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Student Attitudes toward Authority in Three School Systems with Reference to Dogmatism

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STUDENT ATTITUDES TOWARD AUTHORITY
IN THREE SCHOOL SYSTEMS
WITH REFERENCE TO DOGMATISM

by

Stanley Fortuna Jr.

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Degree of Doctor of Education

Western Michigan University
Kalamazoo, Michigan
April 1975
ACKNOWLEDGEMENTS

It is impossible to list all those individuals who have made a contribution to my intellectual development. A debt of gratitude is owed these many people.

However, it was my doctoral committee who made the present research a reality. If this, my initial effort in the field of educational research, has merit, then the credit must be attributed to their encouragement and valuable suggestions. Dr. William P. Viall who served as my program and thesis advisor must be singled out as the ever-present guide who was most responsible for the successful completion of my dissertation and related studies. Dr. Rodney Roth provided incisive assistance relative to the problem statement, research design, and data analysis. Dr. Donald H. Bouma helped me both in the initial development of my topic and in the later stages of the research with his sociological awareness and advice thereof.

Finally, I wish to give special thanks to my wife, Diane. She made possible a dream.

Stanley Fortuna Jr.
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CHAPTER I: PROBLEM STATEMENT

Introduction

Attitudes toward authority

In many ways, ours is a time of crisis. It is particularly a time of a crisis of authority. Virtually all institutions of authority, and connected notions thereof, are being questioned and challenged. The student unrest at the university level in the 1960's provides an initial example of this challenging of authority. Further, unrest in educational institutions has extended itself even to the grade school level-- evidenced in a children's liberation movement.

The authority of ecclesiastical institutions, especially that of the Catholic Church, has been severely questioned and challenged. Even the liberal reforms of the Second Vatican Council have not much resolved the authority question in this institution.

Finally, the authority of the various law enforcement agencies, as well as the authority of governmental bodies in general, is under both scrutiny and attack. Police officers are finding it more and more difficult to successfully perform their duties. In the aftermath of Watergate, respect for governmental and political authority may quite likely further decline.

The situation is, of course, paradoxical. Though various forms of institutional authority are under attack, people are becoming increasingly dependent on the functions of authority. The growing complexity of society and the increasing interdependence of society's members mandate increased organization and thus, an increased dependence on authority.

One of the primary purposes of this study will be to assess the attitudes toward authority held by various groups of elementary school children. Further assessed will be the
children's perceptions of both their peers' and parents' attitudes toward the same authority figures. The information so-gained will be of primary importance in both understanding the authority question, and in the development of strategies for attitudinal improvement and the democratization of authority.

**Public and parochial schooling**

Not unrelated to the question of authority, but certainly of primary importance in its own right, is the issue of public versus parochial schooling. More poignantly, the issue may simply be parochial schooling inasmuch as the existence of public schools in the United States is not threatened. For parochial school supporters the question is this: Are parochial schools worth the time, effort, and money needed to maintain them? And for everyone, supporters of such education and otherwise, the question remains: Are these schools "good" or "bad" from the standpoint of the growth of the whole society?

In responding to these questions, James B. Conant (1953) made his now-famous position quite clear:

> They [Protestants, Catholics, and Jews favoring private schools] assume--erroneously, I believe--that the tax-supported schools because they must be free of any denominational bias cannot be concerned with moral and spiritual values... The greater the proportion of our youth who fail to attend our public schools and who receive their education elsewhere, the greater the threat to our democratic unity. To use taxpayer's money to assist private schools is to suggest that American society use its own hands to destroy itself. (pp.80-4)

The diametrically opposite view was expressed by the Reverend James A. Pike in 1953 in an address before the Advisory Council of Christian Schools:

> The insistence upon a totalitarian, state-controlled monolithic school system does not savor of Americanism; it smacks of Nazism and of Fascism and of Communism. The first thing that Hitler did was to get rid of all schools except the state-controlled ones. (unpaginated)
Finally, a position of cooperation was presented by McCluskey (1966) when he called for and predicted new cooperative ventures between public and parochial schools. He further predicted that such ventures would increase even in the face of declining enrollments.

The second major purpose of this study will be to provide specific input into the very large question of the value of parochial education. Precisely, the attitudes toward authority held by students of public and parochial schools will be assessed, analyzed and compared. As will be stressed later, very broad generalizations based on the present research will not be possible. However, the data, analysis and conclusions will be of definite value in their own right. With this information available, the larger question of the value of parochial education may be more clearly considered.

An overview

The remainder of this chapter considers in detail the following: dogmatism and authority (definitions, rationale, and hypotheses), parochial school education (goals, pros and cons, and hypotheses), and attitudes (definitions, attitudes and behavior, and variables related to attitudes). Throughout this discussion, the two primary issues of attitudes toward authority, and the efficacy of parochial education will be borne in mind. Research results relative to all of the above will be detailed in Chapter II. The third chapter will explain the methods and procedures utilized in the present research. Analysis of the data so-collected will be given in Chapter IV. The final portion, Chapter V, will discuss the obtained results and the implications they contain. It is hoped this research will be of use in attacking the two central problem areas of authority and parochial school efficacy.
The nature of authority

The nature of authority and what is meant by authority in a given situation are essential background information for this discussion. However, there are a variety of analyses and approaches possible.

Perhaps most well-known is the work of Max Weber on authority. Peters (1973) provides a clear analysis of the theoretical explanations and distinctions made by Weber. According to Weber, there are different types of rules which give people rights to command, and there are different authority systems with different grounds of legitimacy. First, there is a legal-rational arrangement where the claim to legitimacy rests on a belief in the correctness of patterns of normative rules and the right of those in authority under such rules to issue commands. Secondly, there is a traditional authority based on the belief of the sanctity of immemorial traditions and the legitimacy of those exercising authority under them. And thirdly, there is charismatic authority based on devotion to the character of an individual person.

William Meissner (1971) distinguishes among five types of authority. The first is the traditional notion of authority which he defines similarly to Weber's traditional authority. The second is social authority:

In the context of social actions and interaction, the concept of authority is very closely related to that of power. Power is essentially the capacity to influence the behavior of other members of the group, but authority is not just any kind of power, since it depends upon the recognition by the subordinate members of the group that the one possessing authority may legitimately prescribe the patterns of behavior for the group to follow. (p.22)

The third type of authority is referred to as "authority as power." According to this view, authority is simply a
form of institutionalized power.

Next, there is "authority as communication." This is explained as the character of a communication (order) in a formal organization by virtue of which it is accepted by a contributor or member of the organization as governing the action he contributes.

Finally, there is Meissner's own conception of authority which he refers to as "authority as relation." Here, authority is defined as:

a dynamic and reciprocal relationship between two or more persons in which one claims to be a bearer of authority, and at least one accepts the claim of the bearer to be authoritative in some area of his own existence. (p.32)

In addition to the explanations of Weber and Meissner there are various other schemas available. Simple definitions are also abundant. Dubin and Dubin (1963) present a classic definition of authority: a given person designating a course of action for another person in some circumstances of choice among alternatives, where the alternatives are perceived by both.

It is Meissner's conception of authority as relation which is most useful here. However, the term authority as used in this research refers to the bearer of that authority rather than the reciprocal relationship involved. Specifically, those "bearers of authority" will be police, teachers, and principals.

Authoritarianism and the authoritarian personality

The psychological construct of authoritarianism and the authoritarian personality must be described and discussed in order to distinguish them from authority, as well as to provide an introduction to the construct of dogmatism. The so-called authoritarian personality was born out of research on German anti-Semitism in the 1930's. In particular, E.R. Jaensch (1938) set forth contrasting personality types. The
S-type was said to be liberal, an adherent of the view that behavior was shaped by education and environment, individualistic, effeminate, and generally unstable. The ideal J-type was described as being tough, masculine, reliable, and intolerant of ambiguity.

However, it was the work of Adorno and others (1950) culminating in the massive work *The Authoritarian Personality* which has proved to be of the greatest importance, both theoretically and practically. The major hypothesis, for which much evidence was furnished, was that the political, economic, and social convictions of an individual often form a broad and coherent pattern, as if bound together by a mentality or spirit, and that this pattern is an expression of deeplying trends in his personality.

A total of eleven different syndromes or personality types were distinguished with the help of the F-Scale constructed for their research. The syndrome or type on which the most emphasis was placed and which is of the most import here is the authoritarian syndrome. Paraphrasing the authors, the authoritarian person is the one who achieves his or her own social adjustment only by taking pleasure in obedience and subordination. Ambivalence is all-pervasive, being evidenced mainly by the simultaneity of blind belief in authority and readiness to attack those who are deemed weak and who are socially acceptable as victims.

In contrast to the bigot of the older style he seems to combine the ideas and skills which are typical of a highly industrialized society with irrational or anti-rational beliefs. He is at the same time enlightened and superstitious, proud to be an individualist and in constant fear of not being like all the others, jealous of his independence and inclined to submit blindly to power and authority. (p.xi)

In critiquing this work, Meissner (1967) mentions that what the California study (The Authoritarian Personality) truly demonstrated is that certain characteristics tend to vary in relation to each other (i.e., the nine basic
Components of the F-Scale). What is not clear is what the implications of such covariance might be. Is there an underlying personality to account for this covariance, or is there a set of socio-economically determined variables covarying in response to other influences? Extreme caution must be exercised in drawing conclusions.

Kirscht and Dillehay (1967) point out that The Authoritarian Personality does not withstand critical appraisal by standards of advanced personality research methods and theory. However, the volume did widely influence thinking and research in the social sciences. In particular, it provided the substance for the future work of Milton Rokeach.

**Dogmatism**

Dissatisfaction with the F-Scale led to the development of the construct of dogmatism. Rokeach (1960) found that there was a somewhat greater tendency for persons to the right of center to be more authoritarian than persons to the left of center as measured by the California F-Scale. However, on the Dogmatism Scale constructed by Rokeach, authoritarian groups both to the right and to the left of center are found to score high.

Understanding dogmatism requires several preliminary definitions:

A belief system is conceived to represent all the beliefs, sets, expectancies, or hypotheses, consciously and unconsciously, that a person at a given time accepts as true of the world he lives in. The disbelief system is composed of a series of subsystems rather than merely a single one, and contains all the disbeliefs, sets, expectancies, conscious and unconscious, that, to one degree or another, a person at a given time rejects as false. (Rokeach, 1960: p.33)

The extent to which a person's system is open or closed is the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside. (Rokeach, 1960: p.57)
Thus the concept of dogmatism can now be defined as:

(a) a relatively closed cognitive organization of beliefs and disbeliefs about reality, (b) organized around a central set of beliefs about absolute authority which, in turn, (c) provides a framework for patterns of intolerance and qualified tolerance toward others. (Rokeach, 1954: p.195)

It must be emphasized that dogmatic thinking and rigid thinking are related but not equivalent concepts. The former refers to resistance to change of systems of beliefs, whereas the latter refers to resistance to change of single beliefs. The distinction is important since in ordinary usage the two expressions are often used interchangeably.

The construct of dogmatism is not without its critics. Kirscht and Dillehay (1967), for example, discuss the possibility of a response bias. This occurs when a respondent selects certain categories of responses regardless of question content. The possibility here exists for a response bias since all the items of the Dogmatism Scale are worded in the direction of dogmatism. Also, they point out, that the Dogmatism Scale is rather highly correlated with the F-Scale (correlations ranging from .54 to .77) to support the distinctions between the two.

These two reservations not withstanding, the construct of dogmatism has proved itself to be extremely useful and beneficial. Further, it is very relevant to this research on attitudes toward authority. Those students with very closed belief systems (that is, they are highly dogmatic) may tend to be less discriminating in their perceptions and inclined to endow an authority with the qualities which fit their stereotype for the particular situation (for example, see Kemp, 1963). Thus a closed belief system group may tend to show very high or positive attitudes toward authority.

This reasoning, as well as research to be discussed later, leads to the first research hypothesis:

Hypothesis One: Students scoring high in dogmatism will register more favorable attitudes toward
authority than will students scoring low in dogmatism.

Parochial School Education

Preliminarily, a distinction among three terms is necessary: parochial school, public school, and private school. Fichter (1958) explains:

The parochial school differs from both the public and the private elementary school. Like the public school, it draws from all classes in the community, the Catholic Church being more representative of the total community than any other Church. Unlike the public school, religion is at the center of its total function. Unlike the private school, the parochial school does not select its pupils on a basis of social class and family income. (p.451)

It may be that the definition of the parochial school included above is more ideal than real since the parochial school effectively selects students from a higher socioeconomic class, be it purposeful or otherwise (see Rossi and Rossi, 1957; Greeley and Rossi, 1966). In the following pages, parochial school will refer specifically to the Catholic and Christian Reformed School Systems and generally to any private religious school.

Catholic parochial schools

Catholic parochial school enrollment is declining. According to the National Catholic Educational Association (1974), total elementary and secondary school enrollment in 1973-1974 was 3,614,000 students compared to 3,790,000 in 1972-1973. This represents a decline of 4.6%, which happens to be the smallest percentage decline since the 1967-1968 school year. Regardless of the exact figures, proponents of Catholic parochial schools find these statistics basically alarming. It may be that this decline is not unrelated to the present questioning of the effectiveness if not the very existence of this school system.

Such serious questioning cannot avoid the most
fundamental issue of all: the real goals and objectives of Catholic schools. Pierre Marieque (1970) provides a partial response here, which is somewhat typical:

And so it is that the one purpose of religious education in Catholic schools is to teach Christ, to reveal Him to the mind and heart of the child, of the boy and girl, to win them over to Him, to make of them followers of Christ. And so it is too, that religious education in the Catholic schools is not, cannot be limited to a course on religious doctrines; the influence of the Christian religion should extend to every situation in school life, it should be felt in the teaching of every subject, because that religion should be the very life of the Christian. (p.304)

However noteworthy on the piety dimension, such a response is not particularly useful in trying to answer the basic question of the efficacy of such schooling. Much more usefully, Deferrari (1964) cites the following set of aims for Catholic education:

To produce the true and finished man of character, the man who has
1. The sound knowledge of Catholic theology basic to the formation of the Christian character;
2. A "philosophic mind" with habits of intellectual curiosity, discriminating inquiry, and precision;
3. The ability to speak, read, write, and listen intelligently;
4. An understanding and appreciation of his cultural heritage;
5. An understanding of the physical world around him;
6. A knowledge of Christian principles and attitudes toward man as a social and political being; and
7. A sound knowledge and proper habits of physical and mental health. (p.17)

These seven aims are possibly the most explicit such listing to be found for the Catholic schools. Very relevant to this study, though, is the continual explicit and implicit stress on inculcating a respect for authority in the students. Marieque (1970) states that one of the principles which is a basis for a Catholic education is a respect for authority. Fichter (1950), in a study of a Catholic Elementary School found that the children were taught that obedience, respect for authority, and self-control were virtues.
pleasing to God. In any case, the inference is, then, that a successful Catholic school graduate will have, among other things, a respect for, and a positive attitude toward, authority.

**Christian Reformed schools**

A brief introduction to the philosophy of the Christian Reformed schools is contained in the following:

First, it [Christian education] must develop and bring to maturity the powers, skills, attitudes, and capacities of growing and maturing personalities. Second, it must seek to reorganize, re-integrate, and re-energize or redirect the warped personality... Education is Christian when it leads youth to accept the life of "new obedience." (DeBeer and Jaarsma, 1961: p. 2, 8)

Quite interestingly, the Christian Reformed schools seem to stress quite heavily, as do the Catholic schools, the need for respect for authority. Edward Heerema (1970) states:

The product of the Christian school is reared to respect authority... Only that parson who has been taught consistently to have regard onto the laws of God as the unvarying standard for his life and thought can have any real regard for the laws of the nation. (p. 28)

Also similar to the Catholic schools are some of the goals and objectives of a Christian Reformed education. Debeer and Jaarsma (1961: p. 5) list the following four goals with accompanying objectives:

I. **God-centered Living:**
   a. Understanding of God's eternal purposes, His means of carrying them out, and His revelation to man.
   b. Understanding of the nature of sin and its effects, and of redemption and its results.
   c. Understanding and desire for God-oriented living as proof of and gratitude for redemption.
   d. Understanding of the Christian's relation to creation.

II. **Self-understanding and Development:**
   a. Acquisition of the skills of communication: speech, reading, writing, number, intellectual curiosity.
   b. Understanding of one's own capacities and limitations and how they may be used maximally to serve man's purposes before God.
c. Understanding of the proper care and development of human resources: health, recreation, etc.

d. Development and conscious direction of attitudes and habits appropriate to the man of God. Standards of moral and ethical behavior consciously related to God's revealed standards.

e. Development of higher interests and appreciations: art, music, literature, esthetic and leisure time pursuits.

III. Establishment of Responsible Civic and Social Behavior:

a. Development of attitudes and behavior patterns toward others consistent with Christian ethics.

b. Understanding of the forces and influences within and without which obstruct the development and application of wholesome Christian attitudes.

c. Willingness to assume responsibility for wholesome relationships with others: at home, in school, in recreation, in governmental activities, in social relationships.

d. Knowledge and understandings of the information and facts necessary for proper perspective in the solution of problems.

IV. Vocational and Occupational Effectiveness:

a. Understanding of the purpose of work in God's plan.

b. Understanding of the fields of work open to the Christian.

c. Understanding of one's own capacities and aptitudes for particular fields of service.

d. Appreciation of the work and services of others.

It is interesting to note that these goals and objectives are in substantial agreement with the goal statements of the Catholic writers.

But differences do exist, and certainly in school organization. Oppewal (1963) says that the Christian Reformed schools are neither parochial, nor public, nor private in the usual sense of the word. Further, though they are religious in orientation and aim, they are not maintained by any religious denomination. Rather they are officially parental rather than parochial. They are controlled and paid for directly by parents, not a church body. Though this
distinction is certainly important and has been a veritable cause for discussion in the past, for simplicity "parochial" will refer to both the Catholic and Christian Reformed schools. Further, "Christian school system" will be used in lieu of "Christian Reformed school system" for two reasons: these schools are directly supported by the parents and not the Christian Reformed Church, and because common usage would have it this way.

Public schools

The NEA Commission to Defend Democracy Through Education (1952) said that the public schools are our chief and most effective means of making the democratic aspiration fully meaningful in the lives of succeeding generations. Those engaged in the work of American public education must be free to provide learning situations which exemplify democracy at its best... and to practice as individuals in constructive citizenship and democratic practices... The educational profession stands firm in devotion to its main task-- The development of free men. (p.76)

Slightly more specifically, McCloskey (1967: p.118) discusses five aims of public education. These include: helping young people understand the ideals and traditions of American life, teaching the "fundamentals," giving all pupils increasing opportunity to be successful, strengthening the national defense, and promoting the general economic welfare. These aims, as well as the NEA statement, are certainly admirable but somewhat broad.

Most relevant to the present research, considering that the samples are from Michigan schools, are "The Common Goals of Michigan Education" (Michigan Department of Education and the State Board of Education, 1971). A total of twenty-two goals are presented in three broad goal areas:

I. Citizenship and Morality: Michigan education must create an educational environment which fosters the development of mature and responsible citizens.
II. Democracy and Equal Opportunity: Michigan education must support and advance the principles of democracy by recognizing the worth of every individual and by respecting each person's right to equal educational opportunity.

III. Student Learning: Michigan education must help each individual acquire a positive attitude toward school and the learning process so that, as a result of his educational experience, he is able to achieve optimum personal growth, to progress in a worthwhile and rewarding manner in the career of his choice, and to render valuable service to society. (pp.3-5)

Goal one under "Citizenship and Morality" is the specific goal of interest here: "Michigan education must assure the development of youth as citizens who have self-respect, respect for others, and respect for the law." (p.3)

Thus, the public schools of the state also wish to inculcate a respect for one part of authority, "the law." On this all three school systems agree. However, there seems to be a very definite difference in emphasis. The Catholic and Christian schools have traditionally placed extraordinary emphasis on obedience as well as respect for authority. The public schools, however, as indicated in the previously cited NEA statement, have traditionally placed more emphasis on democratic principles and notions of good citizenship. Thus successful Catholic and Christian schools would conceivably be developing in their students, attitudes toward authority which are more accepting and more positive than would be the case in the public schools where the emphasis on obedience is not as great.

Based on these emphases and research to be presented later, the second research hypothesis and related subhypotheses are as follows:

Hypothesis Two: Parochial school students will register more favorable attitudes toward authority than will public school students.

H2a: Christian school students will register more favorable attitudes toward authority than will public school students.

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H_{2b}: Catholic school students will register more favorable attitudes toward authority than will public school students.

H_{2c}: Christian school students will register attitudes toward authority which will not differ significantly from the attitudes registered by Catholic school students.

Reference Groups

A consideration of reference groups is critical in discussing the attitudes of youth. In a different context, David Berlo (1960) defined reference groups as "the social systems that serve as reference points for the individual, groups whose norms and role-behaviors are pertinent predictors of his own behavior and beliefs." (p.158) It is important, then, that the social systems crucial to behavior be selected. Since individuals belong to multiple groups and perform multiple roles this selection process can be difficult.

By no means, though, is their unanimity in acceptance of the Berlo definition. According to Shibutani (1955) current usage discloses three distinct referents for the reference group concept: (1) groups which serve as comparison points; (2) groups to which men aspire; and (3) groups whose perspectives are assumed by the actor. The present research opts for the last of these three definitions.

Though the so-called peer group is a significant reference group for most youths (see Glueck, 1950; Hartley, 1952), perhaps the most significant of all reference groups for elementary school students is the family. Kenneth Keniston (1965), who has studied a number of groups of young people, says that "no other social institution plays a comparable part in shaping the motivations, the adaptations, the inhibitions, and the values of the young." (p.309) And in a similar vein, Charles T. Brown (1973) speaks of the family as the particularly powerful reference group in the molding of communication, and hence attitudes.
One of the purposes of this study will be to assess the students' perceptions of both their parents' and their peers' attitudes toward authority. Quite likely, students' perceptions of their parents' attitudes will be similar to their own for the reasons cited above. However, Dingman (1969) and others have found that students tend to perceive their friends' attitudes as being more negative than their own or at least they so indicate. Thus research hypothesis three is as follows:

Hypothesis Three: Students will perceive their peers to have less favorable attitudes toward authority than they themselves register. However, they will perceive their parents to have attitudes toward authority similar to their own.

Attitudes

Definitions

Definitions of attitude are multitudinous. But even prior to defining attitude it is necessary to indicate that there is not universal acceptance of the existence of attitudes nor of the usefulness of the construct. Doob (1947) says even though attitude is a socially useful concept, it has no systematic status as a scientific construct and therefore should be replaced with such learning theory constructs as afferent- and efferent-habit strength, drive, and anticipatory and mediating responses. Blumer (1955) recommends discarding the concept because of its ambiguity. These objections notwithstanding, attitude is generally regarded as a legitimate construct.

For the purposes of this research, attitude will be defined as a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some favorable manner. (see Rokeach, 1968)

Attitudes and behavior

Attitude studies in general, and this study in
particular, would be of little interest if there was not some connection between attitudes and behavior. Though there is a fair amount of disagreement as to the relation between the two, most writers do agree that an attitude is a predisposition of some sort: a predisposition to respond, to evaluate, to experience, to be motivated, to act, etc.

Somewhat clarifyingly, Triandis (1971) says that behavior is a function of (a) attitudes, (b) norms, (c) habits, and (d) expectancies about reinforcement. When all four factors are consistent, there is consistency between attitudes and behavior. Thus it can be said that attitudes alone are not good predictors of behavior. In other words, knowledge of attitudes is a necessary but not a sufficient condition for prediction of behavior.

Though the purpose of this study is not the prediction of behavior, such prediction would be more accurate than with a simple attitude survey. The reason for this is that some information on the other three factors involved in behavior prediction will be had through the test instrument. For example, information on expectancies about reinforcement will be gathered indirectly in asking for student perceptions of peers' and parents' attitudes.

**Significant variables affecting attitudes toward authority**

It is obviously not possible to control for all of those variables which may influence student attitudes toward authority. However, certain variables must be controlled to insure the possibility of meaningful results and conclusions.

One of these variables is socio-economic status. Richard Centers (1949) states that "men's satisfactions, desires, aspirations, and goals are strongly conditioned or determined by their present roles, statuses, and levels of achievement as these are manifested in their diverse occupational strata." (p.29)

Adequately controlling socio-economic status is not a
clear-cut, easily-defined, proposition. For this reason, three approaches are being used in the present research. First, students sampled will be from approximately the same geographic area. Secondly, subjective evaluation would rate all three schools as not far apart socio-economic-wise. Third, each respondent is being asked to describe the occupation of his or her parents.

As indicated previously, the influence of the home is quite important. SES determination helps to assess the influence of the "home variable." Also deemed significant relative to the influence of the home, and controlled in this study is the frequency of church attendance of the parents.

The race of the respondent is another significant variable in analyzing stated attitudes toward authority. (Dingman, 1969; Brown, 1973) In order to make the study manageable in scope, race was controlled by limiting the study primarily to Caucasian students.

In order to discuss possible effects of church-related schools, the religion of respondents in the public schools, as well as of respondents in the parochial schools had to be controlled. In addition, the standard biographical information of age and sex was obtained.

Finally, but not least in importance is the variable of the regularity of church attendance on the part of the student. Jones (1960) lists church attendance as one of the important environmental factors in character development and attitude formation. Arnold Meier (1952) discusses programs for character development and attitude formation based on the general principle of conditioning. It would seem that regular church or Sunday School attendance would indeed be a form of conditioning which would contribute to the development of positive attitudes toward authority. Thus, research hypothesis four is as follows:

Hypothesis Four: Students regular in church or Sunday
School attendance will register more favorable attitudes toward authority than will students irregular in church or Sunday School attendance.
CHAPTER II: REVIEW OF RELATED LITERATURE

Introduction

All of the research literature to be reviewed in this chapter will be related to one of the two central problem areas of attitudes toward authority, or public versus parochial schooling. In simple numerical terms, the number of studies concerned with attitudes toward authority is great. The number of studies concerned with parochial education is not nearly so great. Thus, in the first case, the burden of objectively selecting and synthesizing the research is particularly difficult. In the second case, the greater burden will be one of interpretation of those relatively few studies which have been done.

An important subset of these two groups of studies consists of those studies involving the construct of dogmatism. For the purposes of simplification they will be grouped under the one heading of dogmatism. There will not be further grouping of studies relative to the other variables of socioeconomic status (SES), home influences, religion, age, sex, and church attendance. Undue complexity would result from such an attempt. Instead, the influence of these variables will be discussed as they appear in the various studies.

In reviewing this literature, the standard problem of definitions was unavoidable. For example, the word attitude is open to a huge variety of interpretations in addition to being denied as a viable concept (see Doob, 1947; Blumer, 1955; McCloskey, 1967; Rokeach, 1968; Triandis, 1971; etc.). And this variety of interpretations is certainly to be found in the authority literature. Realistically, it would be difficult and indeed wasteful to review only those studies which come close to matching definitions with those accepted for the purposes of this study. For this reason,
studies will be reviewed which have used a variety of approaches and definitional contexts, provided, of course, they are germane to the issues of this research.

In conclusion, the remainder of this chapter will consist of four sections: studies related to attitudes toward authority, studies involving parochial schools, studies related to dogmatism, and conclusions and synthesis.

Authoritarianism and Attitudes Toward Authority

The Authoritarian Personality (Adorno, et al., 1950), in terms of subsequently generated research, has proved to be the most significant research to date relative to authoritarianism and attitudes toward authority. This massive research project was originally concerned with the potentially fascistic individual. It culminated with a number of findings on personality types. Only those portions of the study germane to the purposes of this research will be discussed.

A number of group and individual studies were performed using interview techniques, special clinical techniques, and written questionnaires. Some of the groups studied included the following: University of California students (Public Speaking classes, extension classes, etc.), men of the Oregon Service Club, psychiatric clinic patients, inmates of the San Quentin State Prison, PTA groups, Unitarian Church groups, and others. Various instruments were developed both before and during the course of these studies, most notable of which is the California F-Scale. This instrument, in several forms, is still widely used today. Indeed, dissatisfaction with the instrument led to the development of the Rokeach Dogmatism Scale.

The major result of The Authoritarian Personality was the discovery of certain personality types or syndromes. Six such syndromes were found among those subjects scoring high
on the F-Scale, and five syndromes were found among the low-scoring. In that first group is the syndrome of the most interest here, the authoritarian. Subjects considered authoritarian were found to achieve their own social adjustment by taking pleasure in obedience and subordination. They evidenced an all-pervasive ambivalence by simultaneously holding a blind belief in authority while attacking those deemed weak and who are socially acceptable as victims. In other words, while appearing to be independent and individualistic, the authoritarian is inclined to submit blindly to power and authority.

The work of Adorno et al. is not without its critics, the most common criticism being that The Authoritarian Personality does not withstand critical appraisal by standards of advanced personality research methods and theory (Kirscht and Dillehay, 1967). Meissner (1967) indicates that the conclusions regarding personality types must be very cautiously interpreted since other factors may have contributed to the covariance on which the personality syndromes are based. Finally, Rokeach (1960) found that the F-Scale was somewhat biased toward subjects right-of-center politically. That is, there was a greater tendency for persons to the right-of-center to obtain high scores on the F-Scale than for persons to the left-of-center. This inadequacy led to the development of the Dogmatism Scale. Nonetheless, the F-Scale is still very widely used today.

Weiss et al. (1970) studied student attitudes toward authority (teachers) and student classroom performance by assessing various combinations and degrees of student and teacher authoritarianism as measured by the F-Scale. Their study, done in a large West Coast high school, had a sample consisting of thirty-six students and ten teachers who had volunteered to participate. It was found that low-scoring students responded favorably to both high- and low-scoring
teachers. High-scoring students responded favorably only to high-scoring teachers. All students performed better in the classroom when taught by teachers with F scores similar to their own. Unfortunately, the use of volunteers may have influenced the results of this research. Nonetheless, other researchers, including Desjardins (1971), have noted the importance of examining the authoritarianism of both the recipient and source of authority.

Frymier (1959) attempted to determine the relationship between church attendance and authoritarianism. He administered the F-Scale and other tests to ninety-one high school students from rural Alabama, sixty-four students from a large metropolitan area in Michigan, and 133 students from a small city in Florida. Other information obtained from the Ss included: name, age, sex, church affiliation, TV viewing habits, length of residence, and grade in school. Though he found that the three groups responded differently to the F-Scale, there was no significant relationship between the tendency to be authoritarian and the frequency of church attendance. Once again, some shortcomings are evident, such as the author's indiscriminate use of the t-test throughout his analysis. However, the research does point to some pertinent conceptual questions as well as showing an interesting use of the F-Scale.

The final study to be cited here in which the F-Scale was used was done by Montgomery (1955). His was an inquiry into the relationship between early school leaving and attitude toward authority figures. Forty-three dropouts from the Detroit School System (Fall, 1953) were matched with forty-three students attending school. A semi-structured interview and the F-Scale were used with each student. Not surprisingly, the early school leaver was judged to be more hostile than the school non-leaver. Also, Montgomery found the dropout to be more authoritarian than his in-school counterpart. For an interesting comparison, the very different
results found by Kemp (1963) will be detailed in discussing
the dogmatism-related studies.

It must be pointed out and emphasized that there are
many very interesting "authority" studies which do not nec-
essarily rely on the F-Scale. Two of these studies present
a different view on the existence of a generalized attitude
toward authority. Thus, one supports and the other rejects
the central finding of The Authoritarian Personality.

Krosky (1969) examined the attitudes toward authority,
political socialization, and political orientations of 680
urban and rural children in grades four through six. Infor-
mation was gathered by means of a thirteen-part question-
aire patterned after similar questionnaires used earlier.
Krosky found that, in general, the respondents had a benign,
accepting attitude toward government, law, and figures of
authority. Thus support was offered for a generalized at-
titude toward authority.

In a somewhat different setting, Burwen and Campbell
(1957) found that evidence for a generalized attitude toward
authority which encompasses attitudes toward father, symbolic
authority, and boss is totally negative. This would suggest
in the authors' view, then, that the results presented in
The Authoritarian Personality need complete reassessment.
The sample in this study consisted of 155 men at Randolph
Air Force Base. Each subject was interviewed, and adminis-
tered the Thematic Apperception Test (TAT), a "description
of self" test, a photo judging test, an autobiographical in-
ventory, an attitude survey, and a sociometric questionnaire.

Several other interesting studies of authoritarianism
and attitudes toward authority have been done without making
use of the F-Test. The work of Stanley Milgram (1965) is a
case in point. He investigated the conditions necessary for
obedience toward authority. Milgram defined the problem in
its most general form as this: if X tells Y to hurt Z,
under what conditions will Y carry out the command?

To investigate this problem, Milgram recruited male adults, aged twenty to fifty years, who were engaged in a variety of occupations. He asked each subject to administer an electric shock, which ostensibly was to be part of a learning experiment to study the effect of punishment on memory. Beside the experimenter, one naive subject and one accomplice "performed" in each session. A number of variations were done on the original experiment. How obedient were the experimental subjects? Milgram reported that:

At many points we attempted to establish a boundary. Cries from the victim were inserted; not good enough. The victim claimed heart trouble; subjects still shocked him on command. The victim pleaded that he be let free, and his answers no longer registered on the signal box; subjects continued to shock him. At the outset we had not conceived that such drastic procedures would be needed to generate disobedience, and each step was added only as the ineffectiveness of the earlier techniques became clear. (Milgram, 1965: p.75)

Overwhelmingly, obedience to authority was found to be the case. A positive attitude toward authority may be here inferred, as well as some type of generalized attitude toward authority.

In a very less dramatic fashion, Bieri and Lobeck (1959) investigated acceptance of authority and parental identification. The authors' stated assumption was that attitudes toward authority are functionally related to the individual's developmental patterns of parental relationships. This study of sixty undergraduates at a large Eastern university was focused on one aspect of parental relationships (parental identification) and on one aspect of attitudes toward authority (acceptance of authority). Bieri and Lobeck said that a sufficient number of meaningful trends were observed to indicate the need for distinctive descriptions of high-, middle-, and low-acceptance subjects. That is, a generalized attitude toward authority is not here the case.
In another study to be noted in this group of authority findings, Formanek and Woog (1972) studied the attitudes of both preschool and elementary school children to authority figures (police, principals, teachers, fathers, and mothers) as a function of sex, age, ethnic group, and socio-economic status. At the preschool level, both socio-economic status and sex were shown to be predictors of perceptions of authoritarian figures. Specifically, boys were found to perceive the authority figures as more threatening than did the girls, while children in the lower socio-economic group perceived the authority figures as more threatening than did children in the middle socio-economic group. At the children became older, however, they seemed to become more threatened by effects outside the home, and more protective in their perceptions of those in the home. Thus, once again, support is denied for the notion of a generalized attitude toward authority. At the same time, support is here offered for students having attitudes toward authority more similar to those which they perceive their parents to have, than to those which they perceive their peers to have. The authors suggest explanations for these findings in terms of child development and psychoanalytic theory.

And in a final study to be noted in this set of authority findings, Dolan (1960) performed an investigation of the disturbing effect which various authority figures had on 1436 eighth and tenth grade students. The "D.A. Figures Scale" was constructed and administered for the purpose of identification of authoritarian figures to be found in the lives of adolescents. A standardized scholastic aptitude test was also given. Variables in the study included: age, grade, sex, religious preference, socio-economic status (based on father's occupation), and intelligence. Significant differences were found in mean values:

- Between the sexes;
- Between the sexes at different age levels;
Within sex among age groups;
Between the sexes within religion;
Within sex by religion;
Between the sexes within socio-economic status;
Within sex among socio-economic groups;
Between the sexes within IQ quarters;
Within sex among IQ quarters.

In this particular research, two salient points are these: (1) attitudes toward authority do vary; and (2) certain variables must be assessed in studying attitudes toward authority: sex, age, religion, socio-economic status and intelligence.

A second set of research findings related to attitudes toward authority are those which are concerned with attitudes toward law enforcement. In most of these, a very specific authority, namely police, is the authority figure. Also in most of these, a sociological rather than a psychological emphasis is to be noted. For this reason, perhaps, authoritarianism or related psychological constructs have not usually been assessed. Again, a total review of this body of research is not called for here. And again, a certain selectivity was exercised in the choice of particular studies for inclusion. This selection was based both on the overall significance of the study as well as on the manner in which the various researchers highlighted certain variables.

An early study was done by Chapman (1953) when he compared 133 delinquent and 133 non-delinquent boys in Dayton, Ohio, on the attitudes they held toward legal agencies. Not surprisingly, he found that delinquent boys were more hostile or antagonistic toward police than were non-delinquent boys. Most significantly, though, he found that age, intelligence (measured by the California Test of Mental Maturity), and body type had little effect on attitude scores. There were, however, significant differences between the means of the scores of delinquent boys when subdivided according to the occupation of the father.
Clark and Wenninger (1964) performed a detailed study of the attitudes toward legal institutions held by sixth through twelfth graders. A total of 1154 students in four different types of communities responded to an anonymous questionnaire administered in a group setting. The communities were selected for their unique social class structure, and the Duncan "Socio-economic Index for All Occupations" was used to determine each community's occupational profile. The conclusions pertinent to this review of the literature were these:

1. Socio-economic class, per se, is not closely related to a negative attitude toward the legal institution.

2. There is some indication that differences between communities and/or similar classes in different communities are concentrated in the extreme social class categories.

3. A negative attitude toward the legal institution is related in some way to juveniles' assessment of the quality of discipline received in their home, and their adjustment to teachers in school.

In 1966, Edmund Casey tested the hypothesis that citizen attitudes (in St. Louis) toward the police and law enforcement are directly related to the ecology of the police districts. Ecology was defined as "the relationship between the distribution of the human groups with reference to the material resources and the related social and cultural patterns" (p.102). Operationally defined in socio-economic terms, ecology is the level of formal educational attainment, occupation, income, race, social class, age, sex, and length of residency. After administering a questionnaire to a sample of 981 households, Casey concluded that as levels of education, occupation, income, social class, and age (for Whites and Blacks) became higher or better, the more

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favorable are the citizen attitudes. Thus, Casey's conclusions relative to the effect of social class are not in agreement with Clark and Wenninger, but do confirm Chapman's findings.

Lending further support to these results on the effect of social class is a study done by Bouma (1969). Students in grades seven through nine in three Michigan cities were administered a forty-six item questionnaire, one of the purposes of which was to assess various student attitudes toward police (Attitudes of police were also determined but will not be discussed here). Social class, primarily determined by the occupational status of the father, varied inversely with expressed antagonism toward police. Other findings of interest here were these:

1. Male students had less favorable attitudes toward police than did female students.
2. Students who attended church or Sunday School regularly had more favorable attitudes toward police than did students who did not attend church or Sunday School regularly.
3. Race was found to be the most significant single factor associated with differences in attitudes toward police, with Black students showing markedly more hostility.
4. Students felt their friends were more antagonistic toward police than they themselves were. However, students perceived their parents' attitudes to be similar to their own.

In a study primarily designed to evaluate Police-School Liaison Programs, Bouma, Williams and Dingman (1970) found that in addition to Liaison Programs being a positive force in stemming the deterioration of attitudes toward police, that the findings cited above (Bouma, 1969) were further supported.
Finally, in a somewhat different approach to the problem of attitudes toward authority, Rokeach, Miller, and Snyder (1971) assessed the "value gap" between police and policed. The three compared police values with those of representative samples of Black and White Americans. A total of 153 White male police officers of a middle-size, Midwest police department were administered the Rokeach Value Survey. The same Value Survey was administered by the National Opinion Research Center to an area probability sample of Americans over age twenty-one. This sample included 561 White males, and 93 Black males. The hypothesis was supported that personality factors and social backgrounds are more important than occupational socialization in understanding police value systems. The authors conclude that the value gap involves not only discrepancy in value patterns but also a discrepancy that implies value conflict between police and policed. Thus, all other things being equal, there is a basic reason in terms of values for a certain level of negative attitudes toward police.

Parochial Schools

Ideally, perhaps, there would be in existence a series of studies in which the parochial and public schools are systematically compared taking into account all of the many relevant variables. The larger question of parochial school effectiveness, then, would be so much easier to address oneself to. The truth is that there are relatively few significant studies of parochial schools, and very little by the way of systematic comparison between or among systems. Reviewing the literature in this area, then, is at once easier and more difficult-- easier since there is less material quantitatively speaking, and more difficult since more caution is perhaps needed in drawing conclusions.

Inasmuch as the larger question of interest is the
effectiveness of parochial schools, significant studies relative to this larger question will be reviewed. In the process of doing this, variables relevant to the more specific concern of attitudes toward authority in the several school systems will be brought to the fore. Simply reviewing the literature of attitudes toward authority across school systems would be useless since virtually no research has been done on this specific topic.

There are but a handful studies which are generally considered significant in the area of parochial school effectiveness. The leading candidate for significant status would likely be The Education of Catholic Americans by Greeley and Rossi (1966). The authors present a rationale for the study of this particular group when they note that the system of Catholic schools in America consists of more than 300 institutions of higher learning, 2500 secondary schools, and 10,000 elementary schools, which in total enrollment is approximately fourteen percent of the youths in American schools.

And certainly, special difficulties are encountered in studying this school system as well as other parochial systems. Greeley and Rossi mention as a prenote to their work that the following background factors associate with Catholic school attendance: ethnicity and parental religiousness, hometown size, parental and respondent's social class, and the religiousness of one's spouse. Thus any one of these, or combinations thereof, could serve as intervening variables that would render spurious any relationship between Catholic education and adult behavior that might be discovered. Careful controls are needed.

The sample used by the authors was drawn from a previously existing national sample of Catholics (a 1962 study of adult education in the United States). A total of 2,753 Catholic respondents between the ages of twenty-three and fifty-seven were selected for interviewing. Another 1000
self-administered questionnaires were left at the homes of remaining Catholic respondents of the 1962 sample. Finally, questionnaires were mailed to a randomly selected sample of 1000 readers of Commonweal so that the liberal Catholic intelligentsia could be compared with the total population of Catholics. Also, interviews were conducted with a small sample of Protestants chosen to match the regional distribution of Catholics.

The results of this inquiry are extensive and lengthy. Of special interest, though, are the following conclusions:

(1) There is a moderate but significant relationship (at the .05 level) between Catholic education and religious behavior. Thus it could be said that the Catholic experiment in value-oriented education has been a moderate, though expensive, success. In other words, there is evidence that value-oriented education can affect human behavior and attitudes in matters invested with heavy symbolic importance.

(2) This association is strongest among those with very religious family backgrounds.

(3) The association is strongest among those who went to Catholic colleges. However, educational level is a strong predictor of religious behavior regardless of the kind of school. Importantly, the combination of college and a cumulation of years of religious education apparently produces another multiplier effect.

(4) Religious education is a more important predictor of adult behavior than is an individual's sex, but is less important than his educational level or religiousness of his parents.

(5) There is no evidence that Catholic schools have been necessary for the survival of American Catholicism. Though recognized for its importance, criticism is possible regarding this study. Hassanger (1967) mentions that
the sample consisted of self-identified Catholics of whom 72% cooperated. It is possible that the more critical Catholics are underrepresented here. Also, the "general knowledge index" contained in the Greeley and Rossi questionnaire consists of but eight questions—very few on which to base many conclusions of school effectiveness.

The massive Notre Dame survey (Neuwien, 1966) is worthy of mention here. Though not a research study with hypotheses and conclusions, certain useful information is presented. For example, the Catholic pupils were slightly above the national average on IQ and achievement measures (largely due to selective admission and socio-economic status); parents of Catholic school students showed a clear pattern of preference for religious over academic goals, the family was found to play a crucial role in predisposing the individual to influence by the schools and to marriage to a religious spouse in turn.

Extensive criticism can be made of the Notre Dame survey, however (see Hassenger, 1967). For example, only thirteen dioceses are represented and only certain parishes in these dioceses cooperated, achievement data came from schools which already had testing programs (quite likely these schools are more progressive than regular Catholic elementary schools), no raw data is given, etc. Despite these shortcomings, so few studies have been done here that all studies of this magnitude must be considered.

The final in depth Catholic school study to be here mentioned was done by Fichter (1958). He performed what appears to have been the first total group study of an elementary school, be it private, parochial, or public, in actual operation over a period of time. The school chosen for this study, "St. Luke's" in South Bend, Indiana, was shown to be very typical of Catholic elementary schools on a number of variables. According to Fichter, then, results of the study
can be widely projected throughout the parochial school system. For the purpose of certain comparisons, a nearby public school, "Taft School," was also studied. Methodology included parental, teacher and student interviews; group interviews; classroom observations; informal contacts; sociometric tests; various questionnaires; autobiographies of the students; etc.

Some of the findings and comments pertinent here now follow. Immediately significant is the fact that the children in St. Luke's were taught that "obedience, respect for authority, and self-control are virtues pleasing to God." Thus, a successful Catholic education would imply the internalization of these virtues by the students. However, it was found that there was little difference between parochial and public school children in their standards of conduct as measured by the California Test of Personality. The greatest difference found between the two schools was in the fact that the parochial school children explained their attitudes most often with religious and supernatural reasons. Finally, in view of Fichter's findings, it is interesting to note that in response to the question "Why did you send your child to this school rather than any other?," almost 60% of the parents responded that they "wanted a Catholic education" for their child.

The final major study of Catholic school effectiveness to be cited was done by Greeley (1963). His focus was the career and graduate school plans of the June, 1961, class of college graduates from 135 colleges and universities. These schools were selected by a stratified sampling process as part of a mailed survey done by the National Opinion Research Center. Secondary analysis was made possible by three sets of questions relating to family religion, current religious preference, and degree of religiosity. Greeley found that graduates of Catholic colleges were very similar
to their public college counterparts in terms of: occupational values and career plans; and economic, social and demographic backgrounds. Some slight differences were found in the area of church attendance and in the development of certain life values.

Various other studies have also failed to find clear-cut evidence for the effectiveness or greater effectiveness of private religious schools. In a 1966 study of Lutheran elementary and secondary schools, Johnstone found that although there were many expected differences discovered among Lutheran youth, few of these differences were found to be significantly traceable to parochial versus public education. However, in the area of Biblical knowledge and Lutheran doctrinal understanding, a number of differences were found which gave a definite edge to parochial schools. It should be noted that a number of criticisms of the study are possible, the most important of which centers around Johnstone's failure to use indices in representing the various dependent variables. Single item questions were used. Several minor deficiencies of this study are detailed by Hautt (1971).

Erickson (1962) had very similar findings. His was an exploratory study of the differential effects of five Fundamentalist schools on their students when compared with public school students with comparable family and church backgrounds. The dependent variable of the study was termed "delta religiosity" which was an index comprised of such items as conversion to Christianity, belief in God, finding God's will, etc. The author simply states that the findings of the present study lend no support to the view that sectarian education is more conducive to religious development than is public education. Though the sample used in the study was, in the author's terms, "frankly fortuitous," his methodology was thorough and is worthy of note.

Relevant to the present research in several ways, Hakes
(1967) studied freshmen at Calvin College from Protestant Day School and public school backgrounds relative to Bible knowledge, value orientation, and dogmatism. The sample consisted of four groups of thirty-five students. Two of these (one male group, and one female group) were composed of students whose elementary and secondary education was predominantly in church-related schools (schools affiliated with the National Union of Christian Schools). The other two had predominantly public school backgrounds. Significant differences were found between the two male samples and between the two female samples relative to knowledge of Bible content (in favor of church-related schooling). However, no significant differences were found between the two male samples or between the two female samples relative to value orientation or dogmatism.

Also relevant to the present research was the study done by Dingman (1969) on the differential impact of Protestant, Catholic, and public schooling upon the attitudes toward police of junior high students. The question he wished to answer was whether or not religious school systems were producing in their students, attitudes toward police and authority which were different than those of public school students. His answer to the question was ultimately no. The answer would have been yes had he not taken into account the intervening variables of sex, race, parental occupational status, police experience, and church attendance. Virtually all analyses of the data used the chi-square technique.

Dogmatism

Studies using the dogmatism construct are very numerous, and all are at least tangentially important to the present study. Unfortunately, the use of the construct is seldom the same from study to study. For this reason, no systematic grouping of these studies has been attempted. Rather, a
small sample of studies involving dogmatism has been chosen for discussion here, based on some specific import it holds for the present research.

Perhaps, foremost among these is the research done by Kemp (1963). His interest was in how perceptions of authority differed with one's degree of dogmatism. His sample consisted of five groups of graduate students, aged 28 to 45, with approximately thirty students in each group. These students were administered Form E of the Dogmatism Scale, as well as a perception checklist on which the instructor (the same person for all groups) was described. The instructor also described himself using the same checklist. A comparison was then made of students' perceptions of the instructor of those with low and high dogmatism scores in each of the five groups. Also, the degree of relationship was found between the self-perception of the instructor and the perceptions of him by those with low and high dogmatism scores in each of the five groups.

The results proved interesting. Students with closed belief systems (highly dogmatic) tended to idealize authority and were less discriminating in their perceptions of authority. Students with open belief systems (low in dogmatism) were more realistic, that is, less accepting and positive. Kemp believes that this latter group has the ability to accept their perceptions directly without undue censoring to make them conform to their preformed value systems.

Very similar results were noted by Larsen (1968) in a study of attitudes toward police. He found large positive correlations between degree of dogmatism and attitudes toward police. No differences based on sex were found, but age was found to correlate inversely with both degree of dogmatism and attitudes toward police ($r = -.66$, $p < .001$; and $r = -.44$, $-.60$, $p < .001$ respectively). The sample consisted of students, aged 18 to 33 years, recruited from introductory
sociology classes at Brigham Young University.

Though the above-mentioned studies and others indicate a general positive relationship between degree of dogmatism and attitudes toward authority, there is less agreement on the relationship between dogmatism and religious affiliation. For example, Rokeach and others (1960) found in virtually all of their studies, that Catholic respondents were more dogmatic than any other religious group. Nonbelievers scored lowest on dogmatism, and Protestant groups were always somewhere in between the two.

On the other hand, Kilpatrick and others (1970) found that Catholics and nonbelievers were less dogmatic than Jews and Protestants. They also found that churchgoers were generally more dogmatic than nonchurchgoers. The nature of their sample is extremely important here, for they purposefully sampled students in two Southern universities, one Catholic and one non-Catholic. They did this inasmuch as no Southern sample had been reported in the literature up until that time. They very simply concluded that speculations about the relative dogmatism of religious groups as a whole are inappropriate. Though this contention must be borne in mind, the weight of evidence in the literature nonetheless supports the results of Rokeach above.

As an addendum to the above two studies and to those research results described in the section on parochial schools, the research of Ranney (1970) will be described. He wished to determine if a relationship existed between years of public or Catholic school education and attitudes held by college freshmen. The specific attitudes were in the areas of dogmatism, values, and self-concepts. His subjects were from Southern Illinois University and St. Louis University and were selected from a larger population on the basis of religious preference, level of education, and type of elementary and secondary educational training they had.

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received. Using a multiple linear regression analysis, Ranney noted a number of findings. He summarized these by saying that either the educational training experienced by the various study groups had no significant effects on the attitudes measured, or the Catholic institutions attended by the study groups did not cultivate significantly different value systems, dogmatic attitudes, or self-concepts than the public schools attended by the study groups.

The final two studies to be mentioned must be included since they are among the very few studies which have attempted to assess the degree of dogmatism of students below the college level.

McNeice (1969) investigated the relationship between authoritarian school environments and the degree of dogmatism present in elementary school students and teachers. Students were selected from grades four through six of eight elementary schools. Form E of the Dogmatism Scale was administered to the teachers and Figert's Elementary School Form of the Dogmatism Scale was administered to students. The results obtained were these:

1. No significant relationship exists between teacher dogmatism and authoritarian school environments.
2. There is a significant relationship between pupil dogmatism and authoritarian school environments.
3. No significant difference exists between the mean dogmatism scores of pupils whose teachers have high dogmatism scores and the mean dogmatism scores of pupils whose teachers have low dogmatism scores.

Kammes (1972) sampled a group of secondary school students in order to investigate differences in dogmatism, interpersonal values, and attitude toward school, while controlling for sex, grade level, and demographic mobility. Instrumentation included Form E of the Dogmatism Scale, Gordon's Survey of Interpersonal Values, and Remmers' The
Purdue Master Attitude Scale.

An analysis of variance for dogmatism scores showed significant differences on sex and grade variables: juniors and seniors scored significantly lower than freshmen and sophomores; and females scored significantly lower than males. And an analysis of variance for attitudes toward school test scores showed girls to have significantly higher or more positive attitudes than the boys.

Conclusions and Synthesis

Remarks relative to concluding and synthesizing the presented research will be grouped into the three topical areas of authoritarianism and attitudes toward authority, parochial schools, and dogmatism. Several final statements will follow.

Authoritarianism and attitudes toward authority

The eleven studies reviewed relative to the construct of authoritarianism present differing and sometimes contradictory results. For example, there is both support for and against the existence of a generalized attitude toward authority. However, the question of the existence or non-existence of the same must not necessarily be resolved for the purposes of this research for authoritarianism and dogmatism are not equivalent. What is important to note is the fact that there are concerns and reservations over the construct of authoritarianism itself. Indeed, certain such reservations provided impetus for the development of the dogmatism construct.

The studies centering on attitudes toward police presented here exhibit a greater degree of agreement. In general, attitudes toward police must be interpreted only with knowledge of such variables as socio-economic status, sex, race, age, and church attendance. It is interesting to note
that only one study was located which controlled the degree of dogmatism, while assessing attitudes toward police. It is hoped that the present study will make a contribution in this area by providing a specific kind of input.

**Parochial schools**

Reviewing the literature concerned with parochial school efficacy has provided no clear cut answers. But no such answers were really anticipated. One glaring problem that becomes more and more obvious while studying the parochial schools is the lack of a measurable dependent variable. That is, how do parochial schools know when they are being truly effective? Since parochial school goals and objectives are at best very vague in nature, measurement of success can only be indirect and somewhat subjective in interpretation. The only common denominator of these schools seems to be the previously mentioned stress on obedience and respect for authority. One of the hypotheses of the present research addresses itself to this common denominator.

In reviewing the parochial school literature in some depth, Hooley (1974) reached somewhat the same conclusions as did Greeley and Rossi (1966). Their conclusions, as well as the significant studies considered in this review of the literature, suggest the following:

1. Parochial schools are, in general, no more effective than are the public schools.
2. The only exceptions to this occur in such areas as Biblical knowledge, and doctrinal knowledge. These exceptions occur not only in Catholic schools, but also in most other parochial school systems.
3. Parochial schools are more effective with those students who come from homes sporting a religiously supportive environment.
4. Parochial school education can have a multiplier effect. That is, such education is more effective
in quantity. Students who have attended parochial schools through college inclusively are different significantly so in religious behavior from students who have had no parochial school education.

(5) Parochial schools are not necessary for the continuation of the particular religion involved.

**Dogmatism**

Some support exists, as has been shown, for the following generalizations:

(1) The degree of dogmatism and attitudes toward authority (police and otherwise) are positively related.

(2) With some exceptions, Catholics and Protestants are more dogmatic than nonbelievers.

Indeed, it is the likelihood of dogmatism being a significant (and thus possibly confounding, if not assessed) variable affecting the attitudes of parochial and public school students that provided much impetus for the present study. There are but a few studies in which the degree of dogmatism of elementary school students has been assessed. Yet dogmatism has been shown to be, in a variety of ways, quite related to attitudes toward authority. Thus, differences in attitudes in students of different school systems might be due to differences in dogmatism, rather than to the effects of the schools involved. Research to date which has joined these concerns is apparently nonexistent.

In conclusion, research results relative to the authoritarianism construct are somewhat contradictory, whereas results relative to attitudes toward authority (in particular the body of research concerned with attitudes toward police) are in substantial agreement. Parochial school research is often contradictory and indicates no particular advantage, in general, of these schools over public schools. And dogmatism research indicates that dogmatism is quite important.
in considering attitudes toward authority.

Finally, this review of the literature indicates some need for: research on attitudes toward authority and contributing factors thereof; research across school systems, public and parochial; and a consideration of the influence of dogmatism on parochial and public school student attitudes. It is hoped the present study helps meet these needs.
CHAPTER III: DESIGN AND METHODOLOGY

Introduction

The purposes of this study were twofold: (1) to investigate the attitudes toward authority held by various groups of elementary school children, along with the perceptions they have of their peers' and parents' attitudes toward authority; and (2) to provide specific input into the very large question of the relative value and merits of parochial school education. Both of these purposes were addressed in this study by assessing student attitudes in the Christian, Catholic and public school systems. Variables controlled, either by means of the research design or by specific items in the test instrument, included the following:

1. School attended: Christian, Catholic or public;
2. Dogmatism;
3. Sex;
4. Length of attendance;
5. Regularity of student church attendance;
6. Religious affiliation;
7. Socio-economic status;
8. Regularity of parental church attendance;
9. Age.

The remainder of this chapter presents the design and methodology used in this study. This will be accomplished by considering in detail these four areas: sample composition, instrumentation, definition of variables and summary statistics, and statistical procedures.

The Sample

Research setting

This study was conducted in one of Michigan's largest
cities, a metropolitan area including a population of approximately 300,000 people. The residents of the area have been characterized as being predominantly conservative. However, recent national attention drawn to the area has brought into question this characterization.

Of specific interest in this study are the educational arrangements to be noted in this city. In addition to the public schools, several parochial school systems exist which have notably served a significant number of elementary, secondary and college-age students. The Catholic and the Christian school systems are the largest of these nonpublic school systems. This study focused on these two systems, as well as on the public schools of the core city.

Several Christian school systems exist within the metropolitan area in question. This study is concerned with that Christian school system located within the core city. In brief description of this system, Mulder (1973) notes that:

The Christian school system is a private, religiously oriented school system providing education for students in grades kindergarten through twelve. There are seven school buildings providing education for students from grades kindergarten through nine... There is one high school with tenth grade students attending together at another building. Since 1968, these schools have been organized as a Christian School Association under the administration of a Superintendent of Schools and a fifteen member Association Board... Enrollment in these Christian schools is subject to the approval of an enrollment board. (p.56)

It must be mentioned that parents of children attending these schools agree, in writing, to have their children taught according to the written religious philosophy of the school. This religious philosophy is essentially that of the Christian Reformed Church. At present, over 90% of the student body are of the Christian Reformed Faith (Buursma, 1974), and total enrollment numbers 3672 students (National Union of Christian Schools, 1974).

The Catholic schools in the area, by way of contrast,
enroll more students but are administered in a different manner. A total of seventeen elementary schools and two major high schools comprise the Catholic school system here. A diocesan board of education has overall responsibility for education in these schools, but at the same time a considerable degree of autonomy is exercised by the individual schools and their respective administrations and parish units. Control of these schools is parish-centered as opposed to the parent-centeredness of the Christian schools.

The sample and population

Three schools were selected for study, one from each of the three systems. All three schools were located in the southeast portion of the city and are within a two-mile radius of each other. Selection of these specific schools was not done randomly but was done on the basis of geographic location and a judged similarity in the socio-economic backgrounds of their respective clientele. Table 2 indicates that the socio-economic backgrounds of respondents were indeed similar. These considerations resulted in virtually all-White samples, thus eliminating race as a significant variable with which to contend.

Within each school, sixth grade boys and girls were chosen for study. Since homerooms consisted of heterogeneous groupings relative to achievement, total homeroom groupings were selected for study. The only exception to this occurred in the Catholic school in which the sixth grade students had been ability-grouped. Here, both ability-based groups were combined for the purposes of this study. Hence, ability or achievement level was eliminated as a variable with which to contend when considering group scores or means. This sampling procedure of sixth grade students yielded sample sizes of 25, 44, and 30 respectively, for the Christian, Catholic and public schools.
Several reasons dictated the choice of sixth grade students for inclusion here. First, students in the sixth grade are all part of an elementary school setting. If seventh or eighth grade students had been chosen, public school students would have necessarily been in a junior high school or middle school situation, while at the same time the Catholic school and Christian school students would have been in an elementary school situation. Two such different settings could possibly have had an influence on attitudes toward authority scores. Thus, this possibility was circumvented. Secondly, the choice of sixth grade students allows enough time for the respective school systems to have had an effect on the attitudes toward authority of their students. A first or second grade class would not have been appropriate for this study, because of this time factor. Thirdly, students at the sixth grade level are beginning to feel the effects of peer pressure, thus allowing an adequate testing of Hypothesis Three.

Given the characteristics of the sample (see Tables 1, 2 and 3), along with the method in which it was chosen, it is clear that generalization of results obtained in this study must be done with care. The reason is that the sample under study was not randomly chosen. The total sample is, then, the true population under consideration.

Instrumentation

Attitude measurement

As indicated previously, definitions of attitude are multitudinous. For the purposes of this research, attitude will be defined as a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some favorable manner (see Rokeach, 1968).

There are several considerations relative to attitude measurement (Krech, 1948; Kerlinger, 1973). First, the
Table 1
Characteristics of Respondents by Schools

<table>
<thead>
<tr>
<th></th>
<th>Christian</th>
<th></th>
<th>Catholic</th>
<th></th>
<th>Public</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>%**</td>
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<td>%</td>
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<td>%</td>
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</tr>
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<td>3.3</td>
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<td>9</td>
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<td>63.6</td>
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<td>9</td>
<td>36.0</td>
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<td>0.0</td>
<td>1</td>
<td>3.3</td>
</tr>
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<td>0.0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reformed</td>
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<td>3</td>
<td>10.0</td>
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</tr>
<tr>
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<td>37</td>
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<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Jewish</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
<td>96.0</td>
<td>41</td>
<td>93.2</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
<td>No</td>
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<td>4.0</td>
<td>3</td>
<td>6.8</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>NR</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Regularity of Parental Church Attendance:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes ***</td>
<td>24</td>
<td>96.0</td>
<td>36</td>
<td>81.8</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
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<td>8</td>
<td>18.2</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>NR</td>
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<td>0</td>
<td>0.0</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

* NR indicates that no response was given to the question.
** Percentages in a given category may not total exactly 100% due to rounding.
*** A yes response indicates that both parents attend church regularly. A no response indicates that only one parent or neither parent attends regularly.
### Table 2
Socio-economic Categories of Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Christian N</th>
<th>%</th>
<th>Catholic N</th>
<th>%</th>
<th>Public N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0: Large Business, Professional</td>
<td>8</td>
<td>32.0</td>
<td>7</td>
<td>15.9</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>1: Small Business, White Collar:</td>
<td>2</td>
<td>8.0</td>
<td>10</td>
<td>22.7</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>2: Skilled Manual Workers, Foremen:</td>
<td>6</td>
<td>24.0</td>
<td>11</td>
<td>25.0</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>3: Semi-skilled Manual Workers:</td>
<td>2</td>
<td>8.0</td>
<td>11</td>
<td>25.0</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>4: Unskilled Manual Workers, Unemployed:</td>
<td>5</td>
<td>20.0</td>
<td>4</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>NR.*</td>
<td>2</td>
<td>8.0</td>
<td>1</td>
<td>2.3</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Descriptions of these categories are based on those of Centers (1949). Further details are given in the chapter.

* NR indicates that no response was given.

### Table 3
Age Categories of Respondents

<table>
<thead>
<tr>
<th>Ages in Years</th>
<th>Christian N</th>
<th>%</th>
<th>Catholic N</th>
<th>%</th>
<th>Public N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3</td>
<td>12.0</td>
<td>3</td>
<td>6.8</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>11</td>
<td>21</td>
<td>84.0</td>
<td>37</td>
<td>84.1</td>
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<td>4.0</td>
<td>2</td>
<td>4.5</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>2.3</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>NR*</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>2.3</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* NR indicates that no response was given.
measurement of attitudes is necessarily indirect. Inferences must be drawn from the individual's behavior and immediate experience. This suggests that behavioral analysis and introspective analysis can be utilized for measurement. In connection with the former, situational behavior or verbal behavior may be analyzed. Introspective analysis can be accomplished using projective techniques (see Sanford, 1954).

The second consideration is that the manner in which beliefs and attitudes reflect themselves in behavior and experience is governed in part by the nature of the momentary situation. As the situation varies so may the individual's reaction. This indicates the absolute need for standardization of testing procedures. Such standardization was built into the present research.

Thirdly, the required precision of measurement of beliefs and attitudes may vary. The basic requirement is that the particular dimension involved shall be susceptible to a high enough degree of differentiation and with a sufficiently high level of reliability that the necessary statistical treatment is made possible. The use of certain summary statistics has helped to provide the level of differentiation required for the present study.

The fourth consideration is that belief and attitude measurement, like all measurement, demands reliability. Repeated measurement must yield essentially the same values.

Finally, the validity of measurement of beliefs and attitudes can be determined only indirectly, in terms of predictions of behavior based on such measurements. Validity of an instrument is the extent to which it measures what it purports to measure. Attitude measurement being necessarily indirect suggests that there is no direct mode of validation. However, various possibilities do exist for indirect validation, depending on the type of validity with which one is
concerned, be it content validity, criterion-related validity, or construct validity (Kerlinger, 1973).

The use of indices or summary statistics takes into account several of these considerations. For example, Erickson (1967) notes that comparisons on single items, rather than on indices, provide less reliable results. Hautt (1971) makes the same observation. Favorable use of indices in attitude measurement has been made by various researchers (see Greeley and Rossi, 1966; Erickson, 1962; Williams, 1969; Bouma, Williams and Dingman, 1970). Indices or summary statistics have been used in the present research.

The test instrument

The test instrument used in this study consisted of three parts: The Elementary School Form of the Dogmatism Scale (Figert, 1965, 1968), a set of biographical questions, and those questions designed to assess student attitudes toward authority and student perceptions of parental and peer attitudes toward authority. Discussion of these will be in that order. A copy of the total instrument may be found in the Appendix.

Russell Figert (1965, 1968) was responsible for development of The Elementary School Form of the Dogmatism Scale. The well-known Rokeachian Dogmatism Scale (Rokeach, 1955, 1960) for adults was adapted to provide an instrument for use in dogmatism-related studies of children in grades four through six. This paper and pencil instrument contains fifty forced-choice type items, and can be administered to groups. A dogmatism score is obtained by summing point values for each question, where responses of agree, uncertain or disagree receive three, two or one point respectively. A high numerical score indicates a high degree of dogmatism and vice versa. Figert compared responses to individual items by students in the high and low twenty-seven percent range of the total distribution of scores of his
sample (n= 485). Forty-eight of the test items were found to discriminate at $p < .01$, and two items (numbers ten and seventeen) were found to discriminate at $p < .05$. Odd-even reliability coefficients were found to be .73 for grade four, .60 for grade five, and .67 for grade six. It should be noted that the students were required to read the instructions and actual questions silently. In the present research, test directions and test items were read aloud to the group by the test administrator.

Biographical information was obtained by a set of seven questions placed between the attitude questions and the Dogmatism Scale. Placement of these questions in the middle of the instrument was done since several of the questions were personal in nature. The assumption was that the students would respond more accurately and honestly to personal questions if they were not placed at the beginning. Indeed, the Dogmatism Scale was placed at the end of the instrument for similar reasons.

The Attitudes Toward Authority Scale was developed for the purposes of the present research. It consists of a series of twenty-eight questions divided into four groups: student attitudes toward teachers and principals (questions one through seven), student attitudes toward police (questions eight through fourteen), student perceptions of their peers' attitudes toward authority (questions fifteen through twenty-one), and student perceptions of their parents' attitudes (questions twenty-two through twenty-eight). These four sets of parallel questions yield indices very useful for the present analysis. Definitions of these indices are included in this chapter.

Questions in the Attitudes Toward Authority Scale are based on the revised Attitudes Toward the Police questionnaire developed by Bouma and Williams (see Williams, 1969; Bouma, 1969; Bouma, Williams and Dingman, 1970). Their
instrument was designed to determine respondents' attitudes toward the police, their willingness to cooperate with the police, and their perceptions of parents' and peers' attitudes. Of particular note are the two subscales of the Attitudes Toward the Police questionnaire: Scale PPR (Perception of Police Reputation), and Scale PPP (Perception of Police Prejudice). The reliability of these scales was evaluated through the use of the split-half method by utilizing the Spearman-Brown prophecy formula (see Guilford, 1954). Reliability coefficients were calculated for all possible combinations of split-half groups in the Kalamazoo sample (Williams, 1969). For scale PPP, only one coefficient was below .75, and the coefficients ranged from .74 to .82. For Scale PPR, no coefficients were less than .75, and the coefficients ranged from .75 to .79. Also, the scales were judged to have content validity, and construct validity was shown to exist by the power of the scales to discriminate between two known groups, White students and Black students (Shaw and Wright, 1967: pp.18-19).

In the Attitudes Toward Authority Scale developed for the present study, questions one through five, and eight through fourteen were obtained directly from the Bouma and Williams instrument. The remaining attitude questions are modifications of questions found in the Bouma and Williams instrument, and were adapted for present research purposes.

Administration of the total test instrument was completed during the period from September 12, 1974 to October 8, 1974. State regulations required that the parents of the public school students had to be notified ten days in advance of the testing day. This was done and no parents objected to administration of the instrument to their child. A copy of the letter sent to parents appears in the Appendix.

The test instrument was administered by a trained test
administrator who was not known by any of the respondents. Several precautions were taken in the administration of the test instrument to ensure accuracy and truthfulness of responses. These included the following: the teacher of the students was asked to leave the room while the instrument was being administered; the questions in the test instrument were read aloud, one-by-one, in order to circumvent any reading problems the students might have; the students were cautioned to give their attitudes toward all teachers, principals and police as a whole; and complete anonymity was guaranteed the students.

Definition of Variables and Summary Statistics

Variables

1. **School attended** is defined as the school the respondent was attending at the time of the test administration: Christian, Catholic or public.

2. **Dogmatism** is defined as the degree of openmindedness or closedmindedness of the respondent. Operationally, it is the summated score obtained on The Elementary School Form of the Dogmatism Scale.

3. **Sex** is defined as male or female. Operationally, it is the response to question two of the biographical data question set.

4. **Length of attendance** is defined as the number of years a student has attended his present school, including the present year. Operationally, it is the response given to question three of the biographical data question set.

5. **Regularity of student church attendance** is defined as whether or not a student usually goes to church or Sunday School. Operationally, it is the yes or no response given question five of the biographical data question set.
6. **Religious affiliation** is defined as the religious faith of the respondent. Operationally, it is defined as one of the following four categories chosen by the respondent: Christian Reformed, Other Protestant, Catholic, or Jewish.

7. **Socio-economic status (SES)** is defined according to the head of household's occupation. Students were asked to tell the job their parents had, and then to describe in detail what he or she actually did on the job. In order to operationalize these student descriptions, they were ranked on the basis of a modification of Centers' ranking of occupational status (Centers, 1949, as described by Williams, 1969). The following categories were used:

0. Large business, professional: bankers, manufacturers, large department store owners and managers; physicians, dentists, professors, teachers, ministers, engineers, etc.;

1. Small business, white collar: clerks and kindred workers, salesmen, agents, technicians; small retail dealers, contractors, proprietors of repair shops, etc.;

2. Skilled manual workers and foremen: carpenters, machinists, plumbers, masons, printers, barbers, cooks, etc.;

3. Semi-skilled manual workers: truck drivers, machine operators, service station attendants, waiters, countermen, etc.;

4. Unskilled manual workers: garage laborers, sweepers, porters, janitors, street cleaners, laborers and the unemployed, etc.

8. **Regularity of parental church attendance** is defined as whether or not the parents usually go to church on Sunday. Operationally, it is defined as the yes or no response given by the student to question
seven of the biographical data question set.

9. **Age** is operationally defined as the number of years old a student indicates on question one of the biographical data question set.

**Summary statistics**

1. **Attitudes Toward Authority (ATA)** is operationally defined as the summed response score to questions one through fourteen of the test instrument. A response favorable to authority is assigned two points, a not sure response is assigned one point, and a negative response is assigned zero points. The ATA score is obtained by combining the scores for the individual items. Higher scores imply more favorable attitudes toward authority.

2. **Attitudes Toward Teachers (ATT)** is operationally defined as the summed response score to questions one through seven of the test instrument. Scoring is done as for the ATA score.

3. **Attitudes Toward Police (ATP)** is operationally defined as the summed response score to questions eight through fourteen. Scoring is done as for the ATA score.

4. **Perception of Friends Attitudes (PFA)** is operationally defined as the summed response score to questions fifteen through twenty-one of the test instrument. Scoring is as for the ATA score.

5. **Perception of Parents Attitudes (PPA)** is operationally defined as the summed response score to questions twenty-two through twenty-eight. Scoring is done as for the ATA score.

**Statistical Procedures**

Analyses by hypotheses
Hypothesis One predicts that students scoring high in dogmatism will register more favorable attitudes toward authority than will students scoring low in dogmatism.

High and low dogmatic students will be compared on the basis of their ATA scores using a one-tailed $t$-test. This will be done for the total sample as well as within each school. The significance level for this analysis as well as for all other analyses will be $\alpha = .05$. Figure 1 presents the analyses to be done in testing Hypothesis One.

**Figure 1**

**Hypothesis One Analyses**

<table>
<thead>
<tr>
<th>Degree of Dogmatism*</th>
<th>Christian School</th>
<th>Catholic School</th>
<th>Public School</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (high)</td>
<td>$\bar{m}_{11}$</td>
<td>$\bar{m}_{12}$</td>
<td>$\bar{m}_{13}$</td>
<td>$\bar{m}_{14}$</td>
</tr>
<tr>
<td>2 (low)</td>
<td>$\bar{m}_{21}$</td>
<td>$\bar{m}_{22}$</td>
<td>$\bar{m}_{23}$</td>
<td>$\bar{m}_{24}$</td>
</tr>
</tbody>
</table>

The $\bar{m}_{ij}$ are the means for the indicated groups, with $i = 1, 2$; and $j = 1, 2, 3, 4$. Thus, $\bar{m}_{11}$ and $\bar{m}_{21}$ will be compared using the $t$-test, etc.

* A dogmatism score is considered to be high if it falls in the upper quarter of the distribution of dogmatism scores of the total sample. A dogmatism score is considered low if it falls in the lower quarter of the distribution of dogmatism scores.

Hypothesis Two predicts that parochial school students will register more favorable attitudes toward authority than will public school students.

An analysis of variance will be done on the ATA scores of the three groups. Such an analysis tests the null hypothesis that there are no differences in ATA scores among the three groups. A post hoc analysis will be made if the null hypothesis is rejected.
An analysis of variance will be done on the dogmatism scores of the three groups. This analysis will test the null hypothesis that there are no differences in dogmatism scores among the three groups. A post hoc analysis will be made if the null hypothesis is rejected.

An analysis of covariance will be done on the ATA scores of the three groups with dogmatism being the covariate. In this way, differences in ATA scores will be analyzed while taking into account possible differences in the degree of dogmatism among students of the three schools.

In all three of the above analyses, students in attendance at the various schools for a period of two years or less will not be included. The reason for this is that the influence of each school is of primary interest here, and students relatively new to a school could hardly be said to be valid products of the schools in question.

Hypothesis Three predicts that students will perceive their peers to have less favorable attitudes toward authority than they themselves register. It also predicts that these students will perceive their parents to have attitudes toward authority similar to their own.

A two-tailed correlated t-test will be used to compare student attitudes toward authority with their perceptions of their parents' attitudes toward authority. For this analysis, the PPA and the ATT indices will be used. Further, this analysis will be done for the total sample as well as within each school.

A one-tailed correlated t-test will be used to compare student attitudes with their perception of their peers' attitudes. For this analysis, the PFA and the ATT indices will be used. Further, this analysis will be done for the total sample as well as within each school.

Schematically, this analysis could be described in virtually the same manner as were the analyses for Hypothesis One. (see Figure 1)
Hypothesis Four predicts that students regular in church or Sunday School attendance will register more favorable attitudes toward authority than will students irregular in church or Sunday School attendance. Regular and non-regular churchgoing students will be compared on their ATA scores using a one-tailed t-test. This will be done for the total sample.

Figure 2
Data Arrangement and Analysis Schematic, Hypothesis Four

<table>
<thead>
<tr>
<th>Regular Church Attenders</th>
<th>Non-Regular Church Attenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>$a_1$</td>
<td>$b_1$</td>
</tr>
<tr>
<td>$\cdot$</td>
<td>$\cdot$</td>
</tr>
<tr>
<td>$\cdot$</td>
<td>$\cdot$</td>
</tr>
<tr>
<td>$a_m$</td>
<td>$b_n$</td>
</tr>
<tr>
<td>$\bar{M}_a$</td>
<td>$\bar{M}_b$</td>
</tr>
</tbody>
</table>

Where: the $a_i$ and $b_j$ are the ATA scores of those students regular and not regular in church or Sunday School attendance respectively, and $\bar{M}_a$ and $\bar{M}_b$ are their respective means.

Secondary analyses

1. Male and female students will be compared on the basis of ATA scores using a two-tailed t-test. This will be done for the total sample as well as within each school.

2. An analysis of variance will be done on the ATA scores of students in the four religious affiliation categories. This will be done for the total sample.

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3. Students with a high SES ranking (0 or 1 in the modified Centers scheme) will be compared with students with a low SES ranking (2, 3, or 4 in the modified Centers scheme) on the basis of ATA scores using a two-tailed t-test. This will be done for the total sample as well as within each school. This collapsing of SES categories was necessitated by insufficient n's in some of the SES categories.

4. Students with parents regular in church attendance will be compared with students whose parents are not regular in church attendance on the basis of their ATA scores using a one-tailed t-test. This will be done for the total sample as well as within each school.

5. Student attitudes toward teachers will be compared with student attitudes toward police using ATA scores and an attitude toward police score based on questions eight through fourteen. A two-tailed correlated t-test will be used in the analysis which will be done for the total sample as well as within each school.

6. No analysis of scores of students of different ages will be done due to the lack of variation in age (see Table 3).
CHAPTER IV: ANALYSIS OF DATA

Primary Analyses

**Hypothesis One**

High and low dogmatic students were compared on their Attitudes Toward Authority (ATA) scores using a one-tailed t-test. No significant support was found for this hypothesis. Thus high and low dogmatic students did not differ significantly in their attitudes toward authority. Details of the analyses will be presented shortly.

The Attitudes Toward Authority (ATA) score used in the testing of this hypothesis is a composite score based on fourteen questions. Seven of these questions investigate student attitudes toward teachers and principals, while the remaining seven questions investigate student attitudes toward police. High student ATA scores indicate positive attitudes toward authority, and low scores indicate less positive or negative attitudes toward authority.

Students scoring high in dogmatism were operationally defined as those students whose dogmatism scores were in the upper one-fourth of the distribution of dogmatism scores for the total sample (high dogmatism scores so-defined ranged from 123 to 147). Students scoring low in dogmatism were operationally defined as those students whose dogmatism scores were in the lower one-fourth of the distribution of dogmatism scores for the total sample (low dogmatism scores so-defined ranged from 78 to 106). Figure 3 provides detailed information relative to the distribution of dogmatism scores in the three schools.

The basic analysis was performed on the entire sample as well as on the three subsamples: the Christian, Catholic and public school students. Discussion will be in this order.
Figure 3
Percentage Distribution of Dogmatism Scores

Key:
- Christian
- Catholic
- Public

Percentage of Scores in Given Range

Dogmatism Scores

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1. Total sample

No support was found for Hypothesis One using the data of the total sample. In other words, no reason was found to reject the null hypothesis of no difference between high and low dogmatic students in their attitudes toward authority. High dogmatic students, it was hypothesized, would have more positive attitudes toward authority (higher ATA scores) than low dogmatic students. This did not prove to be the case. Indeed, the mean ATA score for the high dogmatic group was slightly lower than was the mean for the low dogmatic group, but not significantly so. Table 4 presents the details of this analysis.

<table>
<thead>
<tr>
<th>Dogmatism: t-test on Total Sample ATA Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Low Dogmatics</td>
</tr>
<tr>
<td>High Dogmatics</td>
</tr>
</tbody>
</table>

The probability for a t of -0.7949 with 51 d.f. is 0.2152 (one-tailed).

2. Christian school subsample

No support was found for Hypothesis One using the data of the Christian school sample. In other words, no reason was found to reject the null hypothesis of no difference between high and low dogmatic students in their attitudes toward authority. High dogmatic students, it was hypothesized, would have more positive attitudes toward authority (higher ATA scores) than low dogmatic students. This did not prove to be the case. Table 5 presents the results of this analysis.
Table 5

Dogmatism: \( t \)-test on Christian School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Dev.</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Dogmatics</td>
<td>8</td>
<td>24.13</td>
<td>2.800</td>
</tr>
<tr>
<td>High Dogmatics</td>
<td>5</td>
<td>21.40</td>
<td>4.980</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of -1.277 with 11 d.f. is 0.1139 (one-tailed).

3. Catholic school sample

No support was found for Hypothesis One using the data of the Catholic school sample. In other words, no reason was found to reject the null hypothesis of no difference between high and low dogmatic students in their attitudes toward authority. High dogmatic students, it was hypothesized, would have more positive attitudes toward authority (higher ATA scores) than low dogmatic students. This did not prove to be the case. Table 6 presents the results of this analysis.

Table 6

Dogmatism: \( t \)-test on Catholic School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Dev.</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Dogmatics</td>
<td>10</td>
<td>20.50</td>
<td>5.061</td>
</tr>
<tr>
<td>High Dogmatics</td>
<td>11</td>
<td>19.36</td>
<td>6.265</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of -0.4542 with 19 d.f. is 0.3274 (one-tailed).

4. Public school sample

No support was found for Hypothesis One using the data

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of the public school sample. In other words, no reason was found to reject the null hypothesis of no difference between high and low dogmatic students in their attitudes toward authority. High dogmatic students, it was hypothesized, would have more positive attitudes toward authority (higher ATA scores) than low dogmatic students. Although the ATA means of the two groups did differ in the hypothesized direction, their difference was not statistically significant. Table 7 presents the results of this analysis.

Table 7

Dogmatism: t-test on Public School ATA Scores

<table>
<thead>
<tr>
<th></th>
<th>Size</th>
<th>Mean</th>
<th>Standard Dev.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Dogmatics</td>
<td>8</td>
<td>17.88</td>
<td>4.970</td>
<td>0.5538</td>
</tr>
<tr>
<td>High Dogmatics</td>
<td>11</td>
<td>19.18</td>
<td>5.154</td>
<td></td>
</tr>
</tbody>
</table>

The probability for a t of 0.5538 with 17 d.f. is 0.2935 (one-tailed).

Hypothesis Two

Three analyses were done in the testing of Hypothesis Two: a one-way analysis of variance on the ATA scores of the three groups, a one-way analysis of variance on the dogmatism scores of the three groups, and a one-way analysis of covariance on the ATA scores of the three groups with dogmatism being the covariate. In all three of these analyses, students in attendance at the various schools for a period of two years or less were not included. The reason for this was that the influence of each school was of primary interest here, and students relatively new to a school could hardly be said to be valid products of the schools in question.

1. Analysis of variance on the ATA scores

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The one-way analysis of variance performed on the ATA scores and the ensuing post hoc analysis provide support for Hypothesis Two. The simple analysis of variance indicated at the .05 level that not all ATA means could be considered equal. The post hoc analysis to be described shortly indicated that the Christian school and the public school means differed significantly. Further, the Catholic school and the public school means differed in the direction hypothesized, but not significantly so. Details of the analysis of variance appear in Table 8.

Table 8
Analysis of Variance: ATA Scores

<table>
<thead>
<tr>
<th>School</th>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>23</td>
<td>21.61</td>
<td>4.075862</td>
</tr>
<tr>
<td>Catholic</td>
<td>37</td>
<td>19.41</td>
<td>5.494742</td>
</tr>
<tr>
<td>Public</td>
<td>25</td>
<td>18.00</td>
<td>5.107184</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>2</td>
<td>79.10</td>
<td>3.121</td>
<td>0.0494</td>
</tr>
<tr>
<td>Within</td>
<td>82</td>
<td>25.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 indicates that there are significant differences among the Attitudes Toward Authority means of the three schools. In other words, the null hypothesis of no difference in treatment means was rejected at the .05 level of significance. In order to determine which pairs of means differed significantly from each other, a Tukey post hoc analysis was performed (see Glass and Stanley, 1970). Since the usual Tukey analysis requires equal n's in the treatment...
groups, and this was not the case here, the modification of
the Tukey Method using the harmonic mean \( \bar{n} \) was utilized
(see Winer, 1962; Bancroft, 1968). By definition, the har­
monic mean equals the number of treatment groups divided by
the sum of the reciprocals of the sample sizes. Thus

\[
\bar{n} = k \sum \left( \frac{1}{n_1} + \frac{1}{n_2} + \ldots + \frac{1}{n_k} \right)
\]

where \( k \) is the num­
ber of groups. In the present situation, \( k = 3 \), and the har­
monic mean \( \bar{n} \) was found to be 27.27.

Table 9 which follows gives the results of the Tukey
analysis. It was found that the Christian school and public
school means differed significantly, with the Christian
school students having significantly more positive attitudes
toward authority than the public school students. Computa­
tions failed to reveal a significant difference between Cath­
olic school and public school means. Similarly, computations
failed to reveal a significant difference between Christian
school and Catholic school means.

| Table 9 |
| Tukey Post Hoc Analysis: ATA Means |

| \( |X_1 - X_j| \) | \( |X_i - X_j| / \sqrt{MS_\epsilon / \bar{n}} \) |
|----------------|-----------------------------------|
| \( \bar{X}_1 - \bar{X}_3 \) = 3.61 | \( \bar{X}_1 - \bar{X}_3 \) = 3.76 |
| \( \bar{X}_2 - \bar{X}_3 \) = 1.41 | \( \bar{X}_2 - \bar{X}_3 \) = 1.47 |
| \( \bar{X}_1 - \bar{X}_2 \) = 2.20 | \( \bar{X}_1 - \bar{X}_2 \) = 3.383 |

Where \( \bar{X}_1, \bar{X}_2, \) and \( \bar{X}_3 \) are the Christian, Catholic, and public
school Attitudes Toward Authority (ATA) means respective­ly.

Since 3.76 \( > \) 3.383, the Christian and public school means dif­
fer significantly at \( \alpha = .05 \).

The preceding analyses were performed on the Attitudes.
Toward Authority (ATA) scores. For the sake of further refinement, the same analyses were also performed on the Attitudes Toward Teacher (ATT) scores. This further refinement is derived from the fact that the ATT scores are computed on the basis of responses to questions which are also used in computation of the ATA scores. That is, the seven questions on which the Attitudes Toward Teachers scores (ATT) are based are combined with seven other questions to form the Attitudes Toward Authority scores. For further details on computation of these scores please note the definitions given in Chapter III.

These further analyses performed on the Attitudes Toward Teachers (ATT) scores provided even greater support for Hypothesis Two. The first of these further analyses, the analysis of variance, is detailed in Table 10.

Table 10
Analysis of Variance: ATT Scores

<table>
<thead>
<tr>
<th>School</th>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>23</td>
<td>10.87</td>
<td>2.180583</td>
</tr>
<tr>
<td>Catholic</td>
<td>37</td>
<td>9.162</td>
<td>3.050624</td>
</tr>
<tr>
<td>Public</td>
<td>25</td>
<td>8.920</td>
<td>2.752575</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>2</td>
<td>27.77</td>
<td>3.664</td>
<td>0.0299</td>
</tr>
<tr>
<td>Within</td>
<td>82</td>
<td>7.579</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10 indicates that there are significant differences among the Attitudes Toward Teachers means of the three schools. In other words, the null hypothesis of no
difference in treatment means was rejected at the .05 level of significance. In order to determine which pairs of means differed significantly from each other, a Tukey post hoc analysis was once again performed.

Table 11 which follows gives the results of the Tukey analysis. It was found that the Christian school and public school means differed significantly, indicating that the Christian school students had significantly more positive attitudes toward authority than the public school students. Computations failed to reveal a significant difference between Catholic school and public school means. Similarly, computations failed to reveal a significant difference between Christian school and Catholic school means.

Table 11
Tukey Post Hoc Analysis: ATT Means

| $|X_i - X_j|$ | $|X_i - X_j| \div \sqrt{\text{MS}_{w/n}}$ | .95q_{3.02} |
|--------------|---------------------------------|------------|
| $|X_1 - X_2|$ | 1.95 | 3.68 | 3.383 |
| $|X_2 - X_3|$ | .242 | .46 |
| $|X_1 - X_2|$ | 3.72 |

Where $X_1$, $X_2$, and $X_3$ are the Christian, Catholic, and public school ATT means respectively.

Since $3.68 > 3.383$, the Christian and public school means differ significantly at $\alpha = .05$.

2. Analysis of variance on dogmatism scores

The one-way analysis of variance done on the means of the dogmatism scores of the three schools failed to reveal significant differences among the three schools. Thus the null hypothesis that there were no significant differences among

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the mean dogmatism scores of the Christian, Catholic and public school groups was not rejected. This being the case, no post hoc analysis was possible. Details of the analysis of variance are given in Table 12.

### Table 12

**Analysis of Variance: Dogmatism Scores**

<table>
<thead>
<tr>
<th>School</th>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>23</td>
<td>111.9</td>
<td>12.32851</td>
</tr>
<tr>
<td>Catholic</td>
<td>37</td>
<td>113.8</td>
<td>12.76462</td>
</tr>
<tr>
<td>Public</td>
<td>25</td>
<td>116.3</td>
<td>13.34329</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>2</td>
<td>115.7</td>
<td>.7037</td>
<td>0.4977</td>
</tr>
<tr>
<td>Within</td>
<td>82</td>
<td>164.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Analysis of covariance

The analysis of covariance performed on the Attitudes Toward Authority (ATA) scores with dogmatism being the covariate gave an F value of 2.83 with a probability of .065. This means there is no support (at the .05 significance level) for the hypothesis that parochial school students have more favorable attitudes toward authority than do public school students. It should be noted that probability of p = .0494 was obtained when dogmatism was not being controlled (see Table 8). Thus dogmatism did make a difference: when dogmatism was ignored parochial school students (Christian school only) showed significantly more positive attitudes toward authority than did public school students; when dogmatism was controlled there were no longer found any
statistically significant differences between parochial school and public school students. Details of the analysis of covariance appear in Tables 13 and 14.

Table 13
Analysis of Covariance: ATA Scores- I

<table>
<thead>
<tr>
<th>School</th>
<th>Size</th>
<th>Unadjusted Mean</th>
<th>Adjusted Mean</th>
<th>Covariate Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>23</td>
<td>21.6</td>
<td>21.5</td>
<td>112</td>
</tr>
<tr>
<td>Catholic</td>
<td>37</td>
<td>19.4</td>
<td>19.4</td>
<td>114</td>
</tr>
<tr>
<td>Public</td>
<td>25</td>
<td>18.0</td>
<td>18.1</td>
<td>116</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>19.6</td>
<td></td>
<td>114</td>
</tr>
</tbody>
</table>

Beta Weight: -.031

Table 14
Analysis of Covariance: ATA Scores- II

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>Mean Squares</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Adjusted Treatments)</td>
<td>2</td>
<td>72.26</td>
<td>2.83</td>
<td>.065</td>
</tr>
<tr>
<td>Error</td>
<td>81</td>
<td>25.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The preceding analysis was performed on the Attitudes Toward Authority (ATA) scores with dogmatism being the covariate. For the sake of further refinement, the same analysis was also performed on the Attitudes Toward Teachers (ATT) scores, with dogmatism once again being the covariate.

This second analysis of covariance indicated that statistically significant differences did exist among the Attitudes Toward Teachers means of the three schools. An

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examination of the means themselves indicates that, even
while controlling for dogmatism, the parochial school stu-
dents had significantly more positive attitudes toward teach-
ers than did the public school students. Tables 15 and 16
provide details of the analysis.

Table 15
Analysis of Covariance: ATT Scores - I

<table>
<thead>
<tr>
<th>School</th>
<th>Size</th>
<th>Unadjusted Mean</th>
<th>Adjusted Mean</th>
<th>Covariate Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>23</td>
<td>10.9</td>
<td>10.8</td>
<td>112</td>
</tr>
<tr>
<td>Catholic</td>
<td>37</td>
<td>9.16</td>
<td>9.15</td>
<td>114</td>
</tr>
<tr>
<td>Public</td>
<td>25</td>
<td>8.92</td>
<td>9.00</td>
<td>116</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>9.55</td>
<td></td>
<td>114</td>
</tr>
</tbody>
</table>

Beta Weight: -.0342

Table 16
Analysis of Covariance: ATT Scores - II

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>Mean Squares</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Adjusted</td>
<td>2</td>
<td>24.31</td>
<td>3.25</td>
<td>.044</td>
</tr>
<tr>
<td>Treatments)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>81</td>
<td>7.477</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis Three

A one-tailed correlated t-test was used to compare stu-
dent attitudes with their perception of their peers' atti-
tudes. For this analysis, the Perception of Friends
Attitudes (PFA) index and the Attitudes Toward Teachers (ATT)
index were used, and the analysis was performed on the total sample as well as on the three subsamples. It was found that in both the Catholic school and in the public school samples, that students perceived their peers to have significantly less favorable attitudes toward authority than they themselves registered.

A two-tailed correlated $t$-test was used to compare student attitudes toward authority with their perceptions of their parents' attitudes toward authority. For this analysis, the Perception of Parents Attitudes (PPA) index and the Attitudes Toward Teachers (ATT) index were used, and the analysis was performed on the total sample as well as on the three subsamples. It was found that in no case did students perceive their parents to have attitudes toward authority similar to their own. However, in all three samples it was found that students perceived their parents to have attitudes toward authority which were more positive than their own, and significantly so.

Before the results of the various analyses are presented, some explanation will be given regarding the use of the correlated $t$-test (see Snedecor and Cochran, 1967). This statistical test is used with paired samples and tests the significance of the differences in the paired scores. For the first part of Hypothesis Three, the pairs consist of the PFA and the ATT scores for each student; the pairs for the second part of Hypothesis Three consist of the PPA and the ATT scores (for the sake of simplicity, the first part of Hypothesis Three will be termed $H_{3a}$, and the second part of Hypothesis Three will be termed $H_{3b}$). The null hypothesis when using the correlated $t$-test is $\mu_D = 0$, where $\mu_D$ is the population mean of the differences between the paired scores. The alternative hypothesis in the two-tailed case is $\mu_D \neq 0$, and in the one-tailed case is $\mu_D < 0$ (or $\mu_D > 0$).

1. Total sample

Neither part of Hypothesis Three was supported by the
data for the three subsamples combined. In the case of $H_{3a}$, a $t$-value of 0.7611 (98 d.f.) was obtained which has a one-tailed probability of 0.2242. Thus there was no reason to reject the null hypothesis $\mu_D = 0$. Hence, no evidence was provided for the hypothesis that students perceive their peers' attitudes as being less favorable than their own.

In the case of $H_{3b}$, a $t$-value of 4.654 (98 d.f.) was obtained which has a two-tailed probability of less than 0.0001. Thus the null hypothesis $\mu_D = 0$ was rejected. This rejection of the null hypothesis means that the two sets of scores (PPA and ATT) could not be considered the same. But it was hypothesized that they were the same. Thus no evidence was provided for students perceiving their parents to have attitudes toward authority similar to their own.

At this point a simple examination of means indicated that students perceived their parents to have significantly more positive attitudes toward authority than they themselves registered.

2. Christian school sample

Neither part of Hypothesis Three was supported by the data for the Christian school sample. In the case of $H_{3a}$, a $t$-value of -0.9751 (24 d.f.) was obtained which has a one-tailed probability of 0.1696. Thus there was no reason to reject the null hypothesis $\mu_D = 0$. Hence, no evidence was provided for the hypothesis that students perceive their peers' attitudes as being less favorable than their own.

In the case of $H_{3b}$, a $t$-value of 2.248 (24 d.f.) was obtained which has a two-tailed probability of 0.0340. Thus the null hypothesis $\mu_D = 0$ was rejected. This rejection of the null hypothesis means that the two sets of scores (PPA and ATT) could not be considered the same. But it was hypothesized that they were the same. Thus no evidence was provided for students perceiving their parents to have attitudes toward authority similar to their own. However, at this point a simple examination of means indicated that
students perceived their parents to have significantly more positive attitudes toward authority than they themselves registered.

3. Catholic school sample

The Catholic school data provided support for $H_{3a}$, but not for $H_{3b}$. In the case of $H_{3a}$, a $t$-value of $-4.046$ (43 d.f.) was obtained which has a one-tailed probability of less than $0.0001$. Thus the null hypothesis $\mu_D = 0$ was rejected. This rejection means that significant differences do exist between students' attitudes toward authority and their perception of their peers' attitudes (an examination of the means indicated that their peers were perceived as having less favorable attitudes than the students themselves registered). Hence, the research hypothesis $H_{3a}$ was supported.

In the case of $H_{3b}$, a $t$-value of $3.231$ (43 d.f.) was obtained which has a two-tailed probability of $0.0024$. Thus the null hypothesis $\mu_D = 0$ was rejected. This rejection of the null hypothesis means that the two sets of scores (PPA and ATT) could not be considered the same. But it was hypothesized that they were the same. Thus no evidence was provided for students perceiving their parents to have attitudes toward authority similar to their own.

At this point a simple examination of means indicated that students perceived their parents to have significantly more positive attitudes toward authority than they themselves registered.

4. Public school sample

The public school data provided support for $H_{3a}$, but not for $H_{3b}$. In the case of $H_{3a}$, a $t$-value of $-3.525$ (29 d.f.) was obtained which has a one-tailed probability of $0.0007$. Thus the null hypothesis $\mu_D = 0$ was rejected. This rejection means that significant differences do exist between students' attitudes toward authority and their
perception of their peers' attitudes (an examination of the means indicated that their peers were perceived as having less favorable attitudes than the students themselves registered). Hence, the research hypothesis $H_{3a}$ was supported.

In the case of $H_{3b}$, a $t$-value of 4.181 (29 d.f.) was obtained which has a two-tailed probability of 0.0002. Thus the null hypothesis $\mu = 0$ was rejected. This rejection of the null hypothesis means that the two sets of scores (PPA and ATT) could not be considered the same. But it was hypothesized that they were the same. Thus no evidence was provided for students perceiving their parents to have attitudes toward authority similar to their own.

At this point a simple examination of means indicated that students perceived their parents to have significantly more positive attitudes toward authority than they themselves registered.

**Hypothesis Four**

Regular and non-regular church-going students were compared on their ATA scores using a one-tailed $t$-test. Since the number of non-churchgoing students was small within any given subsample, this analysis was performed on the entire sample only. No support was found for Hypothesis Four. Students regular in attendance did not register more favorable attitudes than those students regular in attendance. Details of the analysis are given in Table 17.

**Table 17**

<table>
<thead>
<tr>
<th>Student Church Attendance: $t$-test on ATA Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

The probability for $t = 0.2292$ with 96 d.f. is 0.4096, 1-tailed.
Secondary Analyses

Sex

Male and female students were compared on the basis of their ATA scores using a two-tailed $t$-test. This analysis was done on each of the three subsamples as well as on the total sample. In no case was the null hypothesis rejected. That is, computations did not reveal a significant difference in ATA scores between boys and girls. Tables 18, 19, 20, and 21 present the details of this analysis.

Table 18
Sex: $t$-test on Total Sample ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$t$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51</td>
<td>19.41</td>
<td>5.449</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>19.55</td>
<td>4.916</td>
</tr>
</tbody>
</table>

The probability for a $t$ of .1345 with 96 d.f. is 0.8933 (two-tailed).

Table 19
Sex: $t$-test on Christian School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>$t$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12</td>
<td>19.75</td>
<td>5.610</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>22.46</td>
<td>2.933</td>
</tr>
</tbody>
</table>

The probability for a $t$ of 1.532 with 23 d.f. is 0.1392 (two-tailed).
Table 20
Sex: t-test on Catholic School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12</td>
<td>19.75</td>
<td>5.610</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>22.46</td>
<td>2.933</td>
</tr>
</tbody>
</table>

The probability for a t of 1.532 with 23 d.f. is 0.1392 (two-tailed).

Table 21
Sex: t-test on Public School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>15</td>
<td>18.93</td>
<td>5.035</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>17.67</td>
<td>5.150</td>
</tr>
</tbody>
</table>

The probability for a t of -.6811 with 28 d.f. is 0.5014 (two-tailed).

Religious affiliation

A one-way analysis of variance was done on the ATA scores of students in the four religious affiliation categories. Due to insufficient n's in some of the categories, this analysis could only be performed on the entire sample and not on the three subsamples. No support was found to reject the null hypothesis of there being no difference among the ATA means in the different religious affiliation categories. Since the null hypothesis was not rejected, no post hoc analyses could be performed on individual means. Details of the analysis are provided in Table 22. Discussion will be had in the last chapter.
Table 22
Religious Affiliation: Analysis of Variance on ATA Scores

<table>
<thead>
<tr>
<th>Religion</th>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Reformed</td>
<td>28</td>
<td>20.36</td>
<td>4.953220</td>
</tr>
<tr>
<td>Other Protestant</td>
<td>27</td>
<td>17.63</td>
<td>4.985735</td>
</tr>
<tr>
<td>Catholic</td>
<td>42</td>
<td>19.88</td>
<td>5.392870</td>
</tr>
<tr>
<td>Jewish</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source of variation  
d.f. | Mean Square | F  | Probability
--- | ------------ | --- | -------------
Between | 3 | 41.68 | 1.583 | 0.1985
Within | 95 | 26.33 |     |           
Total | 98 |        |     |           

Socio-economic status

Students with a high SES ranking (0 or 1 in the modified Centers scheme) were compared with students with a low SES ranking (2, 3, or 4 in the modified Centers scheme) on the basis of ATA scores using a two-tailed t-test. This was done for the total sample as well as within each school. In none of these analyses was any reason found to reject the null hypothesis. That is, computations failed to reveal a significant difference between the high and low SES groups. Tables 23 through 26 present details of these analyses. These tables may be found on the following page.

Parental church attendance

Students with parents regular in church attendance were compared with students whose parents were not regular in church attendance on the basis of their ATA scores using a
Table 23
SES: t-test on Total Sample ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SES</td>
<td>39</td>
<td>19.13</td>
<td>5.376</td>
</tr>
<tr>
<td>Low SES</td>
<td>56</td>
<td>19.70</td>
<td>5.081</td>
</tr>
</tbody>
</table>

The probability for a $t$ of 0.5236 with 93 d.f. is 0.6018 (two-tailed).

Table 24
SES: t-test on Christian School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SES</td>
<td>10</td>
<td>20.80</td>
<td>4.962</td>
</tr>
<tr>
<td>Low SES</td>
<td>13</td>
<td>22.23</td>
<td>3.320</td>
</tr>
</tbody>
</table>

The probability for a $t$ of 0.8286 with 21 d.f. is 0.4166 (two-tailed).

Table 25
SES: t-test on Catholic School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SES</td>
<td>17</td>
<td>18.41</td>
<td>6.315</td>
</tr>
<tr>
<td>Low SES</td>
<td>25</td>
<td>19.60</td>
<td>5.074</td>
</tr>
</tbody>
</table>

The probability for a $t$ of 0.6745 with 40 d.f. is 0.5039 (two-tailed).
Table 26
SES: \( \overline{t} \)-test on Public School ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SES</td>
<td>12</td>
<td>18.75</td>
<td>4.267</td>
</tr>
<tr>
<td>Low SES</td>
<td>18</td>
<td>18.00</td>
<td>5.605</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of -0.3930 with 38 d.f. is 0.6973 (two-tailed).

A one-tailed \( t \)-test. This analysis was done on the total sample as well as on the Catholic and public school subsamples. (This analysis could not be performed on the Christian school sample since all but one student reported that their parents attended church regularly). In all three analyses, no reason was found to reject the null hypothesis. That is, computations failed to reveal a significant difference in ATA scores between students whose parents attended church regularly and those students whose parents did not attend regularly. Details of the analyses may be found in Tables 27, 28, and 29. These tables may be found on the following page.

Attitudes toward teachers versus attitudes toward police

A two-tailed correlated \( t \)-test was used to compare student attitudes toward police. The ATT and ATP indices were used in this analysis which was performed on the total sample as well as on the three subsamples. In none of these analyses was the null hypothesis \( H_0 = 0 \) rejected. That is, computations failed to reveal a significant difference between the Attitudes Toward Teachers (ATT) scores and the Attitudes Toward Police (ATP) scores. However, in all of the analyses (except for the Christian school sample) the ATP means proved to be slightly more positive than the ATT (teacher)
Table 27
Parental Church Attendance: \( t \)-test on Total Sample
ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>82</td>
<td>19.34</td>
<td>5.133</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>20.19</td>
<td>5.492</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of 0.5963 with 96 d.f. is 0.2762 (one-tailed).

Table 28
Parental Church Attendance: \( t \)-test on Catholic School
ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36</td>
<td>18.83</td>
<td>5.316</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>20.88</td>
<td>6.105</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of 0.9575 with 42 d.f. is 0.1719 (one-tailed).

Table 29
Parental Church Attendance: \( t \)-test on Public School
ATA Scores

<table>
<thead>
<tr>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>( t )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>18.23</td>
<td>5.061</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>19.14</td>
<td>5.429</td>
</tr>
</tbody>
</table>

The probability for a \( t \) of 0.4101 with 27 d.f. is 0.3425 (one-tailed).

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means, though not significantly so. *t*-test values obtained and accompanying probabilities are given in Table 30.

**Table 30**

Correlated *t*-values: ATT Scores and ATP Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>ATT Mean</th>
<th>ATP Mean</th>
<th><em>t</em>-value</th>
<th>Probability (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>9.505</td>
<td>9.919</td>
<td>1.318</td>
<td>0.1906</td>
</tr>
<tr>
<td>Christian School</td>
<td>10.72</td>
<td>10.44</td>
<td>-0.7715</td>
<td>0.4479</td>
</tr>
<tr>
<td>Catholic School</td>
<td>9.159</td>
<td>10.05</td>
<td>1.592</td>
<td>0.1187</td>
</tr>
<tr>
<td>Public School</td>
<td>9.000</td>
<td>9.300</td>
<td>0.5382</td>
<td>0.5945</td>
</tr>
</tbody>
</table>

The correlated *t* analyses indicate that no substantial differences existed between the ATT and the ATP scores when considered on a student by student basis. However, such an analysis provides no direct indication of the strength of the relationship between the ATT and the ATP scores. In order to obtain a measure of the strength of the relationship between the ATT and ATP scores, Pearson Product-Moment Correlation Coefficients (*r*<sub>xy</sub> values) were calculated for the total sample and for the individual subsamples. In the case of the total sample, *r*<sub>xy</sub> = .45 indicates a moderate, direct relationship between ATT and ATP scores (see Glass and Stanley, 1970). In the Christian school sample, *r*<sub>xy</sub> = .73 indicates a fairly strong direct relationship between the scores. The Catholic and public school samples both gave *r*<sub>xy</sub> = .37 which indicates a weak to moderate relationship between ATT and ATP scores.

The preceding analyses indicate the extent of the relationship between the Attitudes Toward Teachers scores and the Attitudes Toward Police scores. However, both the ATT and the ATP scores are composite scores, each being based on seven questions. Despite the advantages of composite
scores, it may be that interesting responses to individual questions are being obscured. For this reason, Tables 31 and 32 are here presented. It must be borne in mind that the percentages given in the tables are based on relatively small sample sizes, thus prohibiting further analysis. Complete information on responses to individual questions will be found in the Appendix.

Table 31 indicates that in all three schools the percentage of students who thought that police were pretty nice people was higher than the percentage of students who thought that teachers were pretty nice people. This difference was very great in the public school sample (83% to 13%). On the other hand, the data indicate that in all three schools the percentage of students who thought that being a teacher was a good job for an intelligent person was higher than the corresponding percentage for being a policeman.

Finally, it should be noted that a large disparity existed in the public school sample in response to the question of whether or not Black and White pupils are treated alike. Sixty-three percent thought that the police treated pupils of these two races alike, while only 27% thought that teachers and principals did so.

Table 32 does not indicate any great percentage differences in responses to the two questions. Teachers and principals fared equally well in the Christian school sample. In the Catholic and public school samples, attitudes toward police were slightly more positive than the corresponding attitudes toward teachers and principals.

Both Tables 31 and 32 may be found on the following several pages.
<table>
<thead>
<tr>
<th>Question</th>
<th>Christian %</th>
<th>Catholic %</th>
<th>Public %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think every teacher treats all pupils alike?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>44</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Police</td>
<td>60</td>
<td>48</td>
<td>23</td>
</tr>
<tr>
<td>Do you think every police officer treats Black and White pupils alike?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>80</td>
<td>68</td>
<td>27</td>
</tr>
<tr>
<td>Police</td>
<td>72</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Do you think every teacher treats rich and poor pupils alike?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>96</td>
<td>59</td>
<td>67</td>
</tr>
<tr>
<td>Police</td>
<td>80</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>Do you think police officers are pretty nice people?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>80</td>
<td>68</td>
<td>13</td>
</tr>
<tr>
<td>Police</td>
<td>88</td>
<td>86</td>
<td>83</td>
</tr>
<tr>
<td>Do you think being a police officer is a good job for an intelligent person?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>52</td>
<td>84</td>
<td>77</td>
</tr>
<tr>
<td>Policeman</td>
<td>36</td>
<td>73</td>
<td>67</td>
</tr>
</tbody>
</table>

* A "Yes" response indicates a positive attitude toward teachers or police.
Table 32
Comparison of Attitudes Toward Teachers and Police- II*

"Yes" Responses

<table>
<thead>
<tr>
<th></th>
<th>Christian %</th>
<th>Catholic %</th>
<th>Public %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think _____ are always picking on the person who has been in trouble before?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>24</td>
<td>41</td>
<td>47</td>
</tr>
<tr>
<td>Police</td>
<td>24</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Do you think _____ are mean?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers &amp; Principals</td>
<td>12</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Police</td>
<td>12</td>
<td>9</td>
<td>13</td>
</tr>
</tbody>
</table>

* A "Yes" response indicates a negative attitude toward teachers or police.
CHAPTER V: DISCUSSION AND CONCLUSIONS

Purposes and Summary of Current Study

Events of recent years indicate that ours is a time of a crisis of authority. Most institutionalized forms of authority are being questioned and challenged. Student unrest of the 1960's at the university level has extended itself to the high school and junior high school levels. Ecclesiastical institutions, and in particular the Catholic Church, are finding themselves on the defensive. Law enforcement agencies are under both scrutiny and attack.

The situation is paradoxical. Though the various forms of institutional authority are under attack, people are necessarily becoming more dependent upon the functions of authority. The increasing complexity of modern life and the growing interdependence of society's members mandates increased organization and an increased dependence upon authority.

One of the major purposes of this study was to assess the attitudes toward authority held by various groups of elementary school children. Also assessed were the students' perceptions of their peers' and parents' attitudes toward authority. The information so-gained is of importance in understanding the authority question, as well as in the future development of strategies for attitudinal improvement and the democratization of authority.

The assessment of student attitudes toward authority necessitates a consideration of many variables. Specifically, this study investigated the relative importance of public and parochial schooling in this regard. But the relative importance and merits of public and parochial schooling is a primary issue in its own right since the latter form of education finds its continued existence threatened.

The second major purpose of this study was to provide
specific input into this very large question of the value of parochial school education. Specifically, the attitudes toward authority (as represented by teachers, principals and police) held by public and parochial school students were assessed, analyzed and compared.

The two major purposes of this study were addressed by assessing student attitudes in the Christian, Catholic and public school systems. Variables controlled, either by means of the research design or by specific items in the test instrument, included the following:

1. School attended: Christian, Catholic or public;
2. Dogmatism;
3. Sex;
4. Length of attendance;
5. Regularity of student church attendance;
6. Religious affiliation;
7. Socio-economic status;
8. Regularity of parental church attendance and,
9. Age.

Three schools were selected for study, one from each of the previously mentioned systems. Selection of these specific schools was done on the basis of geographic location and similarity in the socio-economic backgrounds of their respective clientele. Within each school, sixth grade students were chosen for study. These students were administered, in a group setting, the test instrument which consisted of three parts: The Elementary School Form of the Dogmatism Scale, a set of biographical questions, and those questions designed to assess student attitudes toward authority and student perceptions of parental and peer attitudes toward authority. Five different summary statistics or indices were computed for each student to assist in the analyses of the data obtained. Parametric procedures were used in these analyses.
The first research hypothesis was not supported. Computations failed to reveal a significant difference between high dogmatic students and low dogmatic students in their attitudes toward authority.

The second research hypothesis was partially supported. Parochial school students registered more favorable attitudes toward authority than did public school students. However, when dogmatism was controlled this was not always true.

The third research hypothesis was partially supported. Both Catholic and public school students perceived their peers to have less favorable attitudes toward authority than they themselves registered. However, students in all three schools perceived their parents to have more favorable attitudes toward authority than they themselves registered.

The fourth research hypothesis was not supported. Computations failed to reveal a significant difference between students who were regular in church or Sunday School attendance and students who were not regular in church attendance in their attitudes toward authority.

Discussion of Findings

Dogmatism and authority

The initial major finding of the present research was that students scoring high in dogmatism and students scoring low in dogmatism were not found to differ significantly in their attitudes toward authority. This proved to be true for each of the three samples: Christian, Catholic and public school. This finding does not support Hypothesis One. Further, it conflicts with previous research in the area. For example, C. Gratton Kemp (1963) found that high dogmatic students tended to idealize authority. They were not discriminating in their perceptions and were inclined to endow an authority with the qualities which match their stereotype of expectancy for the situation. On the other hand, low dogmatic students were more realistic in their perceptions of...
authority figures, recognizing both the positive and the negative qualities of the people involved.

This present finding also conflicts with results noted by Larsen (1968) in his study of attitudes toward police. He found large positive correlations between degree of dogmatism and attitudes toward police.

Though not entirely satisfactory, a partial explanation of these conflicting results is to be had in the different research settings. Kemp and Larsen investigated the attitudes of students in college classes. The present research involved sixth grade students. Another partial explanation of the differing results may lie in the differing instrumentation necessitated by the age level of the students. The ordinary Dogmatism Scale was used in the research of Kemp and Larsen while The Elementary School Form of the Dogmatism Scale was used in the present research.

Public versus parochial schools

The second major finding of the present research was that parochial school students did indeed register more favorable attitudes toward authority than their public school counterparts. However, further explanation is required here since this finding does not necessarily imply that the respective schools were responsible for these differing attitudes.

Initially an analysis of variance was performed on the Attitudes Toward Authority (ATA) means of the Christian, Catholic and public school groups. It was found that the three group ATA means could not be considered equal, where F = .0494. A post hoc analysis showed that the Christian school students had significantly more positive attitudes toward authority than the public school students. Computations failed to reveal a significant difference between the scores of Catholic school students and public school
students, though the mean of the former group was larger.

The same analysis of variance and post hoc analyses were performed on the Attitudes Toward Teacher (ATT) means. Identical results were obtained. As explained in Chapter III, Attitudes Toward Teacher scores are based on seven questions which investigate student attitudes toward teachers and principals. These same seven questions are combined with seven other questions which investigate attitudes toward police to form the Attitudes Toward Authority (ATA) scores.

After these initial analyses, an analysis of variance was performed on the mean dogmatism scores of the Christian, Catholic and public school student groups. Computations failed to reveal significant differences in dogmatism among the three groups.

Most interesting and revealing were the analyses which tested the significance of the differences in Attitudes Toward Authority (and Attitudes Toward Teachers) scores among the three schools while simultaneously controlling for dogmatism. To accomplish this, the analysis of covariance technique was used, with dogmatism being the covariate.

The Attitudes Toward Authority scores were used first. It was found that when dogmatism was being controlled, computations failed to reveal significant differences between the parochial and public school students in their Attitudes Toward Authority. Thus dogmatism proved to be a rather important variable with which to contend.

Next, the Attitudes Toward Teachers scores were used. Here it was found that when dogmatism was being controlled there were still significant differences between the parochial and public school students in their Attitudes Toward Teachers. Parochial students still had the more favorable attitudes.

One explanation of these differing results may be had in the different scores used: the Attitudes Toward Authority scores and the Attitudes Toward Teachers scores. Since

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the former contains questions which probe attitudes toward teachers and police, it may be that such a composite score tends to obscure the issue and indeed the results. This suggests the importance of carefully delimiting the interpretation given to authority in further research. These results also suggest that it is hazardous to attribute differing attitudes toward authority to the school a student attends if one does not take into account certain key variables, not the least of which is dogmatism. Other variables which were eliminated in this study through the research design but which also must be given attention in studies of this nature include race, achievement, and socio-economic status.

In conclusion it seems that parochial school education had some effect on student attitudes toward authority in the direction of making them more positive. How does this compare with previous findings? The major and significant studies of the effectiveness of parochial school education have not usually considered attitudes toward authority. Greeley and Rossi (1965) found significant relationships between Catholic education and religious behavior. Fichter (1958) found that the greatest difference between the parochial school and public school studied was that students of the parochial school explained their attitudes most often with religious and supernatural reasons. However, these were not attitudes toward authority that were studied. Erickson in 1962 found that sectarian education was no more conducive to religious development than is public education. One study quite relevant to the present study was done by Dingman (1969). In his investigation of attitudes toward police in the Protestant, Catholic, and public schools, he found that parochial school student attitudes were more positive than public school student attitudes. However, these differences could be explained by differences in race, parental occupational status, prior police contact and other variables.
Dogmatism, though, was not considered. Thus no research to date has provided quite the same results as the present study.

Peer and parental attitudes

The third set of findings of the present research concern student perception of peer and parental attitudes. It was found that both Catholic and public school students perceived their peers to have less favorable attitudes toward authority than they themselves registered. Christian school students perceived their peers to have attitudes toward authority similar to their own. Students in all three schools perceived their parents to have more favorable attitudes toward authority than they themselves registered.

Thus it appears in general that students perceive their parents' attitudes as being more positive than their own, while they view their peers' attitudes as being less positive than their own. As a result they have placed themselves in the middle between the two.

These findings both agree and disagree with previous related research. For example, Williams (1969) conducted a questionnaire survey in various public schools in Michigan at a variety of grade levels. He found that adolescents expressed attitudes toward the police which were very similar to their perceptions of their parents' attitudes. This disagrees with the present finding. However, he also found that students felt that their friends had considerably more antagonistic attitudes toward the police than they themselves had. This agrees with the present research.

The question of why students perceived their parents in a more favorable light, and why students perceived their friends in a less favorable light is intriguing. The present research does not propose to answer these questions, but speculation is possible.

Students perceiving their friends as having less
favorable attitudes than their own may simply be a case of people having a holier-than-thou tendency to attribute worse traits to others than to themselves. It may be a case of an unconscious projecting of one's own negative attitudes onto others (see Dingman, 1969). There is also the possibility that some of the students, despite the guaranteed anonymity given them, did not wish to admit in writing that perhaps their attitudes were as negative or even more negative than the attitudes of their friends. This would appear quite likely so since the data indicated that the peers of the respondents almost always were attributed the less favorable attitudes. Since friends were involved together in answering the questionnaire, logically it may be concluded that not all student respondents could have been accurate in their perceptions of their friends' attitudes. Whatever the case, further research would be of interest here.

Students perceiving their parents as having more favorable attitudes than their own raises several questions. Do students simply tend to idealize their parents? How unrealistic are they being? Or were the respondents attempting to portray their parents in a better light for the benefit of whoever was going to read their responses? Taking the most devious of positions, is it possible that students had a need to balance out the negative attitudes they attributed to friends with positive attitudes which they attributed to their parents? In other words, if the holier-than-thou explanation is an adequate one, then possibly students perceived a limit to their own holiness. At any rate, the placement of themselves in a safe middle position between the attitudes of peers and parents is deserving of further attitudinal and psychological research.

Church attendance

The fourth major finding was that students who were
regular in church or Sunday School attendance did not register more favorable attitudes toward authority than those students who were not regular in attendance. The actual number of students who indicated that they did not attend regularly in any of the samples was quite small. For this reason the analysis was performed on the total sample only. Even here, only eleven students of a total of ninety-eight (11.2%) responding to the question indicated they did not attend church or Sunday School regularly. Regardless, the means of the two groups were remarkably identical (see Table 17).

This finding does not agree with previous research. Jones (1960) found church attendance to be one of the most important environmental factors in attitude formation and character development. Meier (1952) found the general principle of conditioning to be of great importance in the development of attitudes and character. Certainly conditioning in the form of regular church attendance would be expected to be of some utility in the development of favorable attitudes toward authority. Clark and Wenninger (1964) found that attitudes toward authority were related to the adjustment of juveniles to other authority situations, namely the school and family. Regular church attendance on the parts of students and their parents would tend to indicate that the adjustment mentioned by Clark and Wenninger had been made at least in part, thus making favorable attitudes toward authority more likely. In another police-related study, Bouma (1969) very clearly found that students who usually went to church or Sunday School had a considerably more favorable attitudes toward the police than those who did not.

Once again, the present finding raises more questions than were answered. Assuming that the students were accurate in their responses, would the results imply that church-going and whatever goes with it had little effect in the direction
of improving their attitudes toward authority? If this is the case, then one of the common goals of the churches involved is not being met with their youth. At this point it will be recalled that developing a respect and a positive attitude toward authority was one of the greatest emphases of the churches involved.

However, if certain students were inaccurate in their responses then it may be the case that the respective churches were meeting their goal of developing respect for, and a positive attitude toward authority. This possibility cannot be ruled out since despite a guaranteed anonymity, certain students may not have wished to admit in writing that they did not attend church regularly. If this is true, it may possibly be said that church-going is recognized by these students as something recommendable.

Secondary findings

Secondary analyses were performed on the Attitudes Toward Authority (ATA) scores while taking into account the following variables: sex, religious affiliation, socio-economic status and frequency of parental church attendance. Finally, several analyses were performed to find out the relationship between the students' attitudes toward teachers and their attitudes toward police. The results of these analyses are summarized and discussed below.

The sex of the respondent evidently made no difference in the resulting Attitudes Toward Authority score. Further, no patterns or trends were observed in the various samples. Christian school females registered more favorable attitudes toward authority than their male counterparts, whereas the results were reversed in the Catholic and public schools. It must be noted that none of these differences in any of the schools were significant, thus implying that they could have occurred by chance.
Previous research relative to the effect of sex on attitudes toward authority generally indicates that sex is an important variable to consider. And it is the females who have the more positive attitudes toward authority (for example, see Formanek and Woog, 1970; Dolan, 1960; Bouma, 1969; Portune, 1966; etc.). One exception to this body of research is the work of Larsen (1968) who noted large correlations between dogmatism and attitudes toward police, but no differences based on sex. The present research agrees with Larsen's finding on the effect of sex, but not with his dogmatism findings.

Regarding religious affiliation, computations failed to reveal significant differences among the four categories: Christian Reformed, Other Protestant, Catholic and Jewish (no students indicated that they were Jewish). For this analysis, the analysis of variance technique was used. It is interesting to note, though, that the difference in the mean Attitudes Toward Authority scores of the Christian Reformed and Other Protestant groups was great (the Christian Reformed students had more favorable attitudes toward authority). Had the hypothesis been made beforehand that a difference would exist, then a test on these two means would have indicated a significant difference. However, it is statistically unacceptable to examine a set of means for differences after the intended analysis and then to draw conclusions. The reason for this is that probability would dictate that as the number of means to consider increases, so does the probability that at least one significant difference between two of the means would occur. Thus no responsible conclusions could be drawn in this way. On the other hand, further research could be directed toward a discovered discrepancy in means which seems suspicious to the investigator. In this case, the attitudes toward authority of Christian Reformed and Other Protestant students might be profitably explored.
Computations failed to reveal significant differences between the high and low socio-economic groups in their attitudes toward authority. And once again, no trends were to be noted. Public school students in the high socio-economic group had a slightly higher Attitudes Toward Authority mean score than the low socio-economic group whereas the situation was reversed in the Christian and Catholic schools.

This finding does not agree with a number of other studies, all of which indicate that as socio-economic status increases, so does the favorableness of the attitudes toward authority (see Formanek and Woog, 1970; Casey, 1966; Bouma, 1969; Chapman, 1953; Clark and Wenninger, 1964; etc.). One possible explanation here might lie in certain precautions which were taken to guarantee anonymity of the respondents. Students were simply asked to describe their parents' occupation, and to tell what he or she did on the job. The actual place of employment was not asked for. Since individual students were not identified, no other means were available to help pinpoint socio-economic status. Further research focusing on socio-economic status would be of interest, especially where attitudes toward a variety of authority figures would be taken into account.

Parental church attendance was not found to be a determining variable in student attitudes toward authority. Once again, there were no discernible trends among the Christian, Catholic and public school samples. Students who reported that their parents attended church regularly did not differ significantly from students whose parents did not attend regularly. Indeed, the mean Attitudes Toward Authority score of students with parents who attended church regularly was slightly lower than for the other group. As was the case with regularity of student church attendance, very few students indicated that their parents did not attend church regularly (16%). Thus, commentary must be cautious.
On the basis of previous research the model and reinforcement provided by parents could reasonably be expected to influence the child's attitudes toward authority. Greeley and Rossi (1966), for example, indicate that the relationship between Catholic education and religious behavior is strongest among those with very religious family backgrounds. Hooley (1974) concluded that it would appear that church-related schools are most effective with students from religiously supportive homes and least effective with students from marginal or indifferent homes. Due to the small number of students indicating that their parents did not attend church regularly, further research would be in order here.

The final secondary analyses performed were aimed at discovering whether or not student attitudes toward teachers (ATT) were related to their corresponding attitudes toward police (ATP). The first of these analyses failed to reveal any significant differences between the two sets of scores. However, this initial analysis provided no indication of the strength of the relationship between the two. For this reason, Pearson Product-Moment Correlation Coefficients ($r_{xy}$) were calculated.

In the Christian school sample, it was found that there was a fairly strong direct relationship between attitudes toward teachers and attitudes toward police ($r_{xy} = .73$). In slight contrast with this was the finding that in the Catholic and public school samples there was but a weak to moderate relationship between the Attitudes Toward Teachers and Attitudes Toward Police scores ($r_{xy} = .37$ in both cases).

Since these analyses were performed on composite scores (the Attitudes Toward Teachers and Attitudes Toward Police scores are each based on seven questions), it may be that interesting responses to individual questions were being obscured. For this reason responses to individual questions were considered by calculating percentages for these
questions (see Tables 31 and 32). In all three schools it was found that the percentage of students who thought that police were pretty nice people was higher than the percentage of students who thought that teachers were pretty nice people. On the other hand, the data indicate that in all three schools the percentage of students who thought that being a teacher was a good job for an intelligent person was higher than the corresponding percentage for being a policeman.

Several other questions were of interest. In response to the questions whether or not teachers (police) were always picking on the person who has been in trouble before and are teachers (police) mean, no great differences were noted. Teachers and principals fared equally well in the Christian school sample. In the Catholic and public school samples, attitudes toward police proved to be slightly more positive than the corresponding attitudes toward teachers and principals.

These results generally confirm previous research on the topic. Bouma (1969) found that in almost every area, students thought school personnel to be less fair than the police. However, students regarded teaching more highly than police work. Dingman (1969) also noted that teaching was held in higher regard than was being a policeman. These findings once again point out the importance of carefully defining authority in studies of attitudes toward authority. Any ambiguity in source of authority must be completely eliminated in studies of this nature.

Limitations of the Present Study

Limitations may be noted in any research study and the present effort is no exception. One such limitation is the fact that certain interactions between and among variables could not be tested due to insufficient n's in the categories.
in question. For example, it was not possible to test the interactive effects of student church attendance and religion on attitudes toward authority, or the interactive effects of perception of parental attitudes and parental church attendance on student attitudes toward authority and so on. As the interactions become more involved, including an increase in the number of independent variables, the sample selection process becomes more and more difficult. The sample used in the present study was not of sufficient scope to allow the testing of such interactions.

Another limitation involves a portion of the test instrument. The Elementary School Form of the Dogmatism Scale is a relatively new test instrument (Figert, 1965, 1968). The Rokeachian Dogmatism Scale, by way of contrast, was initially developed in the early 1950's and has been revised, refined and much-used since then. However, the adult form of the scale not being suitable for sixth grade youngsters required the use of the less-tested Elementary School Form of the Dogmatism Scale.

Another limitation in this as well as in any attitude study is that attitudes alone are being investigated, not behavior. A definite relationship between attitudes and behavior cannot be claimed. That there is often a discrepancy between attitudes and behavior is reported by Berelson and Steiner (1964) in their review of a number of studies. However, a relationship does seem to exist between behavior and the level of moral judgment of a student (Kohlberg, 1964). Moral judgment is, in turn, related to attitudes. The conceptual linkage involved here is involved, though, and the present research was not aimed at clarifying this.

Finally, the question of whether or not parochial schools are being effective in reaching their goal of instilling positive attitudes toward authority certainly.
cannot be completely answered by the present research. Since a variety of variables are involved here, the present study can only be said to be providing input into this problem area.

Conclusions

Introduction

As previously mentioned, general conclusions can be had only with care in a study of this nature. The reason for this is that the sample was not randomly selected and thus the results are not automatically generalizable. That which it is possible to conclude will be discussed with and related to the two central purposes of the present research. Since specific results and ideas for further research have already been presented they will not be repeated here.

The question of authority

The first broad purpose of this study was to investigate the attitudes toward authority held by various groups of elementary school children while taking into account the psychological construct of dogmatism. It has been concluded that dogmatism is indeed a significant variable relative to student attitudes toward authority, and that authority must be clearly and carefully delimited in any such discussion. The differing results obtained in the testing of Hypothesis Two when the ATA score (Attitudes Toward Authority) was used as opposed to the ATT score (Attitudes Toward Teachers) provide ample evidence of the need for such delimitation.

Indeed, the whole question of authority is one of considerable complexity. Initially, a distinction must be made between true respect for authority and mere submission to sources of authority. The series of investigations of Stanley Milgram (1965) highlight this distinction by
providing many examples of people being blindly submissive to authority. He found that otherwise decent people were readily seduced into performing harsh and cruel acts by the uncritical acceptance of authority. The results he termed disturbing:

The results, as seen and felt in the laboratory, are to this author disturbing. They raise the possibility that human nature, or—more specifically—the kind of character produced in American democratic society, cannot be counted on to insulate its citizens from brutality and inhumane treatment at the direction of malevolent authority. A substantial proportion of people do what they are told to do, irrespective of the content of the act and without limitations of conscience, so long as they perceive that the command comes from a legitimate authority (Milgram, 1965: p. 75).

But it is not this kind of acceptance of authority with which this research was concerned, and it is not the kind of acceptance of authority which is the goal of the various school systems. A true respect for authority presupposes a critical attitude and a certain maturity in the person in the authority-acceptance situation.

Strategies for helping to bring about respect for authority need to be developed in the educational setting. A step in this direction has been made by Neumann (1965) in his development of the "Authority Justification" categories. The strategy he developed originally necessitated the use of individual interviews, but he suggested an adaptation for classroom use. Quite interestingly, his categories of levels of reasoning are not unrelated to Kohlberg's moral judgment categories. Unfortunately, little else seems to have been done in the area of developing practical strategies for classroom use.

The question of parochial schools

The second broad purpose of this study was to provide specific input into the very large question of the relative
value and merits of parochial school education. It has been found that parochial school students have attitudes toward authority which are more favorable than the corresponding attitudes of the public school students, but that these differences can be explained, in part, by the degree of dogmatism of the respondents. Thus, the one goal that seems to be a common denominator of the many vague statements of parochial school goals, developing respect for authority, is being met only to a degree.

As mentioned before, one of the significant problems involved in assessing the efficacy of parochial school education has been the lack of agreed upon specific goals and objectives. In the case of the Catholic schools:

Educational needs must be clearly identified; goals and objectives must be established which are simultaneously realistic and creative; programs consistent with these needs and objectives must be designed carefully, conducted efficiently and evaluated honestly.

(National Conference of Catholic Bishops, 1971: p.38)

And in the case of member schools of the National Association of Christian Schools, Hautt found that "these schools do not have behavioral objectives regarding religious practices, beliefs and concomitant attitudes." (Hautt, 1971: p.2). Thus effective and helpful assessment of parochial schools is difficult.

In the present research only limited support was found for the supposed greater efficacy of parochial school education in this area of attitude development. If such lukewarm results are obtained relative to other parochial school goals, then the case for the continued existence of these schools is not strong. On the other hand, overwhelming results in the favor of parochial schools are not necessarily a prerequisite to the continued existence of these schools. Paraphrasing an example given by Greeley and Rossi (1968) one should not say, for example, "Do parochial schools take
young people from families and neighborhoods where there is a long tradition of racial prejudice and turn all of these students into staunch integrationists?" The answer is obvious: they do not and cannot, and neither can any other human institution of which we are aware. The relevant question is this: Is there any difference in the racial and other attitudes of those who went to parochial schools and those who did not? If a difference exists, is it big enough to warrant the effort to produce it? Are there any other institutions that could have done a better job in changing such attitudes?

In the answering of these questions, sentiment must give way to reason. It is hoped that the present research makes this more likely.
## APPENDIX A

Questionnaire Responses of Students in Christian Reformed, Catholic and Public School Samples*

<table>
<thead>
<tr>
<th>Item</th>
<th>Christian</th>
<th>Catholic</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Do you think that teachers and principals treat all pupils alike?</strong>&lt;br&gt;YES</td>
<td>44</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>52</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2. <strong>Do you think that teachers and principals treat Black and White pupils alike?</strong>&lt;br&gt;YES</td>
<td>80</td>
<td>68</td>
<td>27</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>12</td>
<td>25</td>
<td>57</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>8</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>3. <strong>Do you feel that teachers and principals treat rich and poor pupils alike?</strong>&lt;br&gt;YES</td>
<td>96</td>
<td>59</td>
<td>67</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>4</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>0</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>4. <strong>Do you think that teachers and principals are pretty nice people?</strong>&lt;br&gt;YES</td>
<td>80</td>
<td>68</td>
<td>63</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>0</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>20</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>5. <strong>Do you think that being a teacher is a good job for an intelligent person?</strong>&lt;br&gt;YES</td>
<td>52</td>
<td>84</td>
<td>77</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>24</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>24</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>6. <strong>Do you think that teachers and principals are always picking on the person who has been in trouble before?</strong>&lt;br&gt;YES</td>
<td>24</td>
<td>41</td>
<td>47</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>68</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td><strong>NOT SURE</strong></td>
<td>4</td>
<td>20</td>
<td>7</td>
</tr>
</tbody>
</table>

* Figures in table represent percentage of students responding to the question. Totals do not always add up to 100 due to rounding off.
<table>
<thead>
<tr>
<th>Item</th>
<th>Christian</th>
<th>Catholic</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Do you think that teachers and principals are mean?</td>
<td>YES 12</td>
<td>18 20</td>
<td>NO 76</td>
</tr>
<tr>
<td>8. Do you feel that policemen treat all people alike?</td>
<td>YES 60</td>
<td>48 23</td>
<td>NO 28</td>
</tr>
<tr>
<td>9. Do you think that the police treat Black and White people alike?</td>
<td>YES 72</td>
<td>59 63</td>
<td>NO 28</td>
</tr>
<tr>
<td>10. Do you feel that policemen treat rich boys and girls the same as poor ones?</td>
<td>YES 80</td>
<td>75 70</td>
<td>NO 16</td>
</tr>
<tr>
<td>11. Do you think that policemen are pretty nice people?</td>
<td>YES 88</td>
<td>86 83</td>
<td>NO 0</td>
</tr>
<tr>
<td>12. Do you think that being a policeman is a good job for an intelligent person?</td>
<td>YES 36</td>
<td>73 67</td>
<td>NO 32</td>
</tr>
<tr>
<td>13. Do you think that police are always picking on the person who has been in trouble before?</td>
<td>YES 24</td>
<td>34 37</td>
<td>NO 68</td>
</tr>
<tr>
<td>14. Do you think that the police are mean?</td>
<td>YES 12</td>
<td>9 13</td>
<td>NO 80</td>
</tr>
</tbody>
</table>

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Dear Parents:

In about ten days, your sixth grade child will have the opportunity to express his or her opinions of two important groups of people: teachers and police. This will be part of an attitude survey being done in conjunction with the Office of Curriculum Planning and Evaluation of the Grand Rapids Public Schools. The purpose of the study is (1) to find out what attitudes toward authority sixth grade boys and girls do hold, and (2) to discover ways for teachers to help improve these attitudes.

This survey of opinions will take 20 minutes of your child's time and will be administered to the class as a whole by a trained university tester. The only concern is with group scores and averages. Thus your child will not be allowed to put his or her name on the paper. Complete anonymity and confidentiality is guaranteed. If the project is successful, future students will stand to benefit from knowledge gained from your child's participation.

Before the fact we thank both you and your child for your cooperation. If you have any questions or reservations, please feel free to call Bill Reaves, Office of Curriculum Planning
and Evaluation, at 456-4967. Thank you very much.

Sincerely,

Stan Fortuna, Jr., Researcher
Western Michigan University

SF:jg
Youth are an important part of American communities. Much has been said about youths and teachers and police. However, very little is known for sure about how youth feel about teachers and police.

Western Michigan University is interested in what people, like yourself, think about teachers and police. Your thoughts are very important to us. By answering the questions in this survey, you can help us find out more about what young people think.

Remember:

1. Since we are interested in your responses, and not in who you are personally, do NOT put your name on these sheets.
2. There are no right or wrong answers. Just put down the answer you think is best.
3. Please do not skip any questions.
4. No one in this school will ever see your answers.
1. Do you think that teachers and principals treat all pupils alike? Yes__ No__ Not sure__
2. Do you think that teachers and principals treat Black and White pupils alike? Yes__ No__ Not sure__
3. Do you feel that teachers and principals treat rich and poor pupils alike?
4. Do you think that teachers and principals are pretty nice people?
5. Do you think that being a teacher is a good job for an intelligent person?
6. Do you think that teachers and principals are always picking on the person who has been in trouble before?
7. Do you think that teachers and principals are mean?
8. Do you feel that policemen treat all people alike?
9. Do you think that the police treat Black and White people alike?
10. Do you feel that policemen treat rich boys and girls the same as poor ones?
11. Do you think that policemen are pretty nice people?
12. Do you think that being a policeman is a good job for an intelligent person?
13. Do you think that police are always picking on the person who has been in trouble before?
14. Do you think that the police are mean?
15. Do your friends think that teachers and principals treat all pupils alike?
16. Do your friends think that teachers and principals treat Black and White students alike?
17. Do your friends feel that teachers and principals treat rich boys and girls the same as poor ones?
18. Do your friends think that teachers and principals are pretty nice people?
19. Do your friends think that being a teacher is a good job for an intelligent person?
20. Do your friends think that teachers and principals are always picking on the person who has been in trouble before?
21. Do your friends think that teachers and principals are mean?
22. Do your parents think that teachers and principals treat all pupils alike?
23. Do your parents feel that teachers and principals treat Black and White students alike?
24. Do your parents think that teachers and principals treat rich students the same as poor students?
25. Do your parents think that teachers and principals are pretty nice people?
26. Do your parents think that being a teacher is a good job for an intelligent person?
27. Do your parents think that teachers and principals are always picking on the person who has been in trouble before?
28. Do your parents think that teachers and principals are mean?

Some things about yourself:
1. Age:
2. Boy: ___ Girl: ___
3. How many years have you gone to this school? ___
4. Do you usually go to church or Sunday School? Yes ___ No ___
6. What job does your parent or guardian have? _____________
   Describe what he or she actually does on the job: _____________
7. Do your parents usually go to church on Sunday? Yes ___ No ___
1. Some people are always for what is true. Everyone else is always against what is true.
   [Yes] [No] [Not Sure]

2. We must believe what important people say. If we don't, then we will not know what is going on in the world.
   [Yes] [No] [Not Sure]

3. Sometimes I start talking before someone else is done because I must tell what I have to say.

4. I just cannot stop when I talk with people who do not see things like I do.

5. Most people just do not care about others.

6. It is not good to read books that get your thoughts about things mixed up.

7. It is wrong to give in any to those who think different people should run our country.

8. Some ways of thinking are really the same even though people try to tell you they are different.

9. We should not listen to people who just try to change our minds.

10. People know more about things they believe in than things they believe in than things they are against.

11. People are selfish if they think first about their own happiness.

12. I must make myself do a lot of things that I need to do.

13. By saying things over and over you can be sure people know what you mean.

14. Many things in books are not worth being there.

15. People who think about themselves first are terrible.

16. Most people seem smart enough. Even so, groups do dumb things at times.

17. There is so much to do and so little time to do it in.

18. Most people just do not know what is good for them.

19. People must take chances if they really want to do big things.
20. It seems like many people I talk to do not really know about the good and bad things that are going on in the world.

21. It does not matter much if you are not happy now. It is what will happen in years to come that counts.

22. Most people seem to have odd ideas about a lot of things.

23. When people are mad, they often bring up things that do not have much to do with what they are mad about.

24. It is bad to make people do things. Yet, often, this is the only way to help the world.

25. I am sure people talk about me.

26. Sometimes we must make people do things we know are good for them.

27. People who will never say they are wrong make me mad.

28. It is better to be a dead hero than a live "chicken."

29. Farm people and city people think about most things in different ways.

30. Thinking about what might happen makes people afraid.

31. Many times I do not listen to what people are saying because I am thinking of what I will say next.

32. People who do not believe in something important do not have much of a life.

33. People get the most out of life only when they try hard to do what they think is best.

34. I would like it if someone would tell me how to take care of my problems.

35. People do not say much about it, but they are thinking about how they can become great.

36. We have a good way of running our country. Even so, it would be better if we let only smart people do it.

37. Most people seem to find things wrong with what others think.

38. If people knew what I really thought, they might not
like me.
39. It is best to find out what smart people say about something before you say anything yourself.
40. If people had the chance, they would do something great to help the world.
41. People seem to think that most of the things they do are bad.
42. Things are really bad when someone talks against people who think the same as he does.
43. We are going against our own side if we listen to what the other side says.
44. Life is terrible if people do not have help.
45. People should not try to work together if they believe different things.
46. It would be better if we could go back to the way things were in the good old days.
47. It seems like people I do not even know are always looking for the bad things in me.
48. There are many ways to think about things in this world.
49. At times I think I am no good at all.
50. I cannot stand some people because of the way they think about things.
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