COGNITION, ATTITUDE, AND THE LEVEL OF COMMITMENT OF SUPPORTIVE PROFESSIONAL SPECIAL EDUCATION PERSONNEL REGARDING PLAN "A" SPECIAL EDUCATION IN TEXAS

APPROVED:

Graduate Committee:

Harold C. Sunderman
Major Professor

John A. Williamson
Committee Member

Eul H. Milburn
Committee Member

Howard W. Smith, Jr.
Dean of the School of Education

Robert Toulmin
Dean of the Graduate School

The problem of this study is to determine the relationships that exist between cognition, attitude and the level of commitment of supportive professional Plan A personnel in regard to their involvement in Plan A special education.

The purpose of this study is to examine the relationships that exist between cognition, attitude and level of commitment to Plan A based on the respondent's first, second or third year of involvement in Plan A special education.

For the purpose of this study the content is arranged into five chapters. Chapter I includes an introduction, statement of the problem, purpose of the study, hypotheses, background and significance of the study, definitions of terms, basic assumptions, and limitations. The second chapter is a review of literature. Chapter III is concerned with sample description, instrument development, procedures for collection and analysis of data while the fourth chapter presents data analysis with statistical treatments in tabular form. Chapter V is a summary of the study and presents findings, conclusions and recommendations.

Seventy-seven professional staff members from six school districts and one cluster of school districts implementing
Plan A within Education Service Center, Region 10, were involved in the study. Each of the personnel involved was employed as supervisor, visiting teacher, counselor, educational diagnostician, psychologist or associate psychologist in the Plan A special education program.

Three testing strategies were employed to generate data for the study. First, a fifty-one item, multiple choice test was used to generate an index of cognition. Secondly, Semantic Differential Instruments were used, with Plan A Special Education, Plan A Pupil Appraisal, Plan A Individualized Program and Plan A Community Involvement as the concepts selected for the study. Finally, a Method of Ordered Alternatives technique was used to ascertain sizes of latitudes of acceptance, rejection and non-commitment.

Hypotheses I, II and III were tested using single classification analysis of variance. Hypotheses IV, V and VI were tested using the t test for significance of a product-movement correlation coefficient. The statistical treatment used in testing Hypotheses VII, VIII and IX was multiple linear-regression. The .05 level was the level of significance upon which the hypothesis was accepted or not accepted.

As a result of this study, significant relationships were identified between cognition and attitude as well as between cognition and commitment based on the number of years of involvement in Plan A special education. There
was no significant relationship discerned between attitude and the respondent's years of experience. Correlation coefficients generated among cognition, attitude and commitment were all found to be significant at the .05 level. Multiple linear regression data revealed that the respondent's number of years of experience significantly influenced the correlations between cognition and attitude and between cognition and commitment. This kind of significance was not detected in the correlation between attitude and commitment when based on the number of years of involvement.

Relationships between cognition, attitude and commitment were identified. The anticipated pattern of progressively higher levels as a function of more experience was not generally substantiated. The significance of the relationships existing among these variables, however, suggests the need for purposeful staff development programs designed to influence the cognitive, attitudinal and commitment levels of supportive professional staff in Plan A special education.
Cognition, Attitude, and the Level of Commitment of Supportive Professional Special Education Personnel Regarding Plan "A" Special Education in Texas

Dissertation

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Education

By

James E. George, B.A., M.Ed.
Denton, Texas
August, 1973
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CHAPTER I

INTRODUCTION

The extent to which supportive professional Plan A personnel are able to perceive and initiate behavior which is consistent with the philosophy of individualized planning and programming for the exceptional child is critical to the success of Plan A special education in Texas. Therefore, it is suggested that cognition, attitude and commitment levels are factors which influence and are influenced by involvement in a Plan A special education program.

Plan A special education programs are presently in a limited developmental phase. Because of this, the literature lacks specific facts and descriptive data regarding the effects of the program upon the supportive staff members who are involved in implementation.

In 1970, Plan A special education developmental programs were initiated in Texas (17). During the 1971 and 1972 school years, additional developmental programs were approved. Therefore, supportive professional Plan A personnel are completing one, two or three years experience in the program in 1973.

Supportive professional Plan A special education personnel are provided for by specific guidelines (18). The
effects of their involvement in Plan A, as evidenced by how much knowledge they have, what their stated feelings are and what their level of commitment is, are of considerable value as models for statewide designs begin to emerge. In view of this, it seems apparent that a study of the relationships that exist among these factors would be of benefit to state, regional and local special educators.

Statement of the Problem

The problem of this study is to identify the relationships that exist between cognition, attitude and the level of commitment of supportive professional Plan A personnel in regard to their involvement in a Plan A special education program.

Purpose of the Study

The purpose of this study is to examine the relationships that exist between cognition, attitude and the level of commitment of supportive professional Plan A personnel based on their first, second or third year of involvement in Plan A special education.

Hypotheses

The following hypotheses were formulated and stated in the null form so that each might be tested by utilizing tests of significance appropriate to the selected analysis procedures.
Hypothesis I.--There is no significant difference in knowledge about Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years.

Hypothesis II.--There is no significant difference in attitude toward selected concepts in Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years.

Hypothesis III.--There is no significant difference in level of commitment to Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years.

Hypothesis IV.--There is no significant relationship between knowledge of Plan A special education and attitude toward selected concepts in Plan A special education among Plan A special education professional supportive personnel.

Hypothesis V.--There is no significant relationship between knowledge of Plan A special education and the level of commitment to Plan A special education among Plan A special education professional supportive personnel.

Hypothesis VI.--There is no significant relationship between the level of commitment to Plan A special education and attitude toward selected concepts in Plan A special education among Plan A special education professional supportive personnel.

Hypothesis VII.--There is no significant difference in the correlation between knowledge about and attitude toward Plan A
special education among Plan A special education professional supportive personnel who have been in a Plan A program one, two or three years.

**Hypothesis VIII.**—There is no significant difference in the correlation between knowledge about and the level of commitment to Plan A special education among Plan A special education professional supportive personnel who have been in a Plan A program one, two or three years.

**Hypothesis IX.**—There is no significant difference in the correlation between attitude toward and level of commitment to Plan A special education among Plan A special education professional supportive personnel who have been in a Plan A program one, two or three years.

**Background and Significance of the Study**

A survey of related literature suggests that significant research has been done in the areas of cognition (1), attitude (10) and the level of commitment (12, 13), but no formal investigation has been conducted in the area of their relationships in regard to involvement in Plan A special education. This study is an attempt to contribute to the elimination of this insufficiency.

Since 1945, Texas schools have been committed to the principle of education for all children regardless of their several abilities (16). In 1968, three reports and their recommendations (6, 7, 8) emphasized the need for evaluating special education programming in Texas with the intention of
revising or redirecting the effort. Subsequently, in 1969, the Texas State Legislature passed Senate Bill 230, Comprehensive Special Education, which is currently codified in the Texas Minimum Foundation Program for Education (9). Board policies and state guidelines were developed on an interim basis for the 1970-1971 school year (17) and revised for the 1971-1973 school years (18). Particularly significant is this statement:

The instructional organization of all programs and services for exceptional children should be comprehensive and flexible to meet the educational needs of each exceptional child (18, p. 16).

One of the most unique features of this challenge to individualize programs for exceptional children is the recognition that such programs require additional staff support. The Administrative Guide and Handbook for Special Education (18) provides for six such categories of personnel not heretofore provided. These positions are defined in terms of their responsibilities to handicapped pupils, based on their particular school district's plan for meeting pupil needs.

In the traditional program, Plan B, children and personnel are not so fortunate. That is, in terms of their labels and job assignments respectively, the child is categorized by his handicapped condition, and the staff member's role is rigidly associated with this categorical handicapping condition (18). Supportive professional Plan A personnel are expected to behave in a manner which is consistent with meeting the individual needs of pupils rather than the categorical
Measuring behavior is accomplished when the phenomenon being observed is described according to some set of rules (2). When the phenomenon to be observed cannot be observed directly, it must be inferred from other observable but related behavior (15). Behavior has been described as being cognitive (1), affective (4), and psychomotoric (1, 4). Such descriptors permit observations of behaviors to be delineated according to hierarchies which facilitate measurement.

In attempting to define attitude as a multidimensional concept, Fishbein (2) and Summers (15) describe the primary elements as being (1) cognitive, (2) emotional or affective, and (3) conative. These dimensions stand in contrast to Thurstone's (19) unidimensional concept of attitude with the primary element being opinion. In either case, researchers generally agree that investigation of attitudes can be done reliably and validly.

Krech, et al. (5) and Remmers (11) conceptualize attitude so that measurement of cognitive, emotional and action tendency dimensions can serve as legitimate bases of inference. If studies of Plan A special education reveal significant relationships between these elements, perhaps state, regional and local planners of programs will improve methods of implementation to produce desirable behaviors and will suggest the need for additional research.
Definition of Terms

For the purpose of this study, the following definitions were used:

**Attitude:** A learned, evaluative reaction concerning characteristics of an object or objects.

**Cognition:** Knowledge concerning characteristics of an object or objects.

**Developmental Program:** A design or system undergoing study and evaluation with the purpose of improving internal programs and suggesting models for others to emulate.

**Education Service Center (E.S.C.):** One of the twenty intermediate-type educational agencies located throughout Texas which provide services for school districts in their region. Region 10 is located in Richardson and serves schools in eight counties: Collin, Dallas, Ellis, Fannin, Grayson, Hunt, Kaufman and Rockwall.

**Level of Commitment:** The indexed level of a person's own position regarding an object or objects which becomes more extreme as acceptance and rejection levels increase.

**Plan A Special Education:** A comprehensive special education program for exceptional children that is developmental rather than statewide.

**Plan B Special Education:** A traditional statewide special education program based on handicapped pupils identified by disability categories.

**Supportive Professional Personnel:** These full time personnel, authorized and defined in Texas Education Agency
Bulletin 711, are as follows: (1) Special Education Supervisor, (2) Special Education Visiting Teacher, (3) Special Education Counselor, (4) Educational Diagnostician, (5) School Psychologist, and (6) Associate School Psychologist.

Basic Assumptions
For the purpose of this study the following assumptions were formulated:

1. It was assumed that the subjects would respond honestly to the instruments used to measure cognition, attitude and the level of commitment.

2. It was assumed that the use of all subjects in the supportive professional categories from all the districts in Region 10 which are implementing a Plan A special education program would negate the effect of any single unique influence upon cognition, attitude and the level of commitment.

Limitations
This study was limited to the supportive professional Plan A personnel from the six school districts and one cluster of school districts implementing a Plan A special education developmental program in Region 10 and which are in their first, second or third year of involvement in a Plan A program.

Organization of Study
For purposes of presenting the findings, the content of this study is arranged into five chapters. The first chapter
includes an introduction, statement of the problem, purpose of the study, hypotheses, background and significance of the study, definition of terms, basic assumptions and limitations. The second chapter is a review of literature with emphasis placed on definitions of cognition, of attitude and of the level of commitment, the need for attitude-type studies, problems in attitude-type measurement, studies using the "Semantic Differential," and studies using the "Method of Ordered Alternatives." Chapter III is concerned with methods and procedures, description of the sample, development of instruments, procedures for collecting data, and procedures for analysis of data. The fourth chapter consists of analyses of data with the statistical treatments presented in tabular form. Chapter V is a summary of the study along with a presentation of the findings, conclusions and recommendations.
Chapter Bibliography


CHAPTER II

REVIEW OF THE LITERATURE

Special education in Texas is in a transitional phase. Two types of programs are being implemented. First, there is the traditional program, Plan B, which provides special services for the exceptional child on the basis of categorical labels. This means that before the services of a teacher are provided, a predetermined number of children having much the same type of handicap must be identified. Plan A special education represents a radical departure from that basic attitude in that personnel and resources are provided for use with exceptional children based on general school population increments—not specific handicapping conditions of students. Each Plan A staff member, having his own level of cognition, attitude and commitment, plays a significant role in the implementation of Plan A programs.

The terms cognition, attitude and commitment are used in a variety of ways. Cognition is a word which literally means "to know together" and usually is extended to mean an idea or perception. Attitude is a transliteration from the term "aptitude" which originally meant suited or fitted (5). The level of commitment generally refers to the extent to which a person's own position is consistent with externally
described positions regarding an issue. In a sense, commitment is inferrable from noncommitment (48).

Cognition or cognitive structures are becoming a focus of study (2). Presently, interest in cognition suggests a need for theories and measurements to account for cognitive structures as they exist.

The initial study concerning attitudes has been traced to Lange (5) in 1888. Kiesler (33) investigated attitudes in terms of relations to tasks. However, contemporary research in attitudes is largely influenced by directions taken by Hovland (29). Research into attitudes has grown to the extent that there are numerous dimensions and theories, including attitude change theories. Sherif and Sherif state that

Problems of attitude and attitude change are urgent and crucial today, perhaps more than in previous periods of human history. . . . Attitude problems of man's social development and his relations with his fellows have long been recognized as central in social psychology (45, p. 105).

As early as 1935, Allport (4) suggested that attitude, when conceptualized as a simple unidimensional concept, was inadequate to account for certain qualitative dimensions. Commitment is inferrable from a person's consistent and characteristic categorizations of relevancies into acceptable, objectionable and noncommittal categories. The level of non-commitment (45) or level of commitment is an important index serving as a predictor of attitudinal change.
Definitions of Cognition

Two major theories related to cognition deal conceptually with the effects of behavior and affect upon cognitive elements in attitude. Both are concerned with cognitive structure.

First, there is Festinger's (19) cognitive dissonance theory. He is concerned primarily with the inconsistencies which prevail between belief (or knowledge) and action. Festinger attempts to specify the conditions under which more or less change in belief will transpire as a result of cognitive dissonance or lack of cognitive harmony.

Secondly, Heider (28) deals with cognitive balance. Like Festinger, he is addressing the structural changes that are resisted because of cognitive balance.

For the attitude researcher, cognition means meaning. Osgood, Suci and Tannenbaum (40) are interested in measuring that meaning. Osgood (39), however, defines cognition in terms of its dynamic interaction in the conduct of human affairs. He uses these four statements:

1. Cognitive Modification Results from the Psychological Stress Produced by Cognitive Inconsistencies.
2. If Cognitive Elements are to Interact, They must be brought into some Relation with One Another.
3. Magnitude of Stress Toward Modification Increases with the Degree of Cognitive Inconsistency.
4. The Dynamics of Cognitive Interaction are such that Modifications Under Stress always Reduce Total Cognitive Inconsistency (39, pp. 342-348).

For purposes of the study, cognition refers to information or facts. In a general sense, these facts serve as a
sort of belief base so as to provide for examination of the
dynamic relationships that may exist between cognition, atti-
tude and level of commitment.

Definitions of Attitude

Opinions and attitudes have been viewed as being similar. Yanofsky (52) suggests that attitudes are more stable, per-
sonal and subjective than opinions. Hovland, Janis and Kelly
(29) argue that attitudes are general orientations, and opin-
ions are the specific manifestations of attitudes. Kiesler
(33) argues that opinions are overt expressions of covert
attitudes.

Most researchers agree that attitudes are learned pre-
dispositions to respond in an evaluative sense (33). Donald
Campbell states that "a social attitude is (or is evidenced
by) consistency in response to social objects" (10, p. 31).
In his definition of attitude, Allport reports it as being
"a mental and neural state of readiness, organized through
experience, exerting a directive or dynamic influence upon
the individual's response to all objects and situations
with which it is related" (4, p. 43).

Katz and Stotland interpreted attitude as a "disposition
to evaluate an object or the symbol of that object in a cer-
tain way" (32, p. 13). Krech and Crutchfield (35) defined
attitude as "an enduring organization of motivational,
Green, in terms of Guttman's (26) concept of an attitude universe, states,

It is apparent from these examples that the concept of attitude implies a consistency or predictability of responses. . . . This definition does not divest attitudes of their affective and cognitive properties, which may be properties of, or correlates of, the responses which comprise the attitude. . . . The content of an attitude is determined by the responses which constitute it. The set of behaviors comprising an attitude will be called an attitude universe (23, p. 336).

McGuire (38), using Allport's (4) definition of attitude, indicates five dimensions of disagreement among definitions of attitudes: (1) disagreement about the psychological basis of attitudes; (2) disagreement as to whether attitude should be defined as a response or a readiness to respond; (3) disagreement over the degrees to which attitudes are organized; (4) disagreement about the extent to which attitudes are learned through previous experience; (5) disagreement about the extent to which attitudes play a directive-knowledge or dynamic-motivational function.

Before discussing theories of attitude change, Kiesler, Collins and Miller conclude that

Definitions should be intimately bound up in the measurement techniques; material about the function of attitudes within the personality and society is theory about—not measurement of—attitudes (33, p. 4).

Definition of the Level of Commitment

Sherif and Hovland (45), in developing a theory of attitude change, utilized the formation of several terms. Insko used the following descriptors of the terms:
Reference Scale: When repeatedly presented with a number of stimuli, individuals tend to form scales that allow for the relative placement of these stimuli along one or more dimensions.

Anchors: Stimuli which exert a relatively large influence upon the determination of judgement, such as end points in a series of stimuli or standard stimuli . . .

Contrast and Assimilation: Contrast is a shift in judgement away from an anchor, and assimilation is a shift in judgement toward an anchor.

Latitude of acceptance and rejection: The latitude of acceptance is operationally defined in terms of the range of Thurston-type scale statements that are considered acceptable (including the one most acceptable). The latitude of rejection consists of all of those points of view that the individual finds unacceptable, or, in operational terms, the range of items that are considered objectionable (30, p. 64).

Insko (30) went on to report that Hovland, Harvey and Sherif were the first researchers to investigate data collection strategies related to latitudes of acceptance and rejection. Sherif and Sherif (45) specify that there is a third concept within the structure of an attitude:

Latitude of noncommitment—While accepting some and rejecting others, the individual may prefer to remain noncomittal in regard to certain position (44, p. 110).

Sherif and Sherif (45) list two advantages of specifying the structure of a person's attitude in terms of latitudes of acceptance, rejection and noncommitment: (1) Individuals who find the same position as most acceptable differ in their tolerance for other positions and in their patterns of rejection; (2) These three latitudes differ systematically for persons upholding different positions when compared to their degree of involvement in the issue at hand.
Utilizing the Method of Ordered Alternatives procedure for ascertaining latitudes of acceptance, rejection and non-commitment, Sherif, Sherif and Nebergall (44) arrived at certain generalizations about the relationships among them. First, the latitude of rejection increases in size as a function of a person's move toward extreme positions. Secondly, relative sizes of the latitudes of acceptance, rejection and noncommitment differ among persons holding different positions. Thirdly, the size of latitude of noncommitment is inversely related to the extent of commitment.

Whittaker (51) suggests that relative sizes of latitudes of acceptance and rejection differ according to extremity of position and that highly involved subjects do have narrower latitudes of acceptance than uninvolved subjects. Sherif, Sherif, and Nebergall (44) suggest that the degree, or level, of involvement and personal commitment on an issue can be determined operationally by comparing the sizes of the latitudes of acceptance, rejection and noncommitment.

The Need for Attitude-Type Studies

Theoretical works and attitude definitions have focused upon the importance of attitudes in the explanation of individual differences. Kiesler (33) says that two individuals may make different responses in the same social setting.

Festinger (18) focused attention on the relating of attitude change to behavior change. Studies by Fleishman, Harris and Burtt (22) and Greenwald (24) report experiments
which do not find a relationship between attitude change and behavior change.

Doob (14), in 1947, suggested that attitude is a learned predisposition to respond. Currently, the concept of attitude has grown into a complex and multidimensional one, consisting of cognitive, affective and conative components.

Summers, in his introduction to attitude measurement, concludes that

There are numerous sources of invalidity in attitude measurement as in any measurement effort. They range from improper conceptualization of attitude, to inappropriate choice of behavioral specimens, to errors in the collection of specimens, to misapplication of numerical treatment (48, p. 15).

Problems in Attitude-Type Measurement

A review of the literature dealing with attitude measurement suggests that there are three groups of techniques: (1) Unidimensional, (2) Multidimensional, and (3) Alternative. These groups of techniques permit descriptions of measurement scales somewhat according to their order of historical emergence.

In 1928, Thurstone (49) described his attempt to measure attitudes. He elected to define the attitude variable and to specify his measurement in terms of that variable. Ultimately, after seven intervening steps, he produced a list of twenty statements evenly graduated along a continuous scale. These equal interval scales permit unidimensional scaling of shifts by measuring before and after "any specified form of appeal"
(49, p. 554). By 1934, Likert (37) projected Thurstone's scale into a continuous concept such that statements expressed as desired behavior and not as fact could be rated from "one" to "five." Likert, in describing attitude toward the church, states,

So far as the measurement of the attitude is concerned, it is quite immaterial what the extremes of the attitude continuum are called; the important fact is that people do differ quantitatively in their attitudes, some being more toward one extreme, some toward the other. Thus, as Thurstone has pointed out in the use of his scales, it makes no difference whether the zero extreme is assigned to "appreciation of" or "lack of appreciation of" the church, the attitude can be measured in either case and the person's reaction to the church expressed (49, p. 45).

While there is no great volume of empirical comparisons of the Thurstone and Likert Methods, some data are reported. Such data are available from comparisons made by Ferguson (17), Edwards and Kinney (15), Eysenck and Crown (16), Banta (6), Barclay and Weaver (7) and Peppleton and Pilkington (42). Seiler and Hough (48) conclude that single comparisons of a few scales, or few comparisons of several scales, is hardly sufficient to allow unqualified generalizations. They also conclude that the pragmatic values of these two methods, then, are speculations, not facts.

Guttman (26, 27) also conceptualized attitudes as being unidimensional, quantitative scale variables that are relative to time and to populations. A universe may form a scale for one population but not another or at one time but not at a later time.
The concept of semantic space having an unknown number of dimensions produced another school of thought in the area of attitude measurement. Osgood (39) hypothesized that vectors of meaning extend through a neutral meaningless point of origin. The farther out in semantic space from that point, the more meaningful is the concept, and, the nearer that point, the less intense are the meanings of the concept. Measurement of these meanings is accomplished by the use of seven-step scales having bipolar adjectives to permit the respondent a chance to move in various directions from the neutral point of origin. This semantic differential format appears to be among the first non-unidirectional scaling strategies.

According to Coombs (12), a unit of measurement in psychology is obtained from combinations of definitions and assumptions. Since scales must be either ratio, interval, ordinal or nominal, Coombs abandons the typical concepts of units of measure in favor of an "ordered metric" scale with which to "order the magnitude of the intervals between objects" (12, p. 145). In questioning Coombs' method, Abelson (1) suggests doubts about the method's practicality. He also introduces the notion that, from psychophysics, multidimensional scaling methods, centered around psychological distance, might have value for the attitude domain. Bogardus (9) and Lewin (36) employ the term as though they were physical distances. Abelson, in summary, suggests,
The dimensionality of the space into which the stimuli are scaled is not fixed in advance; it is determined by the data, although an attempt is made to limit the dimensionality if the data is willing (1, p. 406).

Such was the background of the search for alternative attitude measures sought after in the late 1950's and 1960's by such researchers as Fishbein and Raven (21), Cooper and Pollack (13) and Sherif and Sherif (45) among others. These efforts served to focus attention upon the need for alternative methods for measuring attitudes.

The social judgment involvement technique is an example of the current attempt to develop an alternative attitude measuring strategy. Sherif and Sherif (45), while remembering that there is a blend of cognitive-motivational-behavioral in attitude arousal, suggest these five criteria referring to internal states of the individual:

1. Attitudes are not innate.
2. Attitudes are not temporary states but are more or less enduring once they are formed.
3. Attitudes always imply a relationship between the person and objects.
4. The relationships between person and object is not neutral but has motivational-affective properties.
5. The subject-object relationship is accomplished through the formation of categories both differentiating between the objects and between the person's positive or negative relation to objects in the various categories.
Sherif, Sherif and Nebergall (44), in translating these attitude concepts into research procedures, developed two techniques: (1) The "Own Categories," and (2) The "Method of Ordered Alternatives."

In the light of some current thinking about attitudes, Webb and Solancik suggest a need for searching for valid relationships among various "measurable outcroppings in the realms of affect, belief, behavioral intention and behavior" (50, p. 318).

They conclude that

In the available grab bag of imperfect research methods, there is room for new uses of the old. Though our disposition leans toward non-reactive measures and away from self report, we do so only in an effort to minimize the investigator's interference in the process of data collection. The goal of all investigation is proper comparison and generalization. For a broader-based robust knowledge of attitudes, an expansion of our conventional wisdom in research methods is necessary (50, p. 325).

As alternatives to the self-report techniques for obtaining behavioral specimens, disguised and projective devices have been very popular. In 1950, Campbell (10) listed doll play, sentence completion, interpretation of ambiguous stimuli and performance of objective tasks among indirect assessment techniques. He alludes to the element of deception involved with such indirect techniques because the investigator interprets responses on different bases than those the respondent had in mind. Nevertheless, the resulting conclusion with regard to these techniques emphasizes their creative but
Fallible attempt as "measures of the multifaceted processes we call attitude" (10, p. 375).

Fishbein (20) focuses attention on the fact that numerous questions still remain in the area of relationship between attitude and behavior. Cohen (11) suggests that attitudes be brought into line with behavior while Fishbein (20) maintains that one resolution of the attitude-behavior problem is to interpret cognitions and intentions as determinants or consequents of attitudes.

Studies Using the Semantic Differential

Semantic measurement in the area of communications research and in personality research has been reported by Osgood, Suci, and Tannenbaum (40). The sensitivity of the technique to underlying dimensions of judgment that people employ justify its applications in these areas.

Within the structure of ethnocentricity, Adorno, et al., (3) tested the general hypothesis that high ethnocentrics would show relatively more variance on evaluation than on potency or activity dimension of the scale. This did not prove to be accurate as there was no significant correlation found between these two variables.

Scale checking style and mental disorder was studied by Bopp (40). From this study, it appears that schizophrenic patients are not so discriminating in their use of semantic scales. Kerrick (40) had high school students rate a number of concepts against a form of the differential scale and
found a relationship between lower intelligence and higher polarization as a pattern.

Use of the semantic differential in attitude change based on effects of deliberate communications messages have been reported by Hovland, Janis and Kelley (29) and Berlo and Kumata (8). In each instance, the scale was employed to determine shifts in attitude which occurred after specific information was introduced. Used in a pre-post setting, the technique detected differences in attitudes.

Studies Using the Method of Ordered Alternatives

Data obtained by the Method of Ordered Alternatives technique reveal certain variations in the overall structure of attitudes based on extremeness of position and relative involvement (46). Both of these extremes were derived from studies in judgment or categorization processes.

Helson (44) suggested in his study that standard stimuli are more influential on judgment than non-standard or less frequent stimuli for comparison. This work was supported by Parducci (41) who stated that the nearest to the end stimuli serve as the primary anchors for individual judgment.

As cited earlier in this Chapter, studies by Whittaker (51), LaFave and Sherif (47) and Sherif, Sherif, and Nebergall (44) provide bases for identifying lattitudes of acceptance, rejection and noncommitment to ascertain indications of involvement.


CHAPTER III

METHODS AND PROCEDURES

This study was conducted in order to investigate the relationships between cognition, attitude and the level of commitment toward Plan A special education in Texas as indicated by school district supportive professional Plan A personnel from school districts in Education Service Center Region 10 involved in their first, second or third year in Plan A. The purpose of this chapter is to describe the subjects who participated in the study, to describe the development of the instruments used for the study, to explain the method used in securing the data and to explain the procedures used for the analysis of the data.

Description of the Sample

Involved in this study were personnel who were employed by the six districts and one cluster of districts in ESC Region 10, and who were involved in their first, second or third year of implementing a Plan A developmental special education program. The positions in which these personnel were employed were Plan A Supervisor, Counselor, Visiting Teacher, Educational Diagnostician, School Psychologist, or Associate School Psychologist. There were seventy-seven respondents, twenty-eight of whom were in their first year.
of involvement in Plan A, twenty-eight of whom were in their second year of involvement and twenty-one of whom were in their third year of involvement in Plan A.

Development of the Instruments

Three instruments were used in this study. First, the Texas Education Agency Special Education Administration Test, hereinafter referred to as TEASEAT, was used to measure the participant's level of cognition regarding special education in Texas as presented by Texas Education Agency, Bulletin 711 (8). This instrument was developed by the Center for Innovation in Teaching the Handicapped, Indiana University, and copyrighted in 1972. Although reliability and validity data were established for the instrument, a pilot study was conducted for the purposes of this study. The instrument was submitted to a pilot group of nineteen participants, all of whom were certified as or serving in one of the six supportive professional staff roles in ESC Region 10 and ESC Region 11 which were like the roles of participants. Serving as judges, they rated each multiple choice item of the TEASEAT with respect to clarity and relevance to Texas Education Agency, Bulletin 711. Any item which was questioned in that regard was eliminated from the final draft of the TEASEAT which was used in the study. Of the original fifty-six items, five were eliminated from the final form of this instrument. The internal consistency reliability coefficient of .79 was considered more than adequate for this study. (See Appendix B.)
Secondly, a "Semantic Differential," hereinafter referred to as SD, instrument was generated as a technique of measurement adaptable to this research problem. The SD, developed by Osgood and his associates (3), was used to detect differences in the meaning of concepts or attitudes among the participants in the study. The semantic differential technique, while offering the advantages of economy, instant readiness and cross-concept comparability (7), has repeatedly proven to be a highly reliable and valid method of attitudinal assessment—providing that the construction of each instrument is done properly (3).

In clarifying the operations of measurement with this technique, Osgood and his associates state,

In terms of the operations of measurement with the semantic differential, we have defined the meaning of a concept as its allocation to a point in the multidimensional semantic space. We then define attitude toward a concept as the projection of this point onto the evaluative dimension of that space (3, p. 190).

To clarify the logic behind the technique and to provide somewhat of a rationale for its construction, Osgood and his associates say,

We began by postulating a semantic space; a region of some unknown dimensionality and Euclidian in character. Each semantic scale, defined by a pair of polar (opposite-in-meaning) adjectives, is assumed to represent a straight-line function that passes through the origin of this space, and a sample of such scales then represents a multidimensional space, the larger or more representative the sample the better defined is the space as a whole (3, p. 25).
The SD measures people's reactions to stimulus words and concepts in terms of ratings on bipolar scales. Adjectives or adjective phrases describe the extremes of the scale continuum (7). The construction of the SD for this study was accomplished through these steps:

(1) A list of concepts representing what were believed to be major dimensions of Plan A special education was submitted to the pilot group of nineteen people from E.S.C. Region 10 and E.S.C. Region 11. This group was asked to rank these concepts with respect to importance as part of a Plan A program.

(2) The three highest ranking concepts as well as the concept "Plan A Special Education" were placed at the top of each of the instruments' four pages.

(3) Once the concepts were selected, a list of fifty adjectival pairs of words and phrases were rated by the pilot group as to their relevance for evaluating the concepts. The twenty most relevant adjectival pairs were selected for inclusion on the final instruments.

The SD for the study was therefore constructed so that each of four concepts appear at the top of each of four pages with twenty criteria scales below them. (See Appendices C, D, E, F, and G.) Each criterion scale is a verbal one with the number of intervals on the continuum indicated by small squares, one of which the respondent was asked to blacken as an indication of his direction and intensity of attitude toward one of the polar descriptors.
Finally, the level of commitment to the Plan A special education developmental program was assessed utilizing the Method of Ordered Alternatives, hereinafter referred to as the MOA, to obtain latitudes of acceptance, rejection and noncommitment (5). These three concepts have been specified to assess the structure of an attitude. Sherif and Sherif provide these definitions:

**Latitudes of acceptance**—If a person voluntarily states his view on a topic, he usually given the view most acceptable to him. The latitude of acceptance is simply this most acceptable position plus other positions the individual also finds acceptable.

**Latitude of rejection**—The position most objectionable to the individual, the thing he most detests in a particular domain, plus other positions also objectionable to him define the latitude of rejection.

**Latitude of Noncommitment**—While accepting some and rejecting others, the individual may prefer to remain non-committal in regard to certain positions . . . . The positions that he does not evaluate as either acceptable or objectionable under these circumstances constitute his **latitude of noncommitment** (5, pp. 113-114).

Sherif and Sherif (5) infer that the most useful predictive indicators of commitment are closely related to the size of the latitude of noncommitment. Studies by Sherif, Sherif and Nebergall (4), Sherif and Hovland (6) and Whittaker (9) suggest that the latitude of noncommitment is inversely related to extremity of commitment and approaches zero for persons with the most extreme commitment. They suggest that this deserves note as an area of research. Diab (2), in his study where partisanship is a critical social issue, suggests
that the sizes of the latitudes of rejection and noncommit-
ment are significantly related to the person's own stand.

In short, the Sherifs observe that

The data obtained by the Method of Ordered Alter-
natives reveal systematic variations in the struc-
ture of an attitude according to extremity of
position and according to relative involvement
in the issue (5, p. 116).

For this study, the MOA was developed by modeling a
series of nine statements about Plan A and Plan B special
education after statements found in Beck and Cowan's 1972
Presidential Campaign Study (1). These statements repre-
sented an entire range of positions which could be ordered
reliably by anyone acquainted with the general issues
between Plan A and Plan B. Each of four sets of the same
nine statements appear on separate pages with specific
directions for the respondent appearing at the top of each
page so that latitudes of acceptance, rejection and non-
commitment were secured. (See Appendices H, I, J, K, and L).

Procedures for Collecting Data

Each superintendent of the six Plan A districts and of
the fiscal agent district of the Plan A cluster of schools
gave permission for data to be secured from each supportive
professional special education staff member in his employ.
A contact person was named to facilitate the group setting
in which the instruments were administered.

On a prearranged schedule, each group was administered
the battery of three tests with the exception of one school
district where staff members were so dispersed as to require that the contact person send the instruments out and have them returned by school mail. For each of the seven situations, the battery of tests was randomly ordered so as to eliminate the potential of serial effect.

In administering the test batteries, each respondent was provided a packet containing an information cover sheet (Appendix A), the TEASEAT with an instruction coversheet (Appendix B), the SD with an instruction coversheet (Appendices C, D, E, F, G), and an MOA with an instruction coversheet (Appendices H, I, J, K, L).

Procedures for Analysis of Data

Data from the instruments were punched into cards and processed by the Data Processing Center at North Texas State University, Denton, Texas. The statistical treatment used in testing Hypotheses I, II and III was single classification analysis of variance. Hypotheses IV, V and VI were tested using the test for significance of a product-moment correlation coefficient from zero. The statistical treatment used in testing Hypotheses VII, VIII and IX was multiple linear regression. The .05 level was the level of significance upon which the null hypotheses were accepted or rejected.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

PRESENTATION OF THE DATA

An analysis of the data was made in order to examine cognition, attitude and the level of commitment of supportive professional Plan A special education personnel regarding Plan A special education in Texas. In order to test the relationships, the respondents were divided into three groups: supportive professional Plan A personnel who were involved in their first, their second and their third year of Plan A programming.

The data secured from these personnel were punched into cards and processed by the Data Processing Center at North Texas State University, Denton, Texas. The statistical treatment used to test the tenability of Hypotheses I through III was single classification analysis of variance. Hypotheses IV through VI were tested using the $t$ test for significance of a product-moment correlation coefficient. The statistical treatment used in testing Hypotheses VII through IX was multiple linear regression. The .05 level was the level of significance upon which the null hypotheses were tested.

Hypothesis I

Each subject completed the fifty-one item TEASEAT. For purposes of scoring, a prior determination provided a value
of one for a correct answer and a value of zero for an incorrect answer. Thus, a high score indicated a high level of cognition.

Cognitive test means and standard deviations are presented in Table I. The data are presented by grouping responses according to the number of years of experience in Plan A special education. Hypothesis I predicted that there would not be significant differences among personnel involved in Plan A for one, two or three years.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year's experience in Plan A</td>
<td>28</td>
<td>28.53</td>
<td>7.19</td>
</tr>
<tr>
<td>Two year's experience in Plan A</td>
<td>28</td>
<td>29.60</td>
<td>4.93</td>
</tr>
<tr>
<td>Three year's experience in Plan A</td>
<td>21</td>
<td>24.66</td>
<td>6.61</td>
</tr>
</tbody>
</table>

That a significant difference in cognition did exist was indicated by an analysis of variance. The data relevant to this test are presented in Table II. Closer examination of the mean scores and standard deviations reveals a difference between the first and second years of experience scores. The significant difference between the scores of the first two years of experience and the third year of experience is also noted in Table I.
These data, along with data from Table I, do not support accepting the null hypothesis.

Hypothesis II

Each subject responded to four Semantic Differential Instruments utilizing twenty scales on which each concept was rated. Values were assigned to each point on the scale for purposes of scoring. Group means for each instrument corresponding to different concepts were computed.

The means and standard deviations of each group of respondents based on the identified number of years of experience in Plan A are displayed in Table III. Each Semantic Differential Instrument is reported separately.
TABLE III
MEANS AND STANDARD DEVIATIONS OF SEMANTIC DIFFERENTIAL INSTRUMENT SCORES

<table>
<thead>
<tr>
<th>Concept by Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year's experience in Plan A</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan A Special Education</td>
<td></td>
<td>128.33</td>
<td>12.79</td>
</tr>
<tr>
<td>Plan A Pupil Appraisal</td>
<td></td>
<td>123.80</td>
<td>16.21</td>
</tr>
<tr>
<td>Plan A Individualized Program</td>
<td></td>
<td>126.96</td>
<td>13.31</td>
</tr>
<tr>
<td>Plan A Community Involvement</td>
<td></td>
<td>118.03</td>
<td>14.15</td>
</tr>
<tr>
<td>Two year's experience in Plan A</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan A Special Education</td>
<td></td>
<td>132.53</td>
<td>13.79</td>
</tr>
<tr>
<td>Plan A Pupil Appraisal</td>
<td></td>
<td>122.42</td>
<td>20.65</td>
</tr>
<tr>
<td>Plan A Individualized Program</td>
<td></td>
<td>129.64</td>
<td>19.29</td>
</tr>
<tr>
<td>Plan A Community Involvement</td>
<td></td>
<td>130.00</td>
<td>13.68</td>
</tr>
<tr>
<td>Three year's experience in Plan A</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan A Special Education</td>
<td></td>
<td>123.85</td>
<td>18.17</td>
</tr>
<tr>
<td>Plan A Pupil Appraisal</td>
<td></td>
<td>124.09</td>
<td>20.93</td>
</tr>
<tr>
<td>Plan A Individualized Program</td>
<td></td>
<td>124.14</td>
<td>16.45</td>
</tr>
<tr>
<td>Plan A Community Involvement</td>
<td></td>
<td>121.66</td>
<td>20.74</td>
</tr>
</tbody>
</table>

Relevant data from the analysis of variance of the performance of the respondents to the concept Plan A Special Education are presented in Table IV. These data, when viewed in conjunction with the data from Table II, suggest that while a positive trend existed between the first year and second year of experience, this trend was not maintained by the third year scores. In any case, the amount of variance was not significant at the .05 level for this concept.
TABLE IV

ANALYSIS OF VARIANCE OF SEMANTIC DIFFERENTIAL INSTRUMENT
SCORES CONCEPT 1--PLAN A SPECIAL EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>908.15</td>
<td>454.07</td>
<td>2</td>
<td>2.09</td>
<td>.13</td>
</tr>
<tr>
<td>Within</td>
<td>16498.20</td>
<td>217.02</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17402.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The second concept, Plan A Pupil Appraisal, is described in Table V in terms of appropriate analysis of variance.

TABLE V

ANALYSIS OF VARIANCE OF SEMANTIC DIFFERENTIAL INSTRUMENT
SCORES CONCEPT 2--PLAN A PUPIL APPRAISAL

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>41.36</td>
<td>20.68</td>
<td>2</td>
<td>2.05</td>
<td>.94</td>
</tr>
<tr>
<td>Within</td>
<td>27909.46</td>
<td>367.22</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27950.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These data do not suggest a significant difference between groups. The mean scores and standard deviations are obviously not related in any pattern of progression, nor are they sufficiently different to detect significance according to years of experience.

Analysis of variance for the concept Plan A Individualized Programs is exhibited in Table VI. Based on these data and the pattern of the mean and standard deviation scores in Table III, the trend is positive between the first and second years of experience with a negative direction developed by
respondents with three years of involvement. These differences, however, are not significant at the .05 level.

**TABLE VI**

**ANALYSIS OF VARIANCE OF SEMANTIC DIFFERENTIAL INSTRUMENT SCORES CONCEPT 3--PLAN A INDIVIDUALIZED PROGRAM**

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>364.89</td>
<td>182.44</td>
<td>2</td>
<td>0.67</td>
<td>.51</td>
</tr>
<tr>
<td>Within</td>
<td>20607.96</td>
<td>271.15</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20972.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table VII** presents data from the analysis of variance among respondent groups toward the fourth selected concept, Plan A Community Involvement. The data suggest a significant difference among the groups related to this concept. This difference is likely attributable to the large positive discrepancy between year one and year two involvement scores and the noticeable negative discrepancy between those scores and the third year involvement scores. The variances detected between these scores is significant at the .02 level.

**TABLE VII**

**ANALYSIS OF VARIANCE OF SEMANTIC DIFFERENTIAL INSTRUMENT SCORES CONCEPT 4--PLAN A COMMUNITY INVOLVEMENT**

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>2071.61</td>
<td>1035.80</td>
<td>2</td>
<td>4.01</td>
<td>.02</td>
</tr>
<tr>
<td>Within</td>
<td>19083.63</td>
<td>257.88</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21155.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis II predicted that there would be no significant differences among respondents' attitudes based on number of years involvement in Plan A. The first three concepts likely represent the general lack of significant difference noted. However, Plan A Community Involvement was an exception.

Hypothesis III

Each of the respondents completed the four page Method of Ordered Alternatives Instrument. For purposes of scoring, a value of one was given for each item selected as accepted, rejected or not marked at all. Since the latitude of non-commitment, or number of unmarked statements, is inversely related to extremity of commitment, high number represents low level commitment.

Level of commitment test means and standard deviations are displayed in Table VIII. The data are presented by grouping responses according to the number of years of experience in Plan A special education.

**TABLE VIII**

Mean and Standard Deviations of Level of Commitment Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year's involvement in Plan A</td>
<td>28</td>
<td>4.3928</td>
<td>1.7917</td>
</tr>
<tr>
<td>Two year's involvement in Plan A</td>
<td>28</td>
<td>3.0000</td>
<td>2.2933</td>
</tr>
<tr>
<td>Three year's involvement in Plan A</td>
<td>21</td>
<td>4.4761</td>
<td>1.9651</td>
</tr>
</tbody>
</table>
In Table IX, data about the level of commitment among groups is analyzed for significance. Variance data is presented which reveals that a significant difference was detected among the groups. This difference is associated with the dramatic increase in level of involvement demonstrated by the second year group in relation to both the first and third year groups. However, the positive trend suffers slightly in the third year scores when compared with the first year scores.

TABLE IX
ANALYSIS OF VARIANCE OF LEVEL OF COMMITMENT SCORES

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>36.44</td>
<td>18.22</td>
<td>2</td>
<td>4.40</td>
<td>.01</td>
</tr>
<tr>
<td>Within</td>
<td>305.91</td>
<td>4.13</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>342.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis III predicted that a significant difference in level of commitment among respondents grouped by years of experience would not exist. Data presented in Table VIII and Table IX suggest significance which infers that there is a difference in commitment level among the respondents.

Hypotheses IV, V, VI

Three criterion measures were used to measure the correlations which existed among cognition, attitude and level of commitment: (1) the fifty-one item cognitive TEASEAT, (2) the Semantic Differential Instruments for the four concepts
about Plan A, and (3) the Method of Ordered Alternatives
number of items of non-commitment. The inverse relationship
between the number of items of non-commitment and the implied
level of commitment created by the scoring strategy previously
described by data in Hypothesis III was expected to produce a
negative correlation coefficient.

The correlation matrix, Table X, presents the correlation
coefficients computed for all combinations of the variables
alluded to in Hypotheses IV, V, and VI. The variables are
cognition, attitude and level of commitment. The correlation
coefficients were tested for significance using the one-tail
t test for significance.

TABLE X
CORRELATION MATRIX FOR COGNITION, ATTITUDE
AND LEVEL OF COMMITMENT

<table>
<thead>
<tr>
<th></th>
<th>Cognition</th>
<th>Attitude (Plan A Special Education)</th>
<th>Level of Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>1.00</td>
<td>.25*</td>
<td>.39**</td>
</tr>
<tr>
<td>Attitude (Plan A Special Education)</td>
<td></td>
<td>1.00</td>
<td>.28*</td>
</tr>
<tr>
<td>Level of Commitment</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.
**Significant at the .01 level.

Hypothesis IV predicted that no significant difference
should exist between knowledge about Plan A and attitude toward
selected concepts in Plan A. A correlation coefficient of .25
is reported in Table X. As noted, this coefficient is
significant at the .05 level inferring that cognition and attitude are significantly related.

That no significant relationship would exist between knowledge of and commitment to Plan A special education was predicted by Hypothesis V. A correlation coefficient of .39 which is significant at the .01 level is reported in Table X. This degree of significance between cognition and commitment is ample to infer that Hypothesis V must not be accepted.

In Hypothesis VI, no significant relationship between commitment to Plan A and attitude toward selected concepts in Plan A was expected to exist. Table X reports a correlation coefficient of .28 which is significant at the .05 level. This infers that the null hypothesis should not be accepted.

Hypotheses VII, VIII, IX

In order to test the significance of the correlation coefficients between cognition, attitude and level of commitment by years of experience, multiple regression analysis was employed. Measures for each respondent were generated using these three processes: (1) the fifty-one item TEASEAT, (2) the Semantic Differential Instrument for the concept Plan A Special Education, and (3) the Method of Ordered Alternatives number of items of non-commitment.

Models and derived values for the multiple regression analyses are presented in Table XI. The regression model for Table XI is based upon the following functional descriptors:
Y₁ = Scores on Cognitive Test.
A₁, A₂, A₃, ... = Partial Regression Weights.
U = Unit Vector.
X₁ = Scores on Attitude Instrument.
X₂ = Level of Non-Commitment Scores.
X₃ = 1 if Subject was involved in Plan A one year, zero otherwise.
X₄ = 1 if Subject was involved in Plan A two years, zero otherwise.
X₅ = 1 if Subject was involved in Plan A three years, zero otherwise.
E = Error Vector.

Hypothesis VII predicted that there would be no significant difference in the correlation between knowledge about and attitude toward Plan A special education based on the number of years of involvement. Table XI reports the restricted Model R², or correlation coefficient squared, to be .07. The full Model formula adds the years of involvement vectors to determine their effect on the R². The computed F value of 3.33 produced a significance at the .04 level which indicates that the correlation coefficient between cognition and attitude is influenced by years of involvement. On this basis, the null hypothesis cannot be accepted.

That number of years of involvement in Plan A special education would not significantly affect the correlation between knowledge about and commitment to Plan A was predicted in Hypothesis VIII. The restricted Model R² of .12
**TABLE XI**

MULTIPLE REGRESSION ANALYSIS OF COGNITION, ATTITUDE AND LEVEL OF COMMITMENT
BASED ON NUMBER OF YEARS OF INVOLVEMENT IN PLAN A

<table>
<thead>
<tr>
<th>Models and Explanation</th>
<th>Models</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis VII: Number of years of involvement in Plan A does not significantly affect the correlation between cognition and attitude.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1: ( Y_1 = A_0 U + A_1 X_1 + A_2 X_2 + A_3 X_3 + A_4 X_4 + A_5 X_5 + E )</td>
<td>Full</td>
<td>.15</td>
<td>2/3</td>
<td>3.33</td>
<td>.04</td>
</tr>
<tr>
<td>Model 2: ( Y_1 = A_0 U + A_1 X_1 + E )</td>
<td>Restricted</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesis VIII: Number of years of involvement in Plan A does not significantly affect the correlation between cognition and level of commitment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1: ( Y_1 = A_0 U + A_2 X_2 + A_3 X_3 + A_4 X_4 + A_5 X_5 + E )</td>
<td>Full</td>
<td>.20</td>
<td>2/3</td>
<td>3.61</td>
<td>.03</td>
</tr>
<tr>
<td>Model 2: ( Y_1 = A_0 U + A_2 X_2 + E )</td>
<td>Restricted</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesis IX: Number of years of involvement in Plan A does not significantly affect the correlation between attitude and level of commitment.</td>
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<tr>
<td>Model 1: ( X_2 = A_0 U + A_1 X_1 + A_3 X_3 + A_4 X_4 + A_5 X_5 + E )</td>
<td>Full</td>
<td>.09</td>
<td>2/3</td>
<td>1.11</td>
<td>.33</td>
</tr>
<tr>
<td>Model 2: ( X_2 = A_0 U + A_1 X_1 + E )</td>
<td>Restricted</td>
<td>.07</td>
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</table>
reported in Table XI was compared to the full Model $R^2$ of .20 produced by adding the number of years of involvement to the equation testing correlation between cognition and level of commitment. The resulting $F$ value of 3.61, significant at the .03 level, does not support retaining the null hypothesis.

Table XI shows that, while a correlation exists between attitude toward and level of commitment to Plan A special education, the correlation is not significantly influenced by the number of years of involvement as predicted in Hypothesis IX. The restricted Model $R^2$ of .07 increased only to .09 when the years of involvement vectors were introduced. The resulting $F$ value of 1.11 was not significant at the acceptable level. These data suggest acceptance of the null hypothesis.
CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to examine the relationships that existed between cognition, attitude and level of commitment to Plan A special education based on the professional supportive personnel's first, second or third year of involvement in Plan A special education. There were seventy-seven professional staff members from the Plan A special education programs in six school districts and one cluster of school districts who were involved in the study. All of the school districts were located in ESC Region 10 and were involved in their first, second or third year of Plan A special education programming as were the respondents.

Three instruments were used in the study. The first, a cognitive multiple-choice test, was originally developed by the Center for Innovation in Teaching the Handicapped for the Texas Education Agency. Although reliability and validity for this copyrighted test was already established, a pilot study was conducted so as to generate validity and reliability for the instrument for use in this study. Secondly, the Semantic Differential technique was used to ascertain an index of attitude. The Semantic Differentials which were
developed in a pilot study are rating scales utilizing concepts which are followed by several bi-polar adjective or phrase pairs. The most favorable polar position is assigned a value of eight. Each of the equal parts of the continuum were assigned numerical values ranging from one to eight. As developed by Osgood, Suci and Tannenbaum, the Semantic Differential has no standard concepts, but for purposes of this study the concepts were Plan A Special Education, Plan A Pupil Appraisal, Plan A Individualized Program, and Plan A Community Involvement. Thirdly, the Method of Ordered Alternatives instrument, developed as a strategy by Sherif, Sherif and Nebergall, was employed to index the level of commitment. The technique consists of a series of nine statements about two opposite types of programs with gradations from each extreme toward the neutral middle statement. In four operations, the respondent will have identified an anchor statement of acceptance and other acceptable items, an anchor statement of rejection and other rejection items and, by process of elimination, any number of items from zero to seven, to which no response was given. All of the statements, based on a format developed by Beck, et al., contain essential ingredient words or phrases.

The statistical treatment used in testing the first three hypotheses was single classification analysis of variance. Hypotheses IV, V and VI were tested using the t test of significance of a product moment correlation
The last three hypotheses were tested, using multiple linear regression. In all tests of significance, the .05 level was the level upon which the null hypothesis was accepted or rejected.

Findings

**Hypothesis I.**--There is no significant difference in knowledge about Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years. An analysis of the data confirmed that a significant difference did exist between the mean differences; therefore, the null hypothesis was not accepted.

**Hypothesis II.**--There is no significant difference in attitude toward selected concepts in Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years. An analysis of the data confirmed that a significant difference, overall, did not exist between the mean differences. However, the concept Plan A Community Involvement did prove to be significantly different. In the main, the null hypothesis was accepted.

**Hypothesis III.**--There is no significant difference in level of commitment to Plan A special education among special education professional supportive personnel who have been in a program of this plan one, two or three years. An analysis of the data confirmed that a significant difference did exist
between the mean differences; therefore, the null hypothesis was not accepted.

Hypothesis IV. -- There is no significant relationship between knowledge of Plan A special education and attitude toward selected concepts in Plan A special education among Plan A special education professional supportive personnel. An analysis of the data confirmed that a significant correlation did exist between the scores; therefore, the null hypothesis was not accepted.

Hypothesis V. -- There is no significant relationship between knowledge of Plan A special education and the level of commitment to Plan A special education among Plan A special education professional supportive personnel. An analysis of data confirmed that a significant correlation did exist between the scores; therefore, the null hypothesis was not accepted.

Hypothesis VI. -- There is no significant relationship between the level of commitment to Plan A special education and attitude toward selected concepts in Plan A special education among Plan A special education professional supportive personnel. An analysis of data confirmed that a significant correlation did exist between the scores; therefore, the null hypothesis was not accepted.

Hypothesis VII. -- There is no significant difference in the correlation between knowledge about and attitude toward Plan A special education among Plan A special education
professional supportive personnel who have been in a Plan A program one, two or three years. An analysis of data demonstrated that the number of years that personnel were involved in Plan A influenced the correlation between knowledge and attitude; therefore, the null hypothesis was not accepted.

**Hypothesis VIII.**--There is no significant difference in the correlation between knowledge about and the level of commitment to Plan A special education among Plan A special education professional supportive personnel who have been in a Plan A program one, two or three years. An analysis of the data confirmed that involvement in Plan A significantly influenced the correlation between knowledge and commitment; therefore, the null hypothesis was not accepted.

**Hypothesis IX.**--There is no significant difference in the correlation between attitude toward and level of commitment to Plan A special education among Plan A special education professional supportive personnel who have been in a Plan A program one, two or three years. An analysis of the data confirmed that the number of years of involvement in Plan A does not significantly influence the correlation between attitude and commitment; therefore, the null hypothesis was accepted.

**Conclusions**

As an outgrowth of this study, two major conclusions may be drawn:

1. The number of years that a supportive professional special education staff member is involved in Plan A affects
what the staff member knows, how he feels and the extent of his commitment to Plan A special education.

2. The levels of knowledge, attitude and commitment of Plan A professional supportive personnel are related. Since these conclusions are apparent, it would seem that a school district would profit from the study by developing strategies for professional growth in knowledge about Plan A so as to promote concomitant attitude and commitment levels.

The study did indicate that certain phenomena exist which deserve closer scrutiny. In terms of the cognitive scores, one such phenomenon was noted in that three years of involvement in Plan A yielded a lower mean score than did either one or two years of experience. Furthermore, two years of involvement produced the highest mean score. Associated closely with the cognitive phenomenon is a similar pattern noted in the attitude mean scores. However, in the case of the attitude scores, the analysis of variance did not yield significance at the .05 level except within the concept Plan A Community Involvement which did produce a significant difference among the groups. In terms of commitment among the groups, the pattern of mean scores also developed unexpectedly. Personnel involved in their second year of Plan A produced a much higher level of commitment score than did those in their first or third year. In terms of progression of commitment, however, the respondents who had three years of involvement had a slightly smaller
mean score of commitment than those who were in their first year of involvement in Plan A. Although the reasons for these patterns were not studied, the overall results of the study indicated that interaction among these variables is a function of a number of years of involvement, thus implying a need for adequate staff development programs in school districts initiating or already involved in Plan A special education.

It was hypothesized that there would be no significant differences in the correlations between cognitive attitude and commitment of professional support of personnel, but those hypotheses were not accepted. Thus, the analyses of data concluded that exposure to Plan A did produce correlating levels of cognition, attitude and commitment regarding Plan A. Although the implications of these significant relationships were not investigated in this study, it is believed that the professional supportive staff member might be directed, through appropriately developed experiences, toward desired levels of knowledge, attitude and commitment.

Hypotheses VII, VIII and IX were concerned with the effects of number of years of involvement on the correlations between (1) cognition and attitude, (2) cognition and commitment, and (3) attitude and commitment. Though not essential to the testing of the hypotheses, it was discovered that correlations between cognition and attitude in the first and second year of involvement of .26 and .32 respectively were
significant at the .05 level using a one tail t test, but the correlation of .13 in the third year was not significant. This substantiates the significance noted by regression analysis but also suggests that in the third year of involvement cognition and attitude do not continue to be related significantly.

Correlation coefficients of .33, .46, and .21 for the first, second and third year respondent groups respectively are all significant as descriptors of the relationship between cognition and commitment. Nevertheless, the third year regressive trend was present.

Commitment and attitude were correlated significantly in year one and two with coefficients of .33 and .22 respectively. The third year correlation coefficient of .11 was not significant, but did serve to demonstrate that the correlation between commitment and attitude declined from significance in the first year and second year to non-significance in the third year.

Recommendations

Based upon the findings and conclusions of this study, the following recommendations are offered:

1. A study of Plan A special education programs should be conducted state-wide in order to establish objective criteria of success.

2. A study comparing levels of cognition, attitude and commitment of professional supportive Plan A staff to objective
criteria of success of Plan A special education should be conducted state-wide.

3. A longitudinal study, utilizing the professional supportive Plan A staff used in this study, should be conducted, terminating when Plan A special education becomes a state-wide program in Texas in 1976.

4. School districts, Special Education components in Universities, Education Service Centers and the Texas Education Agency should develop and implement comprehensive staff development strategies designed to produce and maintain desired levels of knowledge, attitude and commitment among personnel in Plan A special education programs in Texas.
Please complete each of the 2 tests in this booklet.

Instructions for completing each test section are included at the beginning of the section.

Please provide the information requested below before going on to the booklet of tests.

☐ Enter number of years you have been working in Plan A Special Education in any capacity. (1, 2, or 3 only)

Check Your Special Education Assignment Area: (only one)

☐ Supervisor
☐ Counselor
☐ Visiting Teacher
☐ Educational Diagnostician
☐ Psychologist
☐ Associate Psychologist

Check Your Age Bracket:

☐ 20 - 35 years
☐ 36 - 50 years
☐ 51 - 65

Check Your Sex:

☐ Male
☐ Female

REMEMBER:

. Read the instructions carefully.
. Work carefully but quickly.
. Please complete each part.
APPENDIX B

INSTRUCTIONS

Please Read Carefully

The following pages contain multiple choice questions. Circle the letter designating the answer of your choice "(E). Select only one answer for each question.

Please read each question and its choices carefully before selecting an answer.

TEXAS EDUCATION AGENCY
SPECIAL EDUCATION ADMINISTRATION TEST

Used By Permission From:

CENTER FOR INNOVATION IN TEACHING THE HANDICAPPED
School of Education, Indiana University
2853 East Tenth Street, Bloomington, Indiana 47401
(812) 337-5847

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DIRECTIONS: In each of the following questions select the correct or most appropriate answer.

1. The Texas Education Agency furnishes the Governor and the budget office of the Legislature with statistics relating to
   a) the number of children referred to or applying for admission to the Texas School for the Blind and the Texas School for the Deaf.
   b) the number of children actually being served by the Texas School for the Blind and the Texas School for the Deaf.
   c) the number of children who might have been eligible for admission to the Texas School for the Blind and the Texas School for the Deaf but whose admission has been delayed because of inadequate facilities at these schools.
   d) all of the above.
   e) none of the above.

2. Who finances preschool programs for children with hearing losses:
   a) the state through the Foundation School Program funding arrangement.
   b) the participating district through the Foundation School Program funding arrangement.
   c) both a and b.
   d) neither a nor b.

3. A pupil who reveals deficit in all essential learning processes three standard deviation units or more below the mean of the general population is
   a) brain injured.
   b) educable mentally retarded.
   c) trainable mentally retarded.
   d) language and/or learning disabled.
   e) multi-handicapped.

4. Which of the following statements is not true?
   a) the TEA is authorized to establish on a county-wide basis special day schools for the deaf in all counties having a population of 200,000 or more inhabitants, according to the last preceding federal census.
   b) The TEA is authorized to establish on a bi-county-wide basis special day schools for the deaf in any two contiguous counties whose cumulative population exceeds 240,000 but does not exceed 335,000 inhabitants, according to the last preceding federal census.
   c) A school district within a county which has a county-wide or bi-county-wide day school for the deaf is eligible under the regular program of special education to apply for teacher units or contract allocations with approved non-public schools for deaf pupils in the age range served by the county-wide program.
   d) More than one of the above statements is not true.
   e) All of the above statements (a, b, c, d) are true.
5. An accredited local school district may enter into contract with an approved private school for the education and training of certain eligible deaf pupils if
   a) the pupils are eligible for admission to the Texas School for the Deaf,
   b) an application to TEA is made by the local school district on or before October 1 of each year,
   c) the private school is better equipped for those pupils' needs than the state-supported school available to the pupils,
   d) Both a and b,
   e) All of the above (a, b, and c).

6. Comprehensive Programs for Exceptional Children (Plan A)
   a) is available on a statewide basis now,
   b) shall be available on a statewide basis until September 1, 1976,
   c) shall be available on a statewide basis by January 1, 1976,
   d) shall be available on a statewide basis by September 1, 1976.

7. When two or more local school districts develop a cooperative special education program,
   a) It is rejected since it is a violation of Texas Educational Agency regulations,
   b) All school districts should describe the arrangement in the Special Education Planning Document,
   c) One district serves as the fiscal agent,
   d) Each school district must carry out the same type of program individually.

8. A special education pupil transferred from one district, which provided special education services, to another school district. Who will pay the tuition in this case?
   a) The receiving school district,
   b) The home district,
   c) Texas Education Agency, using state funds,
   d) The parent or guardian of the child.

9. A school district under Plan A has received $500 for consultative services. This money may be used for
   a) payment of a part to the regional educational service center,
   b) program evaluation and planning of its comprehensive special education efforts,
   c) strengthening component parts of special education on a consultative basis,
   d) special consultants as may be needed in working with individual handicapped pupils,
   e) All of the above.
10. Under Plan A, the allocation for pupil personal services shall not exceed

a) $350 for each special education teacher unit.
b) $35 per pupil based upon five percent of the district's total ADA for the preceding school year.
c) $25 per pupil based upon ten percent of the district's total ADA for the preceding school year.
d) $35 per pupil based upon ten percent of the district's total ADA for the preceding school year.

11. The primary purpose of the special education visiting teacher is to provide

a) leadership for instructional improvement of exceptional children through working with teachers and other school personnel.
b) assistance to the appraisal team and aid in designing suitable instructional techniques and strategies.
c) information relative to the mental ability and behavioral characteristics of exceptional children.
d) liaison between the school, home, and community.

12. The coordination component of diagnosis

a) appraises the psychomotor coordination of the child.
b) determines the child's general level of educational ability.
c) evaluates the child in his home environment.
d) assesses the physical handicaps of the child.
e) coordinates information from appraisal specialists and classroom teachers.

13. Allocations to Rehabilitation Districts for Handicapped Persons are financed

a) entirely by the Federal government,
b) entirely by the state,
c) entirely by the local school districts,
d) none of the above.

14. A child who has a deficit in all learning processes between 2 and 3 standard deviation units below the mean of the general population is

a) auditorily handicapped.
b) minimally brain damaged.
c) emotionally disturbed.
d) educable mentally retarded.
e) trainable mentally retarded.

15. Under Plan A, a school district with 4,000 pupils in ADA is entitled to

a) 20 professional instructional units.
b) 26 professional instructional units.
c) 6 professional instructional units.
d) no professional instructional units unless it develops a joint program with other districts.
16. The deadline for school districts under Plan A for activating approved personnel units is
   a) June 15,
   b) September 1,
   c) October 15,
   d) February 1.

17. From which group is it not necessary to have a representative on the committee for program coordination between the county and bi-county wide day schools and the residential schools for the deaf?
   a) Texas School for the Deaf,
   b) Special Education Instructional Materials Services,
   c) Each of the county-wide and bi-county day schools,
   d) Division of Special Education,
   e) Texas Rehabilitation Commission.

18. The special transportation allowance for transporting children in special education programs
   a) is $150 per year per exceptional pupil receiving special transportation,
   b) may be transferred to the purchase of electronic communication services for homebound students,
   c) is awarded even if regular transportation is available to the pupil,
   d) is awarded in one lump sum as soon as the report of the estimate of the number of eligible exceptional children is approved.

19. Local school districts may claim for reimbursement of
   a) the total cost of rental, lease or purchase of special seats,
   b) the partial cost of rental only of special seats,
   c) the partial cost of rental, lease or purchase of special seats,
   d) the partial purchase cost only of special seats,
   e) None of the above.

20. Which of the following qualifications is not necessary for a pregnant student to be eligible for special education services provided by local school districts?
   a) She must not be over 21 years of chronological age,
   b) She must not have completed high school,
   c) She must have her pregnancy confirmed by a qualified medical physician,
   d) She must be a resident of or under the care of a licensed maternity home,
   e) All of the above qualifications are necessary.

21. Referral of a child needing special assistance is made to
   a) the parent or guardian
   b) a physician
   c) community agencies
   d) school personnel
   e) coordinator of appraisal services
22. Special education teachers are employed to work
   a) less than the number of days for instructional personnel,
   b) one-half day every day,
   c) the same number of days as instructional personnel,
   d) more than the number of days for instructional personnel.

23. Regional education service centers may provide any special education service after submitting a plan for review and approval to the
   a) Department of Special Education,
   b) local school district,
   c) Special Education Instructional Materials Services,
   d) cooperating school,
   e) Bureau for the Education of the Handicapped.

24. Minimally brain-injured are those who
   a) are below normal intelligence,
   b) have learning difficulties attributable to neurological condition,
   c) have some form of sensory deprivation,
   d) are deficient in the acquisition of learning skills, including ability to think.

25. The Department of Corrections may be allocated Special Education resources for the education of
   a) eligible handicapped, incarcerated persons who can benefit from post-high school education,
   b) eligible handicapped, incarcerated persons who have less than five years to serve,
   c) eligible handicapped, incarcerated persons who are not high school graduates,
   d) eligible handicapped, incarcerated persons who come under the jurisdiction of the juvenile courts.

26. A school district has the responsibility to educate, free of tuition, children within the district residence and enrolled in a private school for exceptional children when
   a) the school district has space available in established special classes serving children with the same degree of handicap,
   b) payment of additional tuition moneys would constitute an undue hardship on the parents of such students,
   c) it is determined that enhancement of the children's progress will result from public school attendance,
   d) the educational program in the private school has been judged inadequate by the local school district.

27. The local school district is responsible for providing follow-up of pupils who
   a) no longer require special education services,
   b) have graduated,
   c) have left the school before completion of the program,
   d) All of the above.
   e) None of the above.
28. All school districts applying for Foundation School Program Funds in special education shall develop a comprehensive plan

a) for a one-year period and be reviewed annually.
b) for a two-year period and be reviewed annually.
c) for a two-year period and be reviewed at the end of the second year.
d) for a five-year period and be reviewed annually.
e) for a five-year period and be reviewed at the end of the five-year period.

29. Which of the following people come under the definition of exceptional children?

a) a two-year old child with a hearing loss.
b) a 22-year old girl who is mentally retarded.
c) a 16-year old girl leaving public school for a time because of pregnancy.
d) a 12-year old boy who has problems with reading.
e) None of the above.

30. Which of the following is eligible to be registered with the American Printing House for the Blind for Instructional Materials and Aids?

a) Any legally blind pupil enrolled in the Texas School for the Blind.
b) Any legally blind pupil enrolled in any other public school as of the first Monday in January.
c) Any legally blind pupil enrolled in any school as of September 15.
d) Any legally blind pupil studying at college level.

e) None of the above.

31. What source should probably be first consulted if you have any questions concerning the present Special Educational System in Texas?

a) The Texas Education Agency.
b) The Commissioner of Education.
c) Senate Bill No. 230 (June 21, 1969).
e) The Admission, Review and Dismissal Committee.

32. When groups of children with two types of handicaps are taught together or taught by the same teacher who divides his time between them, the grouping is called

a) a unit.
b) one-half unit.
c) a combination unit.
d) a cooperative unit.
33. Who should make an application and in what form is it submitted in order for a deaf and blind or totally blind and non-speaking pupil to receive special education services?

a) An educational diagnostician who has tested and identified this type of pupil should make the application to the Texas Rehabilitation Commission.
b) The parent or guardian of this type of pupil may make the application to the Texas Education Agency.
c) An educational diagnostician who has determined that a given pupil is eligible may make the application to the local Admission, Review, and Dismissal Committee.
d) A medical physician who has determined that a given pupil is eligible makes the application to the Texas Educational Agency.
e) More than one of the above.

34. Pregnant students may receive special educational services

a) if certified by a licensed physician,
b) if unable to attend regular classes,
c) if under the care of licensed maternity homes,
d) all of the above.

35. School districts having less than 3,000 pupils in ADA may develop Plan A programs by

a) proportionally reducing the number of professional instructional units,
b) agreeing to support teacher aide units with local funds,
c) cooperating with other districts,
d) coordinating their application through the regional educational service centers.

36. To acquire adoption textbooks from the Textbook Division for use by exceptional children

a) the local school district must purchase them,
b) pupils enrolled in special education programs should be included in the total enrollment figures for textbook requisitions,
c) the school district should plan to use excess textbooks from the normal quota of 110 percent,
d) a supplemental request should be filed,
e) All of the above.

37. Exceptional children are eligible for educational programs of occupational education and technology if

a) the programs are designed for the handicapped,
b) they are regular programs of vocational education,
c) either of the above,
d) neither of the above.
38. A school district having seven instructional personnel units is eligible for how many special education _supportive_ professional service units?

a) one-half unit.
b) one unit.
c) two units.
d) seven units.

39. The financing of special education programs for eligible deaf children between the ages of 6 and 21 (inclusively) comes from

a) the state and is paid from the Foundation School Program Fund.
b) the district(s), with one district serving as the fiscal agent if more than one contiguous county is involved.
c) the U.S. Office of Education, Bureau of the Handicapped.
d) both a and b.
e) none of the above.

40. The Admission, Review, and Dismissal Committee does not include

a) professional staff members.
b) representatives from the area of administration.
c) representatives from the area of instruction.
d) representatives from the area of appraisal.
e) representatives from the area of legal relationships.

41. Rehabilitation Districts for Handicapped Persons provide for the education of eligible pupils

a) between the ages of 14 and 21, both inclusive.
b) between the ages of 14 and 19, both inclusive.
c) between the ages of 16 and 19, both inclusive.
d) between the ages of 16 and 21, both inclusive.

42. Which of the following requirements is not necessary for an 11-year old deaf child to be admitted to the Texas School for the Deaf?

a) Otological examination and audiologist's evaluation.
b) Educational background and intellectual assessment, and medical and family history.
c) Evaluation of the child's physical status.
d) Recommendation of superintendent of the operating district with the concurrence of the Texas School for the Deaf.
e) All of the above requirements must be fulfilled.

43. To be eligible for contracting with school districts, a non-public school must

a) receive a site visit by a team of professional staff members from the Texas Education Agency.
b) have been in operation for at least three years.
c) make an initial application to the Division of School Accreditation on or before September 1.
d) have contracted for three successive years.
44. Which of the following children are not eligible for services from the Texas Rehabilitation Commission?

a) A child who is younger than 16 years of age,
b) A child who has an employment handicap because of his disability,
c) A child whose parents are unable to pay the training fees,
d) A child requiring psychiatric evaluation.

45. The Advisory Council for Children with Learning Disabilities was established by the

a) Texas Education Agency,
b) Texas State Legislature,
c) Bureau of Education for the Handicapped,
d) Council on Exceptional Children,
e) The Texas Department of Mental Health and Mental Retardation.

46. A school district under Plan B has received $300 under Special Materials allotment. Which of the following is not a permitted spending under the policies?

a) Payment of $100 to the regional education service center,
b) Purchase of consumable materials worth $50,
c) Spending $75 for the purchase of special books,
d) Spending $50 for the purchase of a special seat.

47. A special education teacher in an integrated special education program works with special education pupils

a) on a full-time basis,
b) who may be attending a regular class for less than one-half of the school day,
c) who may come from their regular classroom to the resource room as necessary for special instruction,
d) in several classrooms and is scheduled to assist each teacher in providing individual and group instruction to handicapped pupils,
e) from more than one school campus at least one hour per week.

48. Look at the below formulae for allocating teacher units in local school districts which have county-wide or bi-county-wide day schools for the deaf, ages 6 through 21. Which formula is incorrect?

<table>
<thead>
<tr>
<th>Teachers</th>
<th>County-Wide</th>
<th>Bi-County-Wide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) One for each eight pupils</td>
<td>b) One for each seven pupils</td>
</tr>
<tr>
<td></td>
<td>or major fraction.</td>
<td>or major fraction.</td>
</tr>
<tr>
<td>Principals</td>
<td>c) One for each school.</td>
<td>d) One for each school.</td>
</tr>
<tr>
<td>Supervisors</td>
<td>e) One for each 10 teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>not to exceed three;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>however, a minimum of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>one for each approved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>school.</td>
<td></td>
</tr>
</tbody>
</table>
49. State funds may be obtained for the support of developmental programs in the area of

a) early childhood education,
b) language and/or learning disabilities,
c) either of the above,
d) neither of the above.

50. A special education teacher coordinator is

a) a teacher who has full certification in one or more areas of special education,
b) assigned administrative or supervisory responsibilities in addition to his special education teaching duties,
c) eligible to be employed for an additional month,
d) allocated to school districts which have three or more special education teacher units without a supervisor,
e) All of the above.

51. The difference in the guidelines for the homebound and hospital class programs is that

a) the homebound program requires a minimum of four hours of instruction a week for each pupil, while the hospital class program does not.
b) the homebound program requires a recommendation from the family physician stating that the child is unable to attend a regular or special class while the hospital class does not.
c) the homebound program is designed to provide a continuation of educational programs for pupils who cannot attend a regular or special class because of emotional reasons, while the hospital class program is designed for pupils with physical injuries.
d) instruction is provided at home in the homebound program and in the hospital for the hospital class program.
Please Read Carefully

We would like to know how you feel about Plan A Special Education. Please judge the ideas presented at the top of each page in terms of what the descriptive scales mean to you.

There are, of course, no "right" or "wrong" answers and we urge you to be as accurate as possible in your ratings without pausing to reflect for too long a time on each scale.

For purposes of illustration, suppose you were asked to evaluate a thing using the "fair-unfair" scale. If you judged the thing to be extremely "unfair" you would fill in the box as follows:

UNFAIR U — • — • — • — • — • — • — • FAIR

If you judged the thing substantially "fair", you would fill in the box as follows:

UNFAIR U — • — • — • — • — • — • — • FAIR

If you judged the thing to be moderately "unfair", you would fill in the box as follows:

UNFAIR U — • — • — • — • — • — • — • FAIR

If you judged the thing to be slightly "fair", you would fill in the box as follows:

UNFAIR U — • — • — • — • — • — • — • FAIR

In Summary:

1. Be sure you mark every adjective pair for each concept. Never fill in more than one box on a single adjective pair scale.
2. Make each item a separate and independent judgment.
3. Work at a fairly high speed through this survey section; we want your first impressions - the way you actually feel at the present time toward the concepts.
<table>
<thead>
<tr>
<th>VALUABLE</th>
<th>WORTHLESS</th>
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<tr>
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</tr>
<tr>
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<td>REPRESENTS THE INTEREST OF FEW</td>
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</tbody>
</table>
APPENDIX E
PLAN A PUPIL APPRAISAL PROCESS

VALUABLE

SOPHISTICATED

OUR KIND OF PROBLEM

REPRESENTS THE INTEREST OF MANY

DIFFICULT TO USE

RIGHT WAY TO DEAL WITH HANDICAPPED

GOOD FOR ALL SCHOOLS

A STEP IN THE RIGHT DIRECTION

BRINGS EDUCATORS TOGETHER

OPTIMISTIC

COMPLETE

TIMELY

SUCCESSFUL

MEANINGFUL

IMPORTANT

PROGRESSIVE

CONSTRAINED

ACTIVE

STABLE

TANGIBLE

WORTHLESS

NAIVE

NOT OUR KIND OF PROBLEM

REPRESENTS THE INTEREST OF FEW

EASY TO USE

WRONG WAY TO DEAL WITH HANDICAPPED

NOT GOOD FOR ALL SCHOOLS

A STEP IN THE WRONG DIRECTION

PUSHES EDUCATORS APART

PESSIMISTIC

INCOMPLETE

UNTIMELY

UNSUCCESSFUL

MEANINGLESS

UNIMPORTANT

REGRESSIVE

FREE

PASSIVE

CHANGEABLE

INTANGIBLE
APPENDIX F
PLAN A INDIVIDUALIZED PROGRAM

VALUABLE □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ ^
### APPENDIX G
A COMMUNITY INVOLVEMENT

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APPENDIX H

INSTRUCTIONS

Please Read Carefully

Each of the following 4 pages contains a set of nine statements which reflect different positions concerning Special Education Programs in Texas. Although the four sets of nine statements are identical, the instructions at the top of each page are different.

Please read the instructions carefully before you respond to the statements.
The statements below present positions concerning Special Education Programs in Texas.

Please read all of the statements carefully before making any marks on this page.

Now that you have read all of the statements carefully, draw a line under the one statement that comes closest to your point of view on this matter. Underline only one statement on this page.

A. The implementation of the Plan A approach is absolutely essential in the interests of the handicapped student.

B. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan A approach.

C. It appears that the interests of the handicapped student would be better served by the implementation of the Plan A approach.

D. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan A approach.

E. It is difficult to decide between the implementation of the Plan A approach and the Plan B approach.

F. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan B approach.

G. It appears that the interests of the handicapped student would be better served by the implementation of the Plan B approach.

H. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan B approach.

I. The implementation of the Plan B approach is absolutely essential in the interests of the handicapped student.
APPENDIX J

The statements below are the same statements as on the preceding page. Please read all of the statements once more before marking on this page. There may be another or other statements which are also acceptable from your point of view. If there are, put a circle around the letter (□) in front of such a statement or statements which are also acceptable.

A. The implementation of the Plan A approach is absolutely essential in the interests of the handicapped student.
B. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan A approach.
C. It appears that the interests of the handicapped student would be better served by the implementation of the Plan A approach.
D. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan A approach.
E. It is difficult to decide between the implementation of the Plan A approach and the Plan B approach.
F. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan B approach.
G. It appears that the interests of the handicapped student would be better served by the implementation of the Plan B approach.
H. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan B approach.
I. The implementation of the Plan B approach is absolutely essential in the interests of the handicapped student.
The statements below are the same as those on the two preceding pages. Please read the statements again and select the one statement that is most objectionable from your point of view. Cross-out that one statement which is most objectionable.

A. The implementation of the Plan A approach is absolutely essential in the interests of the handicapped student.

B. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan A approach.

C. It appears that the interests of the handicapped student would be better served by the implementation of the Plan A approach.

D. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan A approach.

E. It is difficult to decide between the implementation of the Plan A approach and the Plan B approach.

F. Although it is hard to decide, there would be a slight advantage in the implementation of the Plan B approach.

G. It appears that the interests of the handicapped student would be better served by the implementation of the Plan B approach.

H. On the whole, the interests of the handicapped student will be best served by the implementation of the Plan B approach.

I. The implementation of the Plan B approach is absolutely essential in the interests of the handicapped student.
APPENDIX L

The statements below are the same as those on the three preceding pages.

Please look over the statements again before making any marks on this page.

There may be another statement or statements which you find objectionable
from your point of view. If there are, show which are objectionable by
crossing out the letter in front of such a statement or statements (X).

A. The implementation of the Plan A approach is absolutely essential in
the interests of the handicapped student.

B. On the whole, the interests of the handicapped student will be best
served by the implementation of the Plan A approach.

C. It appears that the interests of the handicapped student would be
better served by the implementation of the Plan A approach.

D. Although it is hard to decide, there would be a slight advantage in
the implementation of the Plan A approach.

E. It is difficult to decide between the implementation of the Plan A
approach and the Plan B approach.

F. Although it is hard to decide, there would be a slight advantage in
the implementation of the Plan B approach.

G. It appears that the interests of the handicapped student would be
better served by the implementation of the Plan B approach.

H. On the whole, the interests of the handicapped student will be best
served by the implementation of the Plan B approach.

I. The implementation of the Plan B approach is absolutely essential in
the interests of the handicapped student.
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\hphantom{and C. Hovland, \textit{Social Judgement}, New Haven, Conn., Yale University Press, 1961.}


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Publications of Learned Organizations

