the proportion of beliefs in parental as opposed to peer authority decreases with age, hypothesis III, the proportion of beliefs in parental as opposed to non-parental adult authority decreases with age, and hypothesis I, the proportion of primitive beliefs decreases with age, were not supported. For each hypothesis there was an unpredicted increase in the sixth grade along with the predicted decreases, except for hypothesis III, from kindergarten to second, and to fourth grade.

There are several possible explanations for the increase in reliance on primary authority by sixth grade subjects. The explanations will be given for hypothesis II, decrease in reliance on adult authority with age, but are also applicable to the other three hypotheses concerned with authority beliefs. First, the increase in reliance on primary authority by sixth graders suggests that age trends are not always linear. Perhaps reliance on adult authority levels off, or

reaches an asymptote, at the fourth grade; the sixth grade nonsignificant increase may be a random variation from the fourth grade asymptote. Or reliance on adult authority may decrease with age, but not in a smooth linear manner. Growth does not often proceed in an orderly fashion without both ups and downs. The relationship between age and reliance on adult authority may be curvilinear. The present work suggests that future investigations should use groups of older children in order to ascertain whether the sixth grade increase was due to random variation, a leveling-off process, or a curvilinear relationship.

Second, it appears that the stories had a differential effect on different age groups. The main concern while writing the stories was whether they would be intelligible to the younger children, not whether they would be very interesting to the sixth graders. The situations depicted may not have been very relevant to most sixth graders. For example, it is unlikely that many mothers of 12 and 13 year old boys would not allow their sons to cross the street by themselves. The sixth graders may have answered as they thought younger children should, or would, do. The age span of the subjects, 5 to 14 was too broad for the stories used.

Third, the sixth graders seemed more concerned with giving what they thought were the right answers, i.e., agreeing with the command of the primary authority, than in saying what they really

would have done. A number of sixth graders seemed to view the experiment as a disguised test in which they felt they had to perform at their best. It seemed to the investigator that the younger children were much more open to the experimental situation than the sixth grade children. The latter seemed more concerned with "psyching out" the experimenter, a newcomer to the school.

Fourth, the sixth grade is the highest grade at Kendon School. The principal and teachers give sixth grade students more responsibilities and privileges. While I was at the school, the principal had a special luncheon for the Safety Patrol, which is composed of sixth grade boys. A policeman was there as a special guest. It seems that the sixth graders identified with the teachers and other adults much more than the younger children.

Fifth, Piaget (1932) mentions, but does not elaborate, an intermediate stage between constraint and autonomous morality. In the intermediate stage, children internalize adult rules without evaluating them. The increased acceptance of adult authority by sixth graders suggests that they are in Piaget's intermediate stage instead of in the stage of autonomous morality. This explanation is supported by the data from Content Category 1, unquestioned acceptance of primary authority. The mean for the sixth grade was higher than that of the second and fourth grades and almost as high as that of the kindergarten.

Sixth, there may be qualitative differences in the reliance on adult authority by sixth grade boys. Acceptance of primary authority due to a moral reason or a generalizable principle (Content Category 7), acceptance of secondary authority while following the spirit, but not the letter, of the primary authority's command (Content Category 14), and acceptance of secondary authority due to a rejection of the validity of the primary authority's command (Content Category 16) all significantly increase with age from kindergarten to sixth grade. In addition, the biggest increase for each of these variables is between fourth and sixth grade. Although the sixth graders show greater acceptance of adult authority than fourth graders, the former appear to be more discriminating or selective in their acceptance of authority as measured by these three categories. For example, one sixth grader stated, "I would have went and played with them because if it's after school the teacher hasn't got anything to do with it. It's you own time." Another sixth grader remarked, "If your dad, if he doesn't know the children--he doesn't have any right to tell you that they're bad." Both of these boys accepted the commands of primary authorities in other situations.

The interpretation of qualitative differences in acceptance of adult authority by sixth graders is weakened by the fact that sixth graders showed a greater unquestioned acceptance of primary authority (Content Category 1) than fourth graders. It seems clear,

however, that the sixth graders' reliance on adult authority is not based on moral realism since the sixth graders made a greater distinction between the spirit and letter of the law (Content Category 14) than any other age group.

Seventh, acceptance of adult authority by sixth graders may be related to fear of punishment. Spontaneous mention of fear of punishment was highest in both kindergarten and sixth grade subjects. The fear of negative reinforcement may play a more important role in the acceptance of adult commands by sixth graders than by second or fourth graders. However, hesitancy over disobeying primary authority decreases with age from second, to fourth, and to sixth grade. Thus the sixth graders are highest on fear of punishment and lowest on hesitancy over disobeying authority. These apparently contradictory findings suggest that the sixth grade is a less homogeneous group than the other grades regarding acceptance of adult authority, perhaps because it is a major transitional period with groups of subjects at several different levels of development.

Hypothesis III, the proportion of beliefs in parental as opposed to non-parental adults decreases with age, was not supported. Both fourth and sixth graders more heavily relied on parents than second graders. The increased reliance on parents may indirectly be related to the increase in fear of punishment with age. Fear of punishment was mainly fear of parental punishment. Rarely was a

child afraid of punishment by the teacher. The increased fear of parental punishment may have resulted in increased obedience of parental as opposed to non-parental adult commands.

Hypothesis I, the proportion of primitive as opposed to nonprimitive beliefs decreases with age, was not supported; although the proportion of primitive beliefs decreased to the fourth grade it increased in the sixth. The increase appears to be due, in part, to the lack of equivalent effects of the different types (e.g., parent versus peer) of stories on primitiveness of belief. Parent versus peer stories seem to elicit more primitive beliefs than the two other types of stories when measured over grades. More importantly, different types of stories have a differential effect on grades. Sixth graders scored higher than second and fourth graders in primitiveness of beliefs on stories A and D (parents versus peer) but lowest of all the grades on the other four stories. Thus the increase in primitiveness of belief for sixth graders appears to be an artifact of stories A and D. In story A, the boy's father told him that his new friends were bad and in Story D, his father told him not to feed the zoo animals although other children were.

The relative lack of differences in primitiveness of belief may be because the children sampled are too old to show many primitive beliefs in response to the questions asked. Even the kindergarten subjects indicated that over half their beliefs were

nonprimitive. The variable of primitiveness of belief should be tested on younger children.

Piaget contended that as the child grows older, he becomes less subject to adult constraint. The present investigation supports Piaget regarding kindergarten, second, and fourth grade boys. Contrary to Piaget, the sixth graders of the present sample seemed to be more subject to adult constraint than second or fourth grade subjects as measured by reliance on adult authority. Although there is probably a trend toward autonomy and away from adult constraint, the present investigation suggests that the trend is not linear. Perhaps there is some regression to an earlier level when children are in a period of transition between stages. Piaget may have thought of an increase in unquestioned acceptance of adult values when he mentioned his intermediate stage between adult constraint and autonomous morality. The increased ability to generalize moral principles, to follow the spirit, rather than the letter, of the adult's command, and the decrease in hesitancy over disobedience suggest that some kind of internalization is taking place in some of the sixth grade subjects.

The present work does not support Piaget's assertion that children reach the stage of autonomous morality by the age of ten. This may be due to the particular sample of American children and to the differences in tasks and methods used.

Piaget also contended that as the child grows older, he becomes less egocentric, that is, he is more able to take the view of others. If the increase in primitiveness of beliefs by sixth graders is not due to the differential effects of stories, then the present study implies that a form of egocentrism may become prominent in the sixth grade subjects.

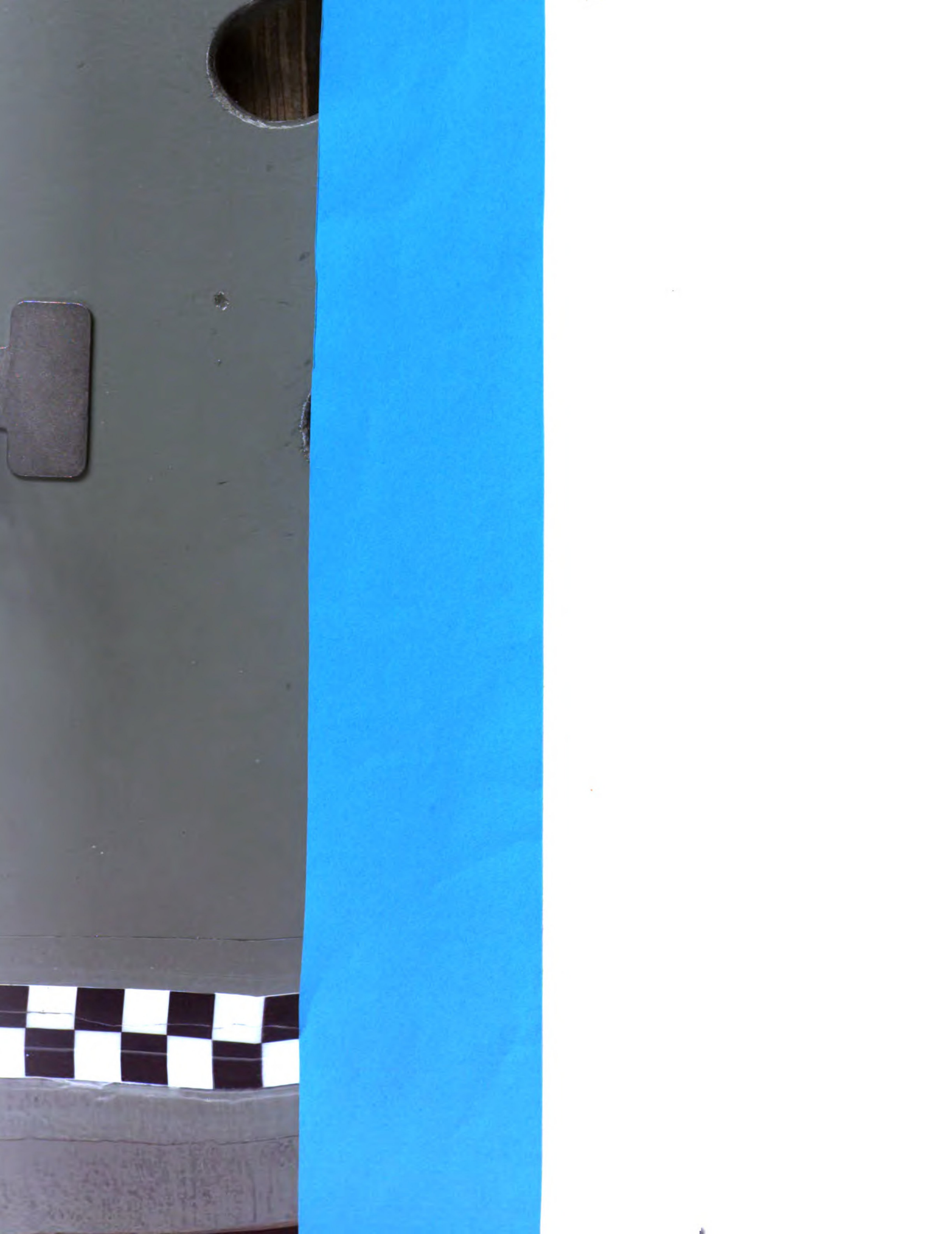
This investigation has shown that Rokeach's framework of belief systems can be applied to child development research. His assertion that reliance on adult authority decreases with age was supported for kindergarten, second, and fourth grade boys, but not for sixth graders. Rokeach's statement that primitiveness of belief decreases with age was not supported although the trend was as he predicted for kindergarten, second, and fourth grades. The present investigation also suggests an addition to Rokeach's (1964) discussion of the development of authority beliefs. He stated that the young child almost exclusively relies on the parents as authorities. As the child becomes older, according to Rokeach, other adults such as teachers and relatives also become authorities. The present investigation shows that it is not enough to know only who are the child's authorities in order to predict his behavior regarding authority figures. It is also necessary to know to what extent, or under what circumstances, a child will rely on an authority. It was found that even though older children may have a larger number of authorities than younger

children, they still view their parents as the primary authorities to be trusted. On sixth grade boy aptly stated, "Well, he must have gotten specific orders from his mother, and I would not think that his teacher was the same as his mother." Another sixth grader said, "I think his mother had more feeling for his safety than his teacher would." In short, besides knowing who are the authorities for a child, it is also necessary to know to what extent they will be relied on by the child.

In sum, the present investigation has shown that reliance on adult authority as opposed to peer authority decreases from kindergarten, to second, and to fourth grade, but increases in the sixth grade. It was found that reliance on parental authority as opposed to non-parental adult authority does not appreciably decline with age. Primitive beliefs did not significantly decrease with age, probably due to artifacts of the stories used. Although the method used needs further refining, the investigation has shown that Piaget's clinical method can be partially standardized without giving up important data. It was also found that small differences in stories and questions influenced the subjects responses, especially those of older children. The investigation has also shown that situational factors are very important in whether a child will accept an adult command. It further suggests that age trends are not always linear.



Further research on the development of beliefs in authority should be concerned with both younger and older subjects than those of the grade-school age range. Do junior high school subjects continue to show increases in primitiveness of belief and acceptance of adult authority? To what extent do small modifications in wording of stories and questions effect the responses given? What forms of questions elicit what types of responses? Under what conditions will children accept adult authority and under what conditions won't they? To what extent is acceptance of adult authority based on fear of punishment or anticipation of positive reinforcement? Are there sex differences in the development of beliefs in authority? Are there age differences in the acceptance of male and female authorities? What are the personality correlates of reliance on adult authority at different age levels? How are child rearing practices related to the child's conception of authority relationships? Future research will have to answer these questions.



SUMMARY

This research was concerned with exploring changes with age in both children's beliefs about authority and the universality of their authority beliefs. The theoretical framework for the research was Piaget's theory of moral development and Rokeach's discription of belief systems.

A review of the literature indicated that although many investigators have been concerned with different aspects of moral development, none has been specially concerned with the development of authority relationships.

There were four groups of 20 boys each in kindergarten, second, fourth, and sixth grade. Each boy was tested individually.

The hypotheses tested were:

- I. The percentage of primitive beliefs decreases as children increase in age.
- II. The ratio of children's beliefs in the positive authority of adults to beliefs in the positive authority of peers decreases with age.
 - IIa. The ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of peers decreases with age.
 - IIb. The ratio of children's beliefs in the positive authority of non-parental adults to beliefs in the positive authority of peers decreases with age.



- III. The ratio of children's beliefs in the positive authority of parents to beliefs in the positive authority of non-parental adults decreases with age.

In order partially to objectify Piaget's clinical method, six semi-projective stories were written. In the two stories used to test hypothesis IIa, the child had to choose between parents and peers. In the two stories used to test hypothesis IIb, the child had to choose between non-parental adults and peers. These four stories were used to test hypothesis II, in which the child had to choose between adults and peers. Two additional stories were used to test hypothesis III, in which the child had to choose between parents and non-parental adults. Hypothesis I was tested by all six stories. The stories were written so that the child would prefer to choose the latter authority of each combination. The subjects were questioned about each story in a prescribed manner. The three primary questions were: "What would you have done if you were (name of boy in story) ?", "How come?", and "Would everybody have done the same thing?" The first question provides data for hypotheses II, IIa, IIb, and III while the third question provides data for hypothesis I; on the basis of the responses to the second question, 20 content categories were devised to help explain why the child chose the authority he did.

The results showed that hypothesis II, beliefs in adult authority decrease with age, and hypothesis IIb, beliefs in non-parental adult authority decrease with age, were partially supported--



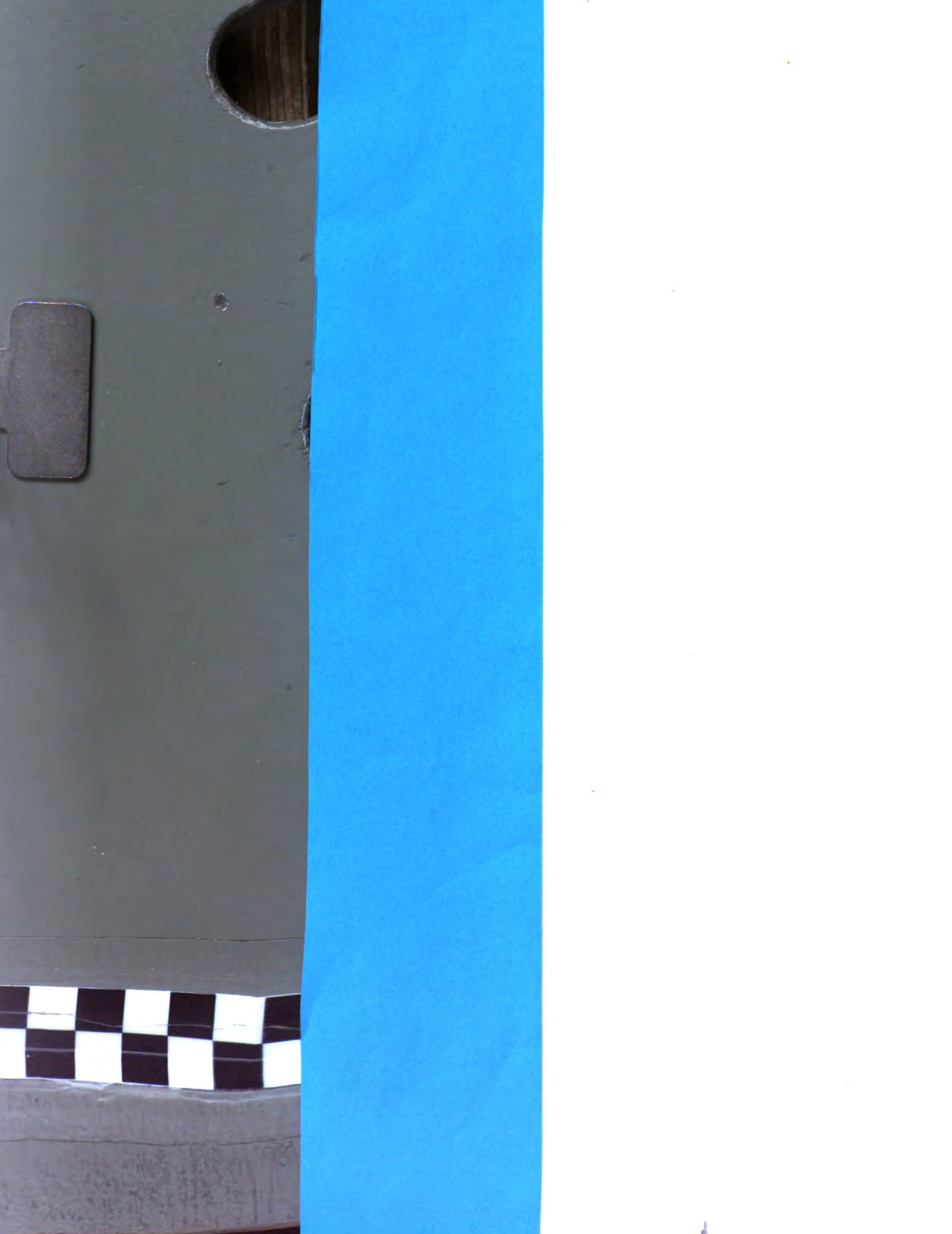
for kindergarten, second, and fourth grades, but not for the sixth grade. The other three hypotheses were not supported, but the results were in the predicted direction for kindergarten, second, and fourth grade (except for hypothesis III).

The study has shown that Rokeach's belief system can be applied to child developmental research. The implication for Piaget's theory is that the transition from adult constraint to autonomous morality is not a simple matter. It was suggested that although the sixth grade subjects showed greater reliance on adult authority, they were more selective and discriminating in their acceptance of adult authority than younger boys. It was found that small differences in the stories and questions differentially effected different age groups.



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