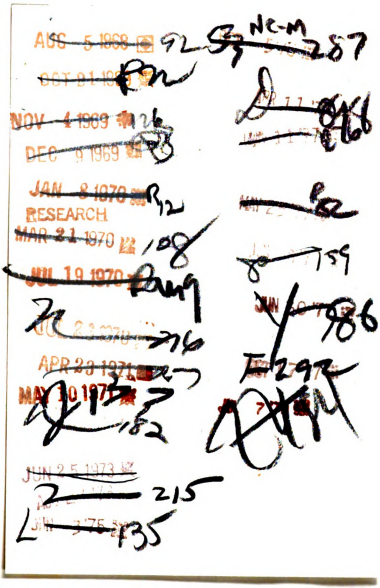
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ABSTRACT

AN ANALYSIS OF ATTITUDES TOWARD EDUCATION, THEOLOGICAL ORIENTATIONS, INTERPERSONAL VALUES, AND EDUCATIONAL EXPERIENCE

by John T. Dean

The task of this dissertation was the exploration of the relationships between attitudes toward education, theological orientations, interpersonal values, and educational experience.

From the 81 colleges affiliated with the Council for the Advancement of Small Colleges (CASC) and the 55 colleges affiliated with the Accrediting Association of Bible Colleges (AABC), 26 were chosen for the sample. Each academic dean of the sample schools was asked to administer (group) a 29-page research instrument to his entire faculty. The results from four hundred and twenty-three satisfactorily completed sets-of-instruments were analyzed. The instruments, designed to measure attitudes, values, theological orientation, contact with education, change orientation, and various demographic characteristics, consisted of (a) Kerlinger's Attitudes-Toward-Education Scale, (b) Toch and Anderson's Religious Beliefs Inventory, (c) Personal Questionnaire (specifically designed for this study), and (d) the Gordon Survey of Interpersonal Values.

The theoretical framework of the present research was mainly social-psychological, specifically relating educational attitudes with interpersonal values, theology, and contact variables such as frequency,

enjoyment, and rewarding alternatives. In keeping with this theoretical orientation, twelve hypotheses were formulated under five major categories: (a) the scale properties of the attitudes-toward-education items; (b) the relationship between contact frequency and attitude scores; (c) the relationship between interpersonal values and attitudes toward education; (d) the relationship of religious variables with attitudes toward education and interpersonal values; and (e) the relationship between type of school and attitudes toward education.

The hypotheses were tested by means of Multiple Scalogram Analysis (Lingoes, 1963), two-way analysis of variance, and multiple and partial correlation. A 70 variable zero-order correlation matrix was secured for the entire group, males, females, CASC educators, AABC member educators, and AABC associate member educators.

A major problem in this study was differentiating between the amounts of contact educators have with education. Nevertheless, the present research has confirmed, in general, the impact of personal contact in the maintenance of favorable attitudes toward education. A more accurate means of measuring contact might have resulted in a complete acceptance of the hypothesis concerning the relationship between contact and favorable educational attitudes. The three contact variables which could also be interpreted as "knowledge" variables were better predictors of favorable attitudes toward education than the three "true" personal contact variables. In all six cases, the contact variable itself contributed more to the multiple correlation than either the enjoyment-of-education or the alternative-rewarding-opportunities. In other words, contact was a better predictor of the criterion than either of the other two variables.

Although the data were inconclusive, contact does appear to increase the intensity of a person's attitude toward education. Some of the "true" personal contact variables as well as some of the "knowledge" contact variables correlated significantly with the intensity scales.

It was hypothesized that those who scored high on progressive-attitude-toward-education (ATEP) would be characterized by asset value orientation rather than by a comparative value orientation. The Benevolence sub-scale of the Gordon Scale of Interpersonal Values was used as a measure of asset value orientation while the Leadership and Recognition sub-scales were employed to measure comparative value orientation. However, the analysis of the data did not support these hypotheses.

It was also hypothesized that those liberal in theology would score higher on Benevolence and lower on Leadership and Recognition than those conservative in theology. The data failed to support this hypothesis. On the contrary, conservatives were significantly higher on asset value orientation.

Although there were no significant differences between the minister-and-non-minister professors in regard to attitudes toward education, liberals did score significantly higher on progressive-attitude-toward-education (ATEP) and lower on traditional-attitude-toward-education (ATET) as was hypothesized.

Those teaching in Bible-Theology and related areas in contrast to other teaching areas and those in schools affiliated with the AABC in contrast to CASC educators did score significantly lower on the ATEP

scale. These groups, however, produced no significant difference on the ATET scale.

Through observation of the results of the zero-order correlational analysis between seventy variables, many other interesting and significant relationships were discovered and tested further with analysis of variance. Among them were the following: (a) the older professors scored significantly higher than the younger on Conformity value; (b) liberals in theology were measured significantly higher on amount of education and Independence value and lower on Conformity value than conservatives; and (c) AABC educators were significantly more theologically conservative than were CASC educators.

The present research raised many questions regarding attitudinal studies. A major problem is the development of attitude instruments which scale according to Guttman's definition of scaling. It was recommended that Guttman-Lingoes Scale Analysis (MSA-I), which allows for multidimensional analysis of data in addition to multi-unidimensional analysis, be used in future studies.

Although several specific hypotheses remain clearly unsubstantiated in this study, it does not necessarily warrant rejection of the theoretical framework. However, the results do point out the necessity of a more rigorous test of the theoretical propositions, particularly by means of an improved research design, more adequate measuring instruments, and more appropriate statistical techniques. Further studies on attitudes must recognize the postulated multidimensionality and complexity of attitude composition. When these technical problems are surrounded, perhaps it will then be possible to derive a

meaningful and predictable relationship between specific attitudes toward education, contact, values, and other postulated interactive variables.

This research is related to a comprehensive study under the direction of Dr. John E. Jordan, of the College of Education, Michigan State University. Samples have been drawn from the United States, Belgium, Denmark, England, France, Holland, Japan, Yugoslavia, Peru, Columbia, and Costa Rica. Other nations will be used later.

AN ANALYSIS OF ATTITUDES TOWARD EDUCATION, THEOLOGICAL ORIENTATIONS, INTERPERSONAL VALUES, AND EDUCATIONAL EXPERIENCE

By

John T. Dean

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PREFACE

This study is one in a series, jointly designed by several investigators as an example of the concurrect--replicative model of cross cultural research. A common use of instrumentation, theoretical material, as well as technical, and analyses procedures was both necessary and desirable.

The authors, therefore, collaborated in many respects although the data were different in each study as well as certain design, procedural, and analyses approaches. The specific studies are discussed more fully in the review of literature chapter in each of the individual investigations.

ACKNOWLEDGEMENTS

I wish to express my appreciation to the members of the Advisement Committee for this dissertation. Dr. F. L. Erlandson, Dr. Carl Gross, and Dr. Alfred G. Dietze provided encouragement and advisement, as well as a willingness to support this type of a project. Thankfulness is also expressed to Dr. George Barnett who substituted for Dr. Carl Gross on the final oral examination. My greatest gratitude is to Dr. John E. Jordan, the committee chairman, who has shown great interest in and given constant encouragement toward the completion of this research project.

Gratitude is also expressed to Dr. John Mostert, Executive Secretary of the Accrediting Association of Bible Colleges, and to Dr. Alfred T. Hill, Executive Secretary of the Council for the Advancement of Small Colleges. These men strongly urged the schools associated with their organizations to participate in this research project. Gratitude is also expressed to the colleges and faculty members who did participate.

I want to thank Miss Evlyne Beyer and Miss Maureen Mather for efficient and accurate scoring of the raw data and Miss Susan Speer for computer programming and processing assistance. I am particularly indebted to Miss Maureen Mather who has from the very beginning done the secretarial work, including the typing of letters, mimeographing of instruments, mailing of packages, and typing of the proposal and dissertation.

I also wish to express my indebtedness to the official Board of Grace Bible College for its granting to me a year of sabbatical leave and to the President of the College, Rev. Charles F. Baker, who showed kindness and understanding in arranging my schedule to allow frequent visits to Michigan State University.

I owe a large debt to my wife, Ann; my daughter, Kathy; and my sons, Jack, Dan, and Bob. Their interests and pleasures were often denied. Their patience and understanding are commended.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

Values are regarded as important sources of attitudes and prejudice. Allport comments:

> The most important categories a man has are his own personal set of values. He lives by and for his values . . . evidence and reason are ordinarily found to conform to them . . . the very act of affirming our way of life often leads us to the brink of prejudice. . . . Man has a propensity to prejudice. This propensity lies in his normal and natural tendency to form generalizations, concepts, categories, whose content represents an oversimplification of his world of experience. . . . One type of categorization that predisposes us to make unwarranted prejudgments is our personal values (Allport, 1958, pp. 24-27).

Rosenberg's (1960) findings give full support to the importance of values, for he indicates that attitudes which are dissonant to a person's central value orientations tend to be abandoned, whereas consonant attitudes tend to be maintained. A principle underlying the present study is that values which pertain to religious convictions are central to a person's belief system (Rokeach, 1960; Adorno, et al., 1950) and consequently have an important effect upon his attitudes.

Nature of the Problem

That attitudes have relevancy to education is suggested by the consistent inclusion of the topic attitude in the various editions of the Encyclopedia of Educational Research.

> Many studies have shown a relationship between attitude and information in a given area, suggesting that people acquire most readily facts which are congruent with their views. Attitudes are, therefore, basic to many educational activities. Attitudes are also products of education; our progress toward democracy at home and international cooperation abroad will depend upon the attitudes developed in children at school (Stagner, 1941, p. 77).

As values underlie attitudes, attitudes (for example, toward social customs, religious dogmas, and economic needs) underlie obstacles to change.

> At present, we know something of attitudes and how to measure them. Now we must discover how to change them efficiently. We shall have to gain this knowledge rapidly and we shall have to work against difficulties inherent in our own culture which are raised against such studies. . . . Critics or not, psychologists must accept the challenge of producing attitude change (Berg, 1965, p. 203).

The present study is related to a larger, long range international study[1] of attitudes, particularly those toward education as a social institution and toward physically disabled and handicapped persons (Jordan, 1963, 1964; Felty, 1965; Friesen, 1966; Sinha, 1966).

The pilot study of attitudes toward physical disability and their determinates was made in 1964 in San Jose, Costa Rica, with primary interest in five types of questions:

1. What are the predominant attitudes within a country toward physical disability?

2. How do these attitudes vary among different groups within the population, principally in respect to sex and occupational groups?

3. Within these various groups, what correlates of attitudes toward disability can be found?

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[1]The comprehensive study, under the direction of Dr. John E. Jordan, of the College of Education, Michigan State University, has drawn samples from the United States, Belgium, Denmark, England, France, Holland, Japan, Yugoslavia, Peru, Columbia, and Costa Rica. Other nations will be used later.

4. What "kinds" of people work with the disabled? For example, do they have any definitive characteristics in respect to such things as inter-personal values, orientation toward education and work, as well as differences among various demographic characteristics, in relation to people who are not so closely involved with disabled persons?

5. What methodologies can be utilized in making cross-national comparisons of the above data? (Felty, 1965)

Underlying the entire international study is the postulated value of determining attitudes toward education as a factor affecting the development and organization of educational programs. An awareness of the existing attitudes toward education is essential to effective development and progress in education.

The present research diverges from the international study in three primary ways:

1. It is being conducted in its entirety in the United States and Canada.

2. It is investigating relationships between theological orientation and attitudes toward education.

3. It is not employing an Attitude Toward Handicapped Persons Scale.

The past century has witnessed an amazing revival of interest in theology. Theological works are being read by laymen, and academicians of other fields are discussing the contributions of Niebuhr, Tillich, Buber, and Maritain (Hordern, 1959, pp. 11-18). It is difficult to specify any one reason for this increased interest in theology. However, it may to a large degree be due to the question raised by the radically altered scientific and cultural outlook of our day: "How much of the traditional (or conservative) interpretation of the Christian faith can an intelligent man logically accept?"

Beginning with Schleiermacher in Germany in the first part of the nineteenth century a constant attempt has been made to harmonize Christian theology with the manifold development in every aspect of science.

By the end of the Civil War, some Biblical scholars in this country were espousing the "new theology" which was founded upon the concepts of the humanity of God and the deity of man. Man was seen as essentially good, and thus his chief problem was overcoming ignorance. Orthodox scholars considered these ideas heretical, and the resultant conflict split Christianity (primarily the Protestant element) into two sharply defined camps: liberals (or modernists) and orthodox (or conservatives). The dichotomization of Protestantism is not as distinct today as it was thirty to fifty years ago. Time has healed many wounds. But even more significant than the passing of time has been the fact that men in both groups have seen the dangers of extremism, and consequently new leadership has arisen. Within conservativism, the neo-evangelical movement, dedicated to the principle that God's Word and scientific truth really cannot be in contradiction, has made impressive gains under the leadership of Billy Graham, Carl Henry, John Ockenga, and others (Nash, 1963). Liberal theology has likewise undergone an evolutionary process, and now there are the neo-liberals and the neo-orthodox. What once was a dichotomy of theological thought now appears more as a continuum; nevertheless, there are the two poles (Jones, no date).

Statement of the Problem

The basic concern of the present study is to examine the relationship between a person's attitudes toward education, his theological orientation, his interpersonal values, and his work experience with

education. The study will seek to determine if there is a consistent difference in attitudes toward education between those who hold liberal theological views and those who contend for conservativism in theology and between those who are high and those who are low in such basic needs as recognition, achievement, and helpfulness.

Theory (Homans, 1961; Zetterberg, 1963) suggests that the amount and kind of contact are determinants of attitudes. Another aspect of the present study is to determine the amounts and kinds of experiences respondents have had in education in order to correlate this data with their attitude-toward-education scores. These attitude scores will be correlated with demographic variables which, from a theoretical viewpoint at least, should serve either as correlates or predictors. Additional personal and demographic data will be procured in addition to the information specified by the main purposes of the study. Modern computer analysis makes it possible to ascertain interrelationships between diverse data of this sort which may provide suggestive relationships for new research predictions.

Definition of Terms

For clarity of understanding, the following terms are defined either because of their specialized meaning or because of the operational definition which is used in this study.

Attitude.--The sense in which this general term will be used follows the definition by Guttman (1950, p. 51). An attitude is a "delimited totality of behavior with respect to something (Author's italics). For example, the attitude of a person toward Negroes could be said to be the totality of acts that a person has performed with respect

to Negroes." Using this definition in this study is consistent with the attempt to use some of Guttman's concepts in respect to scale and intensity analysis.

Attitude Component.--Components of attitudes have been discussed by various investigators (e.g., Katz, 1960, p. 168; Rosenberg, 1960, pp. 320, ff.; Guttman, 1950, Ch. 9). The two components typically considered are those of belief and intensity, although Guttman defines additional components according to certain mathematical properties. In the present study, the first component will be that of item content (or belief), the second that of item intensity (Guttman, 1950, Ch. 9; Suchman, 1950, Ch. 7).

Attitude Content.--The attitude content component refers to the actual item statements within an attitude scale.

Attitude Intensity.--The attitude intensity component refers to the affective statement that a respondent makes regarding each content item; operationally, in this study it consists of a separate statement for each attitude item on which the respondent may indicate how strong or how certain he feels about the content statement.

Attitude Scale.--As used in this study, a scale is a set of items which fall into a particular relationship in respect to the ordering of respondents. A set of items can be said to form a scale if each person's response to each item can be reproduced from the knowledge of his total score on the test within reasonable limits of error (Guttman, 1950, Ch. 3; Stouffer, 1950, Ch. 1).

Conservative.--This term is operationally defined on the basis of the respondent's total score on the Religious Beliefs Inventory. The

"conservative" is further identified on the basis of his own self-estimate of how conservative or liberal his theological beliefs are.

Demographic Variables.--Specifically, this refers in the present study to certain variables typically used in sociological studies. These variables are (a) education, (b) ministerial ordination, (c) denominational affiliation, (d) theological preference, (e) occupation--teaching area, (f) income, (g) rental, (h) age, (i) sex, (j) marital status, (k) number of children, (l) number of siblings, (m) home ownership, (n) mobility, and (o) rural-urban environment as a youth. Data on these demographic variables were secured through responses to questionnaire items.

Educational Progressivism.--This concept is operationally defined on the basis of the respondent's score on the ten-item scale of progressive-attitude-toward-education developed by Kerlinger (1958).

Educational Traditionalism.--This concept is operationally defined on the basis of the respondent's score on the ten-item scale of traditional-attitude-toward-education developed by Kerlinger (1958). These two educational measures do not constitute scales in the Guttman sense, but rather are constituted of two independent clusters of items which appeared in Kerlinger's factor analytic studies, and which Kerlinger characterized by the terms progressivism and traditionalism.

Institutional Satisfaction.--This term is used to describe the responses to a set of questions regarding the perceived effectiveness of various kinds of institutions. These institutions were schools, business, labor, government, health services, and churches.

Liberal.--This term is operationally defined on the basis of the respondent's total score on the Religious Beliefs Inventory. The

"liberal" is further identified on the basis of his own self-estimate of how conservative or liberal his theological beliefs are.

Occupational Personalism.--This term is operationally defined by two questionnaire items designed to ascertain the following: first, about what per cent of the time the respondent works with others with whom he feels personally involved; second, how important it is for the respondent to work with people with whom he is personally involved. A personalistic orientation to life is sometimes considered a distinguishing characteristic of traditional social patterns (Loomis, 1960).

Relational Diffusion.--This term is operationally defined by a questionnaire item designed to determine the extent to which personal relations on the job diffuse into a person's non-job social milieu. A personalistic diffusion between the social milieu and occupational milieu is sometimes considered a distinguishing characteristic of traditional social patterns (Loomis, 1960).

Religiosity.--This term is used to denote orientation to religion. Operationally, it is defined by two items: first, the importance of religion; second, the extent to which the rules and regulations of the religion are followed.

Value.--According to Kluckholn (in Parsons and Shils, 1951, p. 411), "a value-orientation may be defined as a generalized and organized conception, influencing behavior, of nature, of man's place in it, of man's relation to man, and of the desirable and nondesirable as they may relate to man-environment and interhuman relations" (Author's italics). In relation to this general definition, the present study has focused upon the value sub-set of "man's relation to man," or, interpersonal

values. Two interpersonal value categories were adopted: (a) asset values predispose a person to evaluate others according to their own unique potentials and characteristics; (b) comparative values predispose a person to evaluate others according to external criteria of success and achievement (Wright, 1960, pp. 128-133). Operationally, these values were defined by three scales on the Survey of Interpersonal Values (Gordon, 1960). Asset values were measured by the Benevolence Scale, comparative values by the Recognition and Leadership Scales. These scales were judged to have reasonable face validity for the measurement of the values proposed by Wright. Additional variables measured by the Gordon Survey of Interpersonal Values, but which were not used in the hypotheses testing, are labeled Support, Conformity, and Independence.

Organization of the Study

This dissertation is structured according to the following plan:

Chapter I presents an introduction to the nature of the problem and the need for the present study.

Chapter II reviews the theory and research related to this study.

Chapter III describes the methodology of the study. The selection of the sample, the instrumentation, the hypotheses, and the statistical procedures used in analyzing the data are also included in this chapter.

Chapter IV presents an analysis of the data and the statistical results in tabular and explanatory form.

Chapter V contains a summary of the results with conclusions and recommendations for additional research.

CHAPTER II

REVIEW OF THEORY AND RELATED RESEARCH

The theoretical orientation of the present study is primarily social-psychological. Human nature and the social order are products of communication. Shibutani (1961, pp. 22-25) gives some underlying assumptions: (a) the direction of a person's behavior is dependent upon his interpersonal adjustment to others; (b) personality never ceases to develop but is continually being reorganized and reaffirmed; (c) models of proper conduct are given to us by our culture as one interacts with the conditions of life. Underlying these assumptions is a belief in the rational nature of man who himself is an agent of change in his own physical and social environment.

The present study is particularly concerned with attitudes, which is defined in Chapter I. It is important to emphasize that an "attitude does not refer to any one specific act or response, but is an abstraction from a large number of related acts or responses" (Green, 1954, p. 335). It implies consistency or predictability of response or responses. Campbell operationalizes the concept as an enduring "syndrome of response consistency with regard to [a set of] social objects" (Campbell, 1950, p. 31).

Katz and Stotland (1959) state the following regarding attitude:

> An adequate social psychology must include the concept of attitude or some very similar construct. Efforts to deal with

> the real world show our need for a concept more flexible and more covert than habit, more specifically oriented to social objects than personality traits, less global than value systems, more directive than beliefs, and more ideational than motive pattern (Katz and Stotland, 1959).

Attitudes Toward Education

Kerlinger's theoretical model of attitudes toward education underlies his Educational Scale which is used in the present study. His theory can be summarized in the following four propositions:

1. Individuals having the same or similar occupational or professional roles will hold similar attitudes toward a cognitive object which is significantly related to the occupational or professional role. Individuals having dissimilar roles will hold dissimilar attitudes.

2. There exists a basic dichotomy in the educational values and attitudes of people, corresponding generally to "restrictive" and "permissive," or "traditional" and "progressive" modes of looking at education.

3. Individuals will differ in degree or strength of dichotomization, the degree or strength of dichotomization being a function of occupational role, extent of knowledge of the cognitive object (education), the importance of the cognitive object to the subjects, and their experience with it.

4. The basic dichotomy will pervade all areas of education, but individuals will tend to attach differential weights to different areas, specifically to the areas of (a) teaching--subject matter--curriculum, (b) interpersonal relations, (c) normative, and (d) authority-discipline (Kerlinger, 1956, p. 290).

Kerlinger developed statements for his Attitude Toward Education Scale on the basis of the following paradigm:

ATTITUDES
(1) Restrictive-traditional
    (dependence-heteronomy)
(2) Permissive-progressive
    (independence-autonomy)
AREAS
(a) Teaching--subject matter curriculum
(b) Interpersonal Relations
(k) Normative-Social
(m) Authority-Discipline

Kerlinger defines the restrictive-traditional factor as that which emphasizes the importance of subject matter, or external discipline, and of preserving the status quo. The permissive-progressive factor, by contrast, emphasizes problem-solving, self-discipline rather than external discipline, and education as an instrument of change rather than an instrument of preservation (Kerlinger, 1958, pp. 111-112).

An example of 1(a) would be: The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future. An illustration of 2(a) would be exemplified in the following statement: Knowledge and subject matter themselves are not so important as learning to solve problems. An illustration of 1(m) might be: One of the big difficulties with modern schools is that discipline is often sacrificed to the interest of the children. An example of 2(m) might be: True discipline springs from interests, motivation, and involvement in life problems.

> A basic dichotomy seems to exist in educational attitudes corresponding generally to restrictive and permission, or traditional and progressive ways of regarding education, and some individuals show the dichotomy more sharply than others depending on their occupational roles, their knowledge of and experience with education, and the importance of education to them (Kerlinger, 1956, p. 312).

The restrictive and permissive dimensions should not be considered as complete opposites, however (Kerlinger, 1956, p. 296). It is entirely possible for a person to be restrictive in certain areas and permissive in others.

In the development of the present scales, Kerlinger and Kaya (1959) did a factor analysis of a set of 40 items given to 136 undergraduates and 157 graduates at a large Eastern university and 305 people outside

the university. Twenty items (ten for each scale) which had the highest loadings were chosen for the scales. The progressive items correlated positively (.35 to .58) with all other progressive items and their correlations with the traditional items were from .01 to -.26. The traditional items correlated positively (.35 to .64) with all other traditional items and negatively (-.01 to -.38) with all progressive items. The analysis showed that the twenty items belonging to two main factors corresponded exactly to the original factor designations of the items in the original study. Kerlinger seeking further validation found that with relatively minor exceptions, his theoretical predictions were confirmed (Kerlinger, 1961, p. 282).

Taylor (1963), using Kerlinger's Education Scale II, found that teachers with border-line traditional attitudes participated less in activities related to pupils than did teachers in the traditional, progressive border-line, and progressive categories. An analysis of variance showed a positive relation between "traditional" scores and teaching experience for the first ten years, when the trend started to reverse itself (Taylor, 1963).

Smith, a student of Kerlinger, found a high relationship between social attitudes and educational attitudes. Individuals conservative in their social attitudes were, as expected, traditional in their educational attitudes (Smith, 1963).

Kramer identified nineteen "open-minded" and twenty "closed-minded" (dogmatic) teachers with the use of Rokeach's Dogmatism Scale from a sample of 107 subjects. He found the "open-minded" teachers as a group were more consistent and scored higher on permissive-progressive attitudes toward education (Kerlinger's Education Q Sort) than did the

"close-minded" group. It is also interesting to note that the "closed-minded" teachers were, however, more consistent than those who had no clear-cut belief system (Kramer, 1963).

Lawrence (1963), however, reported that Kerlinger's Education Scale II did not seem to differentiate between progressive and traditional attitudes toward education. It is also interesting to note that self-acceptance was not found to be related to progressive educational attitudes.

Block and Yuker (1965) developed an Intellectualism-Pragmatism (I-P) Scale which contextually was inferred to be a measure of intellectual orientation resulting from academic exposure. I-P scores were found to be associated with Kerlinger's Progressive Scale, but, contrary to expectations, did not relate to the Traditional Scale.

The Relationship of Personal Values and Personal Contact to Attitudes

Personal Values

Two variables are important in the determination of attitudes toward social objects: personal values and personal contact. The theory of Festinger (1957) suggests that attitudes that are dissonant to a value orientation would tend to be abandoned, whereas consonant attitudes tend to be maintained. Rosenberg (1956, 1960) demonstrated an instrumental relationship between attitude and value, with stable positive attitudes perceived as instrumental to positive value attainment and the blocking of negative values, whereas stable negative attitudes were perceived as instrumental to negative value attainment and the blocking of positive values. "The individual tends to relate positive attitude objects to

goal attainment (high valued goals) and negative attitude objects to frustration of his goal orientation" (Rosenberg, 1960, p. 321).

Katz, in attempting to understand the reasons people hold the attitudes they do, speaks of attitudes as having four functions. One of these is the "value expressive function" (Katz, 1960, p. 173), which relates to the individual deriving satisfaction from expressing attitudes appropriate to his own personal values and his self-concept. Katz would expect a great deal of consistency between a basic value, such as equality, and a more specific attitude, such as favorableness toward equality of educational opportunity for all regardless of race, nationality, or religion. People are inclined to give up or change attitudes inconsistent or unrelated to central values.

Many studies have shown that values are clearly related to behavior (Allport, 1958; Barton, 1959; Eddy, 1959; Hall, 1950; Homans, 1950). Smith states the following:

> A person will tend to perceive and judge the focus of an attitude in terms of one of his personal values to the extent that (a) the value is important to him, occupying a central position in his value hierarchy; (b) the information available to him about the focus contains a basis for engaging the value; and (c) the scope of the value and of the person's interests is broad enough to extend to the focus of the attitude (Smith, 1949, p. 486).

Woodruff and DeVesta express this relationship in another way:

> One's attitude toward a specific object or condition in a specific situation seems to be a function of the way one conceives that object from the standpoint of its effect on one's most cherished values. This means that while concepts alone cannot be shown to correlate highly with attitudes, when concepts are combined with subjective judgments as to the ability of the concept referent to help the individual achieve the things he wants, the basis exists for explaining attitudinal and emotional reactions. If, in the judgment of the individual, a given object has no effect on his high values, he will exhibit a neutral attitude toward it. If he conceives it to

> be destructive of his high values he will exhibit a negative attitude toward it, and vice versa (Woodruff and DeVesta, 1948, p. 657).

Wright (1960, pp. 128-133) has suggested two value orientations which are different in their effects upon attitude: comparative values and asset values. "If the evaluation is based on comparison with a standard, the person is said to be invoking comparative values....On the other hand, if the evaluation arises from the qualities inherent in the object itself, the person is said to be invoking asset values..." (Wright, 1960, p. 129). A reasonable inference from the asset-comparative value framework is that persons holding a more socially-oriented theology (theologically liberal), with a less condemnatory view of man, would be expected to hold higher asset values than those whose theology is more individually centered with emphasis upon the condemnation of man and his "total depravity."

Personal Contact

Theory has been developed and research conducted in regard to contact frequency and attitudes. Homans (1961) stated that one man influences another if he can provide a reward to the other at the price he is willing to pay. "The open secret of human exchange is to give the other man behavior that is more valuable to him than it is costly to you and to get from him behavior that is more valuable to you than it is costly to him" (Homans, 1961, p. 62). He also described the variables of face-to-face relationships on which effective influence depends: (a) frequency, (b) sentiment (like a kiss, a sign), (c) interaction, (d) quantity (can be reduced to time), (e) value (amount of activity put out to get desired reinforcement), (f) "norms" (related to conformity),

(g) repetition (if in the past a particular stimulus-situation has been desirable, repetition is more likely to occur), and (h) profit (favorable exchange) (Homans, 1961).

Katz and Lazarsfeld (1955, pp. 183-184) concluded that personal contact is more effective in influencing people than any of the other sources of influence investigated in their study.

Allport (1958, pp. 250-268) concluded that "equal status contact" creates more favorable attitudes when the contact is in pursuit of common goals than when the goal is uncertain. Jacobson, et al. (1960, pp. 210-213), however, suggested that "equal status contacts" are more likely to develop friction if one group is uncertain about or unwilling to fully accept the equality of the other.

Cook and Selltiz (1955) analyzed more than 30 studies in changing attitudes or behavior toward ethnic groups based upon personal contact methods. Although three studies showed no significant attitude change, the remaining 27 studies were almost equally divided between distinctly favorable gains and qualified improvements in attitudes. They found the most important aspect of the contact was "intimacy."

> A number of investigators have considered a characteristic of interaction which they have referred to loudly as its 'quality' or 'intimacy.' All such studies have found a clear relation between quality of contact and intergroup attitude--the greater the intimacy of the contact, the more favorable the intergroup attitude (Cook and Selltiz, 1955, p. 53).

Allport (1958, pp. 254-262) reported that those who had contact with high status or high occupational group Negroes held more favorable attitudes than those having contact with lower status Negroes. An experiment conducted by Carlson supported the hypothesis that attitudes "may be changed through altering the person's perception of the object

as a means for attaining valued goals" (Carlson, 1956, p. 261). Attitudes became more favorable toward Negro movement into white neighborhoods as the subjects' beliefs were changed from the view that Negroes tend to lower property values to the view that Negroes tend to raise property values. An experiment to change attitudes toward those of a supposedly lower social-economic group in a housing project (Festinger and Kelley, 1951) involved induced personal contact through community projects, home economic demonstrations, and recreation. For a period of eight months, sixty per cent of the people in the project took part in activities which gave them new contacts with people they had formerly rejected as "low class." The results from a series of surveys showed that favorable contacts in the community activities brought a large and steady increase in improved attitudes and invitations to homes. Those who had no contact or had unfavorable contacts showed no change in attitudes.

Zetterberg (1963) has reviewed social contact considerations of Malawski in which the effects of frequency of social contact on liking or disliking are dependent on two other variables: "Cost of avoiding interaction, and availability of alternative rewards . . . if the costs of avoiding interaction are low, and if there are available alternative sources of reward, the more frequent the interaction, the greater the mutual liking" (p. 13). Phenomenologically, these observations seem related to the felt freedom of a person to interact with another and his choice of this interaction over other activities perceived as rewarding.

Felty (1965) found that "contact frequency alone does not determine attitudes; rather, the nature of the contact must be taken into account" (p. 207). He did not find a positive correlation between the frequency of contact with disabled persons and favorable attitudes

expressed toward them. On the contrary, for those employed in the field of rehabilitation and special education, "A significant negative correlation was obtained between contact frequency and attitude" (Felty, p. 107). He also found it necessary to reject his hypothesis that the more frequent the contact with disabled persons the higher would be the intensity scores on the attitude-toward-disabled-person scale.

Friesen (1966) found in both Columbia and Peru a significant positive relationship between contact frequency and favorable attitude-toward-handicapped-persons scores, as well as between contact frequency and scores on the progressive-attitude-toward-education scale if high frequency is concurrent with alternative rewarding opportunities and enjoyment of contact. High frequency of contact with disabled persons did not produce significantly higher intensity scores on the attitude-toward-disabled-persons scale than did lower frequencies of contact with disabled persons (Friesen, 1966, pp. 126, 130).

The foregoing might be summarized in the following manner. Frequent contact with a person or group is likely to lead to more favorable attitudes if:

1. the contact is between status equals in pursuit of common goals (Allport, 1958, p. 267);
2. the contact is perceived as instrumental to the realization of a desired goal value (Rosenburg, 1960, p. 521);
3. the contact is with members of a higher status group (Allport, 1958, pp. 254, 261-262);
4. the contact is among status equals and the basis of status if unquestioned (Jacobson, et al., 1960, pp. 210-213);

5. the contact is volitional (Zetterberg, 1963, p. 13);
6. the contact is selected over other rewards (Zetterberg, 1963, p. 13); and
7. the contact involves "intimacy" (Cook and Selltiz, 1955, p. 53).

Attitude Intensity

Rosenburg has considered the intensity component of an attitude as an action predictor (1960, p. 336). Carlson (1956, p. 259) found initial intense attitudes much more resistant to change than moderately held attitudes. Guttman and Foa (1951) have shown that intensity is related to amount of social contact with the attitude object. Considerable research has suggested that intensity is an important component of attitude structure in determining the "zero-point" of a scale that discriminates the psychologically "true" positive from negative attitude direction. This is not the same as the actual scale numbers. The printed zero point on a scale may or may not be the actual point of indifference (Guttman, 1947, 1950, 1954; Guttman and Foa, 1951; Guttman and Suchman, 1947; Suchman and Guttman, 1947; Suchman, 1950; Foa, 1950; and Edwards, 1957).

Considering the question of relationship between attitude and action, Rosenburg stated the following:

> What is usually done is to follow a theoretical rule of thumb to the effect that the 'stronger' the attitude, the more likely it will be that the subject will take consistent action toward the attitude object . . . the more extreme the attitude, the stronger must be the action-eliciting situation in which those forces are operative . . . improvement in the validity of estimates of attitude intensity will increase the likelihood of successful prediction (Rosenburg, 1960, p. 336).

In addition to the important function of increasing predictability, attitude intensity locates the true zero-point of a scale in which the area of content has been found to be scalable (Guttman, 1947). Locating a true zero-point appears to have the highly desirable characteristic of elimination of question bias (Foa, 1950; Suchman and Guttman, 1947; and Guttman, 1954b).

The Relationship of Theological Orientation to Attitude

From a historical knowledge of the development of religious conservativism and liberalism, it is clear that these two basic theological orientations differ particularly in respect to their perception of human nature (Withrow, 1960).

There is little doubt, in theory and opinion, at least, that these orientations have differing effects upon important facets of personality. The authors of the Authoritarian Personality summarized what they believe to be the result of their study.

> The most crucial result of the present study, as it seems to the authors, is the demonstration of the close correspondence in the type of approach and outlook a subject is likely to have in a great variety of areas, ranging from the most intimate features of family and sex adjustment through relationships to other people in general to religion and to social and political philosophy (Adorno, et al., 1950, p. 971).

The relationship of religion to attitudes, including prejudice and ethnocentrism, has often been studied. As would be expected the relationship is complex. The Christian doctrine of universal love toward others is opposed to prejudice; yet, at the same time, Christianity's contention that it is the only true religion contains an implicit antagonism against any other religious group. Adorno, et al. (1950) indicated the following: (a) subjects who reject organized religion are less prejudiced on the

average than those who accept it (p. 209); (b) ethnocentrism scores are slightly higher on the average in subjects whose father and mother had the same religion than in those whose parents had different religions (p. 213); (c) belonging to a minor denomination brings about a lack of identification with the status quo, thus resulting in a lesser degree of ethnocentrism (p. 211); and (d) Unitarians, in keeping with their generally liberal outlook, distinguish themselves by having a lower mean score on ethnocentrism than any other protestant group (p. 210). Khann (1957) noted a tendency among highly religious people to be authoritarian, ethnocentric, and inflexible in their thinking. Spilka, as quoted by Meissner (1961), reported that a religious ethnocentric group showed more manifest anxiety, rigidity, and self-concept instability than a religious non-ethnocentric group. Rokeach (1960) found Catholics scoring relatively high on the dogmatism and opinionation scales and also on the California F and ethnocentrism scales. Kanter (1955) also used the California F scale in her study along with an "open-mindedness questionnaire" and a procedure for analyzing sermons. She found that Protestant ministers could be distinguished on the basis of authoritarianism and humanism and noted that the humanist is concerned with helping people, while the authoritarian is concerned basically with getting people right with God. Research by Stanley (1963) and Dodson (1957) indicated that theological conservatives were more dogmatic and authoritarian than their liberal theological counterparts.

Allport (1958) emphasized the motivation for religious affiliation, postulating that those who affiliate with a religious organization for utilitarian self-serving purposes, that is, those with "extrinsic" religious values, tend to be more prejudiced. This postulation was

verified by Wilson (1960) who found a positive relationship between extrinsic religious values (as measured by his Extrinsic Religious Values Scale) and prejudice.

Religious expression and needs are often associated. Using the Edwards Personal Preference Schedule (EPPS), Slusser (1960) found that men who were more favorable toward the church and women who exhibited less favorable attitudes toward the church scored significantly lower on the achievement scale than their opposite counterparts. Psychotic patients may turn to religion. Rosen (1960) noted that they sometimes sought support from religion which was specific to their needs, and Lowe (1955) stated that the religious delusions of psychotics are often caused by emotionally or socially blocked needs.

Religious background is also important to personality traits. Bateman and Jensen (1958) noted that students who had a more extensive religious background tended to be more intrapunitive and to express less anger towards the environment than did those with a less extensive religious background. Yet religious background is not the only important variable in shaping values in that being raised in a specific type of religious environment is no guarantee that a person's total past experience will yield the same value-meaning as that of another individual reared in the same religious environment (Woodruff, 1945).

Theological belief orientation relates to personality traits. From 800 seminary students, representing extremely conservative and liberal theological schools, Ranck (1961) found that the conservatives tended to exhibit the following personality characteristics: racial prejudice, aggression and submission, punitiveness, stereotypy, projectivity, and identification with power figures. In another study,

98 first-year male students from four theological seminaries were differentiated into conservative and liberal groups using the Gustafson Scale of Religious Beliefs. The groups were then compared on the EPPS. Conservatives were higher on Order and Deference (.01 level) and Abasement (.05 level). They were lower on Heterosexuality (.01 level) and Intraception (.05 level) (Withrow, 1960).

Attitudes and needs are often discussed in reference to occupational choice. Dodson (1957) individually matched 50 seminarians from three interdenominational Protestant seminaries in southern California with 50 graduate students from three southern California universities. After extensive testing, his data suggested that seminarians are more guilt-ridden, show more discomfort with sexual and hostile feelings, and are more intrapunitive in handling hostility and aggression. Strunk (1959) reported that he found significant differences on the Bell Adjustment Inventory and the Strong Vocational Interest Blank (SVIB) between 60 pre-ministerial students and 50 business majors who were matched for sex, age, race, and percentile score on the American Council on Education Psychological Examination for College Freshmen (ACE) attending the same liberal arts college at the same time. Of particular interest is the fact that pre-ministerial students showed more aggressiveness in social contact and were significantly higher on the Masculine-Feminine Scale of the SVIB, thus showing more feminine interests.

Does a person's theological orientation relate to his method of performing his occupational role? Both Wise (1951) and Elder (1959) believe it does, suggesting a relationship exists between an individual's basic religious attitudes and his methods, motives, and techniques in counseling. Mannoia (1962) found a significant difference between

liberal and conservative ministers in their preferences for directive and non-directive counseling responses. Miller (1963), replicating Mannoia's study, sampled first year seminarians instead of parish ministers and found that significantly more liberal first-year seminary students chose non-directive responses than did conservatives. Religious beliefs and concepts of leadership by professional church workers are also significantly related. For example, those who scored as high affect-oriented in their concept of the "role of man" were also high affect (process)-oriented to leadership; those who scored as high task-oriented in their concept of the "role of man" were also high task (content)-oriented in their leadership concepts (Foster, 1958).

Attitudinal Changes of College Students

A previous section of this chapter surveyed recent studies which pertain to the relationship of personal contact to attitudes, pointing out that personal contact when other variables are concurrent does seem to have a vital influence upon attitudes. Most of the data is quite consistent in showing that favorable predisposition will lead to receiving predominately favorable evaluative communication and consequently a change in attitudes.

Part of the purpose of this study is to determine if a significant difference exists in attitude toward education and in interpersonal values between professors who are conservative and those who are liberal in their theology, and between those who teach in a Bible College and those in a small liberal arts college. However, even if a difference is found to exist, the question remains as to whether professors and college life in general exercise an important influence in changing the attitudes

and values of the students in their classes. If they do (and this is recognized as an assumption) a further assumption is suggested: Professors with different attitudes and values will influence their students differently.

Many studies have researched the problem of the impact of college on student attitudes and values with contradictory conclusions. Arsenian (1943) at Springfield College, Newcomb (1943) at Bennington College, and Freedman (1960) at Vassar College agree that student values and attitudes do change between the freshman year and graduation. Arsenian reported that professors and courses ranked high as a source of religious influence and more than half the students developed a more favorable attitude toward religion. Newcomb agrees with Arsenian that professors have a great deal of prestige with students. Webster (1958) indicates the difficulty in measuring change but concludes from his data that substantial changes in attitude do occur during college and that attitude change will vary with age, sex, and culture. Further evidence of changing values and attitudes of college students is offered by Eddy (1957, 1959), Brown and Bystrym (1962), Lazure (1959), and Newcomb (1962).

Allport, Gillespie, and Young's (1948) findings of 500 Harvard and Radcliffe students show that 58 per cent changed in their religious beliefs during college and 32 per cent became atheistic or agnostic. The results of earlier research by Katz and Allport (1931) were similar. They reported that nearly two-thirds changed their religious beliefs in college, some even becoming deistic or agnostic. Proctor's more recent study (1961) of attitude changes in theological students during one year of seminary training found the shift of opinion away from conservative theology was significant at the .01 level.

The real question, however, is not whether changes occur during college but whether changes in college students are significantly different from those which take place in college-age individuals not in attendance at college.

Corey (1936) found fault with the research design of many studies and argued that the only technique which will give valid data involves the repeated testing of the same students as well as the repeated testing of young people not in college. After an exhaustive review of studies on attitudes of college students Jacob (1957) concluded that education had little effect on student values.

> The main overall effect of higher education upon student values is to bring about general acceptance of a body of standards and attitudes characteristic of college-bred men and women in the American community. There is more homogeneity and greater consistency of values among students at the end of their four years than when they began. Fewer seniors espouse beliefs which deviate from the going standards than do freshmen (Jacob, 1957, p. 6).

Lehmann and Dressel (1962) challenged Jacob's conclusions, stating: ". . . it is difficult to assume as did Jacob that neither courses, nor instructors, nor instructional methods have a marked impact on students' values" (p. 19). Their study, conducted at Michigan State University, reached a number of conclusions, among which were the following: (a) freshmen students exhibited the greatest magnitude of changes in value orientation; (b) religious changes were mainly toward liberalism and a large proportion of the students felt they have become less attached to religion; and (c) the experience of living with other students was a significant factor in influencing attitude change (pp. 265-269).

Lehmann et al. (1966), in investigating the relationship between length of college attendance and changes in stereotypic beliefs, dogmatism, and value orientation, administered a battery of instruments to 1,747 freshmen at Michigan State University in 1958 and then to the same subjects in 1962 whether or not they were still in attendance. The individuals in the experimental group were those who were in attendance at the institution for at least nine terms and were registered as students in 1962. The control group was divided for purposes of analysis into three subgroups depending upon the amount of college completed. Some of the findings follow: (a) the experimental male group changed significantly more than the control male group in emerging from traditional value orientation (p. 92); (b) no significant relationship was found between the amount of college education and changes in dogmatism, receptivity to new ideas, and an attitude of open-mindedness (p. 93); (c) for females, but not for males, there was a significant relationship between the amount of college attendance and decrease in stereotypic beliefs (p. 94).

The authors concluded that changes in certain attitudes and values are associated with college attendance. But they find no compelling evidence which leads them to isolate a particular cause. On the basis of the evidence that changes do occur during college, they appealed to educators to discard the notion that behavior characteristics are not the concern of colleges and universities (p. 97). If colleges do not directly change attitudes and values, it would appear that they act as catalysts to speed up changes that would ordinarily occur as the individual matures (Plant, 1962).

The remarks of Wise seem to be an appropriate conclusion:

> . . . most of us are now convinced that college has less influence on students than previously assumed. One reaction to this disillusionment is to assert that colleges have no important influence on student values, but such a reaction fails to recognize the substantial data which strongly suggest that some colleges do influence student values (Wise, Hodgkinson, Rogers, and Shafter, 1964, p. iii).

While the following studies were not available for review (since they are still in process) they are related to the larger concurrent-replicative cross cultural research project on attitudes toward education and toward handicapped persons underway at Michigan State University. They are listed to make them known to the professional public.

The additional studies (with their projected completion dates) examine: attitudes in Japan (Cessna, 1967); attitudes of various subgroups of special educators (Mader, 1967); comparison of attitudes of special versus regular educators (Green, 1967); attitudes of college counselors (Palmerton, 1967); ministers' attitudes toward mental retardation (Hester, 1967); attitudes toward general disability versus blindness (Dickie, 1967); attitudes toward general disability versus deafness (Weir, 1968); attitudes toward education and toward the disabled in Belgium, Denmark, England, France, the Netherlands, and Yugoslavia (Kreider, 1967); and factors influencing attitudes toward integration of handicapped children in regular classes (Proctor, 1967) (Appendix E).

CHAPTER III

METHODOLOGY AND PROCEDURES

Since it is presumed that college professors do influence their students, an important question follows: Is there a significant difference between the attitudes of professors in different types of colleges?

Research Population and Rationale for the Selection of the Sample

The research demanded a population which was somewhat knowledgeable in both education and theology. Parish ministers as a group and seminary students did not appear to have sufficient first-hand knowledge in the area of education. Educators, as a group, lacked knowledge of theology. However, a majority of the professors in colleges affiliated with the Accrediting Association of Bible Colleges (AABC) and the Council for the Advancement of Small Colleges (CASC) would very likely be knowledgeable in both areas, since all AABC schools and many CASC colleges have strong interests in religion.

The population consisted of all full-time teachers in the 81 colleges affiliated with CASC and in the 43 colleges which are members of and the twelve colleges which are associate members of AABC. The exceptions to this general rule were Fort Wayne Bible College which is affiliated with both organizations and Grace Bible College, an AABC-Member college,

where the researcher teaches. Barrington College is also a member of both organizations, but this fact was not realized at the time of sampling.

General Description of AABC

The Accrediting Association of Bible Colleges was established in 1947 to assist in upgrading educational programs offered in Bible colleges in the United States and Canada. Twelve charter member schools received their accreditation in 1948. Present membership is 56; 43 are accredited and 13 are associate schools. All members are Bible schools (that is, each student must major in Bible-Theology), protestant, coeducational, nontax-supported, and nonprofit organizations. Both three-year institutes and four- and five-year colleges are eligible for membership if they meet the collegiate criteria of the Association. The fall, 1966, enrollments in these colleges varied from less than 100 per school to more than 1000.

Among the purposes of AABC are the following:

1. To assist Bible colleges through the processes of accreditation to achieve more effectively their objectives of preparing students for Christian service.

2. To improve the quality of Bible institute and Bible college education generally by describing as explicitly as possible the criteria of institutional excellence for such schools, thus encouraging self-evaluation and stimulating continuous growth.

3. To promote the interests of Bible-centered higher education and training schools for Christian service through representation in national educational organizations and cooperation with other accrediting associations.

4. To provide and circularize a list of approved colleges for the use of denominational boards, mission societies, school boards, regional and national accrediting agencies, departments of government, foundations, and all other organizations interested in the educational rating of schools and their students.

5. To provide a basis of selection among Bible colleges by prospective students, teachers, and other interested individuals.

6. To facilitate the transfer of credits among under-graduate colleges and to provide a basis for the evaluation of preparation for graduate study.

7. To make it possible for Bible colleges to preserve their evangelical integrity while striving for the highest academic standards (AABC Manual, 1960).

General Description of CASC

The Council for the Advancement of Small Colleges was founded in April, 1956, with 52 charter members. Its membership has grown to 81 colleges in 32 states. All members are four-year, nontax-supported, nonprofit institutions of arts and sciences with programs leading to the baccalaureate degree. Its primary purpose is to provide for its members the means of collectively achieving various goals faster than they could individually. "These goals include regional accreditation, expansion of enrollment, raising of academic standards, improvement of faculty qualifications and salaries, and development of physical plant" (CASC, A director of member colleges, no date). Seventy-two are coeducational; six are for men; three are for women. Fifty are Protestant; twelve are Catholic; sixteen are independent. The fall, 1965, enrollments varied from less than 100 to more than 2000 with an average of 650.

CASC has been successful in achieving its goals. Executive Director Albert T. Hill recently stated: "I think the small colleges are benefiting and will benefit from the wave of nostalgia for small schools. Many persons are fed up to the teeth with big organization; along with its bureaucratic waste of manpower and money" (The State Journal, 1966). Although money is the number one problem of the small school, CASC

President Ellwood A. Voller thinks the small colleges will be able to get the funds they need. He feels one of the important aspects of the religious liberal arts college is its opportunity to teach values--moral, ethical and practical and emphasized that he sees "no conflict between real intellectual attainment and moral and spiritual values . . ." (The State Journal, 1966).

Sampling

For purposes of sampling, the colleges were placed in stratified groups according to their religious control (or denominational affiliation). Mr. Dale S. DeWitt, Assistant Professor of New Testament at Grace Bible College, assisted with the stratification. A random sample proportionate to the size of the stratified groups was selected on the basis shown in Table 1.

TABLE 1.--Random sampling procedures[1] indicating the sub-sample to be proportionate to the size of the sub-population.

Number of schools affiliated with a specific religious orientation (sub-population)			Number of schools to be selected from a sub-population of specific size (sub-sample)
CASC	AABC Member	AABC Assoc. Member	
1-4	1-3	1-2	0
5-9	4-7	3-5	1
10-15	8-12	6-9	2
16-	13-	10-	3

[1]For example, twelve CASC colleges are Catholic; therefore, two of these were randomly chosen for the sample. Fourteen AABC Member colleges are interdenominational; therefore, three of them were randomly chosen for the sample.

Those sub-populations which were too small to be eligible for representation in the initial sampling procedure were placed together in a new category called "Other schools." A sub-sample was then drawn from this new category on the same basis and included in the sample.

Twenty-six schools were selected--fourteen CASC schools, eight AABC member schools, and four AABC associate member schools. Dr. John E. Jordan, the Chairman of the Doctoral Committee, wrote an introductory letter (Appendix A-1) to the Academic Dean of each college requesting the school's cooperation in the research. A check-list response card (Appendix A-2) and a self-addressed return envelope were enclosed in his original letter. Dr. John Mostert, Executive Director of AABC, and Dr. Alfred T. Hill, Executive Secretary of CASC, wrote letters (Appendices A-3 and A-4) to their respective colleges urging their cooperation.

When a college was unable to cooperate in the study, a new school was selected from the same sub-population. Five CASC colleges were unable to cooperate, four were reselected; time did not allow for a fifth selection. One of the CASC college's data was apparently lost in the mail. One AABC member was unable to cooperate and a reselection was made. All four AABC associate member schools chosen for the sample returned their completed Questionnaires.

After indications of cooperation were received, the questionnaires (Appendix B) were sent to the participating schools. Included with the questionnaires were the following: (a) a note of appreciation for the cooperation of the group with a general statement of the reasons for the investigation (Appendix A-5), (b) specific explanations regarding the administration of the questionnaire (Appendix A-6), and (c) the Test Administration Data sheet (Appendix A-7) which was developed for the

recording of pertinent administrative data. To summarize, data was received from twelve CASC schools, eight AABC member schools, and four AABC associate member schools. The names of the participating colleges are listed in the Code Book (Appendix D-2).

Selection of Variables

The variables selected were those which were postulated to be in some particular relationship to the criterion variable of attitudes toward education. Other variables were included, however, which were intended to provide information in respect to the characteristics of persons who work in colleges and institutions associated with either the AABC or CASC. The major variables to be used in this study are discussed in this section.

Attitudes Toward Education (Criterion Variable)

Kerlinger's Attitudes Toward Education Scale (Kerlinger, 1958, 1961; Kerlinger and Kaya, 1959) was chosen because it is short and simple to administer and because there is a rationale for hypothesizing a relationship between attitudes-toward-education and theological orientation. The complete instrument consists of twenty items, of which ten are "progressive" and ten are "traditional." The two scales (progressive and traditional) represent a factor analysis of a set of 40 items given to 598 subjects of varying backgrounds, but all apparently of above-average education. The scales have been found adequate under cross-validation.

Modifications were made in the provisions for respondent scoring. The Likert-type format was retained, but the response categories for each item were reduced from seven to four. A further modification was that instead of requiring the respondent to transfer a number from a set

of coded categories at the top of the page to indicate his response the item alternatives were stated following each question (Appendix B-4). It was felt that these modifications would simplify the task for the respondent.

Intensity Scale

Following each content item on the Attitudes Toward Education Scale is an intensity question: "How strongly do you feel about this?" with answer categories of "Not strongly at all," "Not very strongly," "Fairly strongly," and "Very strongly."

Interpersonal Values

The Survey of Interpersonal Values (SIV) (Gordon, 1960) has been included in a wide range of research. For the present study an instrument was needed which would yield scores on items that seemed logically related to the values being tested in the hypothesis: Those of "asset orientation" to others and "comparative orientation" to others.

Of the six sub-scales in the instrument, Benevolence is described as follows: "Doing things for other people, sharing with others, helping the unfortunate, being generous" (Gordon, 1960, p. 3). Among studies presented in a subsequent research brief, Benevolence was found to correlate .49 with the Nurturance score on the EPPS and negatively with Achievement (-.24) and Aggression (-.28) (Gordon, 1963, p. 22). It was decided on the basis of the description, the item content, and the inter-correlations with the EPPS that the Gordon Benevolence Value would be an adequate operationalization of "asset value."

The second value to be operationalized was that of a "comparative orientation" toward others. The Gordon manual offers the following

definition for Recognition Value: "Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition" (Gordon, 1960, p. 3). The following definition is offered for Conformity Value: "Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist" (Gordon, 1960, p. 3). Leadership is described as follows: "Being in charge of other people, having authority over others, being in a position of leadership or power" (Gordon, 1960, p. 3). All three of these values would appear to involve rankings of others on some kind of absolute scale, either of social acceptability (Conformity), achievement (Recognition), or power (Leadership). On the basis of surface consideration of such content the Recognition and Leadership scales were judged to be most representative of Comparative Values.

The SRA Manual for Survey of Interpersonal Values (1960) states that the "reliabilities are sufficiently high to permit interpretation of SIV scores for individual use." The SIV was developed through the use of factor analysis and the scales are considered to represent reliable, discreet categories and can be said to have factorial validity (Appendix F gives reliability and validity data).

Religious Belief Inventory

The Religious Belief Inventory was developed by Toch and Anderson (1960) as an instrument to describe the content of religious belief. It is designed to differentiate four religious classifications within two major divisions--liberal and conservative. The original inventory was developed from statements of belief that had been compiled by the authors and constructed under headings such as God, Jesus Christ, the Bible, the Church, Epistemology, and Metaphysics. After an informal screening

process, 146 items were submitted to twenty-one Lansing and East Lansing, Michigan, ministers for a pre-testing evaluation as to whether the statement manifested theological conservativism or liberalism. Seventeen ministers responded. Of the 146 items, 45 were eliminated because they were not unanimously classified as either liberal or conservative (in this case "unanimous" included not more than two abstentions). A short form of sixty items (27 identified as conservative and 33 as liberal) was constructed by the authors from the 101 "unanimous" item form. It is the 60 item form which was used by Mannoia (1962) and Miller (1963) and in the present study.

The reliability of the Inventory is substantiated by the fact that scores obtained from several successive college freshmen groups indicated that they were derived from the same population (Toch and Anderson, 1960). In addition, an independently obtained sample of ministers in Jackson, Michigan, yielded similar findings. Miller (1963), by asking the students to rate themselves as either liberal or conservative, obtained correlation coefficients for concurrent validity of .92 and .96.

Personal Contact Variable

Eight different items were included to measure different aspects of this variable. Respondents were requested to indicate the following: (a) the amount of graduate courses in education; (b) the amount of knowledge possessed in regard to the developments in the local school district; (c) the amount of contact (work) with public schools, grades 1 to 12; (d) the amount of contact (work) with parochial (or private) schools, grades 1 to 12; (e) the amount of contact (work) with all types of education; (f) the amount of reading related to the discipline or

field of education; (g) enjoyment of professional educational work experience; and (h) alternative opportunities available (refers to other possible employment). Each item generated a score. Single item scores are notoriously unstable, and no reliability data can be offered. Since, however, each item concerns the individual's involvement (either objectively or subjectively) with education, each item in its uniqueness will measure the amount of that particular type of contact with education. Collectively the items give a multi-facet measurement of contact with education. The items were used singly and also as a multiple variable in the data analysis.

Preference for Personal Relationships

This set of three items (Personal Questionnaire, items 20-22) was devised to help identify respondents, or groups of respondents, along a traditional-modern dimension in respect to personal relationships. The predominance of affective relationships as opposed to affective neutrality is supposedly one of the distinguishing characteristics of the "Gemeinschaft," or traditional, orientation (Loomis, 1960, p. 61).

> Members of the Gemeinschaft-like system are likely to know each other well; their relationships are functionally diffuse in that most of the facets of human personality are revealed in the prolonged and intimate associations common to such system (Loomis, 1960, p. 72).

Question 20 asked the respondent to indicate the approximate per cent of personal interactions on the job which were with persons who were close personal friends. Question 21 asked how important it was to work with persons who were close friends. Question 22 was intended to measure diffuseness or specificity of personal interactions under the hypothesis that the traditionally oriented person is more likely to have personal

interactions which are diffused between job and family or other affective non-job interactions.

Religiosity

In addition to the RBI, three questions were included in the Personal Questionnaire (items 18, 19, and 31) which were oriented toward religion: religious preference, the perceived importance of religion to the respondent, and the degree of his adherence to the rules and regulations of the religion.

Institutional Satisfaction

This was a set of measures adapted from Hyman (1955, p. 400). The institutions selected (schools, business, labor, government, health service, churches) were listed and an opportunity offered to indicate whether they are judged excellent, good, fair, or poor in respect to how well they do their particular job in the community. It is suggested that the theologically conservative would be less satisfied with institutions generally than those of liberal persuasion since conservatives are more concerned with a conversion experience (a personal experience of change) and generally are less involved with these social institutions. Persons with a great deal of education in relation to income might also be expected to be less satisfied than others. Again, no reliability estimates are offered, and validity will be a function of concurrent correlation coefficients.

Change Orientation Variable

Change orientation was measured by statements which purported to reflect attitudes toward change in such areas as health practices, child

rearing practices, birth control, automation, political leadership, and self change (Personal Questionnaire, items 32-36 and 40). It was postulated that the theologically liberal would be more open to change and the theologically conservative would be predisposed to oppose change. Favorableness toward change would, of course, challenge many existing cultural norms.

Demographic Variables

Respondents were asked to indicate their placement on several variables often found to be of significance in social-psychological research. These were: (a) education, (b) ministerial ordination, (c) denominational affiliation, (d) theological preference, (e) occupation, (f) income, (g) rental, (h) age, (i) sex, (j) marital status, (k) number of children, (l) number of siblings, (m) mobility, and (n) rural-urban youth background.

Collection of Data

All full-time academic personnel in the schools selected in the sample were requested to complete the questionnaire. Good cooperation was received with a return of 423 useable questionnaires from the 560 mailed (75 per cent). The nineteen returned Administrative Data Sheets showed 313 of 373 subjects responding (84 per cent). For this type of group administration the response was judged to be exceptionally good. However, full cooperation and participation were not received for a number of reasons, among them being the following: (a) for various reasons (Academic Dean out of town, need for approval at faculty meeting before accepting participation in the research, not selected in original sampling) a number of schools did not receive their questionnaires until

late in the school year; (b) although group administration was requested (not demanded), nine schools used the self-administration method which allowed the individual faculty members more freedom to choose whether they would respond to the questionnaires; (c) some faculty members felt the questionnaire was either too long or too foolish to spend time with it. Table 2 indicates the cooperation received.

TABLE 2.--Questionnaire response for the four different college groups.

	No. of Q'aires mailed*	No. of faculty answered Q'aire (from Admin. Data Sheet**)	No. of faculty did not answer (from Admin. Data Sheet)	No. of useable Q'aires****
CASC	350	188	50***	266
AABC-member	141	87	8	93
AABC-associate	39	38	2	39
Other	30	24	4	25
Total	560	337	64	423

*Most schools requested a few more Questionnaires than they actually needed.

**Of the 24 colleges, only 19 returned the Administrative Data Sheet.

***One school failed to indicate number of faculty who did not complete Questionnaire.

****From all 24 colleges.

Statistical Procedures

Descriptive Statistics

The responses were first scored on a special scoring sheet and then transferred to punched cards which could be fed into the CDC 3600 computer, available at Michigan State University. Three Frequency Column

Count Programs (Clark, 1964) were used, designated as FCC I, FCC II, and FCC III (Appendix D-3). These programs were utilized in tabulating the frequency distributions for every item. This proved useful in selecting variables for analysis and in gaining a clinical "feel" for the data.

Scale and Intensity Analysis

The basic references for scaling are Guttman (1950) and Suchman (1950, chapters 4 and 7). Scale analysis provides a method for determining whether a set of items can be ordered along a single dimension. If a particular universe of items is really one-dimensional, any sample from it should also be one-dimensional. If scale ordering does not occur, the universe is judged to be multi-dimensional and consequently not scalable. "We shall call a set of items of common content a scale if a person with a higher rank than another is just as high or higher on every item than the other person" (Guttman, 1950, p. 62).

While the Waisanen (1960) technique is appealing by virtue of its simplicity, the "CUT" Computer program, developed by Hafterson (1964) at Michigan State University, saved numerous hours of work and avoided errors which would have resulted from a longer and more tedious method. The program determined each possible cutting point as well as the number of errors involved in each cut. The dichotomized items were then scaled by the Multiple Scalogram Analysis program in use with the CDC 3600 Computer with the amount of error allowable in reproducing item scores from a knowledge of respondent total score rank arbitrarily set at 10% (Lingoes, 1963; Hafterson, 1964).

After scaling was completed, an objective zero point was needed, independent of the content of the items, to divide the favorables from

the unfavorables. This zero point was determined by the use of the intensity questions. The form used for the intensity question is simply: "About how strongly do you feel about your answer?" with categories of "not strongly at all," "not very strongly," "fairly strongly" and "very strongly." Repeating such a question after each content question yields a series of intensity answers. Scored by the same procedure as that used for content answers, each respondent was given an intensity score (Suchman, 1950, p. 210). Intensity scores may form a quasi-scale, which occurs when the reproducibility of a scale is lower than the arbitrarily established .90, but when the errors occur in a random pattern. Intensity when plotted against the content dimension reveals the point on the content scale of lowest intensity. This point then is established empirically as the point of indifference, or zero point (Foa, 1950, 1961; Guttman 1947, 1950; Guttman and Foa, 1951; Guttman and Suchman, 1947; Suchman, 1950; Suchman and Guttman, 1947). Attitudes become favorable on one side of the point and unfavorable on the other side.

Mean Differences Analyses

A 2-way analysis of variance design for unequal N's was used to analyze group-sex interaction (Ruble, Paulson, Rafter, 1966). For convenience of computer programming, the *F* statistic was used for all testing of mean differences, even though differences between two means are usually tested by the *t* statistic. The results are the same (Edwards, 1960, p. 146). If a *F* between two means is significant, inspection of the size of the two means will indicate which one is higher and thus the main contributor to the differences reflected in the *F*.

However, the problem is more involved when there are three or more groups or levels under investigation. A significant overall F simply leads to non-rejection of the research hypothesis being tested. In other words, we do not know if every mean is significantly different from each of the other means. Since in the present research the samples were not equal in size or in sex ratio within groups, it was necessary to compute an "adjusted mean" which equalizes or accounts for the variance in the size of the samples as well as the unequal sex distribution within the samples.

The F test for the three group comparisons is the usual one while the F test used to test for differences between the adjusted means of the "pairs-of-groups" is equal to a two-sided t test while also fully accounting for the other experimental factors. This procedure for testing for significance among multiple means is approximately equal to Duncan's Multiple Means test (Edwards, 1960; Kramer, 1956, p. 307-310) up to and including three treatment means. The procedure is somewhat more liberal than Duncan's when more than three means are included, thus increasing the likelihood of Type I error. The procedure also does not account for the non-independence among the pairs-of-treatment-means.

The "print-out" from the computer on the 2-way analysis of variance design provided the frequencies, sums, means, sum of squares, and sums of squared deviations of the mean for each category, as well as the F statistic and the approximate significance probability of the F statistics. This convenient figure enabled the researcher to know at a glance whether or not the F was significant without referring to statistical tables. For example, if the number printed out was .01, this implied that for a given F with the appropriate degrees of freedom, the

level of confidence would be .01. However, if only .00 was printed out, the level of confidence was to be considered to be .005 or less.

Relational and Predictive Statistics

With the help of the CDC 3600 computer programs (Ruble and Rafter, 1966; Ruble, Kiel, and Rafter, 1966a, 1966b) the researcher procured the following measures of association for the purposes of predictive and relational analyses: (a) zero-order correlations, (b) multiple correlations, and (c) partial correlations. The programs provided a host of data including means and standard deviations for each variable, the matrix of simple correlations between all variables, the multiple correlations of selected variables on the criterion, the beta weights of all predictor variables used in the analyses, a test of significance for each beta weight, and the partial correlations between each predictor and the criterion. However, the ones which were used in this study are briefly described below.

The zero-order correlational analysis provided a matrix of simple correlations between all variables for the total sample. In addition, a matrix of simple correlations between all variables was obtained for each of the following groups: males, females, CASC educators, AABC member educators, and AABC associate member educators. Tests of significance of the correlation coefficients from zero were the usual ones, with tables entered for the appropriate degrees of freedom.

The multiple regression analysis that was done for the data was consistent with the appropriate research hypotheses. More specifically, the total raw scores of intensity from both the Progressive and Traditional Education Scales were used as the dependent variables in the

analysis of contact with education. The use of multiple regression analysis has been recommended by many researchers. Ward (1962, p. 206) observed that it "not only reduces the dangers inherent in piecemeal research but also facilitates the investigation of broad problems never before considered 'researchable'."

Partial correlation was computed from the outputs of the general multiple regression model used in the CDC 3600 program. One benefit of the use of partial correlation is that a number of variables which are assumed to have some relationship to a criterion, or dependent variable, can be examined simultaneously. Often, when a series of Pearsonian product-moment r's are computed between a criterion and a set of variables considered to be predictors of the criterion, spurious conclusions may be obtained because the predictor variables are themselves interrelated, rather than directly predictive of the criterion. In a partial correlation solution to the problem these relationships among the predictor variables are taken into account in computing the true correlation of each variable with the criterion. That is, the effects of all but one variable are held constant.

Major Research Hypotheses, Derivation, and Instrumentation

Hypotheses Relative to Scaling

H-1: Each set of attitude items employed in the study represents an underlying one dimensional universe of content, so that Guttman Scale Analysis will yield a scale or a quasi-scale of attitude items.

H-1a: Traditional-attitude-toward-education items will yield a Guttman scale or quasi-scale.

H-1b: Progressive-attitude-toward-education items will yield a Guttman scale or quasi-scale.

H-1 Derivation: The basis for the assertion of these hypotheses rests on the original factor derivation of the "traditional" and "progressive" items by Kerlinger (1958, 1961), and on pre-test scaling of these items in Lansing, Michigan, in March of 1964 (Felty, 1965) in which "traditional" items were found to scale independently of "progressive" items among a sample of 97 students and job retraining workers.

H-1 Instrumentation: Attitudes toward education will be measured by the Kerlinger Education Scale (both Traditional and Progressive), as modified for the present study (Appendix B).

H-2: For each attitude scale, the plotting of intensity scores against content scores will yield a U-shaped or J-shaped curve.

H-2a: For traditional-attitude-toward-education items, the plotting will yield a U- or J-shaped curve.

H-2b: For progressive-attitude-toward-education items, the plotting will yield a U- or J-shaped curve.

H-2 Derivation: The hypotheses are derived from empirical findings reported by Suchman (1950) and others that such a relationship may be expected and should serve to establish a zero point dividing the favorably-disposed from the unfavorably-disposed respondents.

H-2 Instrumentation: Following each attitude item, a separate question will be asked concerning the intensity with which the respondent holds the opinion expressed on the content statement of Educational Scale (Appendix B).

Hypotheses Relative to Contact Frequency and Attitude Scores

H-3: The more frequent the contact with education the higher will be the scores on the intensity statements of the Kerlinger Attitudes Toward Education Scale, regardless of whether attitude is traditional or progressive.

H-3 Derivation: The hypothesis is derived from considerations of Rosenberg (1956, 1960), Foa (1950), and Guttman and Foa (1951), that contact frequency is directly related to attitude intensity, regardless of content directions.

H-3 Instrumentation: Contact frequency will be measured by questions 1, 2, 3, 4, 5, and 6 of the Personal Questionnaire; education intensity scores will be obtained through independent intensity questions following each attitude content statement of the Education Scale (Appendix B).

H-4: High frequency of contact with education will lead to favorable attitude toward education if high frequency is concurrent with (a) alternative rewarding opportunities and (b) enjoyment of the contact.

H-4 Derivation: The hypothesis is derived from considerations of Zetterberg (1963).

H-4 Instrumentation: Favorable attitude toward education will be measured by the progressive-attitude-toward-education scale. Contact variable is measured by direction questions 1, 2, 3, 4, 5, and 6 of the Personal Questionnaire; alternatives by question 8 of the Personal Questionnaire; and enjoyment by question 7 of the Personal Questionnaire (Appendix B).

Hypotheses Relative to
Interpersonal Values and
Attitudes Toward Education

H-5: Persons who score high in need for power and control over others will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who score low in need for power and control over others.

H-5 Derivation: The hypothesis is derived from Wright (1960), Adorno et al. (1950), Ranck (1961), Wise (1951), and Elder (1959). Persons with high power needs apply a comparative measure in evaluation of others and should be expected to devalue persons holding a progressive attitude toward education, since a progressive attitude toward education usually implies willingness to change the status quo.

H-5 Instrumentation: Need for power and control will be measured by the Leadership (L) Scale of the SIV and attitudes toward education will be measured by the Education Scale (Appendix B).

H-6: Persons who score high in need for recognition and achievement will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who score low in need for recognition and achievement.

H-6 Derivation: (The derivation is the same as in H-5.)

H-6 Instrumentation: Need for recognition and achievement will be measured by the Recognition (R) Scale of the SIV; attitudes toward education will be measured by the Education Scale (Appendix B).

H-7: Persons who score high in need to help others and to be generous will score higher in progressive-attitude-toward-education and

lower in traditional-attitude-toward-education than those who score low in need to help others and to be generous.

H-7 Derivation: (The derivation is the same as in H-5.)

H-7 Instrumentation: Need to be helpful and generous will be measured by the Benevolence (B) Scale of the SIV; attitudes toward education will be measured by the Education Scale (Appendix B).

Hypotheses Relative to Religiosity and Other Variables

H-8: Persons who are measured as theologically conservative will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who are measured as theologically liberal.

H-8 Derivation: The hypothesis is derived from considerations of Ranck (1961), Mannoia (1962), and Miller (1963) that there is a difference in personality characteristics which results in observable behavorial differences between those who are conservative in theology and those who are liberal.

H-8 Instrumentation: Theological orientation will be measured by the Religious Belief Inventory (Appendix B) of Toch and Anderson (1960); attitudes toward education will be measured by the Education Scale (Appendix B).

H-9: There will be a significant difference in attitudes toward education between persons teaching in Bible-Theology and subjects

definitely related to ministerial training and those teaching in other fields.

H-9 Derivation: Adorno (1950), Ranck (1961), Mannoia (1962), and Miller (1963), give evidence that there exists a close correspondence in the attitudes, outlooks, types of approach, and motives a person is likely to have in a variety of areas of his personality.

H-9 Instrumentation: Persons will be categorized according to their response to question 7 on the Demographic Data sheet of the Personal Questionnaire; attitudes toward education will be measured by the Education Scale (Appendix B).

H-10: There will be a significant difference in attitudes toward education between ordained ministers and persons who are not ordained.

H-10 Derivation: (The derivation is the same as in H-9.)

H-10 Instrumentation: The group will be categorized according to their response to question 4 on the Demographic Data sheet of the Personal Questionnaire; attitudes toward education will be measured by the Education Scale (Appendix B).

H-11: Persons who are measured as conservative in theology will score higher in need for power and control over others and in need for recognition and achievement and lower in need to help others and to be generous than those who are measured as liberal in theology.

H-11 Derivation: The hypothesis is derived from considerations of Mannoia (1962) and Miller (1963) who found that conservatives tended to be more directive in the counseling relationship.

H-11 Instrumentation: Theological conservativism will be measured by the Religious Belief Inventory of Toch and Anderson (1960); need for power and control over others, need for recognition and achievement, and need to be helpful and generous will be measured by the Leadership (L), Recognition (R), and Benevolence (B) Scales of the SIV (Appendix B).

Hypothesis Relative to Type of School and Attitudes Toward Education

H-12: There will be a significant difference in attitudes toward education between teachers in CASC member schools, teachers in AABC member schools, and teachers in AABC associate member schools.

H-12 Derivation: If a difference exists between the belief systems of teachers affiliated with the different types of schools, this difference should also be observed in their attitudes toward education.

H-12 Instrumentation: The type of school with which a teacher is affiliated will be determined from the direct answer to question 11 on the Demographic Data sheet of the Personal Questionnaire; attitudes toward education will be measured by the Education Scale (Appendix B).

Limitations of the Study

1. The questionnaire was sent to the individual colleges late in the spring semester, 1966. Consequently, some faculty members may have either rushed through the questionnaire or ignored it completely because of their busy schedules. The time of the survey probably led to a reduction in the percentage of returns.
2. The involvement of an hour to an hour-and-a-half in filling out the questionnaire is most certainly a factor. If respondents were unable

to grasp the relationship between filling out the questionnaire and research objectives, there would be resentment toward the project, especially if valued activities had to be delayed and plans altered.

3. The method of sample was not done on an individual basis. After the colleges were placed in specific categories according to religious affiliation, entire college faculties were randomly chosen from these sub-populations. College faculties varied in size from six to thirty-nine, and the percentage of faculty members within individual schools completing the questionnaire was from one hundred to less than fifty per cent. This method of sampling may place limitations on the generality of results.
4. Group administration of questionnaires is usually considered the ideal testing condition. This method was suggested to the academic deans of each college but was not demanded as a qualification for acceptance into the sample. Of the nineteen colleges which returned the Administration Data sheet, twelve indicated group administration and seven showed self-administration.
5. Time and money limitations did not permit the giving of these instruments to a pre-test group before administering them to the main sample. Inasmuch as this study is related to a continuing study, this limitation is not as imposing as it might seem at first.
6. The reliability and validity of the measuring instruments is open to question. It is difficult if not impossible to determine the degree of uniformity in communication and the accuracy of the respondents' reporting. Yet even if these factors were negligible, high reliability and validity coefficients are not assured. The Anderson-Toch Religious Belief Inventory has not been used

extensively. The Attitude Toward Education Scales were not found to be uni-dimensional by either Felty (1965) or Friesen (1966). It is also impossible to ascertain with any degree of accuracy the reliability and validity of single item attitude statements such as were used in the Personal Questionnaire.

7. Sampling bias places limitations on the generality of the results. What has been found concerning attitudes of teachers in AABC and CASC schools cannot be generalized to schools outside of these organizations, particularly larger colleges and universities and those which are free from religious denominational affiliation.
8. The reporting of one's own ideas, feelings, or beliefs is always subject to deficiencies because of possible inability to analyze true apprehensions and report them accurately.
9. Another possible limitation exists because of personal or denominational pre-dispositions against empirical studies of the present type.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter is organized into three main sections:

Section 1: descriptive characteristics of the sample.

Section 2: the testing of the hypotheses presented at the end of Chapter III. (This includes comparisons of mean differences of various scores of the subjects when they were divided into groups according to their contact with education, interpersonal values, theological orientation, and types of schools within which they teach.)

Section 3: the presentation of other statistical analyses which did not relate to the hypotheses, but which were of relevancy to the present study.

Section 1: Descriptive Data

The descriptive characteristics of the research samples are presented in this section. Analyses of the data are based on the FCC I, II, and III programs (see p. 43), and the CDC 3600 MDSTAT Program which provided a number of statistics (see pp. 46, 47) useful for simple demographic descriptions.

Table 3 presents the sample size, showing the respondents according to sex and type of college. It is apparent that the number of respondents who teach in AABC-A schools is quite low. The reason for this is two-fold: (a) only twelve colleges are associate members of the AABC; and (b) the four colleges randomly selected from these twelve were all small. However, this should not be construed as an overly limiting

TABLE 3.--Distribution of respondents according to sex and type of college.[1]

Sex	AABC-M	AABC-A	CASC	Both CASC and AABC-M	Total[2]
Male	58	26	168	16	268
Female	29	11	87	8	135
Sub-Total	87	37	255	24	403
Did not indicate sex	6	2	11	1	20
Total	93	39	266	25	423

[1]AABC-M = Educators teaching in schools which are members of the Accrediting Association of Bible Colleges.

AABC-A = Educators teaching in schools which are associate members of the Accrediting Association of Bible Colleges.

CASC = Educators teaching in schools which are members of the Council for the Advancement of Small Colleges.

Both CASC and AABC-M = Educators teaching in a school which is a member of both the Accrediting Association of Bible Colleges and the Council for the Advancement of Small Colleges.

[2]Twenty subjects did not indicate their sex.

factor in the interpretation of the results since only one of the twelve hypotheses divides the independent variable on the basis of type of college.

It is also interesting to note that the total relationship of males to females is approximately two to one and this relationship is also true for the four distinct groups of educators.

Differences in Education, Income, and Age Between Respondent Groups

The data for the three demographic variables of education, income, and age are presented in Table 4. Although there was no significant

TABLE 4.--Comparison of mean differences and F statistics in respect to three demographic variables for the three college categories.

Variable	Type of School[1]	N	Mean	Two-way F	Sig. of F
Education	AABC-M	86	5.070	4.394	.01
	AABC-A	36	4.972		
	CASC	253	5.324		
	Total	375	5.232		
Untested ranking of means: CASC (5.324) > AABC-M (5.070) > AABC-A (4.972)					
Means test results: CASC > AABC-M*; CASC > AABC-A*					
Income	AABC-M	83	9.012	4.616	.01
	AABC-A	34	7.177		
	CASC	233	10.069		
	Total	350	9.537		
Untested ranking of means: CASC (10.069) > AABC-M (9.012) > AABC-A (7.177)					
Means test results: CASC > AABC-A**					
Age	AABC-M	90	42.566	0.583	.56
	AABC-A	38	40.131		
	CASC	263	42.068		
	Total	391			

[1]AABC-M = Members of Accrediting Association of Bible Colleges
AABC-A = Associate members of Accrediting Association of Bible Colleges
CASC = Members of Council for the Advancement of Small Colleges

* $p<.05$; ** $p<.01$

difference between the three groups of educators in respect to age, there was a difference in regard to education and income.

In reference to Table 4, the interpretation of the mean scores for income was coded to mean "thousands-of-dollars" per annum and for age to mean "number-of-years." The data of education was also analyzed in coded form. An interpretation of the education coding is in conformity with the instructions given on page 3-1 of the Code Book (Appendix D). The data was presented so that each score represents a range of grades completed or of degrees attained. For example, score 4 means "some graduate work beyond the first degree," and score 5 means "a M.A., B.D., or equivalent degree." Since the ranges are often uneven, interpretation is somewhat difficult. However, the data is at least ordinal in that the higher score always represents a higher number of grades completed or degree received.

Table 4 gives the results of the means test which was described on page 45. A significant difference was found between CASC and AABC-M and between CASC and AABC-A in regard to education. However, no significant difference appeared between AABC-M and AABC-A on this variable.

Table 4 also indicates the fact that CASC educators received significantly more remuneration than AABC-A educators. However, no significant differences were found between AABC-M and CASC and between AABC-M and AABC-A.

Table 5 indicates significant differences between males and females in regard to education, income, and age. However, since the three different college categories (the fourth category of both CASC and AABC-M will be dropped from further consideration) show the same

TABLE 5.--Comparison of mean differences and F statistic in respect to three demographic variables for male and female total sample.

Variable	Sex	N	M	Standard Deviation	Two-way F	Sig. of F
Education	Male	265	5.347	0.86	10.915	<.005
	Female	134	5.030	1.00		
	Total	399	5.241	0.92		
Income	Male	258	9.919	5.94	4.018	.05
	Female	115	8.696	4.10		
	Total	373	9.542	5.46		
Age	Male	264	40.008	11.19	22.885	<.005
	Female	133	45.820	11.88		
	Total	397	41.955	11.74		

approximate two-to-one relationship between males and females (Table 3), the difference between males and females as such should not have any differential effect upon the characteristics of educators in different types of schools.

Table 39, variable 5, indicates there is no significant difference between male and female (the independent variable) and type of schools (the dependent variable).

Section 2: Hypotheses Testing

In this section twelve hypotheses are presented which are related to the following categories: (a) the scale properties of the attitude toward education items; (b) the relationship between contact frequency and attitude scores; (c) the relationship between interpersonal values and attitudes toward education; (d) the relationship of religiosity

variables with attitudes toward education and interpersonal values; (e) the relationship between type of school and attitudes toward education.

Hypotheses Relative to Scaling

The scaling hypotheses are unlike the hypotheses in the other sections in that the scale hypotheses test an expected empirical-mathematical relationship rather than a relationship between two or more sets of empirically-derived data. Scaling hypotheses predict a relationship between the empirical data and an ordinal scale criteria.

H-1: Each set of attitude items employed in the study represents an underlying one-dimensional universe of content so that Guttman scale analysis will yield a scale or quasi-scale of attitude items.

A strict testing of this hypothesis requires the Guttman Scalogram Analysis (GSA). However, the Multiple Scalogram Analysis (MSA) (Lingoes, 1963) was substituted for the GSA. Two reasons for this can be given. First, no computer program was available for GSA at Michigan State University at the time of the analysis. Secondly, the MSA does not require an a priori assumption of a single dimension, but permits the data "to form whatever relationships are implicit, consistent with the logical and statistical requirements of the procedure" (Lingoes, 1963, p. 513).

Neither the traditional-attitude-toward-education items nor the progressive-attitude-toward-education items formed a meaningful scale. This is consistent with the findings of Felty (1965) and Friesen (1966). Felty found that six of the ten progressive-attitude-toward-education (ATEP) items formed a scale but no suitable scales were formed from the

traditional-attitude-toward-education (ATET) items (Felty, 1965, p. 162). Friesen gives no specific information in regard to his analysis but indicates the two scale hypotheses were not confirmed (Friesen, 1966, p. 221). No scale of more than two items was extracted by the MSA program from the present data.

H-2: For each attitude scale, the plotting of intensity scores against content scores will yield a U-shape or J-shape curve.

The scaling of intensity scores has meaning only if the items have previously scaled for content. Since the content items did not scale, intensity analysis was omitted.

Hypotheses Relative to Contact Frequency and Attitude Scores

H-3: The more frequent the contact with education the higher will be the scores on the intensity statements of the Kerlinger Attitudes Toward Education Scale (ATE), regardless of whether attitude is traditional or progressive.

In testing this hypothesis, intensity scores on the ATE were regarded as the dependent variable and contact frequency scores as the independent variable. Tables 6 and 7 present statistics for the high and low contact groups. In other words, all educators were considered as one group; and then those measured to have high frequency of contact with education were compared with those measured to have low frequency of contact with education. Sub-samples of 15 to 20 percent of the sample were desired for the testing of the hypotheses, but often the size of the sub-samples was determined by the fact that a given percentage of the respondents were in the same category.

TABLE 6.--Means and F statistic comparing high and low frequency of contact with education and intensity scores on the progressive-attitudes-toward-education scale.

Variable[1]	Amount	N	Mean of Progressive Intensity Scale	Two-way F	Sig. of F
Number graduate courses	hi	111	31.892	2.460	.11
	lo	123	31.211		
	total	234	31.534		
Knowledge public school	hi	37	33.622	11.970	.005
	lo	73	31.219		
	total	110	32.027		
Years public school teaching	hi	35	32.000	0.487	.49
	lo	247	31.324		
	total	282	31.408		
Years parochial school teaching	hi	38	33.079	3.096	.10
	lo	291	31.399		
	total	329	31.593		
Total years teaching	hi	210	31.752	0.007	.89
	lo	58	31.603		
	total	268	31.720		
Amount educational professional reading	hi	70	32.429	11.347	.005
	lo	162	30.605		
	total	232	31.155		

[1]See Table 8 for complete title of variables

TABLE 7.--Means and F statistic comparing high and low frequency of contact with education and intensity scores on the traditional-attitude-toward-education scale.

Variable[1]	Amount	N	Mean of Progressive Intensity Scale	Two-way F	Sig. of F
Number graduate courses	hi	111	30.973	2.999	.08
	lo	122	30.131		
	total	233	30.532		
Knowledge public school	hi	37	31.541	1.687	.19
	lo	73	30.589		
	total	110	30.909		
Years public school teaching	hi	34	31.529	1.100	.30
	lo	250	30.396		
	total	284	30.532		
Years parochial school teaching	hi	40	33.000	5.693	.02
	lo	291	30.357		
	total	331	30.677		
Total years teaching	hi	211	31.270	3.924	.05
	lo	58	29.828		
	total	269	30.959		
Amount educational professional reading	hi	70	31.371	7.835	.01
	lo	162	29.673		
	total	232	30.185		

[1]See Table 8 for complete title of variables

Differentiating between the amount of contact with education by educators was difficult. Instead of attempting to measure the amount of contact with one variable, six different variables were used. Three of these (number-of-graduate-courses-in-education, knowledge-of-own-public-school-distirct, and amount-of-educational-professional-reading) could also be interpreted as "knowledge" variables, which turn out to be quite predictive of the intensity of attitudes toward education. These variables will be treated primarily as contact variables, but the reader should keep in mind the dual interpretation of these variables. Table 6 reveals that high frequency of contact with education as measured by two (knowledge-of-own-public-school-district and amount-of-educational-professional-reading) of the six variables produced significantly higher intensity scores on the progressive-attitude-toward-education-scale (ATEP-I). Table 7 indicates that high frequency of contact with education as measured by three (years-of-parochial-school-teaching, total-years-of-teaching, and amount-of-educational-professional-reading) of the six variables produced significantly higher intensity scores on the traditional-attitude-toward-education-scale (ATET-I).

It is interesting to note that the high-frequency-of-contact group (regardless of the method used for this measurement) always had higher mean scores on both the ATEP-I and ATET-I than did the low-frequency-of-contact group.

This is in accord with the analysis of the total sample (Table 8) in which the correlations between the contact variables and the intensity of the attitude are always positive and significantly so for eight of the twelve correlations.

TABLE 8.--Zero-order correlation between indices of contact with education and intensity scores on the attitude-toward-education scales for the entire sample.

Contact Variable	ATEP-I[1]		ATET-I[2]	
	N	r	N	r
Number of graduate courses in education	407	.102*	408	.088
Knowledge of own public school district	412	.150** †	412	.045
Years of public school teaching	409	.088	410	.112*
Years of parochial school teaching	402	.129**	403	.199** †
Total years of teaching	411	.047	412	.141** †
Amount of educational professional reading	411	.208**	412	.173**

[1]ATEP-I = Progressive-attitude-toward-education, Intensity Scale
[2]ATET-I = Traditional-attitude-toward-education, Intensity Scale

* $p < .05$ ** $p < .01$

† This correlation is significantly ($p < .01$) greater than that obtained between the same contact variable and the other intensity scale.

A question may be raised as to whether there is a greater correlation between contact and ATEP-I or between contact and ATET-I. Of the eight significant correlations, four are with each intensity scale, and three of each set of four are beyond the .01 level (Table 8).

Six tests to determine the significant difference between two obtained correlations were performed in reference to each contact variable (Walker and Lev, 1953, pp. 256-257). In other words, each of these tests

was to determine if the correlations between a particular contact variable and ATEP-I and between the same contact variable and ATET-I were significantly different. No significant differences were found for three of the measures of contact (number-of-graduate-courses-in-education, years-of-public-school-teaching, and amount-of-educational-professional-reading). The knowledge-of-own-public-school-district variable produced a significantly larger correlation with ATEP-I than with ATET-I. On the other hand, years-of-parochial-school-teaching and total-years-of-teaching correlated significantly higher with ATET-I.

H-4: <u>High frequency of contact with education will lead to favorable attitudes toward education if high frequency is concurrent with (a) alternative rewarding opportunities and (b) enjoyment of the contact</u>.

The instrumentation of contact with education for hypothesis 4 is the same as hypothesis 3 in that contact was measured in six different ways by six different questions. Favorable attitudes toward education were measured by the content score on the progressive-attitude-toward-education scale (ATEP-C). The multiple correlation from Table 9 indicates that the number of graduate courses taken in education (contact or knowledge variable), the enjoyment of education, and the opportunity for rewarding alternatives outside of education correlated with ATEP-C at a level of significance beyond .01. The partial correlations indicate which of the three variables by itself contributes most to the multiple correlation. In this case, the contact or knowledge variable, that is, the number of graduate courses taken in education, contributed more to the multiple correlation than did the enjoyment of the contact

or alternative reward opportunities. The contact or knowledge contribution was significant beyond the .01 level.

Tables 10-14 are similar to Table 9. Each Table uses a different method of measuring contact with (or knowledge of) education. Four of the six multiple correlations were significant (Tables 9, 10, 11, and 14). Although no test was performed to determine the significance of the difference, in five of the six cases (Table 12 presents the exception) the contact (or knowledge) variable contributed more to the multiple correlation than did the enjoyment of the contact or the alternative rewarding opportunities. It is interesting to note that only those variables which can be interpreted either as contact or knowledge variables produced significant partial correlations (Tables 9, 10, and 14). The "true" contact with education variables produced no significant partial correlations in regard to favorable attitudes toward education (Tables 11, 12, and 13).

TABLE 9.--Multiple and partial correlations between progressive-attitude-toward-education (dependent variable) and amount of graduate courses (contact-knowledge variable), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=396	
	Partial correlation coefficients
Contact-knowledge by graduate courses	.176**
Enjoyment of contact with education	-.049
Alternatives to contact in education	-.054
Multiple correlation = .183**	

** $p < .01$; * $p < .05$

TABLE 10.--Multiple and partial correlations between progressive-attitude-toward-education (dependent variable) and knowledge of public education (contact-knowledge), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=399	
	Partial correlation coefficients
Contact-knowledge by knowledge of public education	.169**
Enjoyment of contact	-.031
Alternatives to contact	-.050
Multiple correlation = .176**	

** p < .01; * p < .05

TABLE 11.--Multiple and partial correlations between progressive-attitude-toward-education (dependent variable) and years of teaching in public schools, grades 1-12 (contact variable), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=396	
	Partial correlation coefficients
Contact by teaching--public schools	.097
Enjoyment of contact	-.026
Alternatives to contact	-.042
Multiple correlation = .109*	

** p < .01; * p < .05

TABLE 12.--Multiple and partial correlation between progressive-attitude-toward-education (dependent variable) and years of teaching in parochial schools, grades 1-12 (contact variable), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=390	
	Partial correlation coefficients
Contact by teaching--parochial school	.038
Enjoyment of contact	-.025
Alternatives to contact	-.046
Multiple correlation = .064	

** p < .01; * p < .05

TABLE 13.--Multiple and partial correlations between progressive-attitude-toward-education (dependent variable) and total years of educational professional experience (contact variable), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=401	
	Partial correlation coefficients
Contact by total teaching	-.070
Enjoyment of contact	-.012
Alternatives to contact	-.047
Multiple correlation = .087	

** p < .01; * p < .05

TABLE 14.--Multiple and partial correlations between progressive-attitude-toward-education (dependent variable) and amount of professional educational reading presently being done weekly (contact-knowledge variable), enjoyment of contact, and alternative rewarding opportunities.

Progressive-attitude-toward-education (dependent)--N=400	
	Partial correlation coefficients
Contact-knowledge by professional reading	.152**
Enjoyment of contact	-.046
Alternatives to contact	-.043
Multiple correlation = .159**	

** p < .01; * p < .05

When the six individual measures of contact were used together as the independent variable, their multiple correlation with progressive-attitude-toward-education is significant beyond the .01 level, as indicated by Table 15. Adding to these six, two more independent variables (alternatives-to-contact-with-education and enjoyment-of-education), an increase in the multiple correlation is observed even though neither of the additions is significant in itself in the relationship. A comparison of Table 15 with Table 16 indicates this increase.

Most of the data analyses performed in reference to H-4 confirm it. High frequency of contact with (or knowledge of) education when alternatives to and enjoyment of contact were concurrent was generally related to favorableness of attitude toward education.

TABLE 15.--Multiple and partial correlations between progressive-attitude-toward-education and combined contact variable.

Progressive-attitude-toward-education (dependent)--N=394	
	Partial correlation coefficients
Contact-knowledge by graduate courses	.102*
Contact-knowledge by knowledge of Public Education	.107*
Contact by teaching--Public Schools	.042
Contact by teaching--Parochial Schools	.013
Contact by teaching--Total	-.169**
Contact-knowledge by professional reading	.045
Multiple correlation = .234**	

** $p < .01$; * $p < .05$

TABLE 16.--Multiple and partial correlations between progressive-attitude-toward-education and combined contact variable when high frequency of contact is concurrent with alternative rewarding opportunities and enjoyment of education.

Progressive-attitude-toward-education (dependent)--N=384	
	Partial correlation coefficients
Contact-knowledge by graduate courses	.086
Contact-knowledge by knowledge of Public Education	.137**
Contact by teaching--Public Schools	.029
Contact by teaching--Parochial Schools	.003
Contact by teaching--Total	-.167**
Contact-knowledge by professional reading	.045
Alternatives to contact	-.043
Enjoyment of contact	.008
Multiple correlation = .243**	

** $p < .01$; * $p < .05$

Hypotheses Relative to Interpersonal Values and Attitudes Toward Education

H-5: Persons who score high in need for power and control over others will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who score low in need for power and control over others.

This hypothesis was tested by means of analysis of variance by comparing the highest scoring educators with the lowest scoring educators

on the Leadership value of the SIV in regard to ATEP-C and ATET-C. The results are reported in Tables 17 and 18.

TABLE 17.--Means and F statistic comparing high and low scores on Leadership value and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
High Leadership value scores	39	29.128	0.074	.78
Low Leadership value scores	50	28.440		
Total	89	28.742		

TABLE 18.--Means and F statistic comparing high and low scores on Leadership value and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
High Leadership value scores	39	25.436	3.628	.07
Low Leadership value scores	50	26.880		
Total	89	26.247		

There was no significant difference between educators with high scores and those with low scores on Leadership value insofar as ATEP-C and ATET-C scores are concerned. In addition to non-significant findings, the resulting mean scores in both cases were reversed from the hypothesized direction of difference. This hypothesis was not confirmed.

Tables 19 and 20 report correlation coefficients for AABC-M, AABC-A, CASC, and the total sample. The "Total" columns do not show a significant correlation between Leadership and ATEP-C but do show a significant negative correlation beyond the .01 level between Leadership and ATET-C. This is in the opposite direction of that hypothesized.

TABLE 19.--Zero-order correlations between progressive-attitude-toward-education (content) and the Gordon value scales for the three groups of educators and the total sample.

Value	Group[1]							
	AABC-M		AABC-A		CASC		Total[2]	
	N	r	N	r	N	r	N	r
Leadership	75	.157	31	.000	219	.080	348	.069
Recognition	75	.171	31	.306*	219	.051	348	.083
Benevolence	75	-.121	31	-.070	219	.037	348	.001
Support	75	.085	31	.192	219	.046	348	.070
Conformity	75	-.341**	31	-.095	219	-.283**	348	-.293**
Independence	75	.096	31	-.211	219	.144*	348	.130*

[1]AABC-M = Members of Accrediting Association of Bible Colleges
AABC-A = Associate members of Accrediting Association of Bible Colleges
CASC = Members of Council for the Advancement of Small Colleges

[2]Total = All respondents including those affiliated with both the AABC-M and CASC

* $p < .05$ ** $p < .01$

TABLE 20.--Zero-order correlations between traditional-attitude-toward-education (content) and the Gordon value scales for the three groups of educators and the total sample.

Value	Group[1]							
	AABC-M		AABC-A		CASC		Total[2]	
	N	r	N	r	N	r	N	r
Leadership	76	-.139	31	-.303*	219	-.136*	349	-.145**
Recognition	76	.057	31	.070	219	-.097	349	-.058
Benevolence	76	.069	31	-.256	219	.023	349	.021
Support	76	.013	31	-.015	219	-.122	349	-.087
Conformity	76	.249**	31	.089	219	.324**	349	.297**
Independence	76	-.175	31	.416*	219	-.050	349	-.062

[1]AABC-M = Members of Accrediting Association of Bible Colleges
AABC-A = Associate members of Accrediting Association of Bible Colleges
CASC = Members of Council for the Advancement of Small Colleges

[2]Total = All respondents including those affiliated with both the AABC-M and CASC

* $p < .05$ ** $p < .01$

H-6: Persons who score high in need for recognition and achievement will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who score low in need for recognition and achievement.

As indicated by Tables 21 and 22 there is no significant difference between persons who scored high and those who scored low on Recognition value of the SIV on either progressive-attitude or traditional-attitude-toward education. Again, as with the last hypothesis, the hypothesized direction of the high and low Recognition groups was reversed on both scales. This hypothesis was not confirmed.

In the total sample, no significant relationship was found between Recognition value scores and progressive-attitude or traditional-attitude-toward education scores (Tables 19 and 20).

TABLE 21.--Means and F statistic comparing high and low scores on Recognition value and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
High Recognition value scores	48	29.458	0.649	.43
Low Recognition value scores	49	28.857		
Total	97	29.155		

TABLE 22.--Means and F statistic comparing high and low scores on Recognition value and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
High Recognition value scores	48	26.396	1.183	.28
Low Recognition value scores	50	27.180		
Total	98	26.796		

H-7: Persons who score high in need to help others and to be generous will score higher in progressive-attitude-toward-education and lower in traditional-attitude-toward-education than those who score low in need to help others and to be generous.

Tables 23 and 24 point out that significant differences do not exist between those who scored high and those who scored low on the Benevolence value of the SIV in respect to progressive and traditional attitudes toward education. Again, as with the last two hypotheses, the predicted direction of the relative-sizes of the means for the two groups was reversed, though very slightly. This hypothesis was not confirmed.

The correlation (simple) coefficients for the value variable in question also indicate a lack of statistical significance for the total sample (Tables 19 and 20).

TABLE 23.--Means and F statistic comparing high and low scores on Benevolence value and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
High Benevolence value scores	58	29.069	0.054	.80
Low Benevolence value scores	41	29.122		
Total	99	29.090		

TABLE 24.--Means and F statistic comparing high and low scores on Benevolence value and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
High Benevolence value scores	59	27.305	0.347	.56
Low Benevolence value scores	41	27.024		
Total	100	27.190		

Hypotheses Related to Religiosity and Selected Variables

H-8: Persons who are measured as theologically conservative will score lower in progressive-attitude-toward-education and higher in traditional-attitude-toward-education than those who are measured as theologically liberal.

Theological orientation was measured by the Religious Belief Inventory of Toch and Anderson. In order to avoid negative scores, the Inventory was scored by beginning with 100 and then adding the number of conservative items and subtracting the number of liberal items with which the respondent agreed. This hypothesis was tested by comparing those who scored 97 or lower (liberal) with those who scored 115 or higher (conservative). Tables 25 and 26 indicate a significant difference in the hypothesized direction on both the ATEP-C and ATET-C between liberals and conservatives. Table 27 also shows a strong positive relationship between theological conservativism and ATET-C for the total

sample and a strong negative relationship between conservatism and ATEP-C for CASC educators and the total sample.

TABLE 25.--Means and F statistic comparing theologically liberal and conservative scores and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
Liberal	51	30.373	7.57	.01
Conservative	58	28.414		
Total	109	29.330		

TABLE 26.--Means and F statistic comparing theologically liberal and conservative scores and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
Liberal	50	26.000	8.71	<.005
Conservative	58	28.327		
Total	108	27.250		

TABLE 27.--Zero-order correlations for theological orientation with the attitude-toward-education scales and with the interpersonal values for the three groups and the total sample.

Independent Variables	Theological Orientation (Dependent Variable) Group[1]							
	AABC-M		AABC-A		CASC		Total[2]	
	N	r	N	r	N	r	N	r
ATEP-C[3]	90	-.008	39	-.210	261	-.198**	415	-.250**
ATET-C[4]	92	.209*	39	-.121	262	.149*	418	.156**
Leadership	75	-.009	31	-.053	220	-.241**	349	-.172**
Recognition	75	-.033	31	.078	220	-.068	349	-.044
Benevolence	75	.237*	31	.118	220	.296**	349	.248**
Support	75	-.023	31	-.098	220	-.055	349	-.073
Conformity	75	.198	31	.234	220	.409**	349	.403**
Independence	75	-.299*	31	-.271	220	-.366**	349	-.374**

[1]AABC-M = Members of Accrediting Association of Bible Colleges
AABC-A = Associate members of Accrediting Association of Bible Colleges
CASC = Members of Council for the Advancement of Small Colleges

[2]Total - All respondents including those affiliated with both the AABC-M and CASC

[3]ATEP-C = Content score on the progressive-attitude-toward-education items

[4]ATET-C = Content score on the traditional-attitude-toward-education items

* $p<.05$; ** $p<.01$

H-9: <u>There will be a significant difference in attitude toward education between persons teaching in Bible-Theology and subjects definitely related to ministerial training and those teaching in other fields</u>.

This hypothesis was partially confirmed as Tables 28 and 29 indicate. A significant difference was found on the progressive but not on the traditional educational scale. The direction of the difference was not previously hypothesized. However, the results indicate that those teaching in the area of Bible-Theology and related subjects are

significantly less progressive in their attitude toward education. Although no significant difference was found in regard to the traditional scale, the mean score for those in Bible-Theology and related subjects was higher (more traditional) than for those teaching in other areas.

TABLE 28.--Means and F statistic comparing individuals in different teaching areas and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
Bible-Theology	88	27.647	16.549	.005
Other than Bible-Theology	302	29.285		
Total	390	28.915		

TABLE 29.--Means and F statistic comparing individuals in different teaching areas and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
Bible-Theology	89	27.730	2.057	.15
Other than Bible-Theology	303	27.020		
Total	392	27.181		

H-10: There will be a significant difference in attitude toward education between ordained ministers and persons who are not ordained.

Tables 30 and 31 indicate that significant differences do not exist between clergymen and non-clergymen in respect to attitude toward education. However, it should be remembered that both these groups are in schools that are mostly church-related; thus the non-clergy group is not representative of that group *per se*.

TABLE 30.--Means and *F* statistic comparing clergymen and laymen and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way *F*	Sig. of *F*
Clergymen	109	27.578	0.285	.60
Laymen	242	27.000		
Total	351	27.179		

TABLE 31.--Means and *F* statistic comparing clergymen and laymen and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way *F*	Sig. of *F*
Clergymen	109	28.523	2.996	.08
Laymen	241	29.087		
Total	350	28.911		

H-11: Persons who are measured as conservative in theology will score higher in need for power and control over others and in need for recognition and achievement and lower in need to help others and to be generous than those who are measured as liberal in theology.

Tables 32-34 indicate this hypothesis was not supported. Although the difference was not significant, the difference in means in regard to the need for Leadership was reversed from that predicted (Table 32). Table 27 does indicate a significant negative correlation between Leadership value scores and theological orientation for CASC educators and the total sample.

The difference between means for Recognition was in the hypothesized direction, but the difference was very slight and far from being significant (Table 33). For all categories of schools and for the total sample (Table 27), no significant relationship was found between Recognition value scores and theological orientation.

TABLE 32.--Means and F statistic comparing theologically liberal and theologically conservative scores and scores on Leadership value.

Variable	N	Mean of Leadership Value Score	Two-way F	Sig. of F
Liberal	38	15.211	2.467	.12
Conservative	49	12.939		
Total	87	13.931		

TABLE 33.--Means and F statistic comparing theologically liberal and theologically conservative scores and scores on Recognition value.

Variable	N	Mean of Recognition Value Score	Two-way F	Sig. of F
Liberal	38	8.526	0.584	.45
Conservative	49	9.163		
Total	87	8.885		

TABLE 34.--Means and F statistic comparing theologically liberal and theologically conservative scores and scores on Benevolence value.

Variable	N	Mean of Benevolence Value Score	Two-way F	Sig. of F
Liberal	38	18.184	6.371	.01
Conservative	49	21.224		
Total	87	19.897		

Table 34 shows a significant difference, but not in the direction predicted by H-11; the conservatives were found to be more benevolent. The relationships between Benevolence value scores and theological scores were found to be statistically significant in three of the four groups--AABC-M, CASC, and total sample (Table 27).

Summary of religious factors

Religiosity did correlate with other variables but not always as hypothesized. Theological conservatives did score significantly lower

on ATEP-C and significantly higher on ATET-C than did liberals. Ministers, however, did not score significantly different from non-ministers on the educational attitude scales. Again it must be remembered that both groups were professors in schools that are primarily church-related; thus the samples are not representative of ministers and non-ministers in general. Those who teach in the Bible-Theology and related areas did score significantly lower than other educators on ATEP-C, but no significant difference was found on the ATET-C. Neither was any difference found between theological conservatives and liberals in regard to Leadership value and Recognition value. Contrary to the direction of prediction, conservatives were significantly higher on Benevolence value than their liberal counterparts.

Hypothesis Related to Type of School and Attitudes Toward Education

H-12: There will be a significant difference in attitudes toward education between teachers in CASC member schools, teachers in AABC member schools, and teachers in AABC associate member schools.

This hypothesis was confirmed in regard to the progressive-attitude-toward-education scale but was not confirmed in regard to the traditional-attitude-toward-education scale. The results of analysis of variance and test for significance among multiple means are presented in Table 35 for the progressive scale. CASC educators scored significantly higher than AABC-M (.01 level) and AABC-A (.05 level); the difference between AABC-M and AABC-A was not significant.

TABLE 35.--Means and F statistic comparing individuals in the three types of colleges and content scores on the progressive-attitude-toward-education scale.

Variable	N	Mean for Progressive Scale	Two-way F	Sig. of F
AABC-M	85	27.129	16.258	<.005
AABC-A	37	28.351		
CASC	251	29.538		
Total	373	28.871		

Untested ranking of means: CASC (29.538) > AABC-A (28.351) > AABC-M (27.129)

Means test results: CASC >AABC-A*; CASC > AABC-M**

* $p < .05$ ** $p < .01$

No significant differences were found between the three different kinds of college faculty in regard to ATET-C (Table 36). Nevertheless, it is worthwhile to mention that the sizes of the means for each group on the traditional-attitude-toward-education scale are in the reverse order to the sizes of the means on the progressive-attitude-toward-education scale, as would be expected.

TABLE 36.--Means and F statistic comparing individuals in the three types of colleges and content scores on the traditional-attitude-toward-education scale.

Variable	N	Mean for Traditional Scale	Two-way F	Sig. of F
AABC-M	87	27.908	1.925	.14
AABC-A	37	27.135		
CASC	252	27.016		
Total	376	27.234		

Section 3: Other Statistical Analyses

Further research beyond that anticipated when the hypotheses were developed was prompted by the results of the CDC 3600 MDSTAT Program which provided zero-order correlational analysis between seventy variables for the total sample (without considering the different college groups separately). The MDSTAT Program was also used for the individual college groups as well as male and female groups. Time, space, and purpose did not permit the investigation and analyzation of all data. However, data which related to age, sex, and theology is considered in this section.

Age Differences

Fifty-four educators 22-28 years of age were compared with 46 educators 58-74 years old. Table 37 indicates that significant differences did exist on two of the four selected variables. Age, which correlates .617 with total teaching experience (years of service), did make a significant difference in regard to income. The variable of age did not make a significant difference however in regard to education (although both age groups are slightly below the mean for the entire sample--compare Table 4) and in regard to theological orientation.

It is interesting to note the great difference that exists between the two age groups on the SIV Conformity[1] Scale.

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[1]Conformity is defined as "doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist" (Gordon, p. 3).

TABLE 37.--Comparison of mean differences and F statistic in respect to selected variables for younger (ages 22-28) and older (ages 58-74) educators.

Variable	Ages	N	Mean	Two-way F	Sig. of F
Education	22-28	54	4.851	1.743	.19
	58-74	46	5.044		
	Total	100	4.940		
Income	22-28	53	7.830	14.426	<.005
	58-74	38	9.421		
	Total	91	8.495		
Theological Orientation	22-28	54	104.722	.434	.52
	58-74	46	106.913		
	Total	100	105.730		
Conformity	22-28	49	12.225	22.898	<.005
	58-74	35	19.657		
	Total	84	15.321		

Sex Differences

A one-way analysis of variance was performed in respect to the 69 variables of the MDSTAT program for male and female in the total sample. The results are given in Tables 5 (three variables) and 38 (66 variables). Highly significant sex differences (.01 level) were obtained on 23 of the 69 variables with an additional 10 variables showing significant (.05 level) sex differences.

Sex differences for education, income, and age were discussed on pages 59-60.

Of the six SIV value scales, five showed significant differences between males and females (Table 38, variables 12-17). Females were significantly higher on Support, Conformity, and Benevolence, while males

TABLE 38.--Comparison of mean differences and F statistics in respect to 66 variables[1] for male and female in the total sample.

Variable	Male N	Male M	Female N	Female M	One-way F	Sig. of F
2. School	268	15.631	135	13.970	1.805	.18
3. School's Denom	259	5.633	134	6.440	7.343	.01
4. School's Size	268	2.332	135	2.267	0.551	.47
5. School's Description	268	2.590	135	2.607	0.028	.84
6. Ordained Minister	239	1.435	115	1.043	65.995	<.005
7. Respondent's Denom	251	5.677	125	6.592	7.215	.01
8. Area of Teaching	266	1.914	129	2.093	6.711	.01
9. Own Theological Evaluation	263	2.095	128	2.102	0.005	.90
10. Religion	266	2.008	134	1.761	17.882	<.005
11. Number of ATE[2]	43	4.000	24	2.833	1.616	.21
12. Support	218	14.771	116	16.362	8.855	<.005
13. Conformity	218	15.739	116	17.517	6.160	.01
14. Recognition	218	8.959	115	8.200	2.568	.11
15. Independence	218	16.587	115	14.939	5.329	.02
16. Benevolence	218	20.312	116	21.552	4.488	.04
17. Leadership	218	13.459	116	11.086	10.322	<.005
18. Number of Graduate Courses	264	2.795	129	2.837	0.057	.80
19. Knowledge of Public Schools	267	2.993	131	2.863	0.996	.32
20. Teaching in Public School	266	1.545	131	1.954	12.301	<.005
21. Teaching in Parochial School	264	1.231	126	2.333	84.667	<.005
22. Total Teaching	267	3.873	131	4.420	19.456	<.005
23. Amt of Professional Reading	266	2.962	132	3.242	4.773	.03
24. Educa Enjoy	263	3.760	129	3.806	0.642	.43
25. Educa Altern	266	4.301	127	3.811	16.471	<.005
27. Marital Status	266	1.124	130	1.808	110.818	<.005
28. Children-Number	221	2.828	41	2.341	1.188	.28
30. Income-Self Comp	260	2.962	116	2.741	4.518	.04
31. Siblings	234	3.299	122	3.967	5.804	.02
32. Income-Father's Comp	265	2.985	127	2.858	2.103	.14
33. Personalism on Job	266	5.011	132	5.015	0.000	.93
35. Ed-Self Comp	266	4.226	130	3.938	17.509	<.005
36. Ed-Father's Comp	265	2.966	131	3.008	0.194	.66
37. Satis-Elem Ed	265	3.385	129	3.620	3.817	.06
38. Satis-Sec Ed	265	3.336	128	3.570	4.137	.05
39. Satis-Univer	260	3.585	122	3.623	0.120	.73
40. Satis-Business	263	3.202	128	3.039	1.736	.18

TABLE 38.--(cont.)

41.	Satis-Labor	265	2.562	126	2.452	0.708	.41
42.	Satis-Local Govt	266	3.128	129	3.124	0.001	.92
43.	Satis-Nat Govt	266	3.162	127	3.118	0.200	.66
44.	Satis-Health ser	266	3.778	128	3.898	1.370	.24
45.	Satis-Church	265	3.260	128	3.578	12.158	<.005
46.	Resid-Change	267	2.697	133	2.173	21.184	<.005
47.	Job Change	267	2.221	132	1.720	24.573	<.005
48.	Relig Conform	262	4.466	132	4.629	3.753	.06
49.	Change-Health	263	3.681	132	3.515	4.416	.04
50.	Change-Child r	261	2.820	130	2.831	0.018	.86
51.	Change-birth c	259	1.676	122	2.016	19.753	<.005
52.	Change-Autom	263	3.414	131	3.267	3.883	.06
53.	Change-Pol Lead	265	2.272	133	2.459	2.993	.08
54.	Local Ed-Finance	265	3.147	130	3.154	0.006	.90
55.	Fed Ed-Finance	264	2.530	131	2.527	0.001	.92
56.	Ed planning	260	2.673	124	2.452	2.362	.12
57.	Change-Self	265	2.547	131	2.473	1.162	.28
58.	Leader-Follower Role	263	2.992	131	2.870	2.179	.14
59.	Change-Self rtn job	265	2.921	131	2.817	1.512	.22
60.	Personalism-oth	265	3.208	132	2.985	6.310	.01
61.	Planning-Fut Ori	265	3.691	133	3.722	0.249	.62
62.	Requisite to Happiness (pre-categorized)	264	6.295	134	6.530	1.892	.17
63.	Requisite to Happiness (uncategorized)	226	7.562	115	6.991	1.645	.20
64.	ATET-C[3]	268	27.313	132	26.917	1.039	.31
65.	ATET-I[4]	265	30.166	131	31.725	14.796	<.005
66.	ATEP-C[5]	266	28.962	131	28.802	0.182	.67
67.	ATEP-I[6]	264	31.205	131	32.145	6.308	.01
68.	Conservative	260	11.242	132	12.326	4.183	.05
69.	Liberal	233	5.494	118	5.000	0.717	.40
70.	Total Theological Score	267	106.146	134	107.948	4.036	.05

[1]Variable numbers correspond to the 70 variables in the MDSTAT program and are given for easy reference. No. 1 is sex. Three demographic variables (no. 26, 29, and 34) are given in Table 5.

[2]Number of attitude-toward-education items upon which the respondent commented

[3]Attitude-toward-education Traditional Content Score

[4]Attitude-toward-education Traditional Intensity Score

[5]Attitude-toward-education Progressive Content Score

[6]Attitude-toward-education Progressive Intensity Score

were significantly higher on Independence and Leadership. No significant difference was found on Recognition for the two sexes.

Of the six contact-with-education variables, women were significantly higher on four, and there were no significant differences between men and women on the other two (Table 38, variables 18-23).

Females also scored significantly higher than males on two of the nine satisfaction-with-institution variables (Table 38, variables 38 and 45). The remaining seven showed no significant differences.

Males changed their residency and their occupational positions more frequently in the last 10 years than did females (Table 38, variables 46 and 47) and also manifested less resistance to change as measured by two attitude-toward-change questions (Table 38, variables 49 and 51).

Women responded with a significantly greater degree of intensity than men on both the ATEP-I and ATET-I (Table 38, variables 65 and 67). Women also were measured as being significantly more theologically conservative than men (Table 38, variables 68 and 70).

Theological differences

In addition to the differences discussed under hypotheses 8 and 11, theological orientation was further researched. Each respondent was asked to classify himself on a theological continuum: very conservative, moderately conservative, moderately liberal, and very liberal. These self-classifications used as the independent variable, had a correlation with the scores on the Religious Beliefs Inventory of .655 with an N of 408. (A correlation of ±.128 is significant at the .01 level.) On four of the five selected dependent variables, significant differences were

found (Table 39). There was no significant difference in regard to the amount of education (Table 39, section 1).

The Means Test reveals that those who classified themselves as being Very Conservative received significantly (.05 level) less remuneration than each of the other three self-classification groups. No significant differences were found between the Moderately Conservative, Moderately Liberal, and Very Liberal groups (Table 39, section 2).

Theological self-classification was also significantly related to Conformity value on the SIV (Table 39, section 3). The mean score on Conformity is highest for Very Conservative and lowest for Very Liberal, with the decrements between each group being about equal. The results of the Means Test indicate that the Very Conservative group was significantly different (.01 level) from each of the other groups. The Moderately Conservative was also significantly different (.01 level) from each of the two liberal groups. No significant difference was found between the two liberal groups (Table 39, section 3).

Favorable attitude toward federal-aid-to-education increased from group to group as theological orientation moved from conservative to liberal. A significant difference at the .01 level was found between each combination of two groups except the difference between Very Liberal and Moderately Liberal was at the .05 level (Table 39, section 4).

Religious conservatives claimed to adhere more closely to their religious regulations than do liberals. Differences were found between each combination of two groups at the .01 level of confidence (Table 39, section 5).

TABLE 39.--Comparison of mean differences and F statistic in respect to selected variables for those who classify themselves as Very Conservative, Moderately Conservative, Moderately Liberal, and Very Liberal.

Variable	Own Theological Evaluation	N	Mean	Two-way F	Sig. of F
Amount of Education	Very Conservative	104	5.173	0.381	.77
	Moderately Conservative	188	5.261		
	Moderately Liberal	94	5.277		
	Very Liberal	22	5.182		
	Total	408	5.238		
Income	Very Conservative	96	8.135	3.377	.02
	Moderately Conservative	163	9.976		
	Moderately Liberal	82	9.866		
	Very Liberal	23	11.478		
	Total	364	9.560		

Untested ranking of means: Very Liberal (11.478) > Moderately Conservative (9.976) > Moderately Liberal (9.866) > Very Conservative (8.135)

Means test results: Moderately Conservative > Very Conservative*; Moderately Liberal > Very Conservative*; Very Liberal > Very Conservative*

Conformity	Very Conservative	81	19.173	15.339	<.005
	Moderately Conservative	155	16.548		
	Moderately Liberal	73	14.110		
	Very Liberal	17	10.588		
	Total	326	16.344		

Untested ranking of means: Very Conservative (19.173) > Moderately Conservative (16.548) > Moderately Liberal (14.110) > Very Liberal (10.588)

Means test results: Very Conservative > Moderately Conservative**; Very Conservative > Moderately Liberal**; Very Conservative > Very Liberal**; Moderately Conservative > Moderately Liberal**; Moderately Conservative > Very Liberal**

TABLE 39.--(cont.)

Federal Aid to Education	Very Conservative	99	2.091	14.234	<.005
	Moderately Conservative	177	2.486		
	Moderately Liberal	88	2.852		
	Very Liberal	22	3.364		
	Total	386	2.518		

Untested ranking of means: Very Liberal (3.364) > Moderately Liberal (2.852) > Moderately Conservative (2.486) > Very Conservative (2.091)

Means test results: Moderately Conservative > Very Conservative**; Moderately Liberal > Very Conservative**; Very Liberal > Very Conservative**; Moderately Liberal > Moderately Conservative**; Very Liberal > Moderately Conservative**; Very Liberal > Moderately Liberal*

Observation of Religious Regulations	Very Conservative	97	4.856	41.447	<.005
	Moderately Conservative	177	4.638		
	Moderately Liberal	91	4.264		
	Very Liberal	21	3.191		
	Total	386	4.526		

Untested ranking of means: Very Conservative (4.856) > Moderately Conservative (4.638) > Moderately Liberal (4.264) > Very Liberal (3.191)

Means test results: Very Conservative > Moderately Conservative**; Very Conservative > Moderately Liberal**; Very Conservative > Very Liberal**; Moderately Conservative > Moderately Liberal**; Moderately Conservative > Very Liberal**; Moderately Liberal > Very Liberal**

* p<.05; ** p<.01

Table 40 provides the results of the analysis of variance for a number of selected dependent variables and theological orientation (independent variable) as measured by the Religious Beliefs Inventory. The first four parts of the Table indicate no significant differences between liberals and conservatives in respect to (a) age; (b) the number of graduate courses taken in education; (c) the amount of reading done in the past year in books and scholarly journals which directly relate

TABLE 40.--Comparison of mean differences and F statistics in respect to selective variables for those who were measured conservative and liberal on the Religious Beliefs Inventory.

Variable	Religious Beliefs[1]	N	M	Two-way F	Sig. of F
Age	Liberals	56	40.018	1.802	.18
	Conservatives	34	43.971		
	Total	90	41.511		
Grad. courses	Liberals	56	2.946	0.051	.81
	Conservatives	33	2.970		
	Total	89	2.955		
Professional reading	Liberals	56	2.964	0.484	.50
	Conservatives	33	3.152		
	Total	89	3.034		
Community	Liberals	55	2.491	2.424	.12
	Conservatives	34	2.177		
	Total	89	2.371		
Education	Liberals	56	5.428	10.228	<.005
	Conservatives	34	4.824		
	Total	90	5.200		
Income	Liberals	54	10.611	17.430	<.005
	Conservatives	31	7.451		
	Total	85	9.459		
Own theological evaluation	Liberals	55	3.164	139.965	<.005
	Conservatives	32	1.500		
	Total	87	2.552		
Conformity	Liberals	41	11.488	32.443	<.005
	Conservatives	28	19.786		
	Total	69	14.855		

TABLE 40.--(cont.)

Independence	Liberals	41	20.659	30.233	<.005
	Conservatives	28	11.893		
	Total	69	17.101		
Attitude toward birth control	Liberals	54	1.519	9.898	<.005
	Conservatives	33	2.000		
	Total	87	1.701		
Area of teaching	Liberals	56	2.089	16.797	<.005
	Conservatives	33	1.546		
	Total	89	1.888		

[1]Liberals = Those who scored 97 and below on the Religious Beliefs Inventory
Conservatives = Those who scored 115 and above on the Religious Beliefs Inventory

to the field of education; and (d) the type of community in which the respondents were reared or brought up in their youth.

The last seven parts of Table 40 show significant differences between theological liberals and conservatives for each of the seven dependent variables. These seven are interpreted in the following ways: (a) religious liberals have more total education than do conservatives (but incidentally no more courses in education); (b) religious liberals receive a higher income than conservatives; (c) those scoring as liberals on the RBI also classified themselves more liberal than did conservatives; (d) religious liberals had a lower score on the Conformity[1] value of the SIV than did conservatives;

[1]Conformity is defined as "doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist" (Gordon, 1960, p. 3).

(e) religious liberals had a higher score on the Independence[1] value of the SIV than did conservatives; (f) religious liberals had a more favorable attitude toward the practice of birth control by a married couple than did conservatives; and (g) religious liberals gave a higher response than did conservatives to the area-of-teaching question, thus signifying liberals were less likely to be found teaching in the area of Bible-Theology and related courses.

Theological orientation was also used as the dependent variable in a determination of its relationship to type of school and area of teaching. As revealed in Table 41, AABC-M and AABC-A educators were theologically more conservative than are those affiliated with CASC (.01 level of significance). No significant theological difference was found between AABC-M and AABC-A educators.

Teachers of Bible-Theology and/or subjects definitely related to ministerial training scored significantly higher on the RBI than did those teaching in liberal arts (or general education) and those teaching in "Other" areas. No significant theological difference was found, however, between educators in liberal arts (or general education) and those classified in "Other" areas (Table 42).

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[1]Independence is defined as "having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way" (Gordon, 1960, p. 3).

TABLE 41.--Comparison of mean difference and F statistic in respect to theological orientation and type of school for educators who teach in different subject areas.

Variable	Type of School[1]	N	M	Two-way F	Sig. of F
Theological Orientation	AABC-M	86	111.767	25.586	<.005
	AABC-A	37	109.189		
	CASC	254	104.823		
	Total	377	106.836		

Untested ranking of means: AABC-M (111.767) > AABC-M (109.189) > CASC (104.823)

Means test results: AABC-M > CASC**; AABC-A > CASC**

[1]AABC-M = Members of Accrediting Association of Bible Colleges
AABC-A = Associate members of Accrediting Association of Bible Colleges
CASC = Members of Council for the Advancement of Small Colleges

* p<.05; ** p<.01

TABLE 42.--Comparison of mean difference and F statistic in respect to theological orientation for educators who teach in different subject areas.

Variable	Area Teaching	N	M	Two-way F	Sig. of F
Theological Orientation	Bible-Theology and related courses	89	110.157	12.056	<.005
	Liberal arts or general education subjects	227	105.828		
	Other	77	105.325		
	Total	393	106.710		

Untested ranking of means: Bible-Theology (110.157) > Liberal arts (105.828) > Other (105.325)

Means test results: Bible-Theology > Liberal arts**; Bible-Theology > Other**

* p<.05 **p<.01

CHAPTER V

DISCUSSION, RECOMMENDATIONS, AND SUMMARY

This chapter is divided into three major sections suggested by the chapter title. Part I is devoted to a discussion of results obtained from testing of the hypotheses and from additional testing of data pertaining to age, sex, and theological orientation.

Part II is a summary of the theoretical and methodological issues and recommendations for further research.

Part III presents the concluding summary.

Part I: Discussion of Results

The hypotheses were divided into five major categories: (a) the scale properties of the attitudes-toward-education items; (b) the relationship between contact frequency and attitude scores; (c) the relationship between interpersonal values and attitudes-toward-education; (d) the relationship of religiosity variables with attitudes-toward-education and interpersonal values; and (e) the relationship between type of school and attitudes-toward-education. In addition to the twelve hypotheses, additional relationships in regard to age, sex, and theological orientation were also tested.

Scale and Intensity Analysis: (H-1, H-2)

Scale and intensity analysis was attempted primarily because this study relates to a long range international study being conducted at Michigan State University. The international study is interested in obtaining attitude scales which can be compared from one cultural, subcultural and/or national-linguistic group to another, with some assurance that similar outcomes reflect similar psychological orientations toward the attitude object. If the attitude items do indeed scale, according to Guttman's definition of this term, then some assurance of cross-group (cultural or otherwise) concept equivalence can be secured. However, the development of scalable attitude items is proving to be extremely difficult (Felty, 1965; Freisen, 1966). The data from the present research formed no suitable scales either from the ATEP-C or the ATET-C. The author feels that the non-confirmation of these hypotheses is due to the fact that attitudes are complex and seldom unidimensional in nature. With this realization in mind, Lingoes and Guttman have extended their work to include programs which are devised to allow for multidimensional analysis as well as multi-unidimensional analyses (Lingoes, 1965).

Contact Frequency and Educational Attitudes: (H-3, H-4)

Two hypotheses are related to contact frequency and educational attitudes. The first has to do with the intensity of the educational attitude, the second with favorable (content) educational attitude.

Contact with education was measured by six different questions. These six questions were analyzed individually for the two different

intensity scores on the educational scales, engendering twelve different analyses of variance (AOV) problems concerning educational attitude intensity (Tables 6 and 7). Since only five of the twelve F statistics were significant beyond the .05 level of confidence, it is difficult to declare unequivocally that this hypothesis has been confirmed. However, in each of the twelve AOV problems, the high-contact group had a higher intensity score than did the low-contact group. It should also be noted that the correlational data for the entire sample shows positive correlations in all twelve measured interactions between contact with education and intensity of attitudes toward education, with eight of the twelve correlations being significant (Table 8).

Three of these six contact measurements (number-of-graduate-courses-in-education, knowledge-of-own-public-school-district, and amount-of-educational-professional-reading) could also be interpreted as "knowledge" variables. It would be possible for a person to score high on these "knowledge" variables and have no actual contact with the educational process itself. The other three variables (years-of-public-school-teaching (grades 1-12), years-of-parochial-school-teaching (grades 1-12), and total-years-of-teaching) were considered to be the "true" contact variables.

No "true" contact variable and two "knowledge" variables were significantly related to ATEP-I (Table 6). Two "true" contact variables and one "knowledge" variable were significantly related to ATET-I (Table 7). The only measurement variable which significantly related to both intensity scales (ATEP-I and ATET-I) was the amount-of-educational-professional reading.

Neither Freisen (1966, p. 223) nor Sinha (1966, p. 226) found significance between contact with education and the intensity scores on the progressive and traditional attitude toward education scale. Sinha suggests a rationale behind the rejection of his hypothesis.

> A possible explanation is that the nature of the attitude object and its functional importance to the individual are significant factors in respect to attitude intensity. It may be that education was not considered a meaningful variable by the subjects selected for the study (Sinha, 1966, p. 226).

Education should be a meaningful variable to educators and is undoubtedly more meaningful to some educators than to others. Consequently, although neither Freisen in Columbia and Peru with a group comprising of some educators nor Sinha with a group of American mothers which contained a few educators found significance, the present study with American college educators did find significance between the intensity of attitude toward education and some variables which measured "true" contact with and "knowledge" of education.

The findings in regard to hypothesis 3 lead to some tentative conclusions: (a) One basic difficulty is locating a valid method of measuring contact with education by educators. (b) Intensity of educational attitude may not be significantly related to contact, per se, but to some other variable such as knowledge-of-education or personal-involvement-with-the-issues (or process)-of-education. (c) The relationship between contact with (or knowledge of) education and the intensity of attitudes toward education may be curvelinear instead of linear. Therefore, differences in contact with education by educators would result in only slight differences in attitude intensity and would make measurement of the differences extremely difficult.

The second hypothesis under this heading dealt with the concept of contact with education leading to favorable attitudes toward education when high frequency of contact is concurrent with alternative rewarding opportunities and enjoyment of the contact. The six contact (or "knowledge") questions were used in six different statistical tests (Tables 9-14) and then were used together as a multiple predictor variable to measure contact in another test (Table 16). The rationale underlying this hypothesis is that contact alone does not produce favorable attitudes, but that attitudes are dependent upon the possibility of avoiding the contact through other rewarding opportunities and the enjoyment (or positive evaluation) of such contact.

Five of the seven tests were statistically significant in confirmation of this hypothesis. It is interesting to note that all three tests involving the "knowledge" variables (Tables 9, 10, and 14) proved to be significant. On the other hand, only one of the three tests involving the "true" contact variables (Table 11) showed significance. It would therefore appear that contact <u>per se</u> with education is not significantly related to a favorable attitude toward education but that some basic underlying factor (such as knowledge of education or involvement with the educational process) may serve as a significant predictor of attitudes toward education when alternative-rewarding-opportunities and enjoyment-of-education are concurrent with such a predictor variable.

A close look at the statistics reveals that alternative-rewarding-opportunities and enjoyment-of-contact only contributed in a secondary sense. Not once in the seven tests did the partial correlation

coefficients for either alternatives-to-contact or enjoyment-of-contact reach the .05 significant level (Tables 9-14, 16). Neither did any of the "true" contact variables show a significant positive partial correlation coefficient (Tables 10, 11, 12, 15, and 16). On the other hand, it was the "knowledge" measurement itself which had a significant positive partial correlation to ATEP-C (Tables 9, 13, and 14).

Then also when the "true" contact and "knowledge" variables were used together as a multiple predictor variable, two of the "knowledge" variables on Table 15 and one on Table 16 indicated a significant positive partial correlation coefficient. None of the "true" contact variables were significant and positive (Tables 15 and 16).

For the entire sample, enjoyment-of-contact with education (N=408) correlated -.027 and alternative-rewarding-opportunities (N=407) correlated -.045 with ATEP-C (the criterion measure for favorable attitudes toward education). On the other hand, all three of the "knowledge" variables correlated significantly with ATEP-C for the entire sample, while one of the "true" contact variables (years-of-public-school-teaching, grades 1-12) correlated with ATEP-C at the .05 level for the total sample.

A suggested rationale for the insignificant correlations between a favorable-attitude-toward-education and the two concurrent variables (enjoyment-of-education and alternative-rewarding-opportunities) is that the differences among American educators on these two variables are minimal. Most American educators like education or they would leave the profession. (On a four-point scale from definitely dislike to definitely like, 412 educators had a mean of 3.782 with a standard deviation of

0.523.) Of 412 educators, only 14 (3.4 per cent) said no other job was (or is) available to them.

The data which relates to hypothesis 4 leads to these tentative conclusions: (a) Knowledge of education appears to be a better predictor of favorable educational attitudes than "true" contact with education. (b) Enjoyment-of-education and alternative-rewarding-opportunities do not appear to be strong predictors of favorable attitudes toward education. (c) Further investigation of this hypothesis, particularly as it relates to "true" contact with education, is needed.

Interpersonal Values and Educational Attitudes (H-5, H-6, H-7)

According to the literature, personal contact alone does not seem to fully account for attitudes toward education. Interpersonal values have been suggested as being instrumental in the formation and maintenance of attitudes toward social objects. Hypotheses were therefore formulated to test the relationship between interpersonal values and educational attitudes.

The *F* tests of the three hypotheses pertaining to the interaction between educational attitudes and interpersonal values yielded consistent results. None of the hypotheses was confirmed (Tables 17-24).

High scorers on Leadership and Recognition values did not score significantly higher on the ATET-C scale than did low scorers on these variables. Those scoring high on Benevolence value did not measure significantly higher on ATEP-C than did those scoring low on Benevolence. Apparently there exists no significant relationship between

interpersonal values and attitudes toward education, at least for educators in these types of colleges.

Religiosity Variables, Attitudes toward Education, and Interpersonal Values (H-8, H-9, H-10, H-11)

The four different hypotheses in this category are not necessarily closely related. They are classified together because of their general relationship to religiosity.

As was indicated in the review of the literature (Chapter 2), there is likely to be a close relationship between the attitudes a subject has in a great variety of areas. As predicted, theological liberals did have a significantly more progressive and less traditional attitude toward education than did conservatives (Tables 25 and 26). This is in keeping with their theological view of the world and man. Generally speaking, the liberal feels that better means and methods can be found toward achieving a more fully-functioning and satisfying life. The conservative, on the other hand, wants to maintain the status quo, for change to him might mean a departure from the absolute standards which he finds in the Bible.

Those teaching in Bible-Theology and related fields indicated a significantly less favorable attitude toward education than did professors in other areas (Table 28). The difference between the groups on the ATET-C was not significant (Table 29), but the Bible-Theology group did have a higher mean score which was directionally consistent with the ATEP-C data. A correlation of -.178 was obtained (N of 412--significant beyond .01) between theological beliefs and area of teaching; thus, indicating a significant correlation existed between those

teaching in Bible-Theology and related areas and conservative theology. It would have been interesting to run a multiple correlation with area-of-teaching and theological orientation as the predictors and ATEP-C as the criterion to determine which of the predictor variables contributes more to the multiple correlation.

Probably, hypothesis 9 is only an additional confirmation of hypothesis 8. However, there is a further rationale behind the outcome of hypothesis 9. Those teaching in Bible-Theology often view their material as a completed revelation from God. Consequently, there is no further need to look for new sources of truth since all theological truth is contained in the Bible. Of course, they would admit that supplementary knowledge can still be gained through archeology and other sciences, but the source of primary truth is God's revelation in Scripture. Teachers in other areas are looking for "new sources of truth" as well as for "new truth itself" which relates to their specific teaching disciplines. This contrast in regard to sources of truth probably affects a person's attitude toward education.

Minister-and-non-minister professors exhibited no significant difference in their attitudes toward either progressive or traditional education (Tables 30 and 31). As a matter of fact, the clergy scored higher on progressive and lower on traditional attitudes toward education, although not significantly so. The underlying assumption for this hypothesis was that clergymen have a conservative role in our society and consequently would oppose change. This hesitancy to change would then be reflected in their attitude toward progressive education which is change oriented.

No significant differences were found between religious liberals and conservatives in regard to the Leadership and Recognition values on the SIV (Tables 32 and 33). It was assumed in developing the hypotheses that conservatives would desire to maintain the status quo and therefore would express a need for power and control over others and a need to attract favorable attention and to receive admiration from others. These values were considered to be a measurement of comparative orientation as opposed to asset orientation. However, this study did not support these hypotheses.

The third variable investigated in this research was Benevolence, which is defined as "the need to help others and to be generous" and was considered a measurement of asset orientation. A significant difference was found between religious liberals and conservatives, but in the opposite direction to that predicted (Table 34). The data indicates that conservatives were more benevolent; whereas it had been hypothesized that liberals would be. The rationale for the prediction is given in the preceding paragraph. The reason for the reversal from that hypothesized is unknown. The researcher's first hunch was that since ministers are supposed to have a greater need to help others than do non-ministers, perhaps the conservative group had a larger percentage of ordained ministers. Upon investigation, however, this hunch was proven fallacious since 31 of the 38 in the liberal group (or 82 per cent) were ministers while only 28 of the 49 in the conservative group (or 57 per cent) were ministers. Besides, the correlation for the entire sample between Ordination and Benevolence is extremely low (0.031 for an N of 318).

Contrary to the conclusions of the studies cited in Chapter 3, it appears that this sample of conservatives is interested in individuals.

Conservative theology is individually oriented, for its adherents are concerned with the eternal destiny of man's individual soul. The suggestion, therefore, is that religious conservatives will measure more benevolent than liberals when the individuals are given the opportunity to respond to a measuring instrument which centers on individuals rather than upon the welfare of society and collective methods of helping others through cooperative institutions and programs. This is in keeping with the fact that conservative theology is also oriented toward a personal relationship with God rather than a sacramental and/or institutional one.

Type of School and Educational Attitudes (H-12)

CASC faculty scored significantly higher on ATEP-C than did the faculty in AABC-M and AABC-A schools (Table 35). No significant difference was found among faculty members in regard to the ATET-C (Table 36). Faculty members no doubt reveal their attitudes toward education by their choice of course content, methods of teaching, and conversations with students. If colleges and professors do have an effect upon the attitudes and values of their students (as discussed in Chapter 2), then CASC students would probably develop more favorable attitudes (a more progressive attitude) toward education than AABC-M or AABC-A students.

Perhaps the reason for the AABC-A scoring higher on the progressive scale and lower on the traditional scale than the AABC-M, even though they are both related to the same organization with the same philosophy and have received an equivalent amount of education (Table 4), is that the AABC-M schools have secured their goal of accreditation and are more interested in maintaining the status quo than would be the AABC-A schools which are still in the process of securing accreditation and

academic recognition. Since AABC-A have "nothing to lose," changing the status quo could not be as detrimental to them as it might be to the AABC-M colleges.

Additional Data: Age

Limited information is given in Chapter 4 in regard to age. Table 4 indicates that no statistical import can be attached to the slight differences in the ages of CASC, AABC-M, and AABC-A educators.

A correlational investigation revealed a number of variables were significantly related to age. The three highest correlations for the entire sample indicate that age was related to the following: (a) number of job changes in the last ten years (-.412), (b) number of residence changes in the last ten years (-.541), and (c) total teaching experience (.617).

All six of the variables of the SIV were significantly correlated with age on the entire sample, and five of the six were beyond the .01 level of confidence. Of the six, Conformity value had the highest correlation (.313 for an N of 348) and also proved to be highly significant on the AOV test (Table 37, part 4). Older professors place a greater value on Conformity than do the younger. An interpretation of Conformity value would probably include a greater satisfaction with the present and an unwillingness to change. This interpretation has substantiation within this study itself as can be seen from the correlations between age and the satisfaction variables and between age and the change orientation variables. Table 43 shows age as being positively and significantly correlated with each of the satisfaction variables beyond the .01 level of confidence. In regard to the change orientation

TABLE 43.--Zero-order correlation between Age and the Satisfaction Variables and the Change Orientation Variables and between Theological Orientation and the Satisfaction Variables and the Change Orientation Variables for the entire sample.

	Age		Theological Orientation	
Satisfaction Variables	N	r	N	r
Elementary Education	405	.233**	412	.286**
Secondary Education	404	.257**	411	.233**
Universities	390	.158**	397	.159**
Business	401	.141**	408	.138**
Labor	400	.222**	407	.093
Local Government	406	.152**	413	.141**
National Government	403	.138**	410	-.065
Health Institution	405	.227**	412	.181**
Church	404	.172**	411	.118**
Change Orientation Variables				
Child rearing	400	-.034	407	-.191**
Birth control	392	.237**	398	.172**
Automation	406	.019	413	-.002
Political leadership	409	.024	416	-.050
Willingness to change	408	-.101*	414	-.154**

* $p<.05$; ** $p<.01$

variable, only two are significant, and one of these is expressed negatively because of the ordering of the responses. Age was positively correlated with the viewpoint that a married couple should not practice birth control, and negatively correlated with one's self-concept of his adaptability to change. An interpretation of these facts indicates that the older professors of this sample were more opposed to change than were the younger.

Age and ATET-C have a significant positive correlation (.209 for an N of 413), and Age and ATEP-C have a significant negative correlation

(-.140 for an N of 411) for the entire sample. This is another indication that resistance to change and the desire to maintain the traditional are characteristic of older professors.

More research needs to be conducted in regard to age. Perhaps future studies should use a three-way analysis of all the data, controlling for both sex and age.

Additional Data: Sex

Tables 5 and 38 present the results of a one-way analysis of variance in respect to 69 variables for sex (independent variable) in the total sample. Significant sex differences were found in regard to 33 of the 69 variables.

The fact that the women of the sample were significantly older than the men could possibly account for some of the attitudinal differences between the sexes. However, to speculate in regard to the effect of age upon other variables as they relate to sex is fruitless. Consequently, the present discussion can only deal with the results of the statistical tests themselves.

Women had a significantly higher mean score in regard to the area of teaching than did men (Table 38, variable 8). Since the response categories for the question regarding area-of-teaching were nominal and not ordinal, the data cannot be accurately interpreted. However it would seem to indicate that there was a larger percentage of men teaching in courses which relate to Bible and Theology.

Five of the six SIV variables showed significant differences between the sexes. Females were significantly higher on Support, Conformity, and Benevolence; males on Independence and Leadership. No

significant difference was found on Recognition (Table 38, variables 12-17). The sex differences on these variables are in keeping with the National College Norms given on the back cover of the SRA Manual for Survey of Interpersonal Values (Gordon, 1960). The norms given by the Manual show females higher on Support, Conformity, and Benevolence; and males higher on Recognition, Independence, and Leadership. The smallest difference between the sexes was on Recognition value. In other words, men and women of this sample were expected to score differently on the SIV variables and they did. This fact again points out the importance of the two-way analysis of variance tests in regard to the hypotheses that deal with interpersonal values in which tests the sex variable was held constant.

Women were significantly higher on all three of the "true" contact variables (Table 38, variables 20, 21, and 22). This would be expected since the women on the average were about six years older than men (Table 5). Women also spent more time reading educational professional material (Table 38, variable 23) which was considered to be a contact with and/or "knowledge" of education variable. The other two contact-knowledge variables showed no significant differences between the sexes (Table 38, variables 18 and 19). Since women were significantly higher on four of the six contact or contact-knowledge variables, it would be expected that they would also score higher (perhaps even significantly so) on the ATEP-C. This, however, was not the case. No doubt their additional six years of age related to their ATEP-C score, for age has a significant negative correlation with ATEP-C (-.140 for an N of 411).

A number of variables form a gestalt which indicated that women seemed to be more passive, satisfied, and contented with the present

circumstances than were men. Women scored significantly higher on two of the nine satisfaction variables, while no significant differences were found on the other seven (Table 38, variables 37-45). On the other hand, men changed their professional positions and their residency more frequently in the past ten years than did women (Table 38, variables 46 and 47). More frequent changes on the part of men might also be related to the fact that men felt more optimistic in regard to the availability of alternative rewarding opportunities (Table 38, variable 25) and consequently would probably feel less insecure in leaving one position to go to another. Men appeared to have a more positive attitude toward change as indicated by their greater willingness to accept changes in health practices and in approving the practice of birth control by a married couple (Table 38, variables 49 and 51). Since the women of this sample appeared more conservative (or traditional) in many of their attitudes toward the circumstances of life than did the men, the theory behind this research would expect the women to be more conservative in their theological beliefs also. This expectation was confirmed by the empirical data (Table 38, variables 68 and 70).

Again the researcher emphasizes the fact that the women of this sample were significantly older than the men and the age variable may be a contributing factor to the seeming differences between the sexes on some of these variables.

Additional Data: Theological Orientation

One of the important variables of this study is theological orientation. In Chapter 2 a number of studies were cited which postulated the relationship of theological belief orientation with personality

traits and behavior (Adorno, et al., 1950; Slusser, 1960; Ranck, 1961; Wise, 1951; Elder, 1959; Mannoia, 1962; and Miller, 1963).

The demographic variables of age, income, and education in relationship to theology will first be considered. Age was not significantly related to theological orientation (Table 40, part 1). Since many variables do relate to theology, it might have been postulated that the basic variable was age with those older being more conservative. This, however, was not true. Age did not appear to play a significant role in the relationship of the other variables to theology.

Income was related to theology (Table 39, part 2; Table 40, part 6). Religious liberals did receive higher salaries than conservatives, with the greatest difference coming between those who classified themselves as "very conservative" and those who classified themselves as "very liberal." The slight difference between the moderately conservative and the moderately liberal was too small to warrant consideration (Table 39, part 2).

The analysis of the data is inconclusive in regard to whether liberals had more education than conservatives. When the entire sample of educators classified themselves theologically (independent variable), no significant difference was found regarding the amount of education (Table 39, part 1). However, in comparing the highs and lows on the RBI, the liberals did have significantly more education (Table 40, part 5). Nevertheless, this greater amount of education did not result in the taking of more graduate courses in education (Table 40, part 2) nor in a greater amount of reading in books and scholarly journals which directly relate to the discipline of education (Table 40, part 3).

Further research with different methods of evaluating theological orientation needs to be conducted.

Religious conservatives apparently placed a greater value upon and gave more import to religion than did the liberals, for the conservatives indicated a greater adherence to the practices and standards of their religion (Table 39, part 5). Perhaps this fact accounts for their willingness to work for less income if they felt their positions as educators were related to the propagation of their theological convictions.

Two separate AOV tests reached the following conclusion: Conformity value was positively related to conservative theology. This relationship was significant beyond the .005 level of confidence when the theology variable was measured by self-evaluation (Table 40, part 3) and by the RBI (Table 41, part 8).

The correlation between Conformity value and the RBI total score was .403 for the entire sample of 349 ($p<.01$). Conformity probably means a greater satisfaction with the status quo and an unwillingness to change. Further substantiation of this interpretation is seen in Table 43 where seven of the nine satisfaction variables were positive and significant in their correlation with conservative theology. Satisfaction-with-the-national-government was negatively but not significantly related to conservativism. It is at this point where religious conservatives must be ambivalent. They want satisfaction; they do not want to change the status quo; yet they are dissatisfied with the national government. It therefore appears as if theological conservatism would be positively related to political conservatism. Further support

for this supposition is advanced by the fact that theological conservatives were measured as significantly less favorable toward federal aid to education (Table 39, part 4). At first it may seem paradoxical to find conservatives more benevolent (H-11 and Table 34) while at the same time more opposed to federal aid to education than liberals. However, the reader should remember that the benevolence of the conservative seems to be related to helping others individually rather than through cooperative institutions and programs.

It should also be noted that conservatives seemed to be opposed to change. Three of the five change orientation variables were significant in their relationship to theological orientation (Table 43). The reason for the negative values is the ordering of the response categories; nevertheless, the interpretation of the three correlations indicates that high scores on the RBI (conservatism) are positively related to opposition to change.

Gordon (1960, p. 5) found a -.38 correlation between Conformity value and Independence value for 275 students ($p<.01$). Conservatives, as would be expected from their high Conformity scores, were significantly lower on Independence value than were liberals (Table 40, part 9). Most of the significant variables which related to conservatism or liberalism in theology seemed to relate to each other in a logical fashion thus substantiating the concept that a close relationship exists among the attitudes and values of an individual in a great variety of areas.

Conservative theology was also significantly correlated with the AABC colleges (Table 41) and the teaching area of Bible-Theology and

related subjects (Table 42). These two findings are closely related to each other, for AABC colleges require a Bible-Theology major of each student. Some of the CASC colleges also offer a major in Bible-Theology (or Religion) but do not require that major of all students.

Part II: A Summary of the Theoretical and Methodological Issues and Recommendations

The main focus of this study was upon the relationship between attitudes toward education, theological orientations, interpersonal values, and contact with education. The assumption was made that both value and contact serve as determinants of attitudes.

Theoretical Issues:

Concerning attitudes toward education, the theoretical framework was provided by Kerlinger (1956) who postulated that the progressive-traditional dichotomy in educational attitudes generalizes to other areas. He further suggested that the sharpness of this dichotomy is dependent upon occupational role, knowledge of and experience with education, and the perceived importance of education (Kerlinger, 1956).

The theoretical framework of the present research is also consistent with the religious findings of Adorno, et al. that theological orientation is closely related to attitudes and values in other areas. Katz (1960) and Rokeach (1960) point out that people are generally more inclined to change or give up attitudes inconsistent or unrelated to central values. From this orientation, there would be an expected consistency between religious values and attitudes, whether those attitudes are expressed toward others, toward education, or toward other social objects.

Foa (1950) and Guttman and Foa (1951) have postulated a theoretical relationship between attitude intensity and the amount of social contact with the attitude object. Rosenberg (1960) suggested that intensity is an important action predictor. Zetterberg (1963) observed that attitude intensity on the favorable-unfavorable continuum is related to perceived freedom or constraint of social interaction and whether this interaction is perceived as rewarding.

The results of the present research provide some empirical support for the hypothesis that contact with (or knowledge of) education does increase the intensity of attitudes toward education as well as favorableness toward education. A question was raised, however, in regard to the significance of the effect that enjoyment-of-education and alternative-rewarding-opportunities have upon an educator's attitude toward education. Insofar as specific interpersonal values are concerned, Leadership, Recognition, and Benevolence did not correlate with attitudes-toward-education. Neither did Leadership or Recognition have a significant relationship to theology; however, Benevolence was positively related to conservatism in theology.

Because the value hypotheses were not confirmed, two pertinent issues are raised. Leadership, Recognition, and Benevolence values on the SIV may not be representative of the hypothesized dichotomy between comparative and asset orientations (see Chapter 3, pp. 36-37). In other words, these SIV scales may not be valid measures of the hypothesized relationship of asset and comparative orientation with other variables such as attitudes toward education and theological orientation.

The second issue is concerned with the conceptualization of dimensions of values. Although the Gordon SIV makes provision for the

intensity of values, other value-dimensions such as generality, specificity, and modality (as suggested by Kluckholn, 1951) were not considered in this research. Whether or not these dimensions would be more relevant and more successful in predicting attitudes apparently depends upon further empirical studies.

Methodological Issues:

The four basic methodological issues relate to the suitability of the research design for the present research, the selection of the instruments and their psychometric properties, the sampling and test administration, and the statistical methodology.

Research which divides respondents on the basis of a single testing period is not considered to be a strong design. A longitudinal research which would have compared educators at different stages of contact with education or at different stages in a developing or changing theology might have yielded more generalizable conclusions.

A detailed discussion of the rationale underlying the selection of the instruments was presented in Chapter 3 under the heading: Selection of Variables. Since many of the hypotheses were not confirmed, a further examination should be made of the validity and reliability of the scales. The Gordon SIV and the Kerlinger ATE content scales have been used in many other investigations. Factor analysis of these scales was not done on the present data. Felty (1965) recommended that the forced-choice technique of the SIV be changed to conform to the ATE format so that all scales could be submitted to Guttman-Lingoes Multi-dimensional Scalogram Analysis (p. 167).

The Kerlinger ATE scales may be measuring only a limited portion of the attitude universe related to traditional and progressive attitudes toward education. Consequently, further investigation of these scales seems advisable to assure breath of representativeness.

The Likert-type intensity scale of the ATE was developed in connection with the international study now being conducted at Michigan State University. Perhaps increasing the response alternatives from four to six or seven would increase the accuracy of detecting a specific zero-point and of determining whether contact with (or knowledge of) education is related to the intensity of attitude toward education.

The RBI has not been used extensively and probably needs further refinement and validation.

The total sample size was adequate; however, it would have been desirable to have had a larger AABC-A group. A random sample of the total population of CASC and AABC educators would have yielded more generalized conclusions, but would also have added other problems: (a) cooperation probably would have decreased since faculty members probably would have been less responsive to an isolated researcher than they were to their own academic deans, and (b) the number of CASC educators would have been increased while the number of AABC-A educators decreased.

Group administration was requested, but not demanded, by the researcher. For various reasons (some unknown to the researcher) nine schools used individual administration. A higher percentage of incomplete or unused questionnaries were returned from these schools.

Consequently, individual administration by academic deans within schools decreased the percentage of return.

Guttman's assumption that attitudes are unidimensional can be seriously questioned. Consequently, this study, like Felty (1965) and Friesen (1966), employed the Lingoes Multiple Scalogram Analyses which does not attempt to scale all of the items together but empirically searches out those items which will scale together, with an arbitrarily determined margin of error of ten per cent. Since the Lingoes procedure (MSA) does permit multi-unidimensionality, it is an improvement over the Guttman procedure (GSA). However, like Felty (1965) and Freisen (1966) and as reported in the previous chapter, the data of this research on the ATEP-C and ATET-C failed to form any meaningful unidimensional scales. A further revision of the Lingoes program (MSA-I) attempts to provide for multidimensional analyses (Lingoes, 1965).

Recommendations for Further Research

The following recommendations should be considered before further research similar to the present study is undertaken.

1. A research design permitting comparison of educators at various stages of contact with (or knowledge of) education or at different stages of a developing or changing theology should be developed for evaluating the precise value of contact with (or knowledge of) education and theological orientation as they affect attitudes and values.
2. The present study should be extended to include other religious and/or educational groups, such as seminarians, college students, parish ministers, priests, and social workers.

3. A different method of sampling to assure better representation of the population should be employed in the next phase of the study. This perhaps will necessitate a departure from the group administration procedure.
4. The RBI needs further validation. Perhaps investigation should also be made into another instrument for determining theological orientation.
5. The ATE scales apparently need revision if Guttman scaling is expected. Guttman has developed a highly systematic model, known as facet theory, which attempts to substructure an attitude universe into logically established semantic components.[1] Problems related to the determination of attitude content, sampling of items from all those possibly within the facetized attitude universe, and length of the scales may be resolved on the basis of this model.
6. The Guttman-Lingoes MSA-I computer program, which allows for multi-dimensional analyses of scaling data in addition to multi-unidimensional analyses, should be used in further research with scales.
7. Factor analysis should be employed as a data reduction method since it appears to have potential value in reducing multiple predictor variables and selecting a smaller but equally predictive set.
8. The age variable should be controlled by a three-way analysis-of-variance design. The partial correlation coefficient for age should be specifically considered when it is one of the set of multiple predictors in multiple correlation analyses.

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[1] A detailed discussion of Guttman's facet theory can be found in Felty's dissertation (1965, pp. 173-180).

Part III: Concluding Summary

A major problem in this study was differentiating between the amounts of contact educators have with education. Nevertheless, the present research has confirmed, in general, the impact of personal contact in the maintenance of favorable attitudes toward education (Tables 9-16). A more accurate means of measuring contact might have resulted in a complete acceptance of the hypothesis concerning the relationship between contact and favorable educational attitudes. The three contact variables which could also be interpreted as "knowledge" variables were better predictors of favorable attitudes toward education than the three "true" contact variables. In all six cases, the contact variable itself contributed more to the multiple correlation than either the enjoyment-of-education or the alternative-rewarding-opportunities. In other words, contact was a better predictor of the criterion than either of the other two variables.

Although the data were inconclusive, contact does appear to increase the intensity of a person's attitude toward education (Tables 6-8). Some of the "true" contact variables as well as some of the "knowledge" contact variables correlated significantly with the intensity scales.

None of the value hypotheses were confirmed. The significant positive relationship between conservative theology and Benevolence value (Table 34) was in the opposite direction of that hypothesized.

Significant differences were found in connection with the ATE scales. Religious conservatives, AABC educators, and teachers in subjects related to Bible-Theology did score significantly lower on the ATEP-C than did those with whom they were compared. The conservatives

were also higher on the ATET-C. These findings, however, are not independent of each other since AABC educators are significantly more conservative and their colleges offer proportionately more courses in subjects related to Bible-Theology. No difference was found, however, between minister-and-non-minister educators in regard to ATE.

Although several specific hypotheses remain clearly unsubstantiated in this study, it does not necessarily warrant rejection of the theoretical framework. However, the results do point out the necessity of a more rigorous test of the theoretical propositions, particularly by means of an improved research design, more adequate measuring instruments, and more appropriate statistical techniques. Further studies on attitudes must recognize the postulated multidimensionality and complexity of attitude composition. When these technical problems are surmounted, perhaps it will then be possible to derive a meaningful and predictable relationship between specific attitudes toward education, contact, values, and other postulated interactive variables.

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APPENDICES

APPENDIX A

Preliminary Sampling Materials

1. Introductory Letter
2. Check-list Response Card
3. Request Letter (Mostert)
4. Request Letter (Hill)
5. Appreciation Letter
6. Administrative Instructions
7. Test Administration Data Sheet

April 4, 1966

Dr. Clifford W. Thomas, Dean
Owosso College
Owosso, Michigan 48867

Dear Dr. Thomas:

I am writing you in regard to some current research which is being conducted at Michigan State University among college teachers in the area of attitudes toward education. This research is closely related to a cross-cultural study which is also designed to measure attitudes toward education. Your college has been selected as one of twenty-six which we are requesting to cooperate in this study.

It is necessary that we secure your assistance in gathering the data. It is our desire to have all of your full-time faculty members complete the questionnaire. The time needed to respond to all items is about an hour. We prefer to have the questionnaires group administered; that is, all faculty members should fill out the questionnaire at the same time. Their names will not be needed for the study. The inclusion of your faculty in the sample would contribute much to this project.

For your convenience enclosed are a self-addressed stamped envelope and a brief form upon which to indicate your response. Suggestions regarding administration will be included in the package of questionnaires. Since the study deadline for gathering the data has been set for May 15th-20th, we need to send out the questionnaires and have them returned to us as soon as possible. Consequently, an indication of your cooperation will result in our forwarding the questionnaires by return mail. If you have further questions, I will welcome your correspondence.

Cordially yours,

John E. Jordan, Ph.D.
Project Director and
Associate Professor of Education

JEJ:mm

Enclosure

RESPONSE CARD

Yes, I will be happy to have our school cooperate in this study.

College_____

Number of questionnaires needed.
(One for each full-time faculty)_____

Your Name_____Title_____

If you are unable to participate, please check here ☐

April 8, 1966

Dr. Terrelle B. Crum, Dean of Faculty
Barrington College
Middle Highway
Barrington, Rhode Island 02806

Dear Terrelle:

By this time you have probably received a letter from Dr. Jordan, Michigan State University, requesting that you cooperate in a study having to do with the attitudes of college teachers toward education.

The segment of the study having to do with the attitudes of teachers in Bible Colleges is being handled by John T. Dean of Grace Bible College. He is participating in this research in connection with his doctoral dissertation.

In that the results of this study should be very meaningful to our Bible college constituency, I would encourage you to cooperate in having your faculty members fill in the questionnaire that they will receive.

Cordially yours,

John Mostert

JM:as

MEMORANDUM THE COUNCIL FOR THE ADVANCEMENT OF SMALL COLLEGES

1501 New Hampshire Avenue, N.W.*Washington, D.C. 20036*Tele. 265-6244

ALFRED T. HILL, Executive Secretary

TO: Deans of Selected CASC Colleges

FROM: Alfred T. Hill, Executive Director

RE: Participation in Research Project

DATE: April 11, 1966

Dr. John E. Jordan of Michigan State University has written you asking you to participate in a research project in the area of attitudes toward education. Your college is one of 14 CASC members selected and one of 26 colleges requested to cooperate in the study.

Since this information will be of interest to your college and to CASC and its members, we ask you to cooperate by returning the form indicating your willingness to participate. As indicated in Dr. Jordan's letter, the time needed by your faculty to respond to the items in the questionnaire is about an hour.

Since there is a deadline for this material, we ask you to return the form immediately if you have not done so. We feel it is an honor to have over half of the colleges requested to participate as CASC members, and we highly encourage you to participate.

May 17, 1966

Dr. Edwin Gedney, Dean
Gordon College
Wenham, Massachusetts 01984

Dear Dr. Gedney:

Thank you very much for your willingness and the willingness of your faculty to participate in this research. We are attempting to examine the relationship between various variables among which are the following: attitudes-toward-education, theological beliefs, and interpersonal values. A number of hypotheses have been generated in regard to these variables, demographic information, and college instructors.

It is important to us that all full-time teachers (or those full-time with the school and who also do administrative work besides teaching) complete the Questionnaire. We prefer to have the Questionnaire group administered. However, if this is impossible, individual administration is acceptable. If a faculty member is absent at the time of the group administration, please attempt to have him take the Questionnaire individually. Omissions may bias the sample.

Enclosed you will find (1) procedures for administration of the Questionnaire, (2) the test administration data sheet which you should fill out and return to me, (3) 30 envelopes for individual Questionnaires to assure each person that his responses will remain anonymous, and (4) 30 Attitude Questionnaires.

Further correspondence on this research will be handled by the research assistant, John T. Dean. After you have returned the Questionnaires to us, Mr. Dean will send you a check covering your cost of postage. (The Questionnaires can be sent through the mail as Educational Material.) Please return all of the Questionnaires in their individual envelopes to us in one package.

Since the deadline for the collection of data has been set as June 1st, we would appreciate receiving the completed Questionnaires by then. Thank you sincerely.

Cordially yours,

John E. Jordan, Ph.D.
Project Director and
Associate Professor of Education

JEJ:mm

PROCEDURES FOR ADMINISTRATION:

AN ATTITUDE QUESTIONNAIRE

The following outline is presented on the basis of my experience thus far with questionnaires and attitude scales.

1. A suitable room should be prepared where respondents will have a table, desk, or similar surface on which to write and ample room between respondents (in group administration) to minimize influencing each other.

2. Read the following to the group:

   "This Questionnaire is a study of attitudes--attitudes toward education, religion, and interpersonal values. Remember, in a study like this, there are no right or wrong answers to the attitude questions. We want you to answer how you feel about certain things. Please answer quickly with your first idea. Do not spend a lot of time thinking about each item. Some questions may appear vague; others perhaps need interpretation. Do the best you can with each item. If there is no answer which exactly fits what you would like to answer, please choose the alternative nearest to your desired answer."

3. Distribute the Questionnaire with an envelope to each respondent.

4. Have the respondents fill out the cover page of the Questionnaire together. Perhaps you will need to inform them regarding the present size of your student body (question 6) or the description of your school (question 7) or other items.

5. Continue by reading the following:

   "We do not want your name on the Questionnaire. We want you to be able to answer all of the questions freely without any concern about being identified. Therefore, when you come to part four of the Questionnaire (the last part) you need not fill in the identifying material (name, grade, or occupation, etc.) on the Survey of Interpersonal Values. When you complete the Questionnaire, place it in the M.S.U.-addressed envelope provided for each individual Questionnaire, seal this envelope, and give it to the Questionnaire administrator. The individual envelopes will remain sealed until opened by the Research Assistant at M.S.U. thereby assuring that your response will remain completely anonymous."

6. As individuals complete the Questionnaire, make sure that each Questionnaire is sealed in an envelope, reminding the respondent that each Questionnaire will remain anonymous.

7. Return all of the Questionnaires in their individual envelopes to us in one package. Our deadline for collecting this data is May 15th-20th.

8. Thank you and your faculty for participating.

TEST ADMINISTRATION DATA

1. School_____

2. Date_____

3. Administrator_____

4. Persons Assisting (if any)_____

_____

5. Total No. respondents_____

6. Place of administration_____

7. Description of test setting: (lighting, desks, noise, condition of room, etc.)

_____

_____

_____

8. Comments: (Group receptivity, verbal and non-verbal reactions, unusual test incidents or reactions, etc.)

_____

_____

_____

_____

APPENDIX B

Instrumentation

AN ATTITUDE QUESTIONNAIRE

This Questionnaire has four main parts to it: (1) Education Scale, (2) Religious Beliefs Inventory, (3) Personal Questionnaire, and (4) Survey of Interpersonal Values.

Since the Questionnaire is completely anonymous, you may answer all of the questions freely without any concern about being identified. For the purposes of this research, the answers of all persons to all questions are important.

1. Questionnaire Number_____ 2. Date_____

3. Sex: Male 1

Female 2

4. Name of School_____

5. Your School's denominational affiliation_____

6. Size of student body of your School.

0-300. 1

301-500. 2

501-1000 3

1001 and above 4

7. Description of your School

Bible college accredited by AABC 1

Bible college--associate member of AABC. 2

College affiliated with CASC 3

Other. 4

Specific instructions regarding each section of the Questionnaire will be given at the beginning of each of the four parts.

No._____

EDUCATION SCALE

Instructions: Given below are 20 statements of opinion about education. We all think differently about schools and education. Here you may express how you think by choosing one of the four possible answers following each statement. These answers indicate how much you agree or disagree with the statement. Please mark your answer by placing a circle around the number in front of the answer you select.

You are also asked to indicate for each statement how strongly you feel about your marking of the statement. Please mark this part of your answer in the same way as before, by placing a circle around the number in front of the answer you select.

---

1. The goals of education should be dictated by children's interests and needs as well as by the larger demands of society.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

   About how strongly do you feel about your answer?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

2. No subject is more important than the personalities of the pupils.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

   About how strongly do you feel about your answer?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

3. Schools of today are neglecting reading, writing, and arithmetic: the three R's.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

4. The pupil-teacher relationship is the relationship between a child who needs direction, guidance, and control and a teacher who is an expert supplying direction, guidance, and control.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

5. Teachers, like university professors, should have academic freedom--freedom to teach what they think is right and best.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

6. The backbone of the school curriculum is subject matter; activities are useful mainly to facilitate the learning of subject matter.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

7. Teachers should encourage pupils to study and criticize our own and other economic systems and practices.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

8. The traditional moral standards of our culture should not just be accepted; they should be examined and tested in solving the present problems of students.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

9. Learning is experimental; the child should be taught to test alternatives before accepting any of them.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

10. The curriculum consists of subject matter to be learned and skills to be acquired.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

11. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

12. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

13. The curriculum should be made up of an orderly sequence of subjects that teach to all students the best of our cultural heritage.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

14. Discipline should be governed by long-range interests and well-established standards.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

15. Education and educational institutions must be sources of social ideas; education must be a social program undergoing continual reconstruction.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

16. Right from the very first grade, teachers must teach the child at his own level and not at the level of the grade he is in.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

17. Children should be allowed more freedom than they usually get in the execution of learning activities.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

18. Children need and should have more supervision and discipline than they usually get.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

19. Learning is essentially a process of increasing one's store of information about the various fields of knowledge.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

20. In a democracy, teachers should help students understand not only the meaning of democracy but also the meaning of the ideologies of other political systems.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

No._____

RELIGIOUS BELIEFS INVENTORY

The next three pages contain a list of a few religious beliefs. Please read all of them. Whenever you find one with which you AGREE, please check the space under "AGREE". Whenever you see one with which you DISAGREE, please check the space under "DISAGREE".

If you neither agree nor disagree with a statement, please leave both spaces blank, but make sure you respond to all the statements about which you feel one way or the other.

	Agree	Disagree
1. My physical body will be resurrected in the after-life.	____	____
2. Things happen that can only be explained in super-natural terms.	____	____
3. Churches are too far behind the times for modern life.	____	____
4. The mind and the soul are just expressions of the body.	____	____
5. Only the clergy are competent to interpret scripture.	____	____
6. There is not enough evidence for me to be able to say "there is a God" or "there is no God."	____	____
7. It is possible that a new religion may arise that will be superior to any present religion.	____	____
8. We should concentrate on saving individuals. When enough individuals are saved, society as a whole will be saved.	____	____
9. God created the universe in six days and rested the seventh.	____	____
10. As the world becomes smaller and smaller, Christianity will be forced to compromise with other religions of the world on matters of belief and practice.	____	____
11. All information about history, nature and science is already contained in the Bible--ready to be interpreted.	____	____
12. Jesus differs from us only in the degree of perfection he attained.	____	____
13. Jesus never intended to found a church.	____	____

		Agree	Disagree
14.	Everyone should interpret the Bible in his own way because the Bible says different things to different people.	____	____
15.	It makes little difference to what church one belongs.	____	____
16.	People can be good Christians and never go to church.	____	____
17.	Our church is the one church founded by God himself.	____	____
18.	Belief in miracles is not essential.	____	____
19.	God is a product of man's wishful thinking.	____	____
20.	A church is a place for religion--churches shouldn't get involved in social and political issues.	____	____
21.	Man is essentially good.	____	____
22.	Jesus was a man like anyone else.	____	____
23.	There is no life after death.	____	____
24.	Experiences of conversion are superficial and have no lasting effects.	____	____
25.	Buddha and Mohammed were as much prophets of God for their cultures as Christ was for ours.	____	____
26.	Churches are a leftover from the Middle Ages and earlier superstitious times.	____	____
27.	The church enjoys special divine guidance.	____	____
28.	Each man has a spark of the divine.	____	____
29.	Man lives on only through his good works, through his children and in the memory of his dear ones.	____	____
30.	Every word in the Bible is divinely inspired.	____	____
31.	The scientific method is the only way to achieve knowledge.	____	____
32.	There is no salvation for one who has not accepted God.	____	____

		Agree	Disagree
33.	Although the Bible is inspired by God, some parts of it are no longer relevant to us today.	____	____
34.	Nothing can really be called "sin" unless it harms other people.	____	____
35.	Man is essentially neither good nor evil.	____	____
36.	The church is the ultimate authority on religious knowledge.	____	____
37.	The minister or priest has powers that ordinary men do not have.	____	____
38.	One day Jesus Christ will return to earth in the flesh.	____	____
39.	Man is headed for destruction; only God's miraculous intervention can save us.	____	____
40.	It doesn't much matter what one believes, as long as one leads a good life.	____	____
41.	If faith conflicts with reason, we should be guided by faith.	____	____
42.	In Holy Communion the bread and wine change into the body and blood of Jesus.	____	____
43.	There is no such thing as a "miracle".	____	____
44.	The Church was created by man, not by God.	____	____
45.	The church sanctuary should be used only for worship services.	____	____
46.	There is only one true church.	____	____
47.	There is no need for miracles because natural law itself is the greatest miracle of all.	____	____
48.	The Church was created by God.	____	____
49.	All non-Christians will go to hell.	____	____
50.	Every conversion is a miracle of God.	____	____
51.	Man is made up of a body and a soul.	____	____
52.	A person should know the day he has become converted or accepted by Christ.	____	____

		Agree	Disagree
53.	Unless missionaries are successful in converting people in non-Christian lands, there people will have no chance for salvation.	____	____
54.	To be a Christian, one must be converted or born again.	____	____
55.	The church building has a special holiness that other buildings do not have.	____	____
56.	The Revised Standard Version of the Bible is a truer version of the Bible than the King James Version.	____	____
57.	There is no soul, in any sense of the word.	____	____
58.	The real significance of Jesus Christ is that in his life and message he left an example for later generations to follow.	____	____
59.	Everything that happens in the universe happens because of natural causes.	____	____
60.	All functions of the church could be handled by other institutions.	____	____

No._____

PERSONAL QUESTIONNAIRE

This questionnaire has two parts to it. The first part has to do with your contacts with schools and education, and what you know about education. You may have had considerable contact with schools and education and you may know a great deal about education. On the other hand, you may have had little or no contact with schools or education and may have never thought much about it at all.

The second part of the questionnaire has to do with personal information about you. Since the questionnaire is completely anonymous, you may answer all of the questions freely without any concern about being identified.

For the purposes of this investigation, the answers of all persons to all questions are important.

Please read each question carefully and answer by circling the correct answer (or answers) or fill in the answer as requested.

SECTION 1: Experiences with Schools and Education

1. How many graduate courses have you had in education?

None 1

From 1 to 9 semester hours or its equivalent . . . 2

From 10 to 18 semester hours or its equivalent . . 3

From 19 to 27 semester hours or its equivalent . . 4

More than 27 semester hours or its equivalent. . . 5

2. In comparison to other people, how much knowledge do you feel you have regarding the developments in your own public school district?

Very little knowledge. 1

Slightly less than average 2

Average. 3

Slightly more than average 4

Very much knowledge. 5

3. Have you ever taught in the public schools, grades 1 to 12?

Never taught 1

Taught 1 to 3 years. 2

Taught 4 to 7 years. 3

Taught 8 to 11 years 4

Taught more than 11 years. 5

4. Have you ever taught in the parochial (or private schools), grades 1 to 12?

Never taught 1

Taught 1 to 3 years. 2

Taught 4 to 7 years. 3

Taught 8 to 11 years 4

Taught more than 11 years 5

5. Counting all of your educational professional experiences, how many years have you spent in education?

Less than one year 1

One to three years 2

Four to seven years. 3

Eight to eleven years. 4

More than eleven years 5

6. In the past year how much reading have you done in books and scholarly journals which are directly related to the discipline or field of education?

None. 1

An average of less than one hour per week 2

An average of one to two hours per week 3

An average of two to four hours per week. 4

More than four hours per week 5

7. How do you feel about the professional work experience you have had in education?

I definitely dislike it 1

I do not like it very much. 2

I like it somewhat. 3

I definitely enjoy it 4

8. What opportunities did you have (or do you have) to work in (or at) something else instead of in education; that is, something else that was (or is) acceptable to you as a job?

I do not know what other jobs were (or are) available or acceptable. 1

No other job was (or is) available. 2

Other jobs available were (or are) not at all acceptable to me. 3

Other jobs available were (or are) not quite acceptable to me 4

Other jobs available were (or are) fully acceptable to me 5

SECTION 2: Personal Information

9. How old are you? (Write age in box). . . . . ☐

10. Where were you mainly reared or "brought up" in your youth (that is, up to the age of 15 or 16)?

Country 1

Country Town. 2

City. 3

City Suburb 4

11. What is your marital status?

Married 1

Single. 2

Divorced. 3

Widowed 4

Separated 5

12. How many children do you have? (Please write number in box) ☐

13. Please answer either A or B, whichever applies best to your present situation. Please read both choices, then answer only one.

A. If you are self-supporting, about what is your total yearly income before taxes (or, if you are married, the total yearly income in the family). Include extra income from any regular sources such as dividends, insurance, etc. Please write the total in the box. ☐

B. If you are not self-supporting (or, if you are married, and your family is not self-supporting), what is the approximate total yearly income before taxes of the persons who mainly provide your support (that is, parents, relatives or others). Make the best estimate you can. ☐

14. According to your answer to Question 13, about how does your income compare with that of most people in the total community where you live?

Much lower. 1

Lower 2

About the same. 3

Higher. 4

Much higher 5

15. How many brothers have you? (Please write number in box) ☐

16. How many sisters have you? (Please write number in box) ☐

17. About how does (or did) your father's income compare with that of most people in the community in which he lives (or lived)?

Much lower 1

Lower. 2

About the same 3

Higher 4

Much higher. 5

18. What is your religion?

Catholic 1

Protestant 2

Jewish 3

None 4

Other (Please specify)_____ 5

19. About how important is your religion to you in your daily life?

I have no religion 1

Not very important 2

Fairly important 3

Very important 4

20. During an "average" work day, you probably have occasion to talk and make contact with other adult persons where you are employed. Estimate about what percent of these contacts and conversations are with people you feel personally close to, whom you consider to be close friends, or that are relatives of yours.

None 1

I do not usually talk or make contact with other adult persons where I am employed. 2

Less than 10%. 3

Between 10 and 30% 4

Between 30 and 50% 5

Between 50 and 70% 6

Between 70 and 90% 7

More than 90%. 8

21. How important is it to you to work with people you feel personally close to?

Not at all important 1

Not very important 2

Fairly important 3

Very important 4

22. Now please consider all of the personal contacts you have with people when you are not at work. Would you estimate about what percent of your contacts apart from working hours are spent with people whom you know because of your job; that is, those who work at the same job, trade, or profession, or in the same place that you do, or that you otherwise contact in the pursuit of your job.

None 1

Less than 10%. 2

Between 10 and 30% 3

Between 30 and 50% 4

Between 50 and 70% 5

Between 70 and 90% 6

More than 90%. 7

23. About how much education do you have? (Circle only one)

12 years of school or less 1

Some college or university 2

A college or university degree 3

Some graduate work beyond the first degree 4

A M.A., B.D., or equivalent. 5

A Ph.D., Th.D., or equivalent. 6

Post-doctoral work 7

Other (Please note number of years of study or diploma obtained)_____ 8

24. About how does your education compare with that of most people?

Much less than most 1

Less than most. 2

About average 3

More than most. 4

Much more than most 5

25. About how does (or did) your father's education compare with that of most people in his time?

Much less than most 1

Less than most. 2

About average 3

More than most. 4

Much more than most 5

26. Answer <u>either</u> A, B, or C. Please <u>read all three</u> before answering.

A. If you are <u>renting</u> the house in which you live, about how much money per month do you pay for rent? (Write amount in box) . . . . . .

B. If you <u>own</u> the house in which you live (house, apartment, or other), about how much money per month do you believe you could rent the house for? (Write amount in box) . . . . . .

C. If you <u>reside</u> in a house owned by a religious organization (house, apartment, or other), about how much money per month do you believe you could rent the house for? (Write amount in box) . . . . . .

27. In every community each group (for example, schools, businessmen, labor, the local government) has a different job to do for the community. In your community, would you say that the schools are doing an excellent, good, fair, or poor job? How about businessmen? Labor? The local government? The doctors and hospitals? The church? (Please circle the appropriate number to indicate how you feel each job is being done.) Please answer for each group.

A. Elementary Schools

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

B. Secondary Schools

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

C. Universities

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

D. Businessmen

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

27. **Continued from Page 19.** The instructions on the previous page apply to the following sections, E through H.

E. Labor

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

F. Local Government

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

G. National Government

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

H. Health Services (Doctors and Hospitals)

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

27. **Continued from Page 20.** The instructions on Page 19 apply to the **following Section I.**

I. Churches

Do not know 1

Poor. 2

Fair. 3

Good. 4

Excellent 5

28. **About how many times have you changed residency (communities) during the past 10 years?** Please circle the correct number.

None. 1

1 Time. 2

2 - 3 Times 3

4 - 6 Times 4

7 - 10 Times. 5

Over 10 Times 6

29. **About how many times have you changed jobs during the past 10 years?** Please circle the correct number.

None. 1

1 Time. 2

2 - 3 Times 3

4 - 6 Times 4

7 - 10 Times. 5

Over 10 Times 6

30. **Are you an ordained minister?** No 1

Yes. 2

31. In respect to your religion, about to what extent do you observe the rules and regulations of your religion? Please circle the correct number.

I have no religion 1

Seldom 2

Sometimes. 3

Usually. 4

Almost always. 5

32. Health experts say adding certain chemicals to drinking water results in less decay in people's teeth. If you could add these chemicals to your water with little cost to you, would you be willing to have the chemicals added? Please circle the correct number.

No 1

Probably not 2

Maybe. 3

Yes. 4

33. Some people feel that in bringing up children, new ways and methods should be tried whenever possible. Others feel that trying out new methods is dangerous. What is your feeling about the following statement?

"New methods of raising children should be tried out whenever possible."

Strongly disagree. 1

Slightly disagree. 2

Slightly agree 3

Strongly agree 4

34. Family planning on birth control has been discussed by many people. What is your feeling about a married couple practicing birth control? Do you think they are doing something good or bad? If you had to decide, would you say they are doing wrong, or rather, that they are doing right?

It is always right 1

It is probably all right 2

It is usually wrong. 3

It is always wrong 4

35. People have different ideas about what should be done concerning automation and other new ways of doing things. How do you feel about the following statement?

"Automation and similar new procedures should be encouraged (in government, business, and industry) since eventually it creates new jobs and raises the standard of living."

Disagree Strongly 1

Disagree Slightly 2

Agree Slightly. 3

Agree Strongly. 4

36. Running a village, city, town, or any governmental organization is an important job. What is your feeling on the following statement?

"Political leaders should be changed regularly, even if they are doing a good job."

Strongly disagree 1

Slightly disagree 2

Slightly agree. 3

Strongly agree. 4

37. Some people believe that more local government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

Strongly disagree 1

Slightly disagree 2

Slightly agree. 3

Strongly agree. 4

38. Some people believe that more federal government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

Strongly disagree 1

Slightly disagree 2

Slightly agree. 3

Strongly agree. 4

39. People have different ideas about planning for education in their nation. Which one of the following do you believe is the best way? Answer only one.

Planning for education should be left entirely to the parents 1

Educational planning should be primarily directed by the individual city or other local governmental unit. 2

Educational planning should be primarily directed by the national government 3

Educational planning should be primarily directed by religious organizations 4

Other (please specify)_____ 5

40. Some people are more set in their ways than others. How would you rate yourself? Please circle the number of your choice.

I find it very difficult to change 1

I find it slightly difficult to change 2

I find it somewhat easy to change my ways. 3

I find it very easy to change my ways. 4

41. I find it easier to follow rules than to do things on my own.

Agree strongly 1

Agree slightly 2

Disagree slightly. 3

Disagree strongly. 4

42. I like the kind of work that lets me do things about the same way from one week to the next. Circle the number of your choice.

Agree strongly 1

Agree slightly 2

Disagree slightly. 3

Disagree strongly. 4

43. A good son will try to find work that keeps him near his parents even though it means giving up a good job in another part of the country.

Agree strongly 1

Agree slightly 2

Disagree slightly. 3

Disagree strongly. 4

44. We should be as helpful to people we do not know as we are to our friends.

Disagree strongly. 1

Disagree slightly. 2

Agree slightly 3

Agree strongly 4

45. Planning only makes a person unhappy because your plans hardly ever work out anyway.

Agree strongly 1

Agree slightly 2

Disagree slightly. 3

Disagree strongly. 4

46. Which of the following requisites do you consider most important to make your life more happy and satisfactory in the future? Circle the single, most important choice.

Nothing. 1

More money 2

More friends 3

Better job 4

Good physical health 5

Good mental health 6

Deeper spiritual maturity. 7

Other (please specify)_____ 8

47. What do you think you can do to make this possible? Please answer one of the two alternatives below.

Nothing_____

Please specify_____

_____

_____

_____

48. Your denominational affiliation_____

49. Area in which you primarily teach.

Bible-theology and/or subjects definitely related to ministerial training 1

Liberal arts or general education subjects 2

Other. 3

50. What would you consider your own theological leaning to be?

Very conservative. 1

Moderately conservative. 2

Moderately liberal 3

Very liberal 4

PERCENTILE | NORM GROUP

% | % | % | % | % | %

Marital Status

School or Firm

SRA SURVEY OF INTERPERSONAL VALUES

By LEONARD V. GORDON

DIRECTIONS

In this booklet are statements representing things that people consider to be important to their way of life. These statements are grouped into sets of three. This is what you are asked to do:

Examine each set. Within each set, find the **one statement** of the three which represents what you consider to be **most important** to you. Blacken the space beside that statement in the column headed M (for **most).**

Next, examine the remaining two statements in the set. Decide which **one** of these statements represents what you consider to be **least important** to you. Blacken the space beside that statement in the column headed L (for **least).**

For every set you will mark **one statement** as representing what is **most important** to you, **one statement** as representing what is **least important** to you, and you will leave **one statement unmarked.**

Example

	M	L
To have a hot meal at noon		▬
To get a good night's sleep		
To get plenty of fresh air	▬	

Suppose that you have examined the three statements in the example, and although all three of the statements may represent things that are important to you, you feel that "To get plenty of fresh air" is the **most important** to you. You would blacken the space in the column headed M (for **most)** beside the statement. Notice that this has been done in the example.

You would then examine the remaining two statements to decide which of these represents something that is **least important** to you. Suppose that "To have a hot meal at noon" is the **least important** to you. You would blacken the space in the column headed L (for **least)** next to this statement. Notice that this has been done in the example.

You would leave the remaining statement unmarked.

In some cases it may be difficult to decide which statement to mark. Make the best decision that you can. This is not a test; there are no right or wrong answers. Be sure to mark **only one M (most)** choice and **only one L (least)** choice in a set. Do not skip any sets. Answer every set. Turn this booklet over and begin.

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Mark your answers in column A →

	A	
	M	L
To be free to do as I choose		
To have others agree with me		
To make friends with the unfortunate		
	M	L
To be in a position of not having to follow orders		
To follow rules and regulations closely		
To have people notice what I do		
	M	L
To hold an important job or office		
To treat everyone with extreme kindness		
To do what is accepted and proper		
	M	L
To have people think of me as being important		
To have complete personal freedom		
To know that people are on my side		
	M	L
To follow social standards of conduct		
To have people interested in my well being		
To take the lead in making group decisions		
	M	L
To be able to do pretty much as I please		
To be in charge of some important project		
To work for the good of other people		
	M	L
To associate with people who are well known		
To attend strictly to the business at hand		
To have a great deal of influence		
	M	L
To be known by name to a great many people		
To do things for other people		
To work on my own without direction		
	M	L
To follow a strict code of conduct		
To be in a position of authority		
To have people around who will encourage me		
	M	L
To be friends with the friendless		
To have people do good turns for me		
To be known by people who are important		
	M	L
To be the one who is in charge		
To conform strictly to the rules		
To have others show me that they like me		
	M	L
To be able to live my life exactly as I wish		
To do my duty		
To have others treat me with understanding		
	M	L
To be the leader of the group I'm in		
To have people admire what I do		
To be independent in my work		
	M	L
To have people act considerately toward me		
To have other people work under my direction		
To spend my time doing things for others		
	M	L
To be able to lead my own life		
To contribute a great deal to charity		
To have people make favorable remarks about me		

B	L

Turn the page and go on

APPENDIX D

Variables, Code Book, and FCC

1. Basic Variables of the Study
2. Code Book
3. FCC I, II, and III

TABLE 44.--Numbers of respondents, means, and standard deviation for 70 variables by AABC-M[1] and AABC-A[2] in the entire sample.

Variable		AABC-M			AABC-A		
		N	Mean	S.D.	N	Mean	S.D.
1.	Sex	87	1.33	0.47	37	1.30	0.46
2.	School	93	24.65	1.94	39	42.15	1.14
3.	School's Denom	93	5.22	3.33	39	5.15	2.81
4.	School's Size	93	1.99	0.68	39	1.00	0.00
5.	School's Description	93	1.00	0.00	39	2.00	0.00
6.	Ordained Minister	82	1.54	0.50	33	1.39	0.50
7.	Respondent's Denom	91	5.45	3.46	36	5.67	3.24
8.	Area of Teaching	90	1.64	0.69	38	1.61	0.75
9.	Own Theological Evaluation	90	1.51	0.59	38	2.08	0.75
10.	Religion	92	2.00	0.00	39	2.00	0.00
11.	Number of ATE[3]	93	1.31	2.96	39	.15	0.54
12.	Support	76	14.74	4.37	31	14.74	4.57
13.	Conformity	76	19.09	5.31	31	15.39	6.47
14.	Recognition	76	8.37	3.54	31	9.16	4.45
15.	Independence	76	14.03	5.97	31	15.06	6.29
16.	Benevolence	76	21.00	4.74	31	21.03	5.12
17.	Leadership	76	12.30	6.25	31	14.10	6.83
18.	Number of Graduate Courses	87	2.79	1.59	38	2.76	1.48
19.	Knowledge of Public Schools	91	2.74	1.20	39	2.85	1.09
20.	Teaching in Public School	90	1.56	1.02	39	1.56	1.02
21.	Teaching in Parochial School	87	1.21	0.63	38	1.61	1.15
22.	Total Teaching	91	4.10	1.13	38	3.87	1.21
23.	Amt of Professional Reading	90	2.89	1.13	39	3.05	1.21
24.	Educa Enjoy	89	3.88	0.39	39	3.69	0.52
25.	Educa Altern	88	4.31	1.10	37	4.30	1.05
26.	Age	90	42.57	11.33	38	40.13	10.60
27.	Marital Status	90	1.29	0.64	39	1.23	0.81
28.	Children-Number	87	2.45	4.34	38	2.18	1.25
29.	Income	89	9.17	9.47	36	7.17	3.19
30.	Income-Self Comp	88	2.56	0.87	38	2.66	0.88
31.	Siblings	90	3.43	2.90	39	3.51	3.09
32.	Income-Father's Comp	86	3.02	0.65	39	2.92	0.62
33.	Personalism on Job	92	5.66	1.64	39	5.03	1.55
34.	Ed-Self Amt	92	5.08	0.96	38	4.97	1.20
35.	Ed-Self Comp	90	4.02	0.58	39	4.15	0.67
36.	Ed-Father's Comp	90	2.91	0.88	39	3.08	0.66

TABLE 44.--(cont.)

37.	Satis-Elem Ed	89	3.62	1.02	39	3.74	0.97
38.	Satis-Sec Ed	89	3.49	1.07	39	3.49	1.00
39.	Satis-Univer	86	3.67	1.13	37	3.62	0.89
40.	Satis-Business	89	3.33	1.11	39	3.36	0.96
41.	Satis-Labor	88	2.53	1.23	38	2.71	1.09
42.	Satis-Local Govt	90	3.23	0.90	39	3.28	0.92
43.	Satis-Nat Govt	89	3.08	0.84	39	3.13	0.89
44.	Satis-Health ser	90	4.03	0.77	39	3.67	0.87
45.	Satis-Church	89	3.36	0.80	39	3.00	0.56
46.	Resid-Change	92	2.33	1.02	39	2.69	1.06
47.	Job Change	91	1.87	0.92	39	2.21	1.06
48.	Relig Conform	89	4.87	0.34	39	4.62	0.54
49.	Change-Health	90	3.61	0.68	39	3.69	0.47
50.	Change-Child r	89	2.72	0.74	38	2.95	0.66
51.	Change-birth c	87	1.79	0.55	38	1.71	0.52
52.	Change-Autom	89	3.33	0.77	38	3.53	0.56
53.	Change-Pol Lead	92	2.30	1.07	38	2.21	1.02
54.	Local Ed-Finance	90	2.98	0.89	39	3.13	0.77
55.	Fed Ed-Finance	91	2.09	1.04	39	2.33	0.96
56.	Ed planning	83	2.48	1.33	38	2.66	1.34
57.	Change-Self	90	2.34	0.58	38	2.63	0.67
58.	Leader-Follower Role	91	2.85	0.77	37	2.97	0.69
59.	Change-Self rtn job	91	2.84	0.81	38	2.89	0.86
60.	Personalism-oth	91	3.29	0.78	39	3.10	0.85
61.	Planning-Fut Ori	91	3.77	0.52	39	3.74	0.59
62.	Requisite to Happiness (pre-categorized)	92	6.79	1.27	39	6.62	1.21
63.	Requisite to Happiness (uncategorized)	87	7.37	3.78	32	7.22	3.33
64.	ATET-C[4]	93	27.96	3.74	39	27.15	3.51
65.	ATET-I[5]	91	31.08	4.07	38	30.92	4.30
66.	ATEP-C[6]	91	27.11	3.41	39	28.49	3.51
67.	ATEP-I[7]	90	31.16	3.57	38	31.87	3.87
68.	Conservative	92	13.74	3.67	39	13.18	4.43
69.	Liberal	92	2.04	2.52	39	4.21	4.26
70.	Total Theological Score	92	111.70	4.42	39	108.97	7.84

[1]AABC-M = Members of Accrediting Association of Bible Colleges
[2]AABC-A = Associate members of Accrediting Association of Bible Colleges
[3]Number of attitude-toward-education items upon which the respondent commented
[4]Attitude-toward-education Traditional Content Score
[5]Attitude-toward-education Traditional Intensity Score
[6]Attitude-toward-education Progressive Content Score
[7]Attitude-toward-education Progressive Intensity Score

TABLE 45.--Numbers of respondents, means, and standard deviation for 70 variables by CASC[1] and Total[2] in the entire sample.

Variable	CASC			TOTAL		
	N	Mean	S.D.	N	Mean	S.D.
1. Sex	255	1.34	0.48	403	1.33	0.47
2. School	266	7.35	3.73	423	15.17	11.72
3. School's Denom	266	6.03	2.91	423	5.77	2.93
4. School's Size	266	2.56	0.75	423	2.31	0.84
5. School's Description	266	3.00	0.00	423	2.59	1.02
6. Ordained Minister	235	1.22	0.42	371	1.31	0.46
7. Respondent's Denom	243	6.50	2.84	394	5.98	3.13
8. Area of Teaching	262	2.13	0.54	414	1.97	0.65
9. Own Theological Evaluation	257	2.30	0.85	410	2.09	0.84
10. Religion	264	1.89	0.72	420	1.93	0.57
11. Number of ATE[3]	266	.46	1.68	423	.60	1.97
12. Support	220	15.56	4.84	350	15.31	4.70
13. Conformity	220	15.54	6.56	350	16.29	6.35
14. Recognition	220	8.89	4.39	350	8.80	4.17
15. Independence	220	16.63	6.30	350	15.92	6.26
16. Benevolence	220	20.52	5.36	350	20.66	5.14
17. Leadership	220	12.65	6.58	350	12.73	6.59
18. Number of Graduate Courses	263	2.89	1.70	413	2.85	1.64
19. Knowledge of Public Schools	263	3.06	1.24	418	2.96	1.23
20. Teaching in Public School	262	1.79	1.19	416	1.69	1.12
21. Teaching in Parochial School	259	1.75	1.36	409	1.59	1.21
22. Total Teaching	264	4.06	1.20	418	4.05	1.18
23. Amt of Professional Reading	264	3.13	1.22	418	3.06	1.20
24. Educa Enjoy	260	3.77	0.54	412	3.78	0.52
25. Educa Altern	262	4.05	1.16	412	4.15	1.12
26. Age	263	42.07	12.13	416	41.80	11.64
27. Marital Status	262	1.39	0.69	416	1.34	0.68
28. Children-Number	244	1.66	1.62	394	1.91	2.49
29. Income	243	10.15	3.23	392	9.61	5.41
30. Income-Self Comp	244	3.11	0.92	395	2.91	0.94
31. Siblings	261	3.07	2.41	415	3.17	2.58
32. Income-Father's Comp	262	2.95	0.86	412	2.95	0.80
33. Personalism on Job	262	4.80	1.61	418	5.01	1.65
34. Ed-Self Amt	264	5.31	0.82	419	5.23	0.90
35. Ed-Self Comp	262	4.20	0.64	416	4.14	0.65
36. Ed-Father's Comp	262	2.99	0.89	416	2.97	0.88

TABLE 45.--(cont.)

37.	Satis-Elem Ed	261	3.33	1.15	414	3.46	1.12
38.	Satis-Sec Ed	260	3.32	1.07	413	3.41	1.07
39.	Satis-Univer	251	3.56	0.96	399	3.60	0.99
40.	Satis-Business	257	3.06	1.16	410	3.16	1.15
41.	Satis-Labor	258	2.53	1.20	409	2.54	1.20
42.	Satis-Local Govt	261	3.08	0.93	415	3.13	0.92
43.	Satis-Nat Govt	259	3.19	0.91	412	3.15	0.90
44.	Satis-Health ser	260	3.78	1.01	414	3.82	0.94
45.	Satis-Church	260	3.41	0.92	413	3.35	0.86
46.	Resid-Change	264	2.54	1.15	420	2.51	1.10
47.	Job Change	264	2.12	1.00	419	2.06	0.98
48.	Relig Conform	260	4.41	0.87	413	4.53	0.78
49.	Change-Health	259	3.63	0.79	413	3.62	0.74
50.	Change-Child r	257	2.85	0.77	409	2.83	0.76
51.	Change-birth c	249	1.80	0.79	399	1.78	0.71
52.	Change-Autom	262	3.36	0.68	414	3.37	0.69
53.	Change-Pol Lead	263	2.34	1.02	418	2.32	1.01
54.	Local Ed-Finance	261	3.23	0.78	415	3.16	0.81
55.	Fed Ed-Finance	260	2.65	1.07	415	2.53	1.07
56.	Ed planning	257	2.60	1.33	403	2.59	1.33
57.	Change-Self	263	2.54	0.65	416	2.52	0.64
58.	Leader-Follower Role	261	3.03	0.77	414	2.97	0.77
59.	Change-Self rtn job	262	2.91	0.78	416	2.88	0.79
60.	Personalism-oth	262	3.09	0.85	417	3.14	0.83
61.	Planning-Fut Ori	263	3.67	0.63	418	3.70	0.60
62.	Requisite to Happiness (pre-categorized)	263	6.24	1.67	418	6.39	1.59
63.	Requisite to Happiness (uncategorized)	219	7.41	4.00	359	7.36	3.88
64.	ATET-C[4]	263	27.03	3.69	420	27.21	3.67
65.	ATET-I[5]	262	30.67	3.80	416	30.74	3.86
66.	ATEP-C[6]	262	29.59	3.37	417	28.96	3.54
67.	ATEP-I[7]	262	31.69	3.50	415	31.58	3.55
68.	Conservative	265	10.52	5.45	421	11.36	5.20
69.	Liberal	265	5.80	5.70	421	4.68	5.12
70.	Total Theological Score	265	104.82	9.16	421	106.74	8.52

[1]CASC = Members of Council for the Advancement of Small Colleges
[2]Total = All respondents including those affiliated with both the AABC-M and CASC
[3]Number of attitude-toward-education items upon which the respondent commented
[4]Attitude-toward-education Traditional Content Score
[5]Attitude-toward-education Traditional Intensity Score
[6]Attitude-toward-education Progressive Content Score
[7]Attitude-toward-education Progressive Intensity Score

APPENDIX D

Variables, Code Book, and FCC

1. Basic Variables of the Study
2. Code Book
3. FCC I, II, and III

A. Attitudes Toward Education

1 Traditional attitudes, Items 3, 4, 6, 10, 11, 12, 13, 14, 18, 19 - Content
Raw Score total
Adjusted total score (dichotomized)

2 Traditional attitudes, Items 3, 4, 6, 10, 11, 12, 13, 14, 18, 19 - Intensity
Raw Score total
Adjusted total score (dichotomized)

3 Progressive attitudes, Items 1, 2, 5, 7, 8, 9, 15, 16, 17, 20 - Content
Raw Score total
Adjusted total score (dichotomized)

4 Progressive attitudes, Items 1, 2, 5, 7, 8, 9, 15, 16, 17, 20 - Intensity
Raw Score total
Adjusted total score (dichotomized)

B. Contact with Education (Personal Questionnaire)

1 Amount of graduate courses in education, Item 1

2 Amount of knowledge possessed in regard to the developments in the local school district, Item 2

3 Amount of contact (work) with schools, grades 1 to 12,
Public schools, Item 3,
Parochial (or private) schools, Item 4,
All types of education, Item 5

4 Amount of reading related to the discipline or field of education, Item 6

5 The enjoyment of professional educational work experience, Item 7

6 Alternative opportunities available (other possible employment), Item 8

C. Aid to Education (Personal Questionnaire)

1 Financial (local), Item 37

2 Financial (federal or national), Item 38

D. Educational Planning (Personal Questionnaire)

1 Orientation to change, Item 39

E. Interpersonal Values (Gordon Scale)

1 S scores: Support
2 C scores: Conformity
3 R scores: Recognition (comparative score)
4 I scores: Independence
5 B scores: Benevolence (asset score)
6 L scores: Leadership (comparative score)
7 Value score items (raw score), Items 1-90

F. Demographic Data (Demographic Data Sheet)

1 Sex, Item 3
2 Name of school, Item 4
3 School's denominational affiliation, Item 5
4 Size of student body of school, Item 6
5 Description of school, Item 7

G. Demographic Data (Personal Questionnaire)

1 Age: Item 9
2 Rural-Urban Status: Item 10
3 Marital status: Item 11
4 Number of children: Item 12
5 Income and rental (S.E. Class), (income - yearly, self-family), Item 13; (Rental), Item 26
6 Size of family, (brothers), Item 15; (sisters), Item 16; (siblings), Items 15-16
7 Education (self--amount), Item 23
8 Mobility: Residency, Item 28
Occupational, Item 29
9 Ordained minister, Item 30
10 Own denominational affiliation, Item 48
11 Area of teaching, Item 49
12 Self-evaluation of theological orientation, Item 50

H. Satisfaction with institutions (Personal Questionnaire)

1 Satisfaction with elementary schools
Item 27-A
2 Satisfaction with secondary schools
Item 27-B
3 Satisfaction with universities
Item 27-C
4 Satisfaction with businessmen
Item 27-D
5 Satisfaction with labor
Item 27-E
6 Satisfaction with local government
Item 27-F
7 Satisfaction with national government
Item 27-G

8 Satisfaction with health services
Item 27-H
9 Satisfaction with churches
Item 27-I

I. Self-Statements (Personal Questionnaire)

1 Comparative income status - self: Item 14
2 Comparative income - father: Item 17
3 Comparative education - self: Item 24
4 Comparative education - father: Item 25

J. Religiosity (Personal Questionnaire)

1 Religious affiliation: Item 18
2 Perceived importance: Item 19
3 Perceived norm conformity: Item 31

K. Personalism (Personal Questionnaire)

1 Orientation toward job personalism
a Statement of extent of personalism on job: Item 20
b Perceived importance of personal relations: Item 21
2 Diffusion of personal relationships
Percent of job-social overlap: Item 22
3 Familialism: Item 43 (Son's work)
4 Other orientation: Altruism: Item 44, (toward friends and others)

L. Attitudes Toward Change (Personal Questionnaire)

1 Health practices (water): Item 32
2 Child-rearing practices: Item 33
3 Birth control practices: Item 34
4 Political leadership change: Item 36
5 Automation: Item 35
6 Self Conception
Item 40 (Perceived self-rigidity)
Item 41 (Adherence to rules)
Item 42 (Job regularity and rigidity)
7 Future orientation
Item 45 (Planning - personal)
Item 46 (Requisites for happiness)
Item 47 (Achievement of happiness)

M. Theological Orientation (Religious Beliefs Inventory)

1 Liberal theological score
2 Conservative theological score
3 Total theological score (100 plus the Conservative score minus the Liberal score)

CODE BOOK

AN ANALYSIS OF ATTITUDES TOWARD EDUCATION, THEOLOGICAL ORIENTATIONS, INTERPERSONAL VALUES, AND EDUCATIONAL EXPERIENCE

John T. Dean, Researcher
John E. Jordan, Advisor
College of Education
Michigan State University
July, 1966

INSTRUCTIONS FOR THE USE OF THIS CODE BOOK

1. Code 0 or 00 will always mean Not Applicable or Nothing, except as noted.

2. Code + for a one column no response, or -9 for a two column no response, or -99 for a three column no response will mean there was No Information or Respondent did not answer.

3. In each case in the following pages the column to the left contains the column number of the IBM card; the second column contains the question number from the questionnaire; the third column (item detail) contains an abbreviated form of the item; and the fourth column contains the code within each column of the IBM card with an explanation of the code. The fifth column (recode) is reserved to later indicate recoding after the item count is finished; i.e., after all data is key punched, run the data through the M.S.U. computer (ACT II, FCC, and/or Single-Column Frequency Distributions) to determine the patterns of response alternatives to a question. This will indicate if regrouping, etc., need to be considered for the item.

4. Coder instructions always follow a line across the page and are clearly indicated.

5. In some cases when codes are equal to others already used, they are not repeated each time, but reference is made to a previous code or the immediately previous code with "same".

6. Under Code, the first number is the questionnaire question alternative and the second number is the actual code which is entered on the data sheets (i.e., 1-4; one (1) is the questionnaire question alternative and 4 is the code).

Column-Ques.	Item Detail	Code	Recode
1,2,3, Face Sheet	Questionnaire Number	101-999	
4,5 Face Sheet	Day of Administration (Use the actual day)	01 to 31	
6,7 Face Sheet	Month of Administration	01 - January 02 - February 03 - March ... . - October 11 - November 12 - December	
8,9 Face Sheet	Year of Administration	66 - 1966 67 - 1967 68 - 1968	
10 Face Sheet	Sex of Respondent	1 - Male 2 - Female	
11,12 Face Sheet	Name of School	01 - Cedarville College 02 - Columbia College 03 - Dominican College 04 - Dominican College of Blauvelt 05 - Gordon College 06 - Lakeland College 07 - Milligan College 08 - Morris College 09 - Owosso College 10 - Philadelphia Musical Academy 11 - Ricker College 12 - Spring Arbor College 13 - Westmont College 21 - Barrington College 22 - Free Will Baptist Bible College 23 - Lancaster School of the Bible 24 - Lincoln Christian College 25 - North Central Bible College 26 - Reformed Bible Institute 27 - St. Paul Bible College 28 - Vennard College 41 - American Baptist Theological Seminary 42 - Berean Bible School 43 - Central Pilgrim College 44 - Winnipeg Bible College	

Column-Ques.	Item Detail	Code	Recode
13,14 Face Sheet	School's denominational affiliation	01 - Assemblies of God 02 - Baptist 03 - Church of Christ (God) 04 - Christian Missionary Alliance 05 - Independent 06 - Inter-denominational 07 - Methodist, Nazarene, Holiness (Armenian) 08 - Roman Catholic 09 - Other 10 - Christian (UCC)	
15 Face Sheet	Size of Student Body	1 - 0 to 300 2 - 301 to 500 3 - 501 to 1000 4 - 1001 and above	
16 Face Sheet	Description of School	1 - Bible college accredited by AABC 2 - Bible college associate member of AABC 3 - College affiliated with CASC 4 - Other 5 - Both AABC and CASC	
17 30 Q'aire	Ordained Minister	1 - No 2 - Yes	
18,19 48 Q'aire	Respondent's denominational affiliation	01 - Assemblies of God 02 - Baptist 03 - Church of Christ (God) 04 - Christian Missionary Alliance 05 - Independent (none) 06 - Inter-denominational 07 - Methodist, Nazarene, Holiness (Armenian) 08 - Roman Catholic 09 - Other 10 - Christian (UCC)	
20 49 Q'aire	Area of teaching	1 - Bible-theology or subjects definitely related to ministerial training 2 - Liberal arts or general education subjects 3 - Other	

Column-Ques.	Item Detail	Code	Recode
21 50 Q'aire	Own theological evaluation	1 - Very conservative 2 - Moderately conservative 3 - Moderately liberal 4 - Very liberal	
22 18 Q'aire	Religion	1 - Catholic 2 - Protestant 3 - Jewish 4 - None 5 - Other 6 - Prefer not to answer	
23,24	Deck or card number	01	
25,26	Project director, location, and content area	41 - Dean: United States and Canada (college professors in CASC and AABC schools)	
27	Type of administration	1 - Group 2 - Self-administered 3 - Interview individual	
30 thru 39 3,4,6 10,11 12,13 14,18 19*	Education Scale Traditional Content Responses	1 - 1, strongly disagree 2 - 2, disagree 3 - 3, agree 4 - 4, strongly agree	

1. Items are to be scored on the transcription sheet as circled by the respondent.

2. Special instructions for NO RESPONSE. Count the number of NO RESPONSE items, if more than 3 occur, do not score respondent for this scale. If there are 3 or less in total, the NO RESPONSE statement is to be scored either 1 or 2 by the random procedure of coin flipping.

   If a head is obtained, the score assigned will be 1.
   If a tail is obtained, the score assigned will be 2.

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* The traditional and the progressive scales are both in the Kerlinger education scale but the responses are scored separately on the transcription sheet.

Column-Ques.	Item Detail	Code	Recode

3. Total the raw scores for each respondent and write the totals on the transcription data sheet directly below the column totaled.*

4. Intensity raw scores for each statement are to be scored on the data sheet exactly as they appear on the questionnaire: i.e., if 1 is circled in the intensity section of question one, score it as 1 on the corresponding section of the transcription sheet.

5. Dichotomization Procedures (i.e., for MSA - applied to both scales).

   a) Using raw data scores (i.e., the actual number circled by the respondent) via the Hafterson CUT Program on the M.S.U. CDC 3600, determine the point of least error for each item on the content scales.

   b) Using this point (i.e., between 1 and 2, or between 2 and 3 or between 3 and 4) rescore the items, via recode cards, as 0, 1 via the Hafterson MSA Program on the M.S.U. CDC 3600 to determine which items form a scale. Run at both .01 and .05 level.

   c) Items are scored 1 above the column break, 0 below the column break.

   d) Using the same procedure in point 5-a above, determine the CUT points for the intensity component of each item.

   e) Enter the MSA Program with the CUT points for the intensity component and scale as in Point No. 5-b for content.

   f) Adjusted total scores for content and intensity. Sum the dichotomized content and intensity scores (i.e., 0, 1) obtained by the above procedure for each respondent on these items that scaled for both content and intensity. Maximum score will be 1 x the number of the same items that scaled on both content and intensity.

   g) Zero Point. Using only the items that scaled for both content and intensity, plot and determine the "zero point" for each cultural group (or other desired groupings) via the method detailed on pages 221-234 by Guttman (1950).

6. Dichotomization Procedure (alternative to No. 5 above). Attempt to program the CUT Program into the MSA so that both procedures under 5-a and b are conducted jointly.

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* By this procedure, the possible range of scores is from 0 to 80. Doubling the obtained score will approximate scores obtained by the method of Yuker, et al., (1960, p. 10)

Column-Ques.	Item Detail	Code	Recode
40 3,4,6, thru 10,11, 49 12,13, 14,18, 19	Education Scale, Traditional, Intensity Responses*	1 - 1, not strongly at all 2 - 2, not very strongly 3 - 3, fairly strongly 4 - 4, very strongly	
50 1,2,5, thru 7,8,9 59 15,16 17,20	Education Scale Progressive, Content Responses**	1 - 1, strongly disagree 2 - 2, disagree 3 - 3, agree 4 - 4, strongly agree	
60 1,2,5, thru 7,8,9, 69 15,16, 17,20	Education Scale, Progressive Intensity Responses***	1 - 1, not strongly at all 2 - 2, not very strongly 3 - 3, fairly strongly 4 - 4, very strongly	

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* Instructions for Coder: EDUCATION SCALE, TRADITIONAL, INTENSITY, COLUMNS 40-49. Intensity questions are scored as indicated on pages 1-4.

** Instructions for Coder: EDUCATION SCALE, PROGRESSIVE, CONTENT, COLUMNS 50-59.

1. Items are to be scored exactly as circled.

2. Follow the procedures outlined on pages 1-3 and 1-4, Education Scale, Traditional Content. Be sure to score only those items indicated above as belonging to the education progressive scale content.

*** Instructions for Coder: EDUCATION SCALE, PROGRESSIVE, INTENSITY, COLUMNS 60-69. Same as instructions for Education Scale, Progressive Content, see above.

70,71	Number of ATE items commented upon	00 - 0 items commented upon 01 - 1 item commented upon ... 20 - 20 items commented upon

Column-Ques.	Item Detail	Code	Recode
1-22		Same as Card 1, pages 1-1, 1-2, and 1-3	
23,24	Deck or card number	02	
25-27		Same as Card 1, page 1-3	
30,31 Raw S score	Value scale, Support score*	01 - 32	
32,33 Raw C score	Value scale, Conformity score*	01 - 32	
34,35 Raw R score	Value scale, Recognition score* (comparative)	01 - 32	
36,37 Raw I score	Value scale Independence score*	01 - 32	
38,39 Raw B score	Value scale, Benevolence score* (asset)	01 - 32	
40,41 Raw L score	Value scale, Leadership score* (comparative)	01 - 32	
42 1 Q'aire	Graduate courses in education	1 - none 2 - 1 to 9 semester hours or equivalent 3 - 10 to 18 semester hours or equivalent 4 - 19 to 27 semester hours or equivalent 5 - more than 27 semester hours or equivalent	

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* Entries for columns 30-41 are obtained through scoring according to SRA Manual for Survey of Interpersonal Values, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois, 1960. For scoring, coders should use the special keys adapted from the SRA English edition of the scale. Although the summed scores of the six value scales should total 90, scores between 84 and 95 are "acceptable."

Column-Ques.		Item Detail	Code	Recode
43	2 Q'aire	Knowledge public school district	1 - very little knowledge 2 - slightly less than average 3 - average 4 - slightly more than average 5 - very much knowledge	
44	3 Q'aire	Public school teaching	1 - never taught 2 - taught 1 to 3 years 3 - taught 4 to 7 years 4 - taught 8 to 11 years 5 - taught more than 11 years	
45	4 Q'aire	Parochial school teaching	1 - never taught 2 - taught 1 to 3 years 3 - taught 4 to 7 years 4 - taught 8 to 11 years 5 - taught more than 11 years	
46	5 Q'aire	Total educational experiences	1 - less than one year 2 - 1 to 3 years 3 - 4 to 7 years 4 - 8 to 11 years 5 - more than 11 years	
47	6 Q'aire	Professional reading	1 - none 2 - an average of less than one hour per week 3 - an average of 1 to 2 hours per week 4 - an average of 2 to 4 hours per week 5 - more than 4 hours per week	
48	7 Q'aire	Feelings about educational work experience	1 - definitely dislike it 2 - do not like it very much 3 - like it somewhat 4 - definitely enjoy it	
49	8 Q'aire	Alternative work (to education)	1 - 1, no information 2 - 2, unavailable 3 - 3, not acceptable 4 - 4, not quite acceptable 5 - 5, acceptable	
50,51	9 Q'aire	Age	20 - 20 years 21 - 21 years ... 40 - 40 years	

Column-Ques.		Item Detail	Code	Recode
52	10 Q'aire	Community in which reared. If more than one is checked try to determine in which one the respondent spent most of the time. If impossible, try to choose a medium (i.e. country, city, score country-town)	1 - 1, country 2 - 2, country town 3 - 3, city 4 - 4, city suburb	
53	11 Q'aire	Marital Status	1 - 1, married 2 - 2, single 3 - 3, divorced 4 - 4, widowed 5 - 5, separated	
54,55	12 Q'aire	Number of children. If blank, check Ques. 11. If single, score 00; if married, score -9.	1 - 01 2 - 02 3 - 03 ... ... 10 - 10	
56,57	13 Q'aire	Yearly Income (self-family)	01 - less than $1,000 02 - $1,000 to $1,999 03 - $2,000 to $2,999 ... ... 12 - $11,000 to $11,999	
58	14 Q'aire	Comparative Income (self-family)	1 - 1, much lower 2 - 2, lower 3 - 3, about the same 4 - 4, higher 5 - 5, much higher	

Column-Ques.		Item Detail	Code	Recode
59,60	15 Q'aire	Brothers. If the respondent answers only one question (15 or 16) and other is blank, assume it to be zero.	1 - 01 2 - 02 3 - 03 ... ... 10 - 10	
61,62	16 Q'aire	Sisters	Same as number of brothers	
63,64	None	Siblings - Obtain by summing above Questions 15 and 16, Col's 59,60 and 61,62	1 - 01 ... ... 15 - 15	
65	17 Q'aire	Father's Income: Comparative	1 - 1, much lower 2 - 2, lower 3 - 3, about the same 4 - 4, higher 5 - 5, much higher	
66	19 Q'aire	Religion (Importance)	1 - 1, No religion 2 - 2, Not very 3 - 3, Fairly 4 - 4, Very 5 - 5, Prefer not to answer	
67	20 Q'aire	Personalism (job-amount)	1 - 1, none 2 - 2, no contact 3 - 3, less than 10% 4 - 4, 10 to 30% 5 - 5, 30 to 50% 6 - 6, 50 to 70% 7 - 7, 70 to 90% 8 - 8, over 90%	
68	21 Q'aire	Personalism (job-importance of)	1 - 1, not at all 2 - 2, not very 3 - 3, fairly 4 - 4, very	

766

Column-Ques.		Item Detail	Code	Recode
1-22			Same as Card 1, pages 1-1, 1-2, and 1-3	
23,24		Deck or card number	03	
25-27			Same as Card 1, page 1-3	
30	22 Q'aire	Personalism (job-diffusion)	1 - 1, none 2 - 2, less than 10% 3 - 3, 10 to 30% 4 - 4, 30 to 50% 5 - 5, 50 to 70% 6 - 6, 70 to 90% 7 - 7, over 90%	
31	23 Q'aire	Education (Self-amount). If more than one answer is circled, choose the highest amount or determine the appropriate answer.	1 - 1, 12 years of school or less 2 - 2, some college or university 3 - 3, a college or university degree 4 - 4, some graduate work beyond the first degree 5 - 5, M.A., B.D., or equivalent 6 - 6, Ph.D., Th.D., or equivalent 7 - 7, post-doctoral work 8 - 8, other	
32	24 Q'aire	Education (Self-comparative)	1 - 1, much less 2 - 2, less 3 - 3, average 4 - 4, more 5 - 5, much more	
33	25 Q'aire	Education (Father - comparative)	1 - 1, much less 2 - 2, less 3 - 3, average 4 - 4, more 5 - 5, much more	
34	26 Q'aire	Housing (rental - month)	1 - $20 or less 2 - 21 - 40 (dollars) 3 - 41 - 75 4 - 76 - 125 5 - 126 - 200 6 - 201 - 300 7 - 300 or more	

Column-Ques.		Item Detail	Code	Recode
35	27-A Q'aire	Institutional Satisfaction Elementary Schools	1 - 3 do not know 2 - 1 poor 3 - 2 fair 4 - 4 good 5 - 5 excellent	
36	27-B Q'aire	Institutional Satisfaction Secondary Schools	Same	
37	27-C Q'aire	Institutional Satisfaction Universities	Same	
38	27-D Q'aire	Institutional Satisfaction Businessmen	Same	
39	27-E Q'aire	Institutional Satisfaction Labor	Same	
40	27-F Q'aire	Institutional Satisfaction Government (local)	Same	
41	27-G Q'aire	Institutional Satisfaction Government (National)	Same	
42	27-H Q'aire	Institutional Satisfaction Health Services	Same	
43	27-I Q'aire	Institutional Satisfaction Churches	Same	
44	28 Q'aire	Residency (change frequency) (i.e., last ten years)	1 - 1, none 2 - 2, one time 3 - 3, two to three times 4 - 4, four to six times 5 - 5, seven to ten times 6 - 6, over ten times	

Column-Ques.		Item Detail	Code	Recode
45	29 Q'aire	Job (change frequency) (i.e., last ten years)	1 - 1, none 2 - 2, one time 3 - 3, two to three times 4 - 4, four to six times 5 - 5, seven to ten times 6 - 6, over ten times	
46	31 Q'aire	Religiousity (norm conformity)	1 - 1, no religion 2 - 2, seldom 3 - 3, sometimes 4 - 4, usually 5 - 5, almost always	
47	32 Q'aire	Change Orientation (Health Practices)	1 - 1, no 2 - 2, probably not 3 - 3, maybe 4 - 4, yes	
48	33 Q'aire	Change Orientation (Child Rearing)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
49	34 Q'aire	Change Orientation (Birth control Practices)	1 - 1, always right 2 - 2, usually right 3 - 3, probably wrong 4 - 4, always wrong	
50	35 Q'aire	Change Orientation (Automation)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
51	36 Q'aire	Change Orientation (Political Leaders)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
52	37 Q'aire	Education (aid to - local)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
53	38 Q'aire	Education (aid to - federal)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	

Column-Ques.		Item Detail	Code	Recode
54	39 Q'aire	Education (planning responsibility)	1 - 1, only parents 2 - 2, only city or local government 3 - 3, primarily federal government 4 - 4, primarily religious organizations 5 - 5, other	
55	40 Q'aire	Change Orientation (self)	1 - 1, very difficult 2 - 2, somewhat difficult 3 - 3, slightly easy 4 - 4, very easy	
56	41 Q'aire	Change Orientation (self-role adherence)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	
57	42 Q'aire	Change Orientation (self-routine job)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	
58	43 Q'aire	Personalism (Familialism - Parental ties)	Same	
59	44 Q'aire	Personalism (Other orientation)	1 - 1, disagree strongly 2 - 2, disagree slightly 3 - 3, agree slightly 4 - 4, agree strongly	
60	45 Q'aire	Future Orientation (Planning)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	
61	46 Q'aire	Future Orientation (Happiness)	1 - 1, nothing 2 - 2, money 3 - 3, friends 4 - 4, job 5 - 5, physical health 6 - 6, mental health 7 - 7, spiritual maturity 8 - 8, other	

Column-Ques.	Item Detail	Code	Recode
62,63 47 Q'aire	Future Orientation (Happiness possibility)	01 - Nothing 02 - Marriage 03 - Divorce 04 - Friends 05 - Religion (In general) 06 - Money 07 - Job 08 - Education 09 - Health (Mental) 10 - Health (Physical) 11 - Religion (Emphasis - study of Bible) 12 - Religion (Service to others) 13 - Family 14 - Combination 15 - Other -9 - No response	
64,65 Sum of item scores 3,4, 6,10,11,12, 13,14,18, 19	Education Scale, Traditional Total Raw Content score entry on transcription sheet	00 - 40	
66,67 Sum of item scores 3,4, 6,10,11,12, 13,14,18, 19	Education Scale, Traditional Total Raw Intensity score entry on transcription sheet	00 - 40	
68,69 Sum of item scores 1,2, 5,7,8,9,15, 16,17,20	Education Scale, Progressive Total Raw Content score entry on transcription sheet	00 - 40	
70,71 Sum of item scores 1,2, 5,7,8,9,15, 16,17,20	Education Scale, Progressive Total Raw Intensity score entry on transcription sheet	00 - 40	

Column-Ques.	Item Detail	Code	Recode
72,73	Religious Beliefs Inventory, Conservative score	00 - 27	
74,75	Religious Beliefs Inventory, Liberal score	00 - 33	
76-78	Total Religious Conservative Score. This is found by adding 100 to the Conservative score and subtracting the Liberal score from it.		
766			

FCC I

Field No.	Question	Variable Name	Col.
		Card 1	
1	3 Face Sheet	Sex	10
2	6 Face Sheet	Size of Student Body	15
3	7 Face Sheet	Description of School	16
4	30 Q'aire	Ordained Minister	17
5	49 Q'aire	Area of teaching	20
6	50 Q'aire	Own theo. evaluation	21
7	18 Q'aire	Religion	22
8	Admin. Data Sheet	Type of Admin.	27
9-18	Education Scale	Trad. Ed.-Content	30-39
19-28	Education Scale	Trad. Ed.-Intensity	40-49
29-38	Education Scale	Prog. Ed.-Content	50-59
39-48	Education Scale	Prog. Ed.-Intensity	60-69
		Card 2	
	First 29 columns SAME as Card 1 except for Col. 23,24 (i.e. Deck or Card No.)		
49	1 Q'aire	Contact (Grad. courses)	42
50	2 Q'aire	Contact (Knowledge/Public School)	43
51	3 Q'aire	Contact (Public school teaching)	44
52	4 Q'aire	Contact (Parochial school teaching)	45
53	5 Q'aire	Contact (Total ed. teaching exper.)	46
54	6 Q'aire	Contact (Professional reading)	47
55	7 Q'aire	Contact (Enjoyment of Education)	48
56	8 Q'aire	Contact (Alternatives to Education)	49
57	10 Q'aire	Community in which reared	52
58	11 Q'aire	Marital Status	53
59	14 Q'aire	Income (comparative-self fam.)	58
60	17 Q'aire	Income (father's comparative)	65
61	19 Q'aire	Religion (Importance)	66
62	20 Q'aire	Personalism (job amount)	67
63	21 Q'aire	Personalism (job-importance of)	68
		Card 3	
	First 29 columns SAME as Card 1 except for Col. 23,24 (i.e. Deck or Card No.)		
64	22 Q'aire	Personalism (job-diffusion)	30
65	23 Q'aire	Education (self-amount)	31
66	24 Q'aire	Education (self-comparative)	32
67	25 Q'aire	Education (father-comparative)	33
68	26 Q'aire	Housing (rental-month)	34
69	27-A Q'aire	Instit. satis. (Elem. Sch.)	35
70	27-B Q'aire	Instit. satis. (Sec. Sch.)	36
71	27-C Q'aire	Instit. satis. (Univ.)	37
72	27-D Q'aire	Instit. satis. (Bus.)	38
73	27-E Q'aire	Instit. satis. (Labor)	39

Field No.	Question	Variable Name	Col.
74	27-F Q'aire	Instit. satis. (Local gov't.)	40
75	27-G Q'aire	Instit. satis. (Nat. gov't.)	41
76	27-H Q'aire	Instit. satis. (Health)	42
77	27-I Q'aire	Instit. satis. (Churches)	43
78	28 Q'aire	Residence (change-frequency)	44
79	29 Q'aire	Job (change-frequency)	45
80	31 Q'aire	Religiosity (norm conformity)	46
81	32 Q'aire	Change orient. (health)	47
82	33 Q'aire	Change orient. (child rear.)	48
83	34 Q'aire	Change orient. (birth cont.)	49
84	35 Q'aire	Change orient. (automat.)	50
85	36 Q'aire	Change orient. (political lead.)	51
86	37 Q'aire	Education (aid to--local)	52
87	38 Q'aire	Education (aid to--federal)	53
88	39 Q'aire	Education (planning respons.)	54
89	40 Q'aire	Change orient. (self)	55
90	41 Q'aire	Change orient. (self-role adher.)	56
91	42 Q'aire	Change orient. (self-rout. job)	57
92	43 Q'aire	Personalism (familialism)	58
93	44 Q'aire	Personalism (other orient.)	59
94	45 Q'aire	Future Orient. (planning)	60
95	46 Q'aire	Future Orient. (happiness prereq.)	61

FCC II

Field No.	Question	Variable Name	Col.
		Card 1	
1	2 Face Sheet	Day of Administration	4,5
2	2 Face Sheet	Month of Administration	6,7
3	2 Face Sheet	Year of Administration	8,9
4	4 Face Sheet	Name of School	11,12
5	5 Face Sheet	School's denom. affiliation	13,14
6	48 Q'aire	Respond's denom. affiliation	18,19
7	None	No. of ATE items commented upon	70,71
		Card 2	
	First 29 columns SAME as Card 1 except for Col. 23,24 (i.e. Deck or Card No.)		
8	Value Scale	Support Value	30,31
9	Value Scale	Conformity Value	32,33
10	Value Scale	Recognition Value (comparative)	34,35
11	Value Scale	Independent Value	36,37
12	Value Scale	Benevolence Value (asset)	38,39
13	Value Scale	Leadership Value (comparative)	40,41
14	9 Q'aire	Age	50,51
15	12 Q'aire	Number of Children	54,55
16	13 Q'aire	Income (yearly-self, family)	56,57
17	15 Q'aire	Brothers	59,60
18	16 Q'aire	Sisters	61,62
19	None	Siblings	63,64
		Card 3	
	First 29 columns SAME as Card 1 except for Col. 23,24 (i.e. Deck or Card No.)		
20	47 Q'aire	Future Orient. (happ. possib.)	62,63
21	Education Scale	Trad. Educ. Total Cont. Raw Score	64,65
22	Education Scale	Trad. Educ. Total Int. Raw Score	66,67
23	Education Scale	Prog. Educ. Total Cont. Raw Score	68,69
24	Education Scale	Prog. Educ. Total Int. Raw Score	70,71
25	Rel. Beliefs Inv.	Conservative Score	72,73
26	Rel. Beliefs Inv.	Liberal Score	74,75

FCC III

Field No.	Question	Variable Name	Col.
		Card 1	
1	1 Face Sheet	Q'aire number	1-3
		Card 3	
	First 29 columns SAME as Card 1 except for Col. 23,24 (i.e. Deck or Card No.)		
2	Rel. Beliefs Inven.	Total Cons. Score	76-78

APPENDIX E

ADDENDUM TO REVIEW OF LITERATURE

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Cessna, W. C. Jr. The nature and determinty of attitude toward education and toward physically disabled persons in Japan. Unpublished doctoral dissertation, Michigan State University, 1967 (c. June).

Dickie, R. F. An investigation of differential attitudes toward the physically disabled blind persons, and attitudes toward education and their determinants among various occupational groups in Kansas. Unpublished doctoral dissertation, Michigan State University, 1967 (c. June).

Green, J. H. Attitudes of special educators versus regular teachers toward the physically handicapped and toward education. Unpublished doctoral dissertation, Michigan State University, 1967 (c. Sept.).

Heater, W. H. Attitudes of ministers toward mental retardation and toward education: Their nature and determinants. Unpublished doctoral dissertation, Michigan State University, 1967 (c. June).

Kreider, P. E. The social-psychological nature and determinants of attitude toward education and toward physically disabled persons in Belgium, Denmark, England, France, The Netherlands, and Yugoslavia. Unpublished doctoral dissertation, Michigan State University, 1967.

Mader, J. B. Attitudes of special educators toward the physically disabled and toward education. Unpublished doctoral dissertation, Michigan State University, 1967.

Palmerton, K. E. Attitudes of college counselors toward education and toward physically disabled persons. Unpublished doctoral dissertation, Michigan State University, 1967 (c. Sept.).

Proctor, Doris I. The relationships between knowledge of disabilities, kind and amount of experience, and classroom integration of exceptional children. Unpublished doctoral dissertation, Michigan State University, 1967 (c. June).

Weir, R. C. An investigation of differential attitudes toward the physically disabled, deaf persons, and attitudes toward education, and their determinants among various occupational groups in Kansas. Unpublished doctoral dissertation, Michigan State University, 1968 (c. June).

APPENDIX F

RELIABILITY AND VALIDITY OF THE SIV

RELIABILITY AND VALIDITY OF THE SIV

Reliability

The SRA Manual for Survey of Interpersonal Values (1960) gives the following:

> Test-retest reliability coefficients for the SIV scales were determined from scores obtained by administering the SIV twice to a group of 79 college students, with a ten-day interval between administrations. Reliabilities were also estimated by the Kuder-Richardson formula (Case III) on data based on a sample of 186 college students. This formula tends to yield underestimates of reliabilities obtained by other methods (p. 5).

Table A presents the two sets of reliabilities--Test-Retest reliabilities on a group of 79 college students and Kuder-Richardson reliabilities on a sample of 186 college students--for scales on the SIV (data taken from the SRA Manual for Survey of Interpersonal Values, 1960, p. 5).

TABLE A.--Reliabilities of scales of the SIV.

	S	C	R	I	B	L[1]
Test-Retest	.83	.86	.78	.89	.83	.88
Kuder-Richardson	.76	.82	.71	.86	.86	.83
No. of items	15	15	13	16	15	16
Range	30	30	26	32	30	32

[1]S = Support
C = Conformity
R = Recognition
I = Independence
B = Benevolence
L = Leadership

Validity

The SIV was developed through the use of factory analysis and the scales were found to represent reliable, discrete categories and, in this sense, can be said to have factorial validity. The scales have maintained

their internal consistency through repeated item analyses for samples of of various composition (Gordon, 1960).

Another method of assessing the validity of an instrument is to determine the reasonableness of relationships between it and other measures. Table B presents intercorrelations obtained between scales on the SIV and traits as measured by the Gordon Personal Inventory and Gordon Personal Profile based on a sample of 144 college students. Correlations which were significant at the .01 level are underscored (Gordon, 1960, p. 7).

TABLE B.--Correlations between SIV scales and personality trait measures.

Traits	S	C	R	I	B	L[1]
Cautiousness	-.07	.28	-.11	-.12	.08	-.06
Original Thinking	-.28	-.19	-.13	.11	.08	.32
Personal Relations	-.14	.14	-.13	-.13	.29	-.03
Vigor	-.30	.05	-.02	-.15	.03	.33
Ascendancy	-.26	-.04	-.05	-.16	.10	.39
Responsibility	-.25	.32	-.21	-.16	.20	.04
Emotional Stability	-.16	.17	-.23	.03	.10	.05
Sociability	-.05	.04	.24	-.30	.02	.21

[1]S = Support
C = Conformity
R = Recognition
I = Independence
B = Benevolence
L = Leadership

Correlations between scales on the SIV and the Alport-Vernon-Lindzey Study of Values, based on data from 89 college students, are presented in Table C with significant correlations underscored (Gordon, 1960, p. 7).

TABLE C.--Correlations between Value Scores from the SIV and the "Study of Values".

	S	C	R	I	B	L[1]
Theoretical	-.19	-.36	.08	.36	-.48	.42
Economic	.10	.04	.29	-.18	-.33	.16
Social	.16	.26	-.08	-.31	.59	-.44
Aesthetic	-.04	-.23	-.11	.46	-.09	-.07
Political	-.06	-.14	.17	-.01	-.31	.30
Religious	-.01	.37	-.27	-.32	.52	-.24

[1]S = Support
C = Conformity
R = Recognition
I = Independence
B = Benevolence
L = Leadership