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CHAPTER I

I N T R O D U C T I O N

A phenomenon of the 1960's has resulted in an awakening of this nation to a new educational need--that of the importance of the first few years of a child's life in determining his future. Educators have recognized the increasingly vital role of schools, teachers, and adults in shaping lives of children at earlier ages. The preparation of adults to interact effectively with children in various settings has become a major concern of early childhood educators.

A surge of expansion and support is rapidly occurring in programs for young children. Head Start, Follow Through, day care, nursery schools, kindergarten and pre-kindergarten are examples of programs in progress. Early childhood education has received strong support as a means to solving social problems and for developing the talents of today's citizens. Experience and research both indicate the importance of the first four to five years of a child's life as crucial for physical, mental, emotional, and social growth and development.

Careful nurturing and guidance is needed to assist children as they grow and learn and begin to assume roles as contributing members of society. Rogers (42) stated the importance of learning for a dynamically changing environment:

In the world which is already upon us, the goal of education must be to develop individuals who are open to change, who are flexible and adaptive, who have learned how to learn, and are able to learn continually. Only such persons can constructively meet the perplexities of a world in which problems spawn much faster than their answers.

Individuals, families, and communities now face the challenges of change which their own imagination and creativity have wrought. Education has identified as one of its major priorities the goal of developing a society in which people can live effectively and comfortably with change. Each individual must develop the capacity to face the "new world" in an effective manner. Thus education must find ways to appropriately and efficiently change the learner.

Leonard (36) proclaimed that the individual learns as he lives and in so doing experiences the process of change. This change is reflected through attitudes and actions; thus, research and education become concerned about both attitude change and behavior change.

Resulting from interests in the area of parent-child relationships, psychologists and psychiatrists have identified a relationship between child rearing practices and personality development. For many children, however, persons other than parents also play an important role in their lives as parent substitutes, teachers, or friends.

Phenomenologists Combs and Snygg (13) stated that the philosophy of child guidance, centered around the democratic-developmental approach, is based upon the concept that all behavior of the mentally healthy, both adults and children, is the reflection of a striving toward self-fulfillment, growth, and the attempt to make use of all inner capacities. This philosophy of child guidance seems appropriate for personnel in private and corporate centers and in public schools working with young children as well as for parents.

Another major emphasis in this philosophy of child guidance is on the age and maturity of the child. Assisting the child in performing at his level of maturity in order to enhance favorable behavior and redirect unfavorable or resistive behavior is considered important to the healthy growth and development of the child according to Kinzie (31). Ilg and Ames (27) maintained that parents, teachers, and adults working with children should be alert to these behaviors and to the child's interests and abilities so that

his environment does not become limiting but instead becomes enhancing.

Driekurs (16) utilized principles in guidance clinics which focus attention toward parents and adults as generally being the problem rather than the child. He stressed that the child often responds only to the treatment to which he is exposed and that younger children, especially, cannot be helped as long as the adults' attitudes do not change. This author further stressed that two factors work conjunctively in guiding young children:

The training of children influences the future social order, just as existing living conditions determine the forms of upbringing. The progressive evolution of mankind is inseparably linked with the improved spirit and technique of child-rearing. Man's imperfection today is in part conditioned by the training he has heretofore received.

The influence of parental attitudes on the development and behavior of children is both pervasive and critical. Apparently there is a great need for understanding the consequences of interactions between teacher and child in addition to those between parent and child.

In a teacher-child relationship, many variables are encompassed which imply the need for careful, continuous, and exhaustive investigation in the area of influencing teacher attitudes toward young children. In general, researchers

have attempted to learn about parental attitudes through observing behavior and measuring opinion.

The present study exhibits an attempt to investigate attitude and attitude change toward child guidance on the part of students studying child development and the guidance of young children. As educators assume the role of providing learning experiences leading to the development of competencies for more effectively guiding the growth and development of young children, research is needed as a basis for approaching the continuous needs of students preparing for work with children.

REVIEW OF LITERATURE

The review of literature is focused on the perspective of research accomplishments in two areas: 1) attitude theory and 2) attitude and attitude change related to guidance of young children. This survey provides a theoretical framework for identifying relationships between opinions or beliefs and attitude objects reflective of characteristics and qualities of a democratic-developmental philosophy of child guidance assumed to be vital for teachers and adults working with young children.

A paucity of research appears in the area of attitudes toward child guidance on the part of teachers and students.

Therefore, this review is reflective of related literature categorized into four areas: 1) theoretical orientation to attitude and attitude change; 2) philosophical orientation to the democratic-developmental philosophy of child guidance; 3) parent attitudes toward child guidance; and 4) teacher attitudes toward child guidance.

Theoretical Orientation

Explained by Koslin (32), attitude theory and research have taken on the following characteristics:

At an abstract level, the aim of research is directed toward formulating generalizations about the regularities of attitude phenomena. A theory of attitudes should organize invariant relationships (laws into a logical internally consistent structure) that explain how attitudes are formed and transformed in a wide array of situations. The goal of attitude theory construction is to formulate a logically connected structure of lawful relations that govern how attitudes are formed and changed in the widest possible set of circumstances, during human development, and in response to social interaction and persuasion in all social settings the world over.

Fishbein (18) has contributed the popularity of the concept of attitude to the fact that it is not the property of any one psychological school of thought and thus serves admirably the purposes of eclectic writers. Attitude may combine both instinct and habit in any proportion; thus, avoiding the extreme commitments of both instinct-theory and environmentalism.

Allport (1) reported from a review of the history of the concept of attitude the culmination of three significant facts: 1) attitudes came into fashion after the breakdown of intellectualistic psychology and the emergence of the phenomena of "determination" in experimental psychology; 2) psycho-analytic theory brought into recognition the dynamic and unconscious character of attitudes; and 3) attitudes gradually gained consideration as the concrete representations of culture.

According to Thomas and Znaniecki (56), attitudes are individual mental processes which determine both the actual and potential responses of each person in the social world. Since an attitude is always directed toward some object, it has been defined by Allport (1) as "any datum having an empirical content accessible to the members of some social group and a meaning with regard to which it is or may be an object of activity."

Bernard (7), in his synthesis of attitude conceptions found in sociological writings, identifies social attitudes with individual attitudes directed toward social objects. In the beginning attitude is a trial response which may become the permanent set of the organism. Attitude in this context forms the basis of all language and communication. Collective attitudes, defined by Bernard (7), are individual

attitudes which have become highly standardized and uniform for the group through strongly interconnected and accumulated contact.

Sherif and Sherif (48) utilized general psychological concept characteristics in formulating a criteria for attitudes. These authors suggested the following as necessary for a basis in developing a definition of attitude:

- 1) Attitudes are not innate. An assumption is that the appearance of an attitude is dependent on learning. Attitudes belong to the domain of human motivation variously studied under the labels of "social drives," "social needs," "social orientation," and the like.
- 2) Attitudes are not temporary states but are more or less enduring once formed. Attitudes do change--but once formed acquire a regulatory function such that, within limits, is not subject to change with the ups and downs of homeostatic functioning of the organism or with every just noticeable variation the stimulus conditions.
- 3) Attitudes always imply a relationship between the person and the objects. Attitudes are not self-generated, psychologically, but are formed or learned in relation to identifiable referents, whether persons, groups, institutions, objects, values, social issues, or ideologies.
- 4) The relationship between the person and object is not neutral but has motivational effective properties. The linkage between the self and the social environment is seldom neutral.
- 5) The formation of attitudes is integral to the process of forming a self-concept.

The individual's relatedness to relevant objects on a conceptual level identifies this approach as cognitive. The above criteria elicit motivational and affective characteristics because attitude relationships are not considered by these researchers as neutral affairs. Further contention was that the approach is a behavioral one because the only possible data from which attitude can be inferred are behaviors, either verbal or non-verbal.

Operationally, Sherif and Sherif (48) defined an attitude as

. . . the individual's set of categories for evaluating a stimulus domain which he has established as he learns about the domain in interaction with other persons and which relate him to various subsets within the domain with varying degrees of positive or negative affect.

Every attitudinal reaction implies that an individual has compared, evaluated, or chosen among alternatives; thus, a judgment process occurs.

The assumption that attitudes can be measured, conceding that attitude is a complex affair which cannot be wholly described by any single numerical index, was supported by Thurstone (57). The attitude is the researcher's main interest, with opinion and belief having interest only when interpreted as symbols of attitude. This author declared that

measurement is aimed at something about attitudes. Opinion or belief in this context serves as a means for such measurement.

Attitude was characterized by Allport (2) as a form of readiness with its main feature being a preparation for response. The attitude is incipient and preparatory rather than overt and consummatory. Attitude is not behavior but the precondition of behavior.

Allport (2) continued by defining attitude as "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." This author concluded that attitude is a learned predisposition to respond to an object in a favorable or unfavorable manner.

Krech and Crutchfield (33) defined attitude globally as "an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world." In an investigation by Smith, Bruner, and White (51), data supported conclusions that attitudes involve both affective and cognitive components. These components interact intimately with one another so that cognitions about attitudinal objects are not felt to be meaningfully analyzable without consideration of affective forces.

Two important recent theoretical developments, dissonance theory by Festinger (17) and theory of cognitive balance by Heider (25), deal conceptually with the effects of organizing forces and affective forces upon cognitive elements. Both are concerned with changes in cognitive structure. Cognitive balance was claimed, by Insko (29), to exist if attitudes toward the parts of a causal unit are similar. Festinger (17), however, dealt mainly with inconsistencies between belief and action, and attempts with his dissonance theory to specify certain circumstances under which there will be more or less change in belief as an outgrowth of cognitive dissonance due to such inconsistencies.

Doob (15) argued that there may not be a one-to-one relationship between attitude and behavior. Attitude conceived as a learned predisposition to respond infers that the attitude is learned. One must learn what response to make; thus, no innate relationship exists between the attitude and behavior because one still has to learn a behavior response.

Proposed by Fishbein (19) was the view of beliefs and behavioral intentions as a part of attitude but these were defined independently and viewed as phenomenon that are related to attitudes. Beliefs and behavioral intentions in this context are considered as determinants or consequents of an individual's attitude. These take a unidimensional form as indicants of one's attitude.

The research of Rosenberg and others (44), Zajonc (64), Fishbein (20), and others demonstrated that an individual's attitudes toward any object are a function of his beliefs about the object and the evaluative aspects of those beliefs. A single "affective" score on an attitude scale was assumed to be highly related to an individual's beliefs about an attitude object.

Fishbein (18) theorized that the attitude score is indexed from a consideration of the respondent's beliefs, his agreement or disagreement with each of the statements. This was in keeping with the Likert scaling where the subject is confronted with a series of belief statements. A similar application was made in the Bogardus (9) Social Distance Scale where the single affective score obtained is based on a consideration of an individual's behavioral intentions and the evaluative aspects of these intentions. The purpose of this approach to measurement was to arrive at a single score that would represent how favorable or unfavorable the individual was toward the attitude object in question.

The conception of an attitude as a disposition to evaluate certain objects, actions and situations in a certain manner was presented by Chein (11). This author theorized that attitude may be conscious or unconscious; that attitude may be momentary or persistent; and that attitude may pertain

to matters socially significant or insignificant. The evaluations may or may not have strong personal pertinence, self-reference, or ego-involvement.

Chein (11) listed the following agreements among researchers concerning the nature of attitudes:

- 1) A person is not born with his attitudes;
- 2) The learning process plays a major role in the development of attitudes;
- 3) Attitudes involve problems of perception and motivation;
- 4) As a result of a particular attitude a person may be more likely to perceive certain objects than others;
- 5) Some attitudes affect perceptions after their arousal even though they may not have oriented the person originally in the direction of the perceived objects;
- 6) Specific behavior cannot be safely predicted from a knowledge of attitude alone; and
- 7) People may act contrary to their attitudes.

The position taken by Chein (11) was that process of thought and perception, leading to the formulation of learning, play a major role in the generation of attitudes. Past learning, for example, are significant in determining how a given situation or object is perceived and what a person wants in it rather than in what learning had previously occurred.

In the cognitive summation theory, Fishbein (18) proposed that with respect to any object, an individual has a positive, negative, or neutral attitude; that is a mediating evaluative response associated with every stimulus. Beliefs about an object may be viewed in terms of probability (or strength) of stimulus response associations. In this framework, a belief system, the habit-family hierarchy of responses, is the totality of an individual's beliefs about an object. The higher the response in the hierarchy, the stronger the belief. Thus, the strength of an individual's beliefs about the object and the evaluative aspect of those beliefs can be predicted.

Fishbein (20) indicated that most of the standardized attitude measurement instruments (Thurston Scales, Likert Scales, Guttman Scales, and others) obtain their estimates of attitude through consideration of a set of the respondent's beliefs about the attitude object and the evaluative aspects of those beliefs. He further stated that the amount and direction of attitude change results in a function of: 1) the number, strength and evaluative aspects of the new beliefs he learns and 2) the individual's initial attitude, and thus the number, strength, and evaluative aspects of his salient beliefs. An individual's attitude toward some concept will only change if he learns something new about the concept.

To contribute to the conduct of research on an improved basis through consolidated thought about the nature of attitude and attitude change processes, Hartley (24) insisted that researchers must:

- 1) be sensitive to the social atmosphere within the framework of which research undertakings are developed;
- 2) endeavor to identify and report the nature of the reference groups dominant for the respondents at the time and under the conditions of the data collection; and
- 3) to explore, even if only speculatively, how, under different circumstances with different reference groups evoked, the same subjects might respond differently to the same materials.

The work of Hovland, Lumsdaine, and Sheffield (26) as well as that of Sherif and Sherif (48) and Berelson (6) clearly demonstrated that the attitudes easiest to change, shape, or form are the least structured ones. Sherif and Cantril (49) presented evidence that once attitudes are formed they tend to maintain themselves. During his social growth, the child naturally learns about many different substantive areas of life, including institutions, events, people, and even the states that individuals experience. The child, through these processes, develops certain underlying predispositions that serve as potentials for his actions. For each such area, the child formulates evaluative judgments and acquires standards that define appropriate functioning

in relation to that area. As a result, the child acts in a particular way when relevant circumstances arise. Together, such underlying predispositions and the consequences of these for action constitute an individual's orientations. These orientations, concluded Sherif and Cantril (49), represent clusters of phenomenally related social attitudes with their component beliefs, feelings, values, standards, and performances.

Campbell (10) emphasized that orientation has cognitive, affective, normative, and behavioral components. These components are basically similar to frequently used classifications of attitudinal components. This researcher asserted that when attitudes are considered, often the datum representing the individual's performance in a given situation, or the behavioral component, is not considered as an integral aspect of the attitude. A popular research question was posed: "How well do attitudes and behavior fit?" This question gains deeper perspective when examined within the context of the interrelation between the several components of an orientation. Campbell (10) briefly defined these:

- 1) Cognitive--Beliefs and opinions: the child develops certain definitions of the matter; gains information; and formulates his own views or adopts those of others.
- 2) Affective--Likes or dislikes: he accepts or rejects and has certain feelings about the matter.

- 3) Normative--Acquisition of certain standards: the individual's views of how he should act; his acceptance of a certain role; the extent to which he judges heightened emotionality to be appropriate; and his development of notions about appropriate ways others should behave.
- 4) Behavioral--Manifestation of orientation through action: the extent to which the child stoically accepts procedures; the extent to which he carries out standards.

These components are all inextricably intertwined and are not separate or distinct entities. Precisely during childhood when the self-image is most unformed and unstructured, the child emerging into the stage of self-consciousness, for example, has nothing concrete upon which to base a self-estimate. Hence, according to Sherif and Sherif (48), with parents, adults, and especially teachers holding a virtual monopoly on communications, these adults' attitudes have particularly powerful significance at this period on the child's life.

Philosophical Orientation

Rollins (43) reported that workshops providing in-service training for teachers who plan to obtain employment in Head Start programs frequently emphasize the democratic-developmental philosophy of child guidance characteristic of many university nursery schools. Explicated in the writings of Baruch (5), Ilg and Ames (27), and Read (41), this

philosophy is centered around democratic ideology and developmental stages of personality formation. The goal of this philosophy is the development of a socially responsible independence in young children but at the same time the development of high levels of creativity, self-esteem, and a sense of personal fulfillment.

Characterized by Read (41), the democratic-developmental philosophy of child guidance focuses on assisting the child in his fulfillment of basic needs and desires in socially acceptable ways. The adult has the responsibility of guiding and redirecting behavior in a manner related to the child's original motives and interest when behavior is indicative of social disapproval.

Ilg and Ames (27) maintained that the democratic-developmental philosophy takes into account the age and maturity levels of the child. A child is not to be pushed or forced to perform beyond his level of maturity. Parents, teachers, and other adults working with children should be cognizant of the child's unfolding abilities in order to enhance his environment and prevent him from becoming bored.

Read (41) characterized punishment as ineffective in the context of the democratic-developmental philosophy as punishment teaches what not to do rather than what to do.

Conscious guidance is advocated as effective when showing how and telling what is expected while also indicating what not to do. This aspect of guidance calls for numerous repetitions before a child actually learns the desired behavior. Redirection of undesirable behavior without shaming or blaming the child or without causing him to feel guilty is basic to this approach of child guidance. Redirection in this manner contributes to the child's feeling of self-respect and also assists the child in becoming more willing to follow suggestions, directions, and requests. Read continued by promoting the positive approach which she considered most effective when attempting to change behavior. The result for the child is usually the tendency to do what is suggested rather than a continuation of the misbehavior. To help the child feel secure and yet allow for growth toward independence and maturity, freedom is allowed within limits that the child can understand and cope with at his age and at his level of development.

Waring (62) advocated certain positive actions on the part of adults involved in guidance as necessary to help the child become self-accepting and at the same time develop and maintain self-respect. Waring included the following four action responses:

- 1) showing affection for the child despite his behavior;

- 2) accepting the child as the kind of person he is without attempting to change him;
- 3) giving help when needed to prevent frustration or to increase knowledge; and
- 4) showing an interest in and approval of the child's efforts and achievements.

Baruch (5) asserted that basic to child guidance, in the democratic-developmental orientation, is the acceptance of a child's feelings, even though they may be negative, and the reflection of those feelings back to the child as he displays them in words or actions. Read (41) stressed that the child be encouraged to explore with all his senses, and that creativity through dramatic play, music, dance, and art is encouraged but without models. The finished product is not of importance compared with the process. The emphasis is placed on the experience and on the process of doing and feeling within the child's chosen media.

Parent Attitudes

The assumption was made that parent attitudes are not consistently analagous to other adult attitudes toward children. Certain commonalities exist, however, and are reflected in the review of literature but with a limited focus on parent attitudes. The family is considered a unique unit when compared with other institutions and situations which supplement and support the family but which do not substitute for it.

Coast (12) compared attitudes of parents of preschool children with optimum attitudes for child guidance. The study was aimed at determining to what extent the generalizations involved in intelligent child guidance were functioning in the thinking of parents of preschool children. Knowledge tests were constructed for generalizations relating to physical growth, motor, and intellectual development. Coast reported results indicating that a significant number of parents did not recognize the implications of generalizations as applied in the tests.

Laws (35) developed four forms to be used for measuring attitudes and practices of parents concerning the social adjustments of children. The instrument consisted of: 1) a cross-out kit using words relating to parent-child relationships; 2) traits of parents which indicated attitudes; 3) practices of parents concerning social adjustment of children; and 4) responses of children which indicated their social adjustment. Laws concluded that the forms provided specific assistance to parents in organizing their thoughts upon problems of child adjustment and were a means for measuring changes brought about in parents' attitudes and practices through organized study.

Stogdill (53) devised several scales for measuring attitudes toward children. This investigator reported that

psychologists, on the average, disapproved of external control and approved of freedom for children. In a study of experiments, from 1899 to 1935, for measuring attitudes toward children, Stogdill (54) reported that parents indicated belief that a child should have some freedom but should be kept under strict control so that freedom is only nominal. The parents tended to approve of introvert and disapprove of extrovert social adjustment.

Gerald (23) suggested treatment of the child's symptoms of resistive behavior in early years, prior to entering school, by improving parents' attitudes toward the child. The preschool years offer more success than any other age period because patterns of reaction are not as fixed as those in subsequent years.

In a study by Miles (39), attitudes of parents appeared to be crucial factors closely related to the social behavior of children. This author also found that parents had very definite attitudes with respect to the management of children and that a very definite relationship existed between parents' opinions about child training and the status which the child achieved in his own social groups. In support of the Miles report, Symonds (55) ascertained a definite relationship between parental attitudes and the way parents behave toward a child and that child's own attitudes and behavior.

Concerning parental attitudes affecting satisfactory guidance, Berrien (8) stated:

Often parents are motivated by the best of intentions but through ignorance or superstition have slipped into a point of view that handicaps or thwarts the normal development of their children.

Stedman (52) proclaimed the importance of not only knowing the attitudes of parents and adults but of knowing them early in the child's life. With knowledge of parent attitudes, re-education of adults having acquired undesirable attitudes becomes possible during this early period.

"The essence of parent-child relations, it must be emphasized, lies more in how a parent feels than in what a parent does," was a statement by Symonds (55) with the reported concern that attitudes toward the child are more important than attitudes toward child rearing.

Fisher (21) emphasized that an individual's basic personality pattern is largely the result of what adults do or expect from him in childhood. Stedman's findings (52) inferred that generally, attitudes toward children and practices exercised by parents and other adults are major influencing factors in the experience of the early period of a child's life; thus, seemingly desirable to measure these attitudes and practices as a starting point for possible re-education or improved learning.

Johnson and Medinnus (30) attributed the interest of the child psychologist in parental attitudes to the notion that a basic, underlying attitude influences many behaviors of parenthood that are assumed to affect the personality development of the child. How the adult conceives of his role in relation to children will influence his attitudes as one responsible for and interacting with children.

Applicable to attitudes of adults, Johnson and Medinnus (30) identified problems in assessment of parent attitudes. Most of these emanated from attempts of psychologists to find a cause and effect relationship between attitudes and child behavior. These investigators reported the following:

- 1) An awareness of the possibility of changes in parent attitudes. For example, a large percentage of parents can readily name the age level of children that they regard as preferable and the level that they regard as least endurable.
- 2) The impact of the feedback provided by a certain kind of child on the parent's or adult's attitudes. Differences, from birth on, affect parents' attitudes toward the child. Because parental attitudes condition the child's further development of personality, growth of the handicapped, the chronically ill, or the extremely sensitive child may be hindered if adult attitudes are not conducive to optimum support and guidance needed during the early years.
- 3) The necessity for identifying the attitudes of the parent toward a particular child. Not only do parents' attitudes vary according to the age of the child, but also on the basis of such factors as sex, intelligence, personality, and appearance.

- 4) The emphasis of psychological literature on the crucial significance of parental attitudes. This impact of parent attitudes on child adjustment has made parents highly sensitive and defensive about revealing their attitudes.

Johnson and Medinnus (30) maintained that from the various attitude tests, two dominant attitudes emerge. One is the pattern of authority in the home and the other is the acceptance of the child as an individual. Findings indicated that regardless of the cause, an authoritarian attitude implies an emphasis on authority and a belief in the value and efficacy of an autocratic approach to child rearing. Control is pre-eminent with the parents being dominant and the child subordinate. Such attitudes were forced to elicit insufficient respect being shown for the youngster as an individual, for his rights, his wishes, and for his individuality. In general, Johnson and Medinnus viewed children of autocratic parents as being unstable. These authors found that harsh parental attitudes were related to personality problems of shyness and withdrawal. Conduct problems of truancy and stealing among kindergarteners were reported as results of negative parental attitudes toward children.

According to Johnson and Medinnus (30), within a given parent various attitudes toward child rearing interact and modify each other; thus, the combination of attitudes is

more important than the effect of any single attitude. Only when parent attitudes deviate markedly from the typical do these attitudes exert harmful influences on child adjustment. In such cases it is more likely that the attitudes toward the child, relative to acceptance or rejection, rather than toward child rearing, are the significant ones.

Stedman (52) directed an investigation of knowledges and attitudes of parents and other adults regarding child behavior in everyday situations. The study included 833 respondents consisting of 130 high school students, 499 college women, and 204 non-school attending adults. A measurement instrument was constructed whereby subjects responded to statements concerning areas of child psychology, mental hygiene, child development, parent education and nursery education. The instrument was tested and deemed valid and reliable for use in measuring insights of parents and others into the behavior of children. Data indicated a need for more education in child guidance, especially for parents. College students having had education and home economics courses scored significantly higher, at the .05 level of confidence, than those not having had such courses. Parents did not score higher than non-parents.

Teacher Attitudes

Lane (34) supported the importance of teacher training programs in placing particular emphasis upon the development of child guidance attitudes in prospective teachers and others working with young children. Kinzie (31) ascertained that the philosophy of child guidance most popular in the United States university nursery school laboratory programs is the democratic-developmental philosophy.

The greater flexibility of behavior during childhood in contrast to later periods of life implies a need for the most favorable environmental conditions including the attitudes of those individuals interacting with children. Barker (4) declared:

We are all familiar with the claim that the child is so completely father to the man that society is helpless before the behavior built into some of its members in childhood. According to this view, child psychology is basic not only to the individual, but also to societal adjustment. The hope that the ills of society can be cured in the nursery is undoubtedly strong--the flexibility of behavior in childhood is the basis of hope that the society may finally learn to build more adequate behavior into all of its children.

Toward understanding behavior problems of children, Shalloo (47) stated:

To the degree that parents, teachers, and other persons are mature and adequate in their

relationships with children, the personality will exhibit few of the characteristics now regarded as indicative of a problem child.

Baldwin, Kalhorn, and Breeze (3) indicated that education for adequate approaches to child care and guidance has become a primary concern for educators. Findings supported the contention that the democratic home is most satisfactory for optimum child development but that specific training is also needed by parents and teachers. Two types of training were suggested: 1) education about the implications and meaning of democratic ideals and 2) education in methods of guiding the behavior and development of children.

Noll and Noll (40) evaluated Wickman's research on teachers' attitudes toward children which proposed that teachers' attitudes should be influenced to become more like the "ideal" clinicians. Clinicians' attitudes, in this respect, were considered ideal because their judgments are based upon knowledge of research in child adjustment.

The difference in attitudes toward the behavior problems of children were interpreted by Noll and Noll (40) as reflecting differences in the roles of teachers and clinicians and the discharge of functions of the role incumbents. These authors advocated that teacher attitudes be changed not by exhortation but by information concerning child

behavior through seminars or other learning experiences and by practices in therapy with children. Evidence indicated that the teachers' functions were becoming less concerned with intellectual learnings and more concerned with life adjustments. These researchers concluded that teachers' attitudes toward the behavior problems of children reflect reduced importance of problems related to honesty, sex, truancy, and classroom order, and increased importance of withdrawing and recessive personality traits.

The research department, Tuscon Public Schools, conducted a study reported by Videen (58) during the 1967-1968 school year involving high school students participating in a vocational program training students for work with pre-school children individually or in groups. The training class was a study of human growth and development with emphasis on the preschool years. Students in the class had simultaneous experiences in observing and working with children of preschool ages. The students received training in guiding children in physical, emotional, and social development. A majority of their involvement in the program was to help each child gain a better foundation for competence in school and society. Twenty-four Pueblo High School students were included in the training program.

The above program included a human growth and development course consisting of two periods, one for classwork and one for work with children. Six weeks of the students' homeroom and lunch periods were utilized in preparing and serving children's lunches and eating with the children. Seventeen preschool children between the ages of three and five years participated in the program. These children represented the same ethnic groups in the same percentages as existed in the high school. Parents of the children were requested to attend class twice monthly in order to gain a better understanding of the program, its objectives, and the children's involvement.

The research department administered a test on Adult Attitudes Toward Children, designed by Votaw (59), to the high school students in the fall and at the end of the course in the spring. The pretest and post-test scores were compared in order to measure significant changes in attitudes that may have taken place during the school year. Changes in attitude were found to be highly significant beyond the .01 level of confidence. The data indicated this change in attitudes was a result of the students' participation in the training program. An overview of the program reported that the opportunities of studying human growth and development concurrently with observing and guiding young children in

their development should better prepare students to meet the responsibilities of marriage and adulthood as well as of employment in day care centers.

Two studies reported the utility of educational experiences for the enhancement of child guidance attitudes related to the democratic-developmental philosophy. However, the evidence presented appeared equivocal. Using the Child Guidance Survey developed by Wiley (63) and the Parent Attitude Survey designed by Shoben (50), Walters (60) found that an introductory course in child development and guidance produced attitude changes, in the direction of the democratic-developmental philosophy, in home economics college students. However, a control group of home economics students not taking the course changed in the same direction and almost to the same degree.

Findings in a follow-up study by Walters (61) indicated that college seniors in home economics continued changing toward this philosophy following completion of the introductory course. Walters concluded that the whole program of the students, rather than a specific course in child guidance, was influencing attitude change.

Marshall and others (37), using the Parent Attitude Research Instrument developed by Schaefer and Bell (45),

found that the child guidance attitudes of college students changed while taking an introductory child development course. However, they found that an introduction of the democratic-developmental philosophy of child guidance to the students at the beginning of the course and then an opportunity to observe the use of child guidance techniques implementing this philosophy in a laboratory nursery school increased attitudes of students who were already highly reflecting the philosophy but decreased such attitudes of students who were initially low.

Under the direction of Sheerer, a demonstration project, Mental Health in Child Care Centers (38), was conducted at the University of Georgia from 1960 to 1963. A two-phase study was designed to test for planned child guidance attitude change in teachers or prospective teachers of young children.

An assumption of the Georgia study, as reported by Rollins (43), was that if there was a change in the child guidance attitudes of the experimental but not of the control subject during phase one, and if the community class subjects had a similar change during phase two, the change of the experimental subjects attributed to the workshop would be a genuine change. The first phase of the research involved an intensive three and one-half week workshop on

methods and techniques of educating young children. Child guidance attitudes of both an experimental and a control group of subjects were measured at the beginning and again at the end of the project. The second phase centered around a nine month course for day care center personnel in eight Georgia communities. The community classes were taught by the subjects of the first phase. Instruction included units on child guidance emphasizing the democratic-developmental philosophy. The community class subjects were measured at the beginning and at the end of the course to test for attitude change toward child guidance.

The experimental group in phase one consisted of 19 persons selected from an identified population of 59 individuals eligible for the workshop. The control group consisted of 15 women selected from 40 persons eligible for but not participating in the workshop.

The second phase of the Georgia study, consisted of 155 students who completed a community course for day care center personnel. These students were enrolled in classes in eight Georgia communities. The majority of participants were not college graduates but were currently employed in day care centers in their respective communities.

The instrument used in phases one and two was the Inventory of Attitudes on Child Guidance (IACG) developed

by Kinzie (31) specifically to operationalize attitudes reflecting the democratic-developmental philosophy of child guidance. This instrument was oriented toward teachers rather than parents of young children.

Statistical analysis, conducted by Rollins (43), consisted of the standard "t" test for a correlated sample to evaluate score changes for the subjects in each of the groups. Scores were computed on each of eight scales for each subject from both the before and after responses of the phase one and phase two groups, respectively. The results supported the expectation that members of the experimental group would change their attitudes in the direction of the democratic-developmental philosophy of child guidance during the course of the workshop while members of the control group would not change. A significant change was reported at the .05 level of confidence on all eight scales in the experimental group. Students in the community classes, taught by experimental group subjects, also changed their attitudes in the direction of this philosophy on seven of the eight scales. These changes were highly significant at the .01 level of confidence. No significant change was reported on the scale, "Encouraging Verbalization."

Scott and Brinkley (46) studied the role of supervising teachers in relation to attitude patterns of student

teachers. The study indicated that the supervising teacher does influence the emerging attitude pattern of the student teacher.

Courtney (14) analyzed four supervising teacher attitude score levels as measured by the Minnesota Teacher Attitude Inventory and compared these levels with scores obtained by student teachers on the same test. The study was designed to develop coefficients of orthogonal comparisons for the analysis. The study analyzed both the Minnesota Teacher Attitude Inventory post-test score and the Minnesota Teacher Attitude Inventory difference figure. The sample included an identified population of 24 student teachers and their supervising teachers. The research was designed to study the influence of the supervising teacher's attitude on the attitude of the student teacher.

Findings indicated that changes in attitude were initially the same for male and female groups. When post-test scores were analyzed, the home economics group (female) had higher mean scores than the male student teacher group. The study suggested that planners of curriculum consider this variation between male and female students when training for the acquisition of democratic principles.

Fisher (22) delineated, from trends in research, three types of parental and teacher roles. These were representative of dominant roles during specified time periods of the past 30 years. The rejecting role was acceptable prior to the advent of permissiveness and child oriented philosophies of the late forties. The warm reactive role followed with emphasis on affective responses of the adult to the child. Within the last decade, the warm initiating role emerged with the adult assisting the child in gaining information evaluating the consequences of behavior, and making decisions for himself. These latter behaviors were in the context of warmth and friendliness toward the child, providing the attitude atmosphere conducive to a democratic approach to child guidance.

Role conceptions held by Heat Start teachers were found to involve variables such as age, marital and maternal status, type and extent of experience with children of different ages, and educational background. More of the younger teachers reported warm initiating role conceptions reflecting a democratic philosophy while greater variation in role conceptions occurred among older teachers.

Fisher (22) stressed that training and experience were negatively related to the current or warm initiating role.

When the age distributions of the groups of teachers were examined, those with high initiating response patterns were higher in the proportion of young women. No differences were indicated between the groups with respect to marital or maternal status. Recent experience in teaching kindergarten-primary children was found to be unrelated to conception of the current role. The investigator assumed that teachers participate in some form of in-service training throughout the professional career, thus the informal education and the experience itself was not accompanied by measurable differences in role conceptions reported. Data indicated that, while no link could be found between professional education and experience on the one hand and role conceptions on the other, personal experiences may have contributed to greater change in role conceptions.

The findings in the above study suggested that either the less formal methods of education facilitate change in conceptions, or the content of such communications as mass media and other informal educational media more directly specifies those behaviors comprising the current role. The analysis of data pointed to regularity in change in role conceptions. Half of the population was assumed to change toward new roles during each five year period.

Ingram (28) insisted that philosophical and educational principles are no less important than those of a psychological nature. In any plan of education, the individual should be thought of as a personality in a social setting with the purpose being complete, harmonious growth and development. These principles place emphasis on the child as a growing individual, on the potentiality and rate of mental development, on the physical and social levels of maturity, on the nature of the learning processes, and on the conditions of the environment.

THE PROBLEM

Two assumptions underlie the present study. The first is the appropriateness of the democratic-developmental philosophy of child guidance held by many children's programs throughout the United States. The second assumption is that experiences with young children, while studying child development, would significantly influence students' beliefs and opinions reflected in their attitudes toward children. The experimental treatment in this study was an experience of observing and working with young children in a preschool program. The central problem of the study was to compare attitude changes of students receiving this experience with those of students not receiving this experience.

For the present study the major purposes were:

- 1) To test the underlying hypothesis that high school students studying child development will have greater favorable changes in attitudes toward child guidance, reflective of the democratic-developmental philosophy, if they have experiences in observing and working with children in a preschool program during the child development course;
- 2) To determine the extent of effect that experiences with children in preschool programs have on students' attitudes toward children;
- 3) To compare attitude changes between experimental and control group subjects in four schools prior to and following the child development course experiences; and
- 4) To report findings and formulate implications and recommendations for further study and for planning learning experiences for individuals preparing to assume roles as teachers, aides, and/or parents of young children.

On the basis of the theoretical framework, assumed appropriate for this study, the investigator formulated the following operational hypothesis:

High school students having an experience with children in a preschool program while studying child development will have greater favorable changes in attitudes toward child guidance, reflective of the democratic-developmental philosophy, than students not having this experience while studying child development.

The following terms were defined for use in the study:

- 1) Attitude.--Resulting from mediation and conditioning, a learned predisposition to respond to an object or situation in a favorable or

unfavorable manner. An organization of emotional, perceptual, and cognitive processes with respect to some aspect of the individual's environment.

- 2) Belief and opinion.--(Used synonymously in this study.) Symbols of attitude; means for measuring attitude. Determinants or consequents in the unidimensional form of indicators of an individual's attitude, the function of which elicits an attitude toward any object or situation.
- 3) Child guidance.--The process of helping the child to fulfill basic needs and desires in socially acceptable ways and to develop intrinsically motivated controls leading ultimately to exclusion of the need for external guidance. The child's original motives and interests are of major consideration in the redirection of undesirable behavior.
- 4) Democratic-developmental philosophy.--The theory underlying beliefs, concepts, and attitudes centered around democratic ideology and developmental stages of personality formation. This philosophy assumes behavior of mentally healthy adults and children to reflect a striving toward self-fulfillment, growth, and an attempt to make use of all inner capacities.

Rationale for this study includes the need for more applied research in the area of training individuals for developing competencies to work effectively with young children, for continuous evaluation of experiences of individuals involved with young children in various programs, and for continuous study of attitude changes in relation to learning experiences.

CHAPTER II

P L A N O F P R O C E D U R E

The conceptual basis of the present study emerged from implications for the need to affect attitude change toward child guidance on the part of students preparing to assume roles as teachers, teacher aides, and parents. The investigator's major interest was directed toward determining attitude change of students as influenced by experiences with young children in preschool settings while studying child development.

A surge of secondary school courses in child development and child guidance, emphasizing human growth and development and guidance of young children, stimulated this study of the relationships between student beliefs, presumably gained through course experiences, and attitude changes toward young children. Many high school home economics and child development courses are incorporating laboratory or community preschool programs as part of the course experiences; thus, a study of the effects of such experiences on students' attitudes toward children seemed not only appropriate but essential.

The plan of procedure for this study specified the variables, instrumentation, sampling, research design and statistical analysis techniques, and the hypothesis under which the variables were tested. For the present problem, the primary concern was to study and compare the extent of change in attitude toward child guidance between experimental and control groups of students in four high school child development courses in the southwestern, eastern, north central, and western regions of the United States.

VARIABLES

The present study focused on two dimensions of the attitude function: 1) the effect of the experience of working directly with and observing young children while studying child development and 2) the effect of a course experience in a given school. The literature relating to experiences of high school students working with children while studying child development was found to be extremely minimal. The investigator has, therefore, selected and defined the following variables for this study:

The Experimental versus Control Situation

The experimental situation consisted of high school students' experiences in working with and observing young children in a preschool program as an additional part of the

child development courses. In order to assure that change in attitude was not caused by some outside variable, a control situation was utilized. The control and experimental situations were alike in all respects with the exception of the additional experience for the experimental situation. The experimental and control groups of students, within each school, were in one class with the same teacher. Essentially, the only difference in the child development course was the additional experience in the children's program for the experimental situation.

The Schools

Each of four participating high schools offered a similar child development course. The democratic-developmental philosophy of child guidance was utilized in all the courses and in the preschool programs. These schools were assumed to be typical of many across the United States in socio-economic and cultural as well as educational aspects.

INSTRUMENTATION

The Inventory of Attitudes on Child Guidance (IACG) was selected for the purpose of measuring students' attitudes toward child guidance before and after the course experiences in child development. This instrument was designed by Kinzie (31) to measure attitudes toward child guidance reflective

of the democratic-developmental philosophy. The effect of the experimental situation upon the students' attitudes in comparison with the effect of the control situation was the primary concern of this study and, thus, the IACG was judged as appropriate for securing data on attitudes.

The IACG was patterned after the well known Parent Attitude Research Instrument (PARI) designed by Shaefer and Bell (45) specifically to operationalize parent attitudes reflective of the democratic-developmental philosophy of child guidance. Kinzie undertook a study to assess the validity of the IACG. The history of the construction of this instrument and the validation study illustrate the care to include all areas representative of the philosophy with discriminating items having face validity for measuring each area.

Results of Kinzie's study (31) supported the content validity for the items which appear on each scale of the IACG. The construct validity of the attitude inventory for measuring the democratic-developmental philosophy of child guidance was supported for eight of the nine original scales with scale six being the exception. A factor analysis and a correlation of the IACG scales with the PARI scales, matched on their validity, further supported the construct validity of the IACG. (For details of the development of the IACG

and tests of the validity and reliability of the separate scales, see Kinzie, 1963.)

Kinzie found no construct validity for scale six of the original inventory which contained seven items; thus, scale six was eliminated from use in the present study and the remaining three scales were renumbered. The inventory, as used in this study, contained a total of 61 items subdivided into eight scales with seven to 10 items on each scale.

In order to analyze the antecedent and consequent effects of the students' experiences, each scale on the IACG was utilized as an independent variable. The scale titles and definitions are summarized:

- 1) Accepting the Child as He Is.--Each child is viewed as a worthwhile individual regardless of physical, mental, and/or emotional limitations. The child is neither pushed nor forced to measure up to preconceived standards. The adult, interacting with the child, recognizes that by accepting the child, the child is being helped to accept himself as a worthwhile person.
- 2) Understanding the Child's Feelings.--The adult exercises sympathy with the child. The adult

views things and circumstances from the child's point of view.

- 3) Reflecting the Child's Feelings.--The adult reflects, verbally, the feelings which the child is expressing through behavior or verbalization, recognizing that by doing so the child is able to more readily recognize and accept his own feelings.
- 4) Accepting the Child's Feelings.--A child is not shamed for acting or saying what and how he feels. The adult recognizes the more favorable results of allowing a child to say or act out how he feels rather than suppress feelings within himself. The adult is not threatened by the child's expression of negative feelings.
- 5) Redirecting Undesirable Behavior.--The child is allowed to accomplish his original purpose in an acceptable manner without being shamed or blamed, and without being made to feel guilty. The adult indicates the appropriate behavior to the child.
- 6) Encouraging Verbalization.--The child is given many opportunities for free, creative type

dramatic play and activity, allowing for free verbal expression of feelings. The adult listens attentively and sincerely to the child's suggestions.

- 7) Encouraging Independence and Initiative.--The adult observes the child and waits before offering help. The adult plans for flexibility through free play periods. The child is allowed to make choices concerning activities and decisions which affect him.
- 8) Encouraging Creativity.--The child is provided a wide variety of self-expression materials and is not required to produce a finished product. The child may use a variety of media. The adult recognizes that the process of working with the materials and expression of oneself is of greatest importance for the child.

Examples of items used on each scale included such statements as "A child's misbehavior is usually a result of misunderstanding, anger, fear, or hurt," "Adults should not permit frequent crying in a child," and "Punishment may teach a child what not to do, but it does not teach him what to do." To such items, respondents were requested to check "A",

strongly agree; "a", mildly agree; "d", mildly disagree; or "D", strongly disagree.

A score was assigned by the investigator for each item on the eight attitude scales to denote amount of knowledge and experience needed for each of the 61 components in the inventory. Each response was scored 1, 2, 3, or 4 with a high score indicating a greater degree of agreement with the democratic-developmental philosophy of child guidance. For scoring purposes, scores on certain items were reversed where strong disagreement with the statement denoted agreement with the philosophy. Summated scores were obtained by totaling item scores on each scale.

Background information on students was secured through use of the "Factual Information About Yourself" survey sheet which accompanied the IACG. The investigator designed this survey sheet primarily for the purpose of securing information about students which would lend to verification of the assumed representation of a typical population. Areas included were age, sex, classification in school, courses and experiences related to studying children, religious affiliation, family information, and residency.

SAMPLING

Four schools, currently offering child development courses to high school students, were invited to serve as the basis for a randomly selected sample of experimental and control subjects from which inferences could be drawn, based on statistical data, about the population performance. Data for measuring and comparing attitude change toward child guidance were collected from 146 female students enrolled in child development courses in the four schools. Subjects ranged in age from 15 to 19 years. Schools were selected from four different areas of the United States in order to obtain data representative of a broad population of student performances. Participating schools included:

- | | |
|---------------------------|-----------------------------------|
| 1) Arlington, Virginia | - Wakefield High School |
| 2) El Paso, Texas | - Irwin High School |
| 3) Ripon, Wisconsin | - Ripon High School |
| 4) Sun Valley, California | - Francis Polytechnic High School |

These schools offered courses in child development which incorporated a simultaneous experience in a preschool program. The democratic-developmental philosophy was utilized as the basis for teaching-learning experiences in the child development courses and in the preschool programs.

One child development course in each of the four schools was subdivided into a control group and an experimental group thus comprising a total of eight groups, four experimental and four control, to be utilized in the study. The control groups participated only in the child development course, while the experimental groups participated in the child development course and in the children's program. In each school, both experimental and control groups had the same course with the same teacher.

RESEARCH DESIGN AND STATISTICAL ANALYSIS TECHNIQUES

The hypothesis to be tested in this study follows:

As a result of the experimental situation, in the form of experience in working with and observing young children while studying child development, there will be a significant attitude change toward child guidance on the part of the experimental subjects but not on the part of the control subjects over a period of one semester. A favorable change in the direction of the democratic-developmental philosophy will be reflected by a statistically significant gain in IACG post-test scale scores by the experimental subjects but not by the control subjects by the end of the experiment.

The operational null hypotheses are stated:

- 1) There will be no difference between the respective school's experimental and control groups' attitudes from the pretest to the post-test period of the experiment.
- 2) No change in attitudes occur over the trial period of one semester.
- 3) The experiment will effect no difference in agreement and/or disagreement with the philosophy among experimental and control groups in the four schools.

The .05 level of significance was selected as the basis for rejection of the null hypotheses. This level or beyond was accepted by the investigator as a result of the paucity of research in the area of student attitudes toward child guidance and because this study is an exploratory one. Rejection of the null hypotheses at the .05 level of significance would be interpreted as an indication that the experience with children in a preschool program was a successful situation for changing high school student attitudes toward child guidance. Failure to reject the null hypotheses would be interpreted as an indication that no difference existed between the experimental and control subjects and that the experience with children in the preschool programs had no significant effect on the attitude change of experimental subjects.

An analysis of variance was judged as being an appropriate technique for treating the data in this study. A two-factor mixed design of subjects over groups by trials permitted: 1) comparison of the differences in the overall attitude change of the subjects in eight groups, four experimental and four control; 2) evaluation of the changes in attitudes shown by the subjects during the experimental and control situations; and 3) comparison of the interaction effects between trials by experimental versus control situations. Both initial and final measurements were made in order to give the research a more complete analysis of the problem. A two-way analysis of variance was initially computed to determine whether statistically significant differences existed between control and experimental groups prior to beginning the experiment.

Scores from the IACG were tabulated and the analysis of variance computed. Where the F ratio was found to be significant at the .05 level or beyond, Duncan's New Multiple Range Test was utilized as a means of comparing the differences of attitude scores between groups, two at a time, for both pretest and post-test data.

The two major factors being analyzed included: 1) experimental versus control situations for eight groups of subjects on pretest and post-test bases; and 2) four

participating schools, each including a control and an experimental group. The conceptual framework for blocking the data consisted of the following design:

		Schools				
		1	2	3	4	
Pretest	Control	20 Ss	Control	22 Ss	Control	14 Ss
	Experimental	20 Ss	Experimental	22 Ss	Experimental	14 Ss
Post-test	Control	20 Ss	Control	22 Ss	Control	18 Ss
	Experimental	20 Ss	Experimental	22 Ss	Experimental	16 Ss

Schools: 1) Arlington, Virginia - Wakefield
 2) El Paso, Texas - Irwin
 3) Ripon, Wisconsin - Ripon
 4) Sun Valley, California - Francis Polytechnic

The present research resolved into a problem with child development and child guidance training ramifications. The knowledge of effects of the experiences with young children upon student attitudes was considered important to both college or university and high school teachers. This study

approached the analysis of teaching-learning situations in child development which include additional experiences in working with and observing young children.

CHAPTER III

P R E S E N T A T I O N O F D A T A W I T H D I S C U S S I O N O F F I N D I N G S

The overall purpose of the statistical analysis was to test the hypothesis that as a result of the experimental situation, in the form of experience in working with and observing young children while studying child development, there will be a significant attitude change toward child guidance, on the part of the experimental subjects but not on the part of the control subjects. A statistically significant gain in IACG post-test scale scores by experimental, but not by control subjects, would be expected to reflect greater favorable attitude change as a result of the experiment. Data collected in this study of students' attitudes toward child guidance, reflective of the democratic-developmental philosophy, were analyzed for the specific purposes of:

- 1) Comparing groups of subjects in the four schools relative to personal background information;
- 2) Comparing the initial interaction effects of each school on the experimental versus the control subjects' attitude change;

- 3) Comparing degree of agreement with the philosophy of experimental subjects and control subjects prior to the experimental situation;
- 4) Comparing attitudes of subjects between the four participating schools prior to the experimental situation;
- 5) Comparing attitude change, and the direction of change in relation to the philosophy, of control subjects with experimental subjects over the trial period of one semester's experience;
- 6) Comparing overall attitude change between eight groups of subjects, four experimental and four control; and
- 7) Comparing overall degree of agreement with the philosophy before the child development course with overall degree of agreement after the trial period of one semester's experience.

Percentages of subjects relative to background information were computed from data collected by the survey, "Factual Information About Yourself." These percentages are reported in Table I.

Analyses of variance were applied to data collected by the IACG for measuring attitudes and attitude change on eight scales representing areas of the democratic-developmental philosophy of child guidance. Examination of Table II, Parts I-VIII, reveals the F ratios for pre-experimental comparisons of attitudes between 1) interaction effects of experimental and control groupings by school; 2) experimental and control groups; and 3) schools. Table III, Parts I-VIII

present summaries of F ratios for post-experimental comparison of attitudes between 1) interaction effects of experimental and control groupings over the trial period; 2) experimental and control groups; and 3) pretesting and post-testing.

Table IV, Parts I-VIII present pretest and post-test mean scores by experimental and control groups in each school and the number of subjects in each group. These tabled scale scores were utilized in the Duncan's New Multiple Range Tests (DNMRT) and in the graphic illustrations. All tables may be found in Appendix C.

The DNMRT was utilized to distinguish between individual groups in cases where the F ratio in the analyses of variance indicated statistically significant differences among various groups. These comparisons of individual groups, two at a time, are presented in the Duncan's New Multiple Range Tests, I-X.

Figures 1-24 explicate, graphically, the comparisons of mean scores for the interaction and main effects analyzed prior to and following the child development experiment for each of the eight independent variables. Figures 25-28 illustrate the pretest and post-test attitude performances of experimental and control groups in each of the schools for

the eight scales on the Inventory of Attitudes on Child Guidance. The relationship of attitudes held by experimental and control subjects can be perceived graphically from the focus of schools, treatment groupings, trials, or a combination of two or more of these variables.

PERSONAL BACKGROUND INFORMATION

Experimental and control groups within all four schools appear to have commonalities in school and family background and in experiences with young children. A major difference between subjects' backgrounds occurred in the type of residential area for subjects in one school. Table I illustrates the percentages in the following discussion of background information.

Subjects ranged in ages between 15 and 19 years. The median age of 17 years included 45 per cent of the students, while 21 per cent were age 16 and 25 per cent were age 18. Age groups of 15 and 19 years included, respectively, 4.0 and 5.0 per cent of the students.

Subjects included in the child development experiment included high school female students in grades nine through twelve. Sixty-three per cent of the participants were eleventh graders, with 7.0 per cent ninth graders; 25 per cent tenth graders; and 5.0 per cent twelfth graders.

Eighty-one per cent of all students in the study lived in families with both a father and a mother. Divorced parents were found in 14 per cent of the families represented, while 5.0 per cent of the parents were widowed.

With the exception of subjects in School 3, Ripon, 90 to 100 per cent of the participants resided in either suburban or urban areas. The Ripon subjects were divided between small town and rural residency; 36 per cent in the former and 64 per cent in the latter.

Information concerning subjects' experiences with young children outside of the school environment revealed that students participated in activities with children in child day care centers, Head Start programs, nursery schools, summer recreation programs, church programs, and in private homes. From 89 to 100 per cent of all subjects had some responsibility and contact with young children in these settings, more in private homes than in the other situations. Some subjects had experiences in more than one area.

ANALYSIS OF ATTITUDE DATA

Data collected by the IACG were analyzed and reported for eight areas of child guidance. The independent variables, Scales 1 through 8, measured attitudes in each respective area with presentation of data in the following discussion:

Scale I--Accepting the Child as He Is

Analysis of child development students' attitudes toward child guidance for the independent variable, accepting the child as he is, was made prior to the experimental phase of this study. Table II, Part I summarizes the comparison of attitude scores between students selected for inclusion into the experimental group and students selected for inclusion into the control group in each of the four participating schools. Computations for the interaction term resulted in no significant difference between the respective schools' experimental and control groups in the period prior to the experimental phase of the study. The main effects, however, resulted in statistically significant initial difference between experimental and control groups at the .01 level. Figure 1 illustrates the relationship of all experimental subjects to all control subjects prior to the experiment, indicating that the experimental subjects with a mean of 2.913 were initially in greater agreement with the philosophy than were the control subjects with a mean of 2.689. A statistically significant difference between schools at the .05 level was computed by the initial analysis of variance. Presented in DNMRT I, the test for differences indicated, at the .05 level of significance (86 per cent Protection) that, initially, a difference in attitude scores for Scale 1

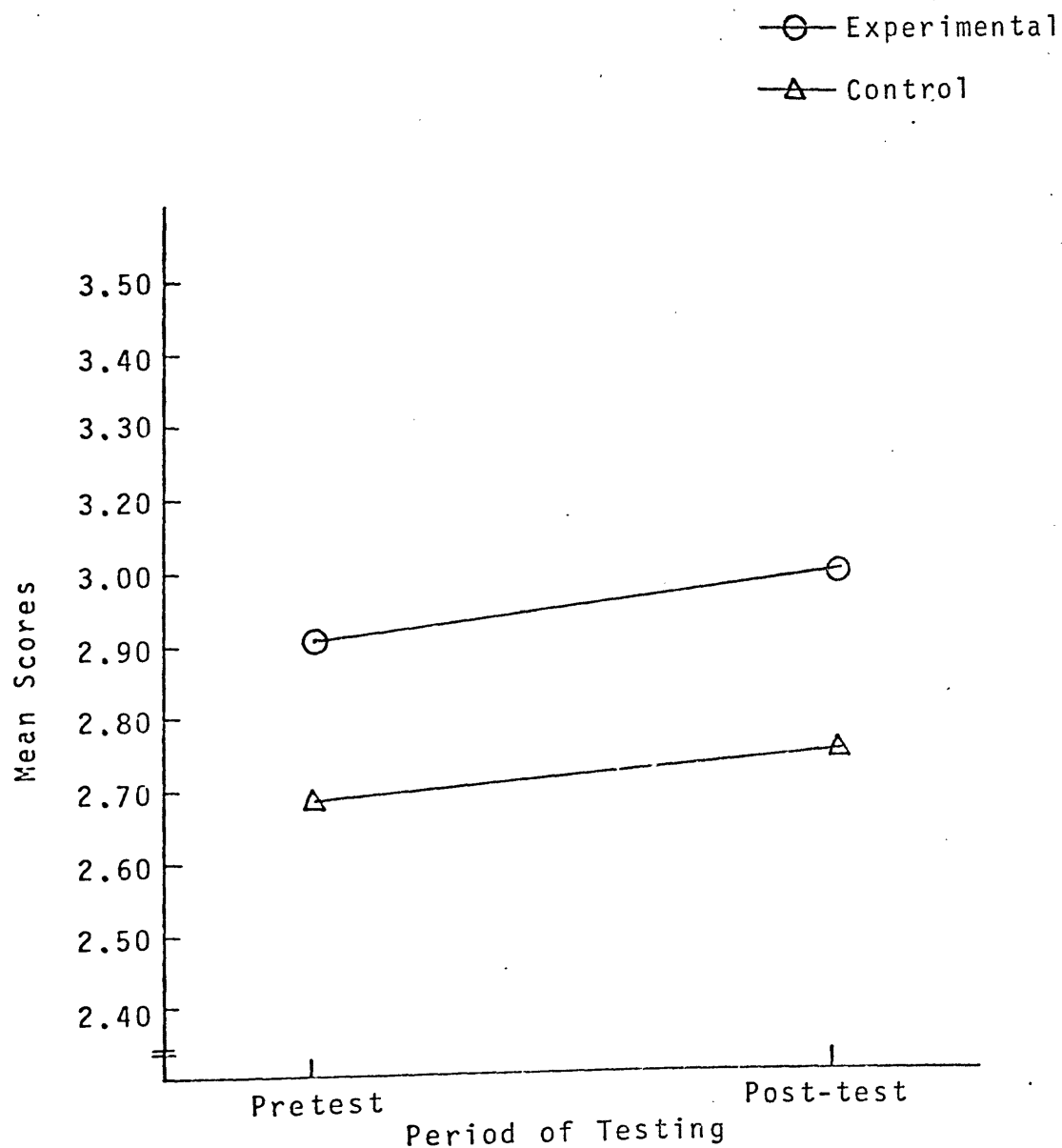


Figure 1
Mean Scores of Experimental and Control Subjects on
Scale 1, Accepting the Child as He Is

DUNCAN'S NEW MULTIPLE RANGE TEST I
DIFFERENCES BETWEEN FOUR SCHOOLS FOR SCALE 1--
ACCEPTING THE CHILD AS HE IS

	(1)	(2)	(3)	(4)	(5)
*School Means	2	1	3	4	**Shortest Significant Ranges
	2.655	2.850	2.861	2.876	
2.655		.195	.206	.221	$R_2 = .165$
2.850			.011	.026	$R_3 = .174$
2.861				.015	$R_4 = .180$
	2	1	3	4	

Any two treatment means not underscored by the same line are significantly different

Any two treatment means underscored by the same line are not significantly different

*School

- 1) Arlington
- 2) El Paso
- 3) Ripon
- 4) Sun Valley

**.05 level of significance on
138 df

existed between School 2 and each of the other three schools respectively. The relationship between attitudes held by experimental and control groups in each of the four schools for the pretest period can be seen in Figure 2.

For Scale I, Table III, Part I, presents a summary of comparisons of mean squares for the interaction terms and main effects from pretest to post-test. Neither interaction of the experimental situation at the pretest and post-test levels, nor interaction of the control situation at the pretest and post-test levels indicated significant changes in subjects' attitudes toward acceptance of the child reflecting the underlying philosophy of the child development courses and children's programs. Figure 2 illustrates the relationships of attitude scores reported in Table IV, Part I, for the interaction effects of the experiment. The experimental group in School 1 was the only group to evidence increased attitude change over the trial period. The null hypothesis that no significant differences will occur between experimental and control groups by the end of the experiment was not rejected. Thus, for Scale I, Accepting the child as he is, subjects having had experience in working with children while studying child development did not change attitudes significantly when compared with subjects not having had the experience with children.

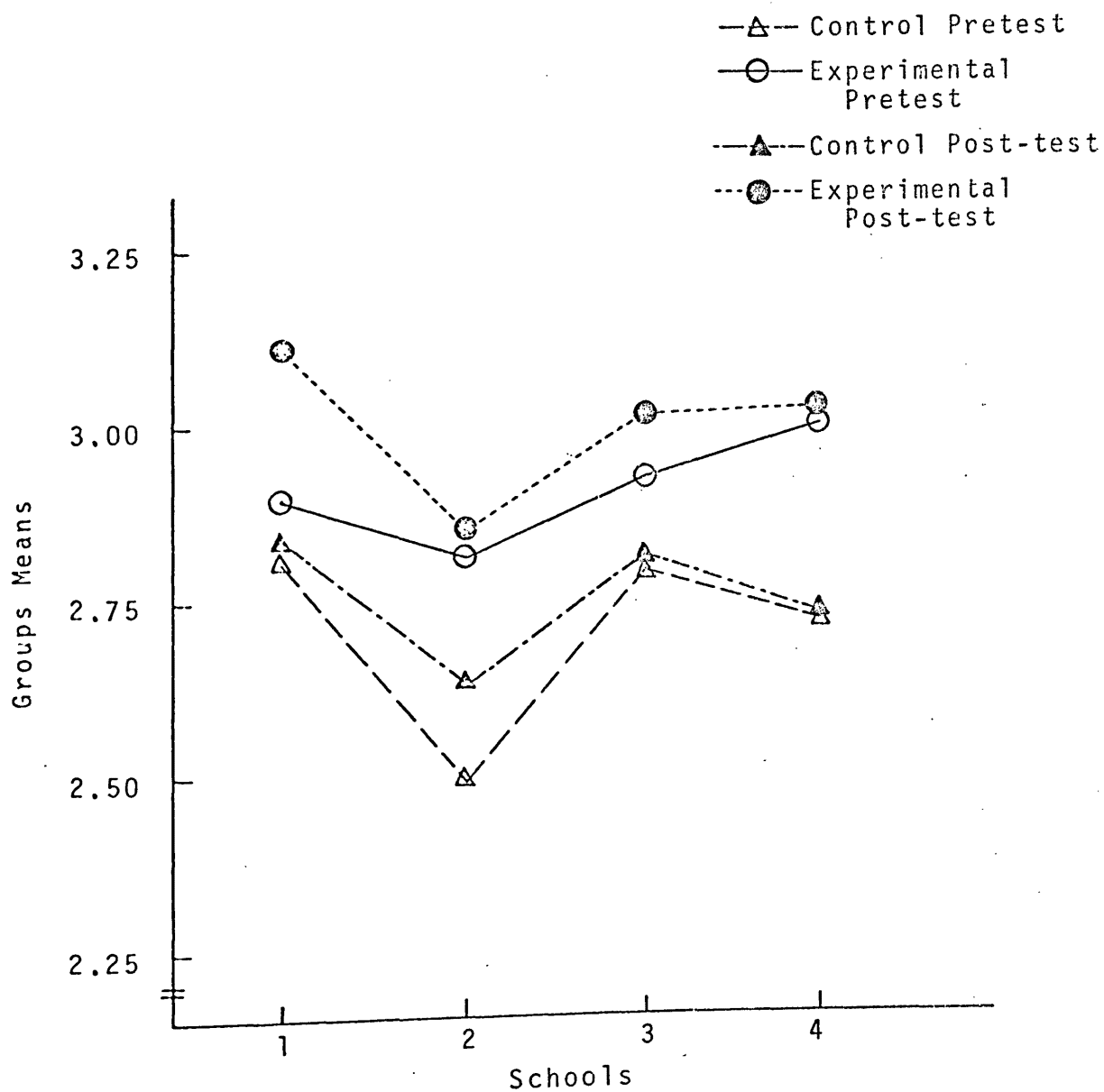
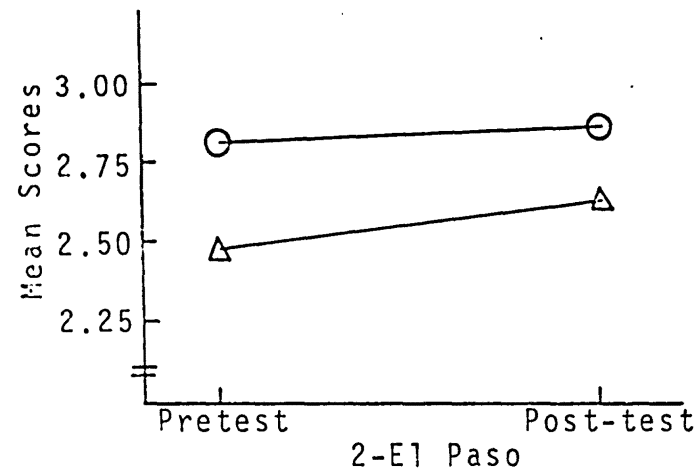
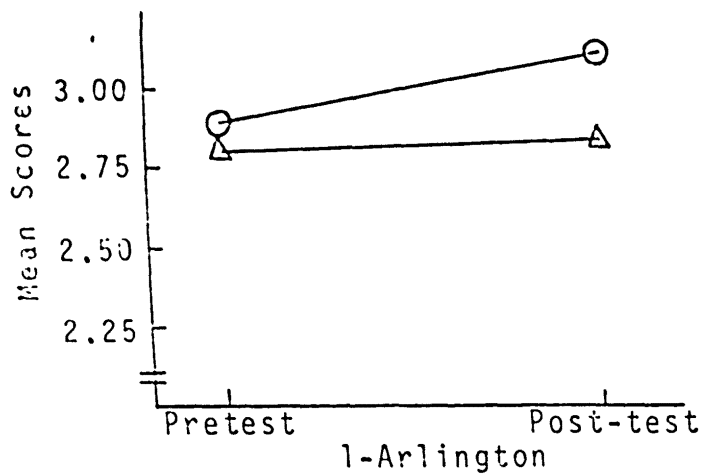


Figure 2

Pretest and Post-test Means for Experimental and Control
Groups in Four Schools for Scale 1 -
Accepting the Child as He Is



—○— Experimental
—△— Control

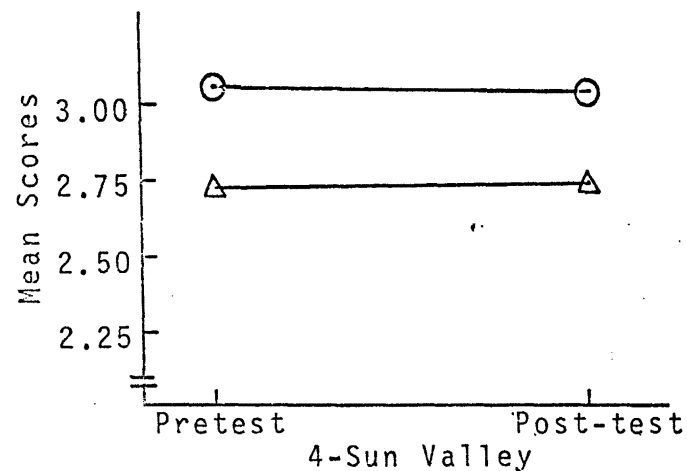
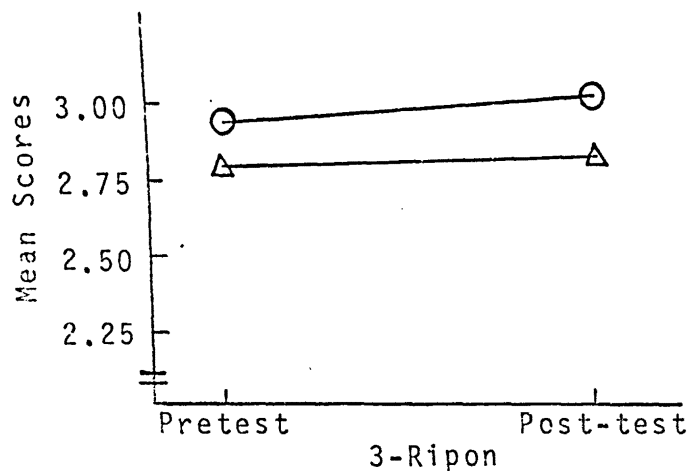


Figure 3

Means for Experimental and Control Groups for Each School over the Period of Testing on Scale 1 - Accepting the Child as He Is

Comparison of the eight groups of subjects, four control and four experimental, revealed a significant difference in attitudes for acceptance of the child variable at the .01 level. Significant difference at the .05 level (66 per cent Protection) was found between School 2 control group and School 4 experimental group on the DNMRT II. The latter evidenced mild agreement with the philosophy, having an average mean score of 2.950, whereas the control group in School 2 scored only slightly above the mid score of 2.500 with an average mean of 2.570. Thus, the null hypothesis that experimental and control groups in the four schools will reflect the same degree of agreement and/or disagreement with the philosophy was rejected; however, this was only because of a difference in two of the groups, which were from different schools.

An F ratio of 6.877 on 1, 138 df indicated that the trial period of one semester's experience produced a significant change in subjects' attitudes. The null hypothesis that no change will occur over the trial period was rejected at the .01 level of significance. Thus, for all subjects considered together as one group, there was a difference in the pretest to post-test attitude scores; pretest mean 2.793 and post-test mean 2.873.

DUNCAN'S NEW MULTIPLE RANGE TEST II

DIFFERENCES BETWEEN EIGHT GROUPS OF EXPERIMENTAL AND CONTROL SUBJECTS

FOR SCALE 1--ACCEPTING THE CHILD AS HE IS

SG*	(1) 2C	(2) 3C	(3) 2E	(4) 4C	(5) 1C	(6) 3E	(7) 1E	(8) 4E	(9) **Shortest Significant Ranges
Means	2.579	2.741	2.753	2.778	2.820	2.837	2.949	2.950	
2.579		.162	.174	.199	.241	.258	.370	.371	R ₂ = .280
2.741			.012	.037	.079	.096	.208	.209	R ₃ = .295
2.753				.025	.067	.084	.196	.197	R ₄ = .305
2.778					.042	.059	.171	.172	R ₅ = .312
2.820						.017	.129	.130	R ₆ = .317
2.837							.112	.113	R ₇ = .322
2.949								.001	R ₈ = .325
	2C	3C	2E	4C	1C	3E	1E	4E	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*SG--School Group
1) Arlington C--Control
2) El Paso E--Experimental
3) Ripon
4) Sun Valley

** .05 level of significance on 138 df

Differences in attitude toward children held before and after the experiment by experimental and control groups were attributed, by the analysis of variance, to natural variability. However, when analyzed by the Duncan's New Multiple Range Test, certain groups were statistically significantly different one from the other. Differences at the .001 level (98 per cent Protection) were found between each group and one or more other groups. School 2 control pretest group score differed from each of the other group's pretest and post-test scores, respectively, with the exception of its own post-test score and the control pretest group in School 4. The DNMRT III presents comparisons of groups, two at a time, for the 16 average mean group scores for Scale 1.

The results of the Duncan's New Multiple Range Test indicate that groups, when compared individually, two at a time, to either their own change from pretest to post-test or when compared to other group's pretest or post-test changes, resulted in some notable differences in group attitude scores; however, in terms of the total analysis, when comparing all of these group attitude scores, both pretest and post-test, there were no overall significant differences among the groups. Thus, normal variability of attitude scores for the samples taken was of such a magnitude that when all group scores were compared no significant difference

DUNCAN'S NEW MULTIPLE RANGE TEST III

DIFFERENCES BETWEEN EIGHT EXPERIMENTAL AND CONTROL GROUPS AT THE PRETEST AND POST-TEST

LEVELS FOR SCALE 1--ACCEPTING THE CHILD AS HE IS

SGP* Means	(1) 2C+	(2) 2C-	(3) 4C+	(4) 4C-	(5) 3C+	(6) 1C+	(7) 2E+	(8) 3C-	(9) 1C-	(10) 2E-	(11) 1E+	(12) 3E+	(13) 3E-	(14) 4E-	(15) 4E+	(16) 1E-	(17) **Shortest Significant Ranges
	2.491	2.632	2.722	2.733	2.793	2.805	2.818	2.821	2.840	2.859	2.895	2.929	3.021	3.031	3.050	3.115	
2.491		.141	.231	.242	.302	.314	.327	.330	.349	.368	.404	.438	.530	.540	.559	.624	R ₂ = .272
2.632			.090	.101	.161	.173	.186	.189	.208	.227	.363	.297	.389	.399	.418	.483	R ₃ = .281
2.722				.011	.071	.083	.096	.099	.118	.137	.173	.207	.299	.309	.328	.393	R ₄ = .287
2.733					.060	.072	.085	.088	.107	.126	.162	.196	.288	.298	.317	.382	R ₅ = .291
2.793						.012	.025	.028	.047	.066	.102	.136	.228	.238	.257	.322	R ₆ = .295
2.805							.013	.016	.035	.054	.090	.124	.216	.226	.245	.310	R ₇ = .298
2.818								.003	.022	.041	.077	.111	.203	.213	.232	.297	R ₈ = .300
2.821									.019	.038	.074	.108	.200	.210	.229	.294	R ₉ = .303
2.840										.019	.055	.189	.181	.190	.210	.275	R ₁₀ = .303
2.859											.036	.070	.162	.172	.191	.256	R ₁₁ = .306
2.895												.034	.126	.136	.155	.220	R ₁₂ = .308
2.929													.092	.102	.121	.286	R ₁₃ = .310
3.021														.010	.029	.094	R ₁₄ = .311
3.031															.019	.084	R ₁₅ = .312
3.050																.060	R ₁₆ = .313
	2C+	2C-	4C+	4C-	3C+	1C+	2E+	3C-	1C-	2E-	1E+	3E+	3E-	4E-	4E+	1E-	

Any two treatment means not underscored by the same line are significantly different

Any two treatment means underscored by the same line are not significantly different

*SGP--School

1) Arlington
2) El Paso
3) Ripon
Sun Valley

Group

C--Control
E--Experimental

Period of Testing

+ Pretest
- Post-test

**-.001 level of significance on 138 df

was noted even though comparisons of groups, two at a time, with restricted variability differences, indicated patterns of differences.

For Scale I, Accepting the child as he is, experimental subjects in each of the schools maintained higher favorable attitudes toward child guidance throughout the experiment than control subjects. However, with the exception of the experimental group in School 1, there was little differences in the respective group scores before and after the semester.

Scale 2--Understanding the Child's Feelings

The analysis of variance computed for pretest scores indicated that initially, the sample was similar in attitudes toward child guidance in the area of understanding the child's feelings. There were no significant differences in interaction effects of schools by experimental versus control groups, no significant difference between experimental and control subjects, and no significant differences between schools. Table II, Part II, summarizes comparisons of these terms. Illustrated in Figure 4 is the relationship of experimental to control subjects attitude scores prior to the experiment. These mean scores of 3.522 for control subjects and 3.617 for experimental subjects indicated that both sets of subjects were initially tending toward strong agreement

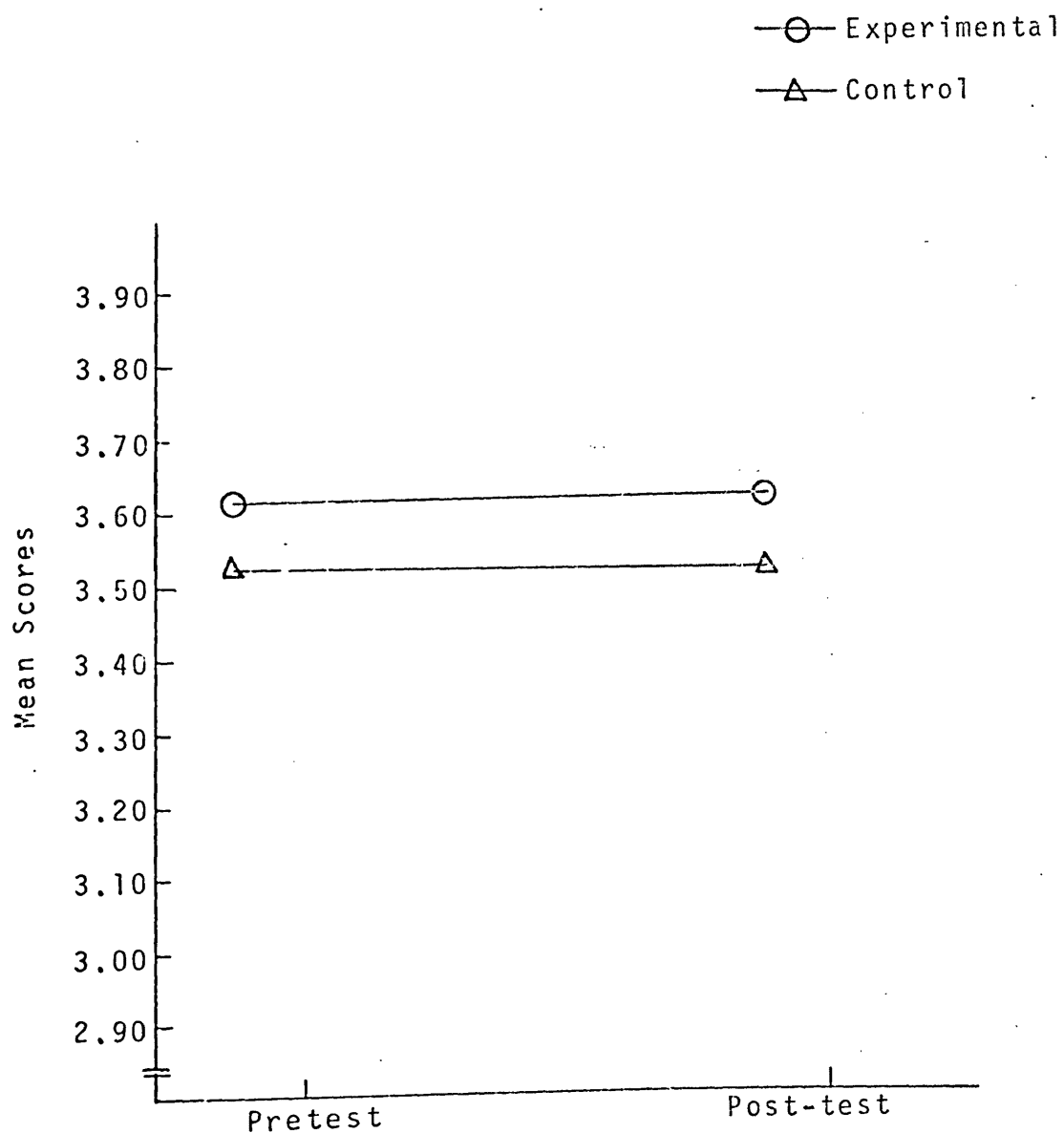


Figure 4

Mean Scores of Experimental and Control Subjects on
Scale 2 - Understanding the Child's Feelings

with the democratic-developmental philosophy with the experimental subjects having the numerically higher mean.

Following completion of the experiment, analysis of variance was computed for Scale 2 on data collected over the semester. As reported in Table III, Part II, the interaction F ratio of 2.000 on 7, 138 df was not statistically significant, thus indicating no significant change in schools' respective experimental and control groups' attitudes by the conclusion of the semester's experience. The null hypothesis of no difference between the respective experimental and control groups' attitudes prior to or following the child development experiment was not rejected at the .05 level of significance.

Comparison of pretest and post-test scores revealed some natural variability but no significant difference, over the trial period, in attitude change for any of the groups toward understanding the child's feelings. Figure 5 clearly demonstrates the similarities in mean scores over the trial period. The independent variable, understanding the child's feelings, measured no significant change in attitude by subjects in experimental or control groups when the analysis of variance was computed for final inventory scores although an F ratio of 2.000 on 7, 138 df was close to the tabled F ratio of 2.080 at the .05 level of significance. Even though

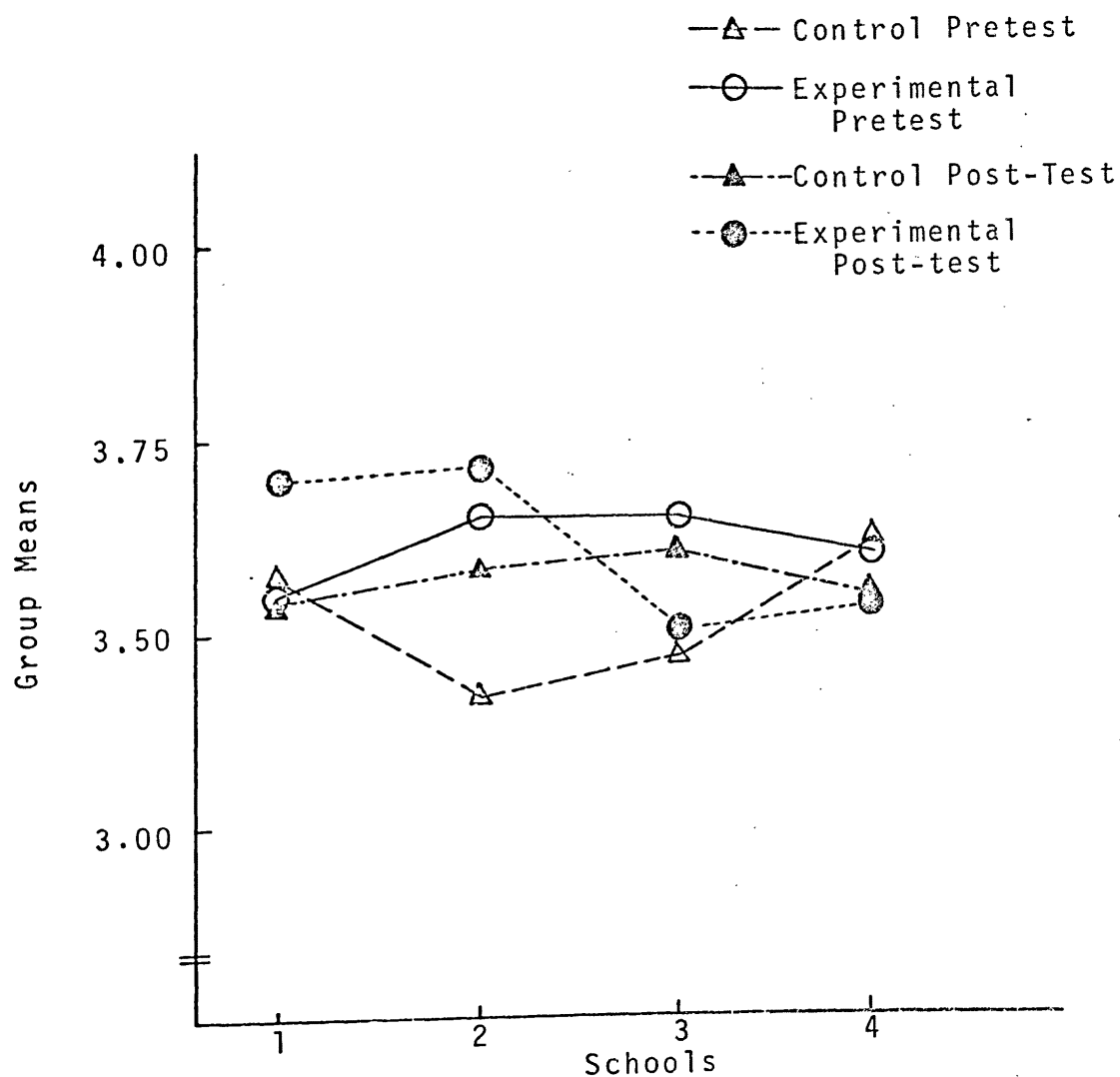


Figure 5

Pretest and Post-test Means for Experimental and Control Groups in Four Schools for Scale 2 - Understanding the Child's Feelings

the experimental groups in Schools 1 and 2 scored higher than the other experimental groups on the post-tests, these scores evidenced no significant gain over the trial period of one semester. Figure 6 illustrates the proximity of scores for groups in each of the schools. The null hypotheses of no change occurring over trial periods and of no differences between experimental and control groups was not rejected. Clearly evident is the absence of change in attitude, inferring little or no effect of the child development experiences on students' evaluative responses toward child guidance in the areas of understanding a child's feelings. Attention is directed, however, to the relatively high scores maintained throughout the experiment ranging from the lowest of 3.419 to 3.722 demonstrating tendency toward strong agreement with democratic-developmental principles related to understanding the child's feelings (Table IV, Part II).

Scale 3--Reflecting the Child's Feelings

Comparisons of subjects' attitudes at the beginning of the experiment were computed by the analysis of variance and are summarized in Table II, Part III. The F ratio of 1.077 indicates no significant difference in interaction effects of experimental versus control groups within each school. No significant difference between schools was evidenced by the F ratio of .932 at the beginning of the experiment.

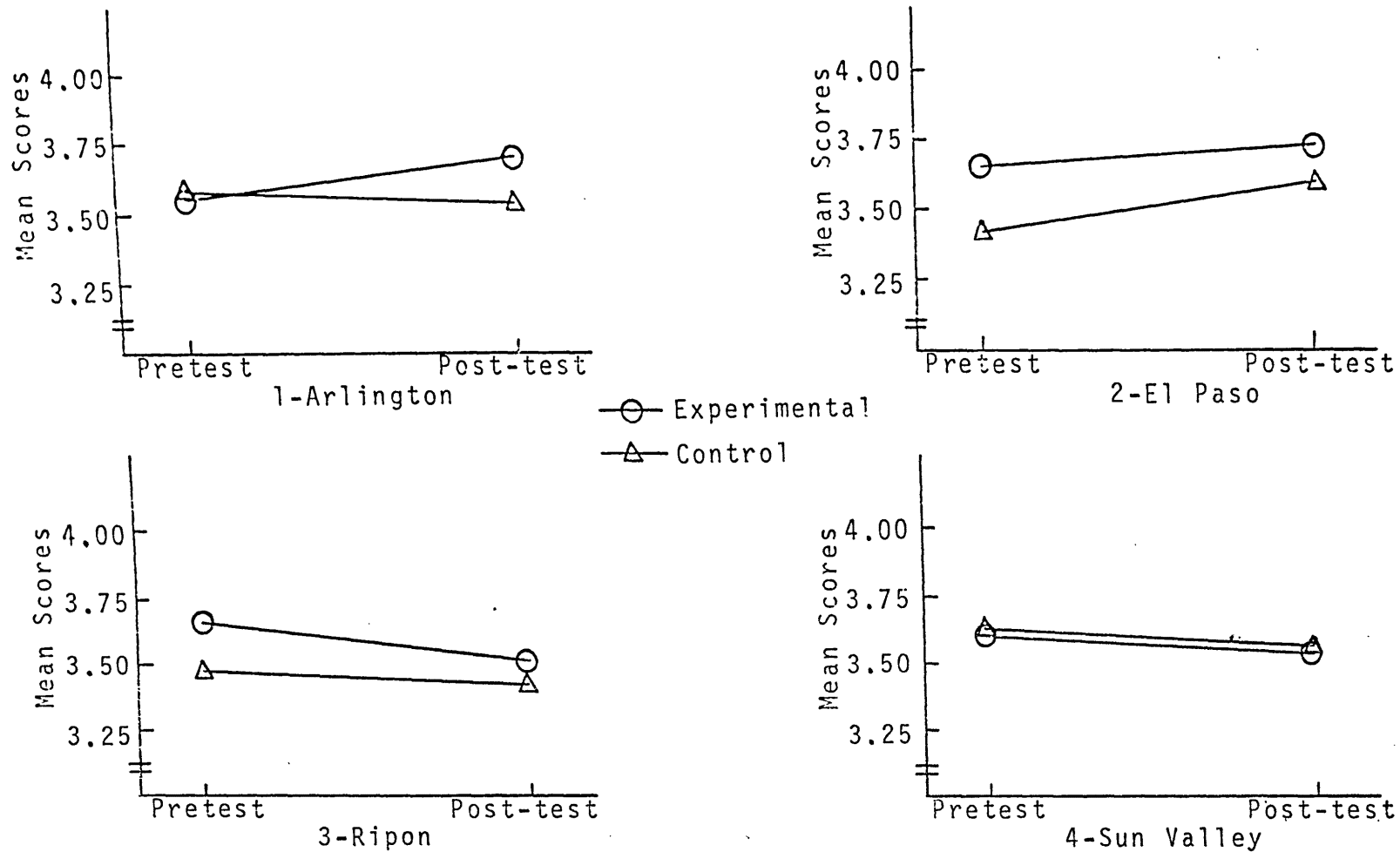


Figure 6

Means for Experimental and Control Groups for School Over the Period of Testing
on Scale 2 - Understanding the Child's Feelings

When categorized according to the type of experience, subjects in the experimental group were in greater favorable agreement with the philosophy than subjects in the control group. Attitudes of experimental subjects were significantly different from control subjects at the .05 level according to the analysis of the pretest data. The mean score for the experimental group was initially higher at 2.906 than the mean score of 2.738 for the control group.

The analysis of variance, Table III, Part III, presents comparison of F ratios reflecting the significance of subjects' attitude changes for Scale 3. F ratios indicate no significant differences in interaction effects of the respective schools' experimental group attitude change from pretest to post-test when compared to the control group's attitude change from the pretest to the post-test periods. The difference in interaction effects of treatments by trials was thus attributed to natural variability. There was neither a significant difference between control and experimental groups within the four respective schools, nor significant difference between pretest and post-test scores. As a result of the experimental situation, failure to reject the null hypotheses occurred at the .05 level of significance for all three terms--interaction, between groups, and between trial terms.

Figure 7 illustrates the change in attitude during the semester, for the 74 control subjects during the semester's course without benefit of the experience with children. The 72 experimental subjects, when considered as one group, maintained a higher score throughout the experiment than did the control subjects. The composite mean score of 2.809 for control subjects compared with the composite mean score of 2.884 for the experimental subjects at the end of the experiment indicates the similarity in attitudes toward accepting the child's feelings to be in mild agreement with the philosophy. This illustration represents the same general trend of change from pretest to post-test periods by School 2 and School 3 as shown in Figure 8. However, mean scores (Table IV, Part III) indicate the trend is not consistent within all four schools. Figure 8 illustrates that in School 1, both experimental and control groups changed by the same degree from pretest to post-test period with a slight increase in favorable agreement with the democratic-developmental philosophy. School 4, on the other hand, illustrates a change on the part of both experimental and control subjects in the direction of less agreement with the philosophy after the course was completed than prior to the course. Except for the control group in School 4, which was low, all other groups were at approximately the same degree of

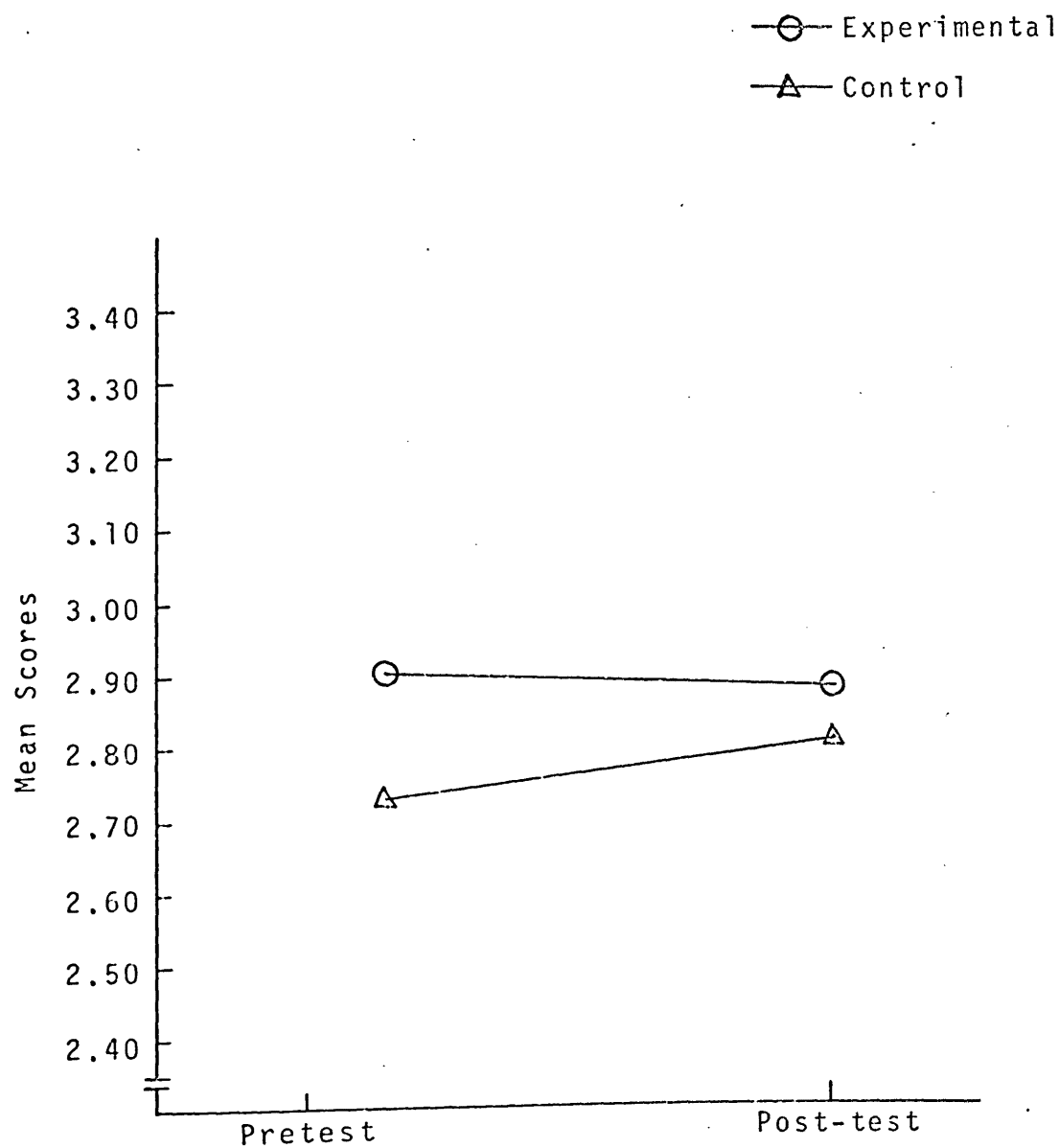


Figure 7

Mean Scores of Experimental and Control Subjects on
Scale 3 - Reflecting the Child's Feelings

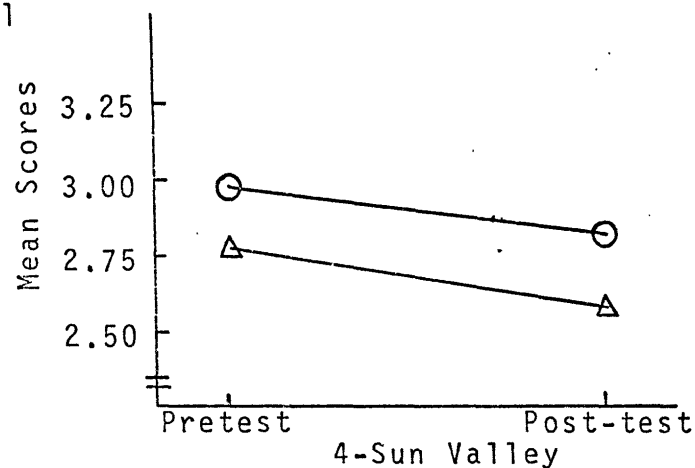
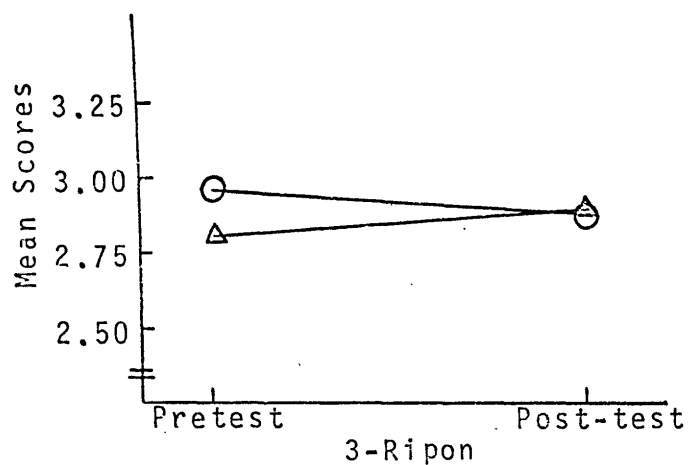
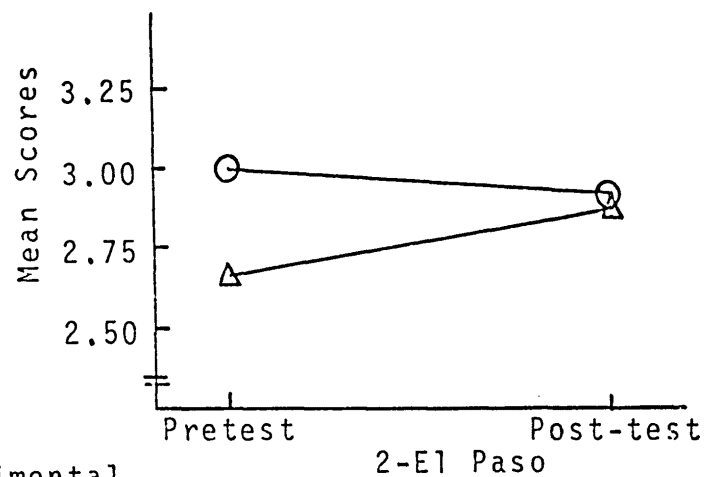
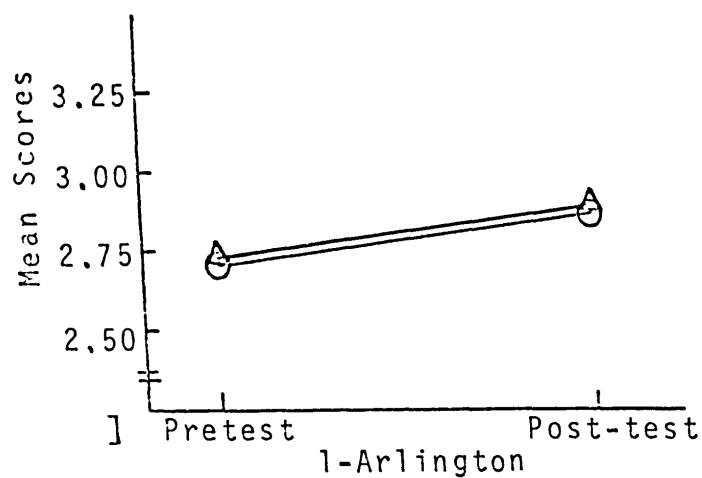


Figure 8

Means for Experimental and Control Groups for Each School Over the Period of Test-
ing on Scale 3 - Reflecting the Child's Feelings

tendency toward mild agreement with the philosophy by the end of the experiment.

Figure 9 illustrates clearly the trend in attitudes for the respective experimental and control groups and the comparison of these trends between schools both on pretest and post-test bases. With the exception of School 1, which exhibits an increase in favorable attitude change, all schools' experimental situations resulted in less agreement with the philosophy by the end of the trial period by subjects than those attitudes held at the pretest period. The experimental groups in Schools 2, 3, and 4 maintained attitudes in greater agreement with the democratic-developmental philosophy than control groups in the same schools. The experimental and control groups of School 1 were alike in attitudes for Scale 3, with Schools 2, 3, and 4 showing a slight difference between experimental and control group attitudes.

The change in mean score for all subjects, taken as a whole, was from 2.821 to 2.846 over the semester. Therefore, in the final analysis, the overall experiment appears to have had little or no effect upon changing subjects' attitudes in the area of child guidance related to reflecting the child's feelings.

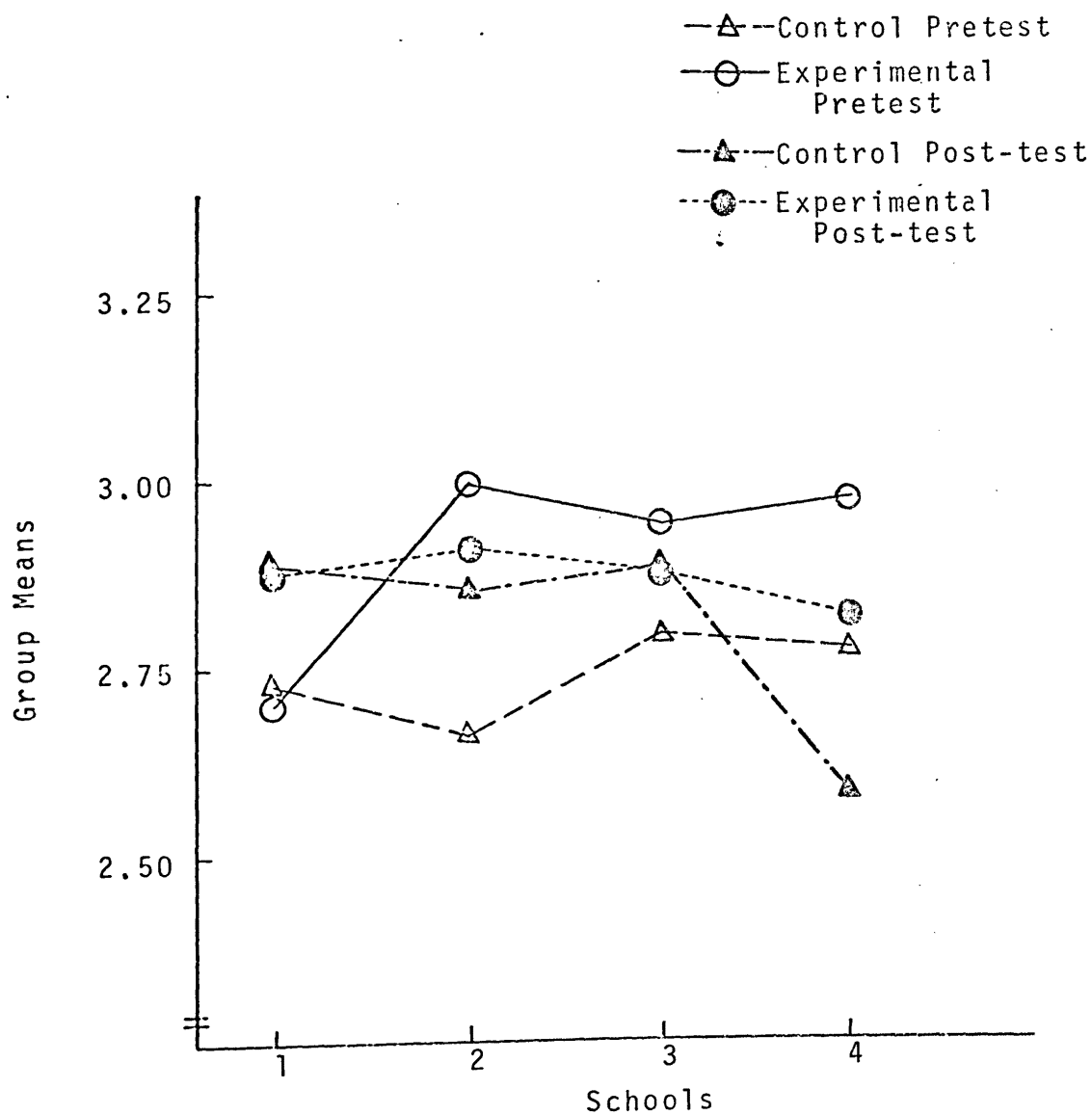


Figure 9

Pretest and Post-test Means for Experimental and Control Groups in Four Schools for Scale 3 - Reflecting the Child's Feelings

Scale 4--Accepting the Child's Feelings

An analysis measuring the effects of the child development course on students' attitudes toward acceptance of the child's feelings was made by comparing experimental and control subjects' attitude scores. An F ratio of .389 reported in Table II, Part IV, indicated that no significant difference in the combination, or interaction, effects of school attended with being placed in a particular control or experimental group existed before application of the experimental treatment in this area of child guidance. No significant difference was found among experimental and control groups on pretest scores. Thus, the assumption was made that, at the outset, subjects in all groups held similar attitudes toward accepting the child's feelings. In relationship to the possible agreement with the democratic-developmental philosophy, the group average mean scores ranging from 2.527 to 2.869 indicated a tendency toward mild agreement by all groups. The F ratio of 4.77 on 3, 138 df, statistically significant at the .01 level, revealed initial differences between schools. The DNMRT IV indicates the difference, significant at the .005 level (98 per cent Protection), is between School 2 and School 4. School 2, with a mean score of 2.587, was indicative of a neutral attitude, falling near the mid-score of 2.500 between mild agreement and mild

DUNCAN'S NEW MULTIPLE RANGE TEST IV
DIFFERENCES BETWEEN FOUR SCHOOLS FOR SCALE 4--
ACCEPTING THE CHILD'S FEELINGS

*School Means	(1) 2	(2) 3	(3) 1	(4) 4	(5) **Shortest Significant Ranges
	2.587	2.656	2.792	2.844	
2.587		.069	.205	.257	R ₂ = .231
2.656			.136	.188	R ₃ = .239
2.792				.052	R ₄ = .246
	2	3	1	4	

Any two treatment means not underscored by the same line are significantly different

Any two treatment means underscored by the same line are not significantly different

*School
1) Arlington
2) El Paso
3) Ripon
4) Sun Valley

**.005 level of significance on
138 df

disagreement with the philosophy. School 4, with the highest score of 2.844, tended toward mild agreement with the philosophy at the pretest level.

In the analysis of the data collected over the semester, the interaction F ratio of 1.216 in the two-factor, mixed design, analysis was not significant. Difference in attitudes held by the experimental and control groups over trial periods was a result of natural variability and not a result of the semester's experiment. Comparison of scores on pretest and post-test inventories revealed no significant change for any of the groups toward acceptance of the child's feelings over the trial period of one semester's experience. Thus, rejection did not occur of the null hypotheses that no difference will occur in interaction effects and no difference will occur over the trial period for attitudes toward acceptance of the child's feelings.

In the final analysis, experimental and control groups differed significantly at the .05 level, with an F ratio of 2.590 on 7, 138 df reported in Table III, Part IV. Using the DNMRT V, at the .05 level of significance (66 per cent Protection), a difference was found only between the control group from School 2 and the experimental group from School 4. This difference in groups appears to be consistent with the difference reported on the pre-experimental comparison

DUNCAN'S NEW MULTIPLE RANGE TEST V

DIFFERENCES BETWEEN EIGHT GROUPS OF EXPERIMENTAL AND CONTROL SUBJECTS

FOR SCALE 4--ACCEPTING THE CHILD'S FEELINGS

SG*	(1) 2C	(2) 3C	(3) 3E	(4) 2E	(5) 4C	(6) 1C	(7) 1E	(8) 4E	(9) **Shortest Significant Ranges
Means	2.536	2.620	2.668	2.748	2.765	2.776	2.843	2.862	
2.536		.084	.132	.212	.229	.240	.307	.326	R ₂ = .280
2.620			.048	.128	.145	.156	.223	.242	R ₃ = .395
2.668				.080	.097	.108	.175	.194	R ₄ = .305
2.748					.017	.028	.095	.114	R ₅ = .312
2.765						.011	.078	.097	R ₆ = .317
2.776							.067	.086	R ₇ = .322
2.843								.019	R ₈ = .325
	2C	3C	3E	2E	4C	1C	1E	4E	

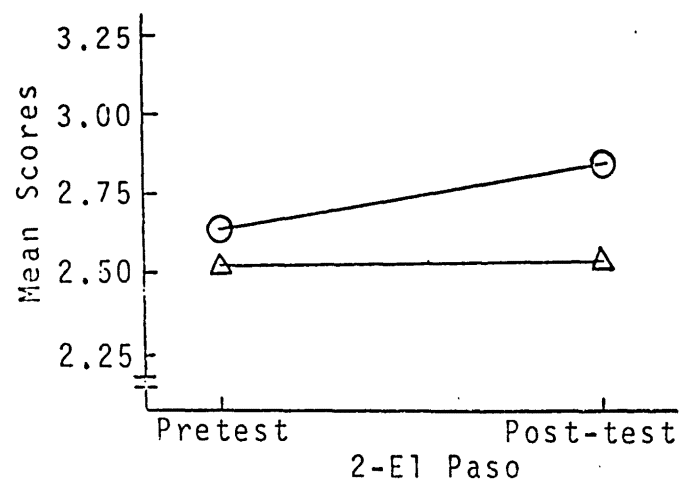
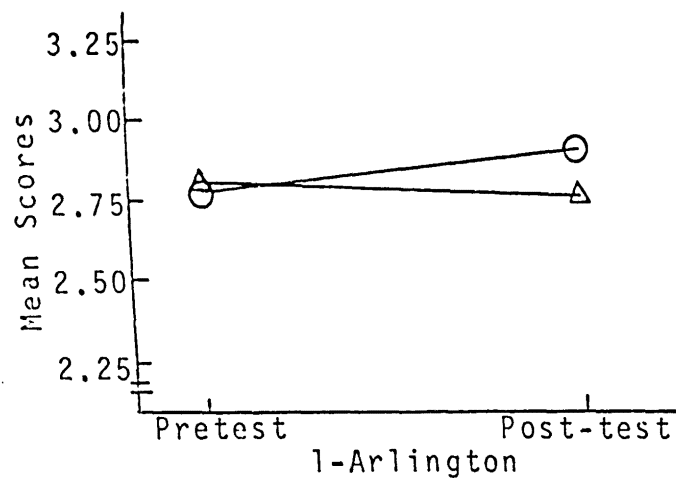
Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*SG--School Group
1) Arlington C--Control
2) El Paso E--Experimental
3) Ripon
4) Sun Valley

**.05 level of significance on 138 df

between schools. School 2, control subjects, indicated control group attitudes between mild disagreement and mild agreement with the philosophy whereas School 4, experimental subjects, indicated attitudes slightly in the direction of mild agreement with the philosophy (Table IV, Part IV). The null hypothesis, that no differences will occur between control and experimental groups in attitude change toward acceptance of the child's feelings, was rejected at the .05 level; however, only between two of the eight groups was there any significant difference in attitude exhibited.

Figure 10 reveals, graphically, the similarity in effects of the experiment on influencing the direction of attitude change by experimental and control groups within each school. In all four schools, the experimental and control groups became less alike in attitudes by the end of the semester with the respective experimental groups exceeding the control groups in mean scores representing a greater favorable agreement with the philosophy. This same trend in direction of attitude change by the 74 control and 72 experimental subjects is clearly illustrated by Figure 11. Consistency in the relationships of group attitude mean scores is depicted by Figure 12. Experimental groups maintained a consistently higher score over the semester than the control group. The difference between scores on pretest and



—○— Experimental
—△— Control

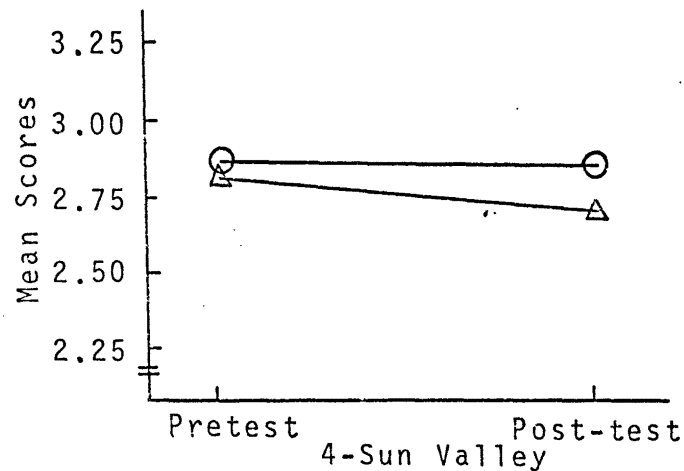
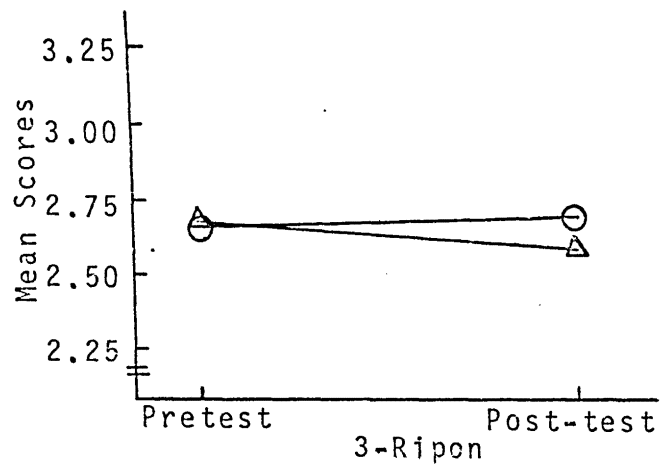


Figure 10

Means for Experimental and Control Groups for Each School over the Period of Test-₅ ing on Scale 4 - Accepting the Child's Feelings

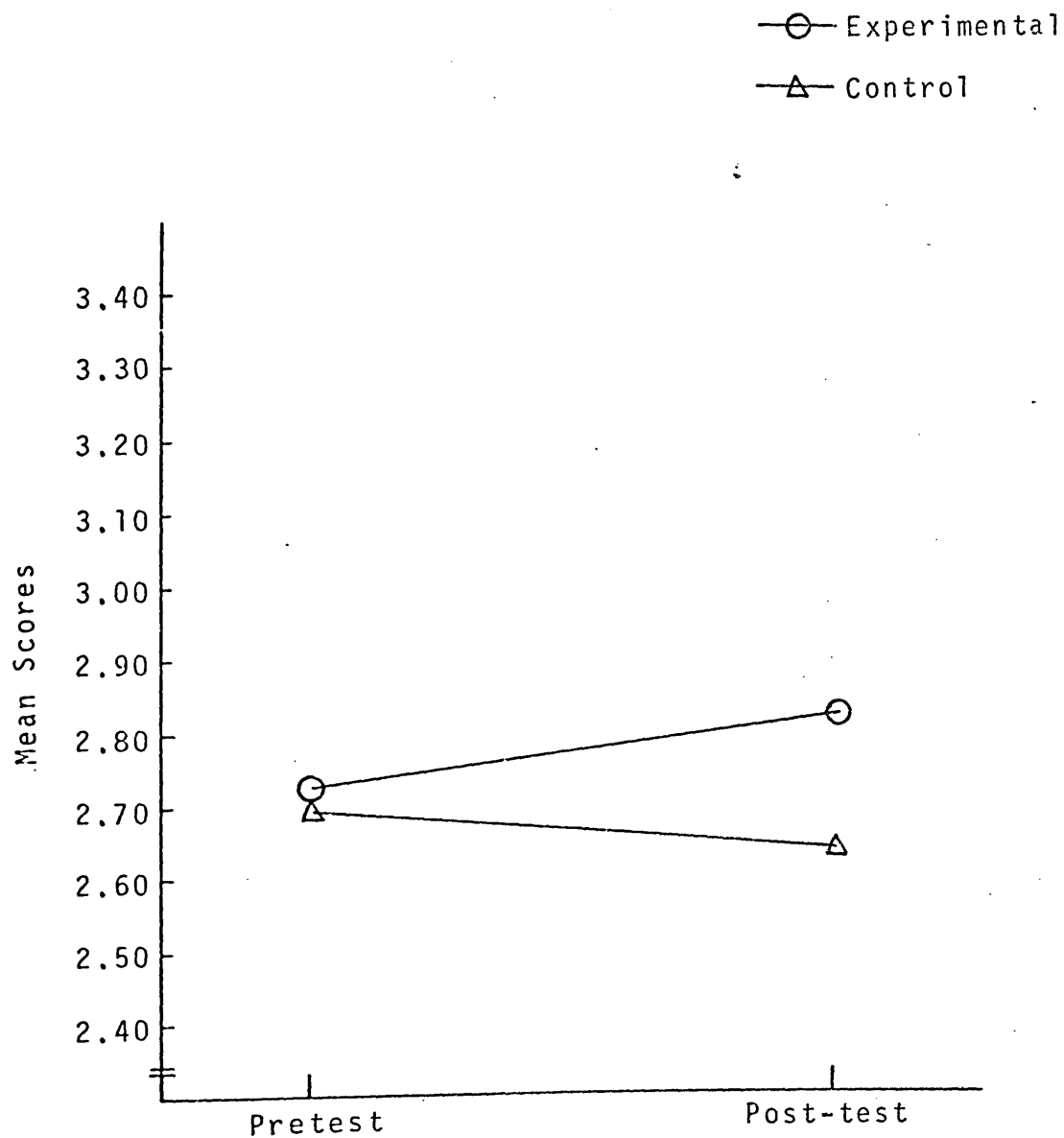


Figure 11

Mean Scores of Experimental and Control Subjects on
Scale 4 - Accepting the Child's Feelings

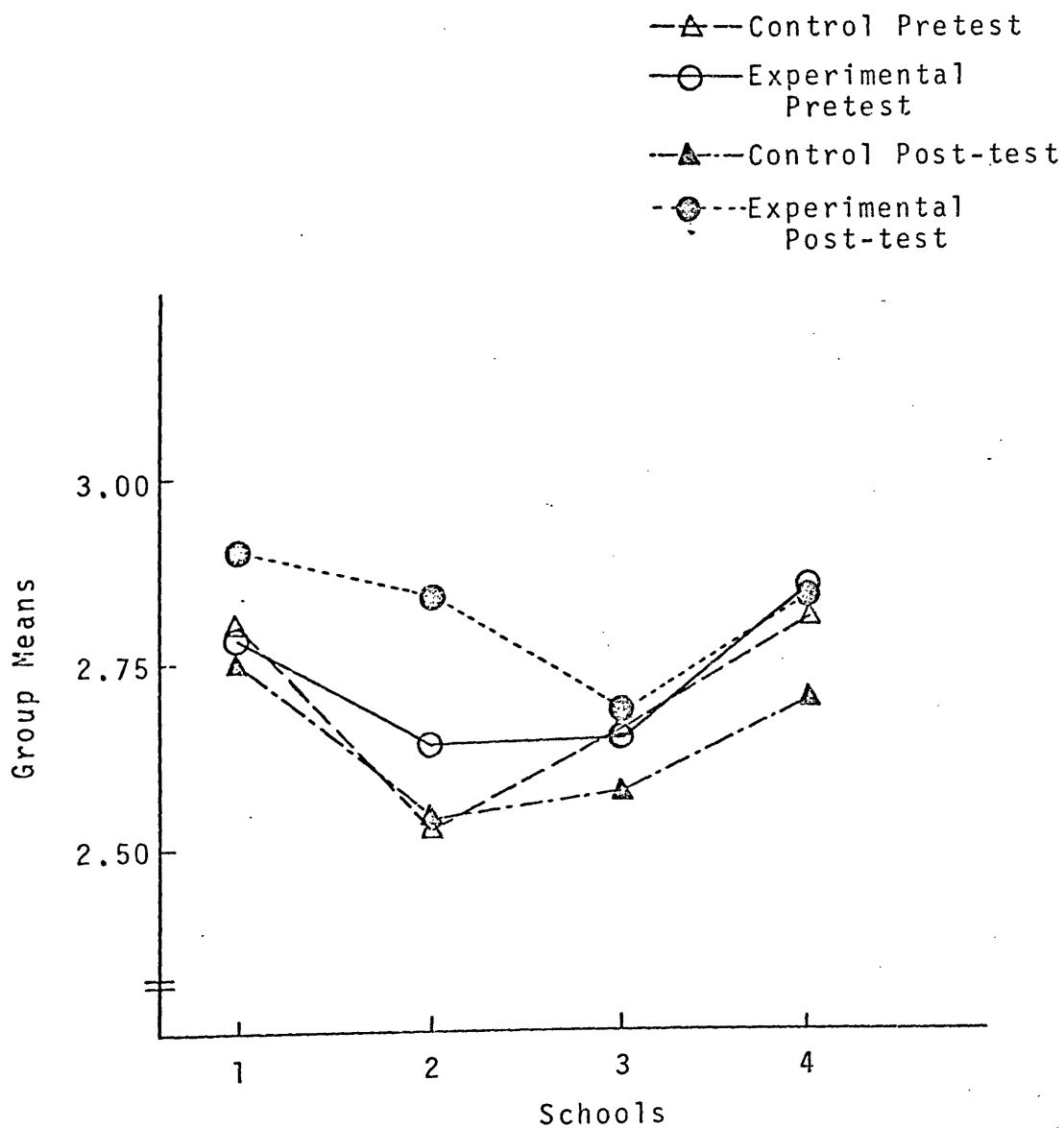


Figure 12

Pretest and Post-test Means for Experimental and Control Groups in Four Schools for Scale 4 -
Accepting the Child's Feelings

post-test was not statistically significant. Thus, the null hypothesis was not rejected.

Scale 5--Redirecting Undesirable Behavior

Comparison of subjects' mean scores for Scale 5, Redirecting undesirable behavior, resulted in no significant differences prior to the experiment when the analysis of variance was computed. Table II, Part V, summarizes these data. Subjects were considered homogeneous in respect to attitudes toward redirecting undesirable behavior. F ratios indicated no significant difference between experimental and control groups as a result of subjects attending four distinct schools. In terms of main effects, computations resulted in no difference between experimental and control subjects and no difference between schools. Figure 13 illustrates the proximity of attitudes held by experimental and control subjects at the beginning of the experiment.

Upon completion of the experiment, null hypotheses, relating to experiences in studying child development to affect attitude change in the direction of a more democratic approach to redirecting undesirable behavior were tested. Analysis of variance resulted in significant differences for the interaction and between treatment effects. An F ratio of 2.259 on 7, 138 df, reported in Table III, Part V, indicated a significant difference at the .05 level between

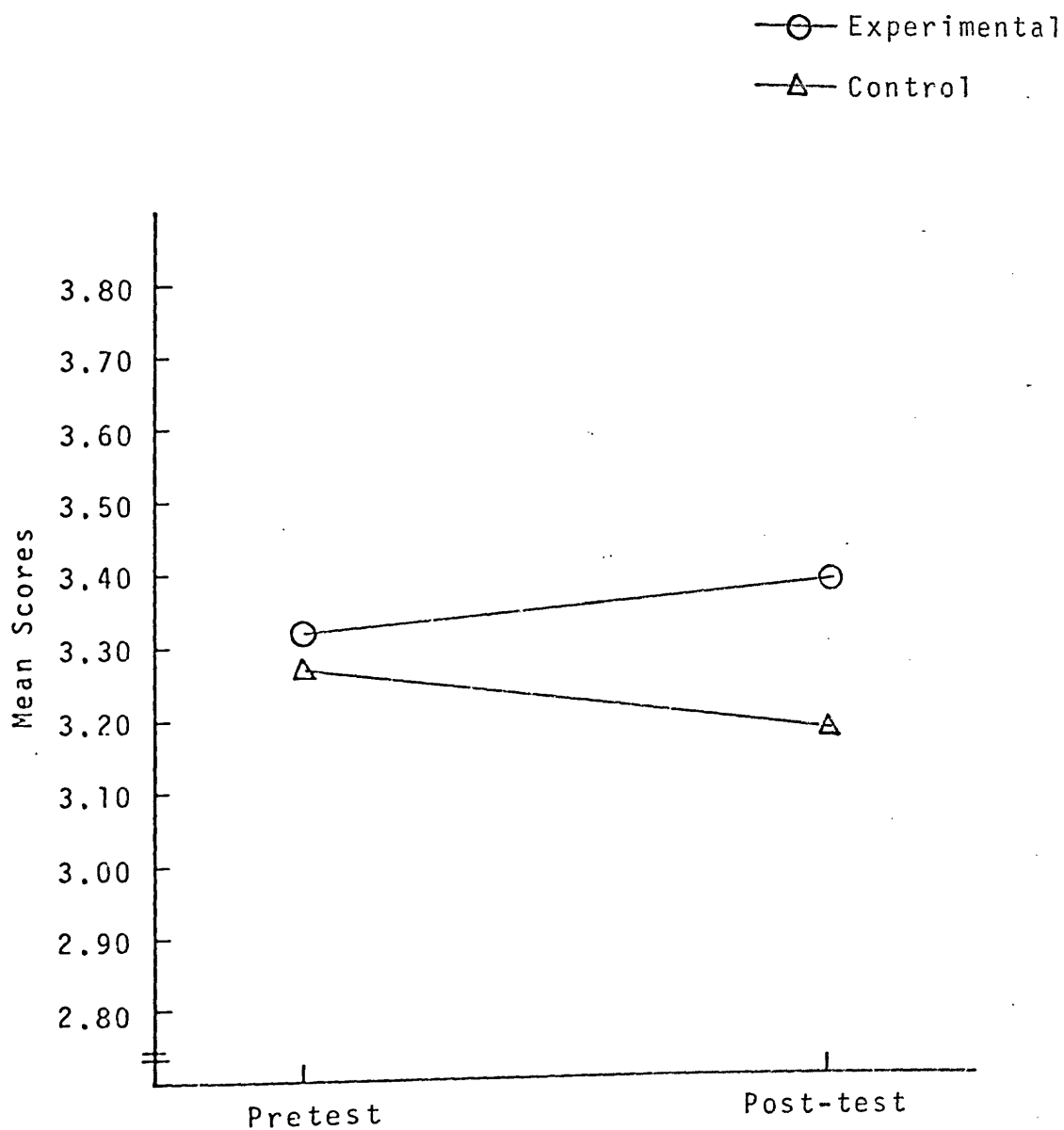


Figure 13

Mean Scores of Experimental and Control Subjects on
Scale 5 - Redirecting Undesirable Behavior

attitudes of the eight respective experimental and control groups by pretest versus post-test comparisons. Comparing the eight experimental and control groups on the basis of pretest and post-test scores respectively, by means of the DNMRT resulted in meaningful significant differences for only one group of subjects. Illustrated in DNMRT VI, School 4 exhibited a different mean score, significant at the .001 level (98 per cent Protection), from School 1 and School 3 control groups, respectively, on the final tests. School 1 control mean of 3.360 and School 3 control mean of 3.296 reflect an increase in attitude change toward strong agreement with the underlying philosophy over the semester as compared with the tendency toward mild agreement reflected by the School 4 control mean of 2.867 (Table IV, Part V). Although the null hypothesis of no interaction effect was rejected on the basis of the combined effect of type of experience and trial period, when considered separately only one of the 16 mean scores represented a statistically significant difference from other mean scores at the pretest and/or post-test levels. The remaining mean scores, when compared, two by two, indicated that the experimental groups from Schools 2, 3, and 4, as a result of the final testing, exhibit attitude scores statistically significantly different from the School 4 control post-test score but not from the School 4 experimental post-test score. These comparisons

DUNCAN'S NEW MULTIPLE RANGE TEST VI
DIFFERENCES BETWEEN EIGHT GROUPS OF EXPERIMENTAL AND CONTROL SUBJECTS
FOR SCALE 5--REDIRECTING UNDESIRABLE BEHAVIOR

SG* Means	(1) 4C	(2) 4E	(3) 3E	(4) 2C	(5) 3C	(6) 1C	(7) 2E	(8) 1E	(9) **Shortest Significant Ranges
	3.028	3.239	3.273	3.274	3.281	3.323	3.433	3.437	
3.028		.211	.245	.246	.253	.295	.405	.409	R ₂ = .311
3.239			.034	.035	.042	.084	.194	.198	R ₃ = .327
3.273				.001	.008	.050	.160	.164	R ₄ = .338
3.274					.007	.049	.159	.163	R ₅ = .346
3.281						.042	.152	.156	R ₆ = .317
3.323							.110	.114	R ₇ = .357
3.433								.004	R ₈ = .361
	4C	4E	3E	2C	3C	1C	2E	1E	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*SG--School

1) Arlington

2) El Paso

3) Ripon

4) Sun Valley

Group

C--Control

E--Experimental

**.05 level of significance on 138 df

seem to indicate that the very low post-test score of 2.867 for the control group in School 4 may have effected a Type I error, thus, assigning rejection of the null hypothesis fallaciously to the influence of the experimental and control treatments over the trial period of one semester.

Between the eight groups, four experimental and four control, a significant difference at the .01 level was found by the analysis of variance. The null hypothesis that experimental and control groups will reflect the same degree of agreement and/or disagreement with the philosophy was rejected. DNMRT VII computations at the .05 level of significance (66 per cent Protection) indicated a difference between School 4 control and experimental groups in Schools 1 and 2 respectively. Figure 14 indicates that the low control group scores for School 4 may have, again, effected a Type I error in the analysis of variance, thus causing rejection of the null hypothesis on the basis of one group's performance.

No significant change occurred from pretesting to post-testing in attitudes reflecting beliefs and opinions concerning the redirecting of undesirable behavior of children; thus, the null hypothesis could not be rejected. The F ratio of .019 was non-significant at the .05 level. Figure 15 illustrates the homogeneity of the subjects' attitudes toward

DUNCAN'S NEW MULTIPLE RANGE TEST VII
DIFFERENCES BETWEEN EIGHT EXPERIMENTAL AND CONTROL GROUPS AT THE PRETEST AND
POST-TEST LEVELS FOR SCALE 5--REDIRECTING UNDESIRABLE BEHAVIOR

SGP* Means	(1) 4C-	(2) 4C+	(3) 2C-	(4) 3E+	(5) 4E-	(6) 4E+	(7) 3C+	(8) 1C+	(9) 3C-	(10) 1E+	(11) 3E-	(12) 2C+	(13) 1C-	(14) 2E+	(15) 2E-	(16) 1E-	(17) **Shortest Significant Ranges
2.867	2.867	3.189	3.216	3.216	3.228	3.251	3.266	3.287	3.296	3.329	3.329	3.332	3.360	3.429	3.436	3.546	R ₂ = .372
3.189		.322	.349	.349	.361	.384	.399	.420	.429	.462	.462	.465	.493	.562	.569	.679	R ₃ = .384
3.216			.027	.027	.039	.062	.077	.098	.107	.140	.140	.143	.171	.240	.247	.357	R ₄ = .392
3.216				.000	.012	.035	.050	.071	.080	.113	.113	.116	.144	.213	.220	.330	R ₅ = .399
3.216					.012	.035	.050	.071	.080	.113	.113	.116	.144	.213	.220	.330	R ₆ = .403
3.228						.023	.038	.059	.068	.101	.101	.104	.132	.201	.208	.318	R ₇ = .408
3.251							.015	.036	.045	.078	.078	.081	.109	.178	.185	.295	R ₈ = .411
3.266								.021	.030	.063	.063	.066	.094	.163	.170	.280	R ₉ = .414
3.287									.009	.042	.042	.045	.073	.142	.149	.259	R ₁₀ = .417
3.296										.033	.033	.036	.064	.133	.140	.250	R ₁₁ = .419
3.329											.000	.003	.031	.100	.107	.217	R ₁₂ = .422
3.329												.003	.031	.100	.107	.217	R ₁₃ = .424
3.332													.028	.097	.104	.214	R ₁₄ = .425
3.360														.069	.076	.186	R ₁₅ = .427
3.429															.007	.117	R ₁₆ = .429
3.436																.110	
	4C-	4C+	2C-	3E+	4E-	4E+	3C+	1C+	3C-	1E+	3E-	2C+	1C-	2E+	2E-	1E-	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*SGP--School Group Period of testing **.001 level of significance on
1) Arlington C--Control + Pretest 138 df
2) El Paso E--Experimental - Post-test
3) Ripon
4) Sun Valley

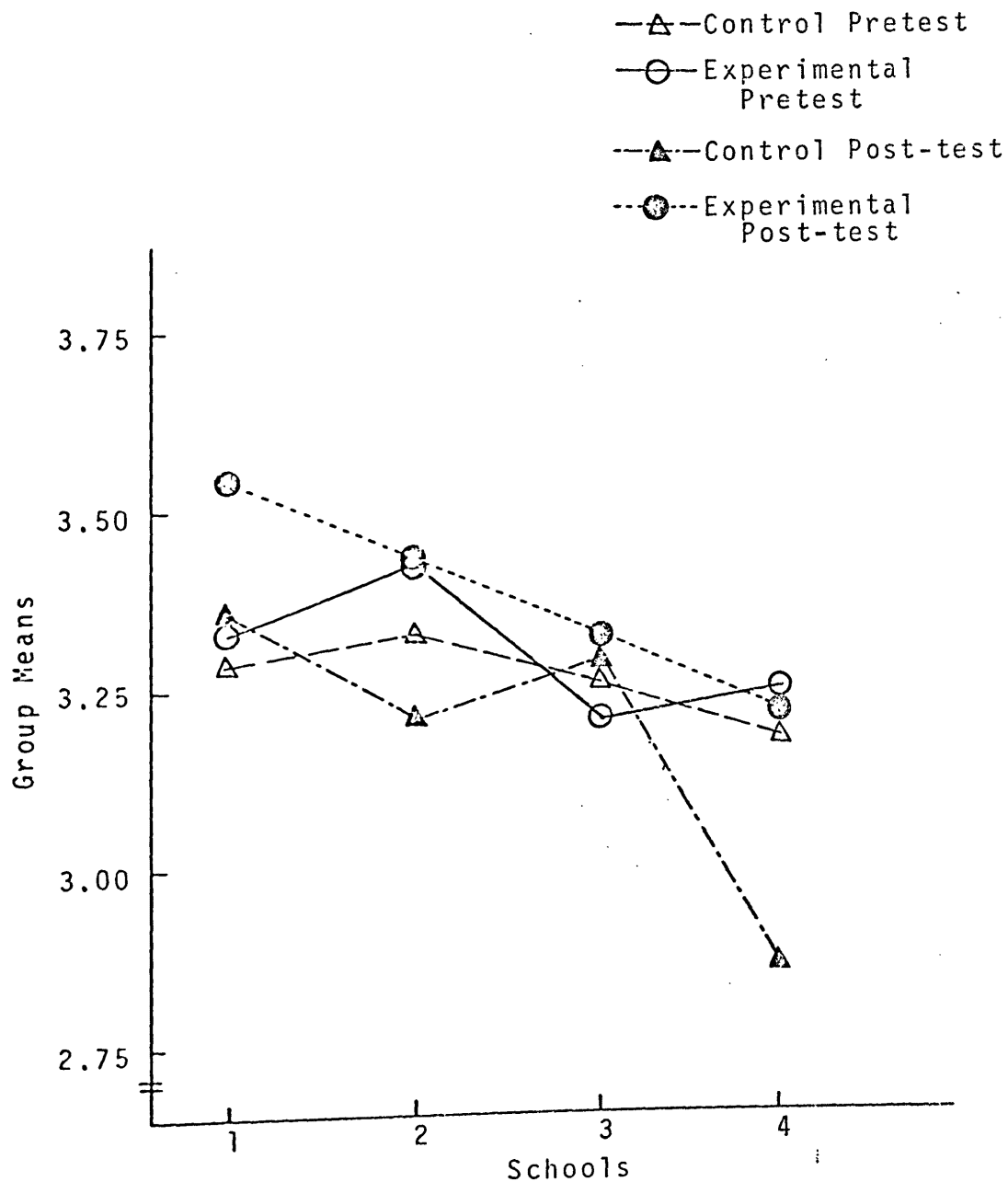
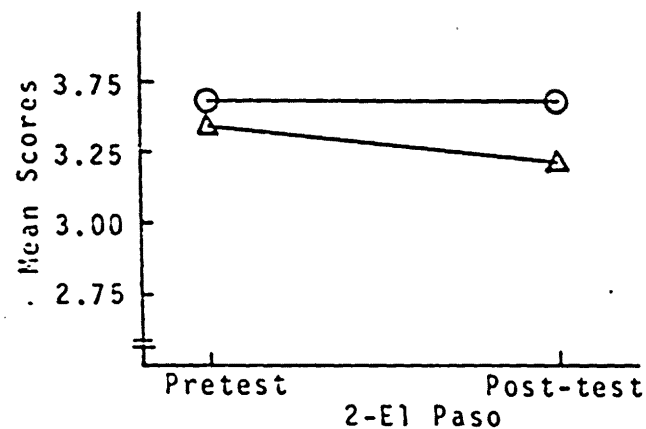
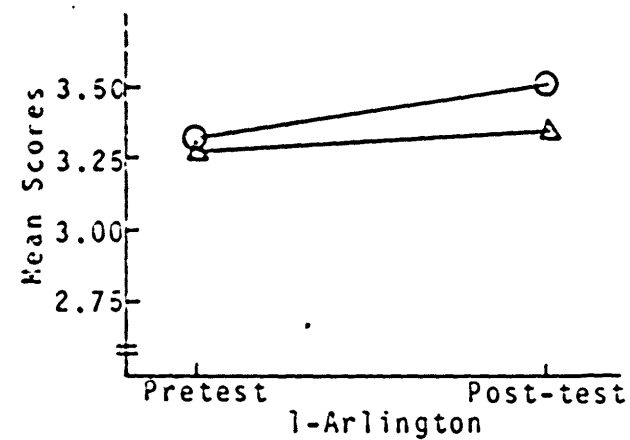


Figure 14

Pretest and Post-test Means for Experimental and Control Groups in Four Schools for Scale 5 - Redirecting Undesirable Behavior



—○— Experimental
—△— Control

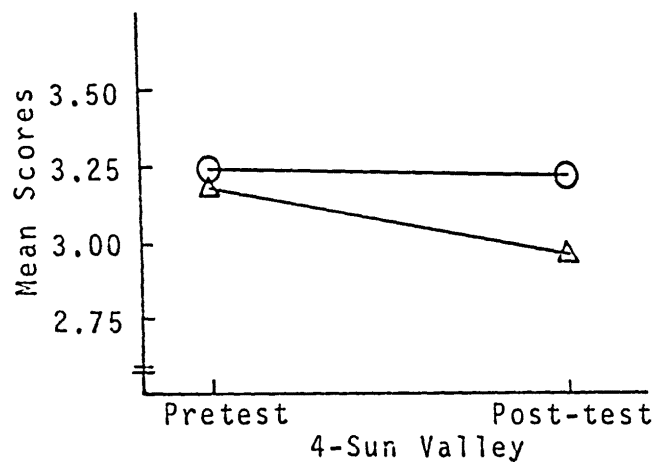
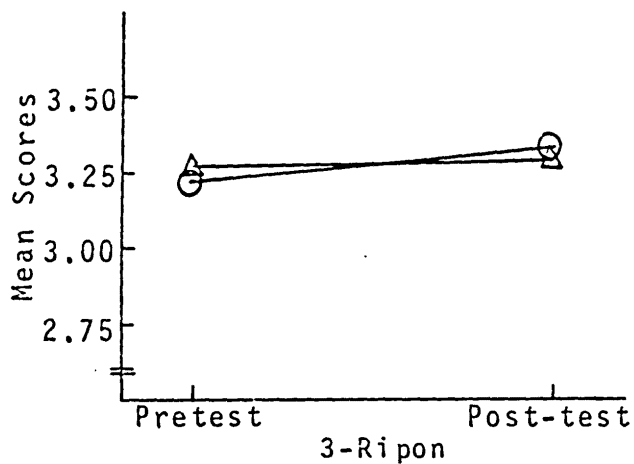


Figure 15

Means for Experimental and Control Groups for Each School Over the Period of Test-
ing on Scale 5 - Redirecting Undesirable Behavior

redirecting children's undesirable behavior throughout the experiment with the exception of School 4 control group. School 4 and School 2 control groups exhibited less agreement with the democratic approach after the child development course than prior to the experience.

Scale 6--Encouraging Verbalization

A two-way analysis of variance was computed for Scale 6, Encouraging verbalization, in order to compare attitudes between the respective schools' experimental and control groups, between the experimental and control subjects, and between the four schools prior to implementing the experiment. A summary of the mean squares and F ratios is reported in Table II, Part VI.

The interaction term elicited an F ratio of 1.137, non-significant at the .05 level, thus indicating no meaningful difference between experimental and control groups subjects as a result of being in four different schools. Natural variability is accountable for the computed F ratio. Between schools no significant difference was computed at the outset of the experiment. Significant difference between the experimental and control subjects was supported by an F ratio of 4.035 on 1, 138 df, significant at the .05 level. The experimental subjects at the pretest stage of the

experiment, had a mean score of 3.483 and thus greater agreement with the democratic-developmental philosophy than control subjects with a mean score of 3.369. Schools 1 and 2 primarily account for this difference. For the area of encouraging children in verbalization, initial scores of the subjects in the experimental category demonstrated a tendency toward strong agreement with a democratic approach to child guidance based on developmental stages of growth and personality formation.

Following the experiment of studying child development on the bases of control and experimental conditions, results from a two factor, mixed design utilized for analyzing and comparing the data collected on the pretest and post-test inventories were summarized in Table III, Part VI. Computations revealed no significant differences, at the .05 level, for interaction effects of treatments over the trial period. Likewise, the main effects contained no significant difference among the eight groups, and no significant difference between pretest and post-test scores. The null hypotheses of no difference in the respective variables, trials and treatments, and of no interaction effects of these variables failed to be rejected at the .05 level. Differences in attitudes held by experimental and control groups prior to and following the experiment were ascribed, by the analysis of variance, to natural variability.

Figure 16 illustrates the homogeneity of all subjects by the end of the experiment in terms of attitudes toward child guidance in the area of encouraging verbalization. Applying the mean scores in Table IV, Part VI, Figure 17 graphically displays the consistency held by the four schools' subjects in maintaining attitudes indicative of tendency toward strong agreement with the underlying philosophy throughout the semester. Reference to Figure 18 further illustrates this trend occurring within each of the four schools. Apparently, the child development experiment had little or no influence on changing attitudes even though stability of existing attitudes was continuous throughout the semester.

Scale 7--Encouraging Initiative and Independence

The independent variable, Encouraging initiative and independence, at the pretest level of this experiment measured no significant difference between the four respective schools' experimental and control groups by application of the analysis of variance statistic. No significant difference existed between control and experimental subjects when attitudes were measured by the IACG prior to utilizing the experimental treatment of experiences in working with children while studying child development in comparison with the control treatment of studying child development without such an experience.

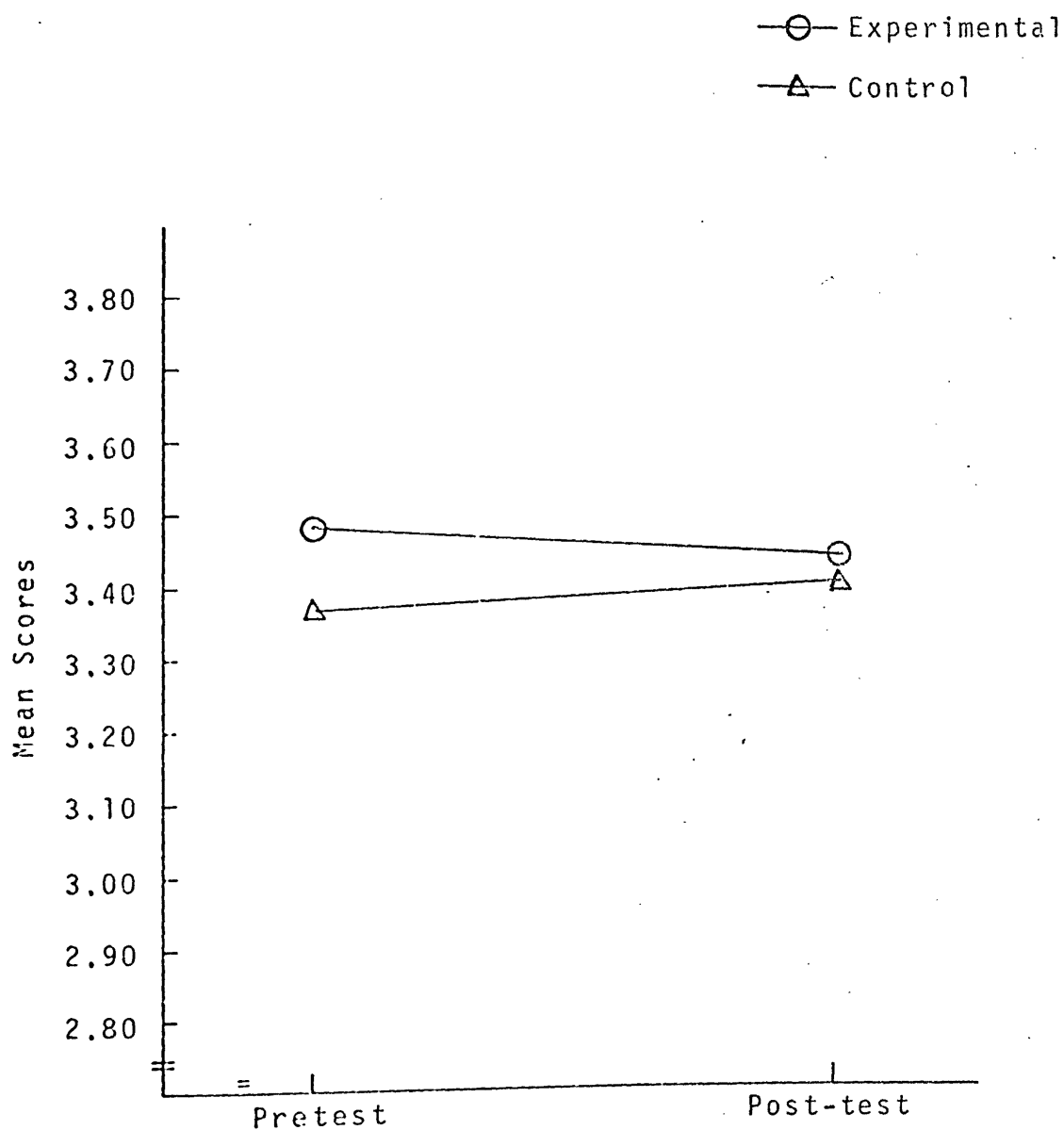


Figure 16

Mean Scores of Experimental and Control Subjects on
Scale 6 - Encouraging Verbalization

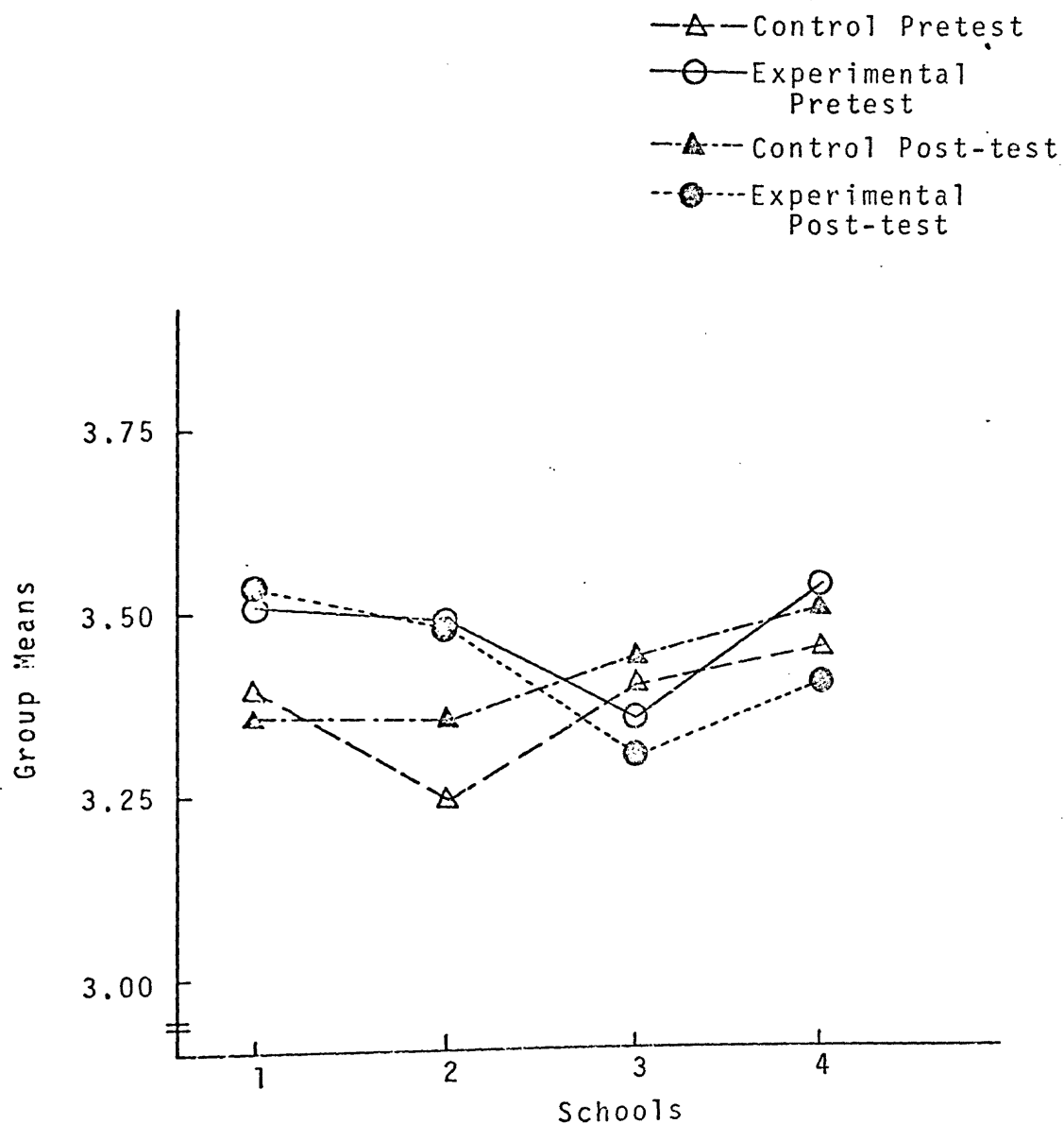
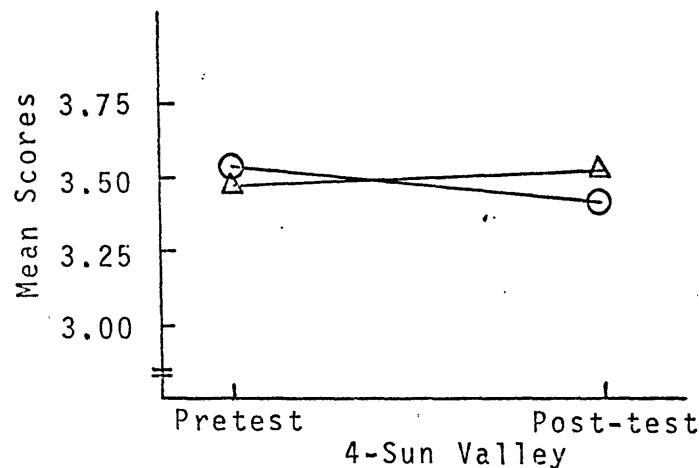
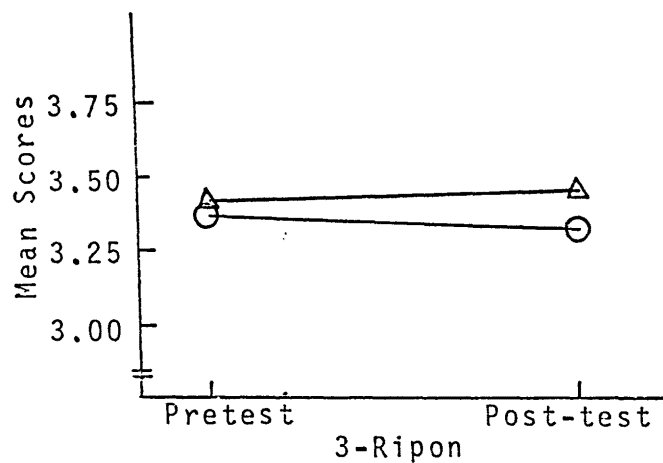
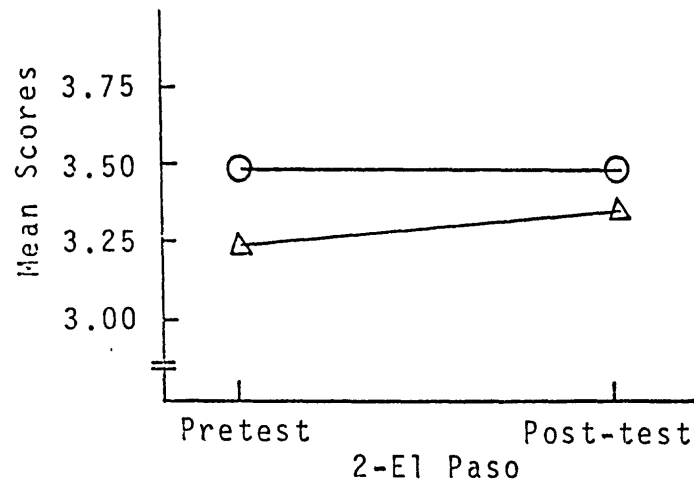
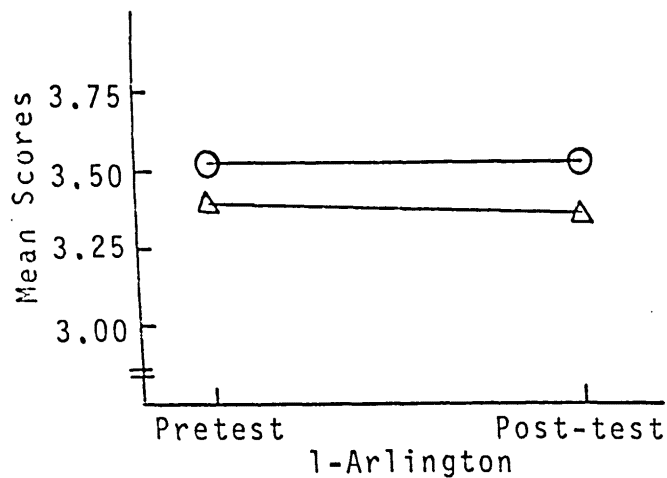


Figure 17

Pretest and Post-test Means for Experimental and Control Groups in Four Schools for Scale 6 - Encouraging Verbalization



—○— Experimental
—△— Control

Figure 18

Means for Experimental and Control Groups for Each School Over the Period of Test-
ing on Scale 6 - Encouraging Verbalization

Figure 19, showing the relationship of experimental to control subjects' attitudes toward the democratic philosophy, in the area of assisting children to become independent and aspirant, at the pretest level clearly demonstrates the similarity of these subjects. However, between schools, a statistically significant difference at the .05 level was computed prior to the experiment and is reported by the F ratio of 3.733 on 3, 138 df in Table II, Part VII. DNMRT was utilized to locate differences among the specific schools. At the .05 level of significance (98 per cent Protection), difference was found between School 4 and School 2. This difference is reported on DNMRT VIII and is illustrated by Figure 20.

The final analysis of variance, computed after the child development courses were completed, indicated no difference between interaction effects of trials by type of experience, thus attributing to natural variability any attitude differences. Rejection of the null hypothesis, that no difference in interaction effects will occur, failed at the .05 level. Each control group exhibits consistent change toward favorable attitudes over the semester. Experimental groups in Schools 1, 2, and 4 maintain consistency with greater gains over the semester than control groups, with the exception of School 3 control group which exhibits relatively no change as a result of the trial period.

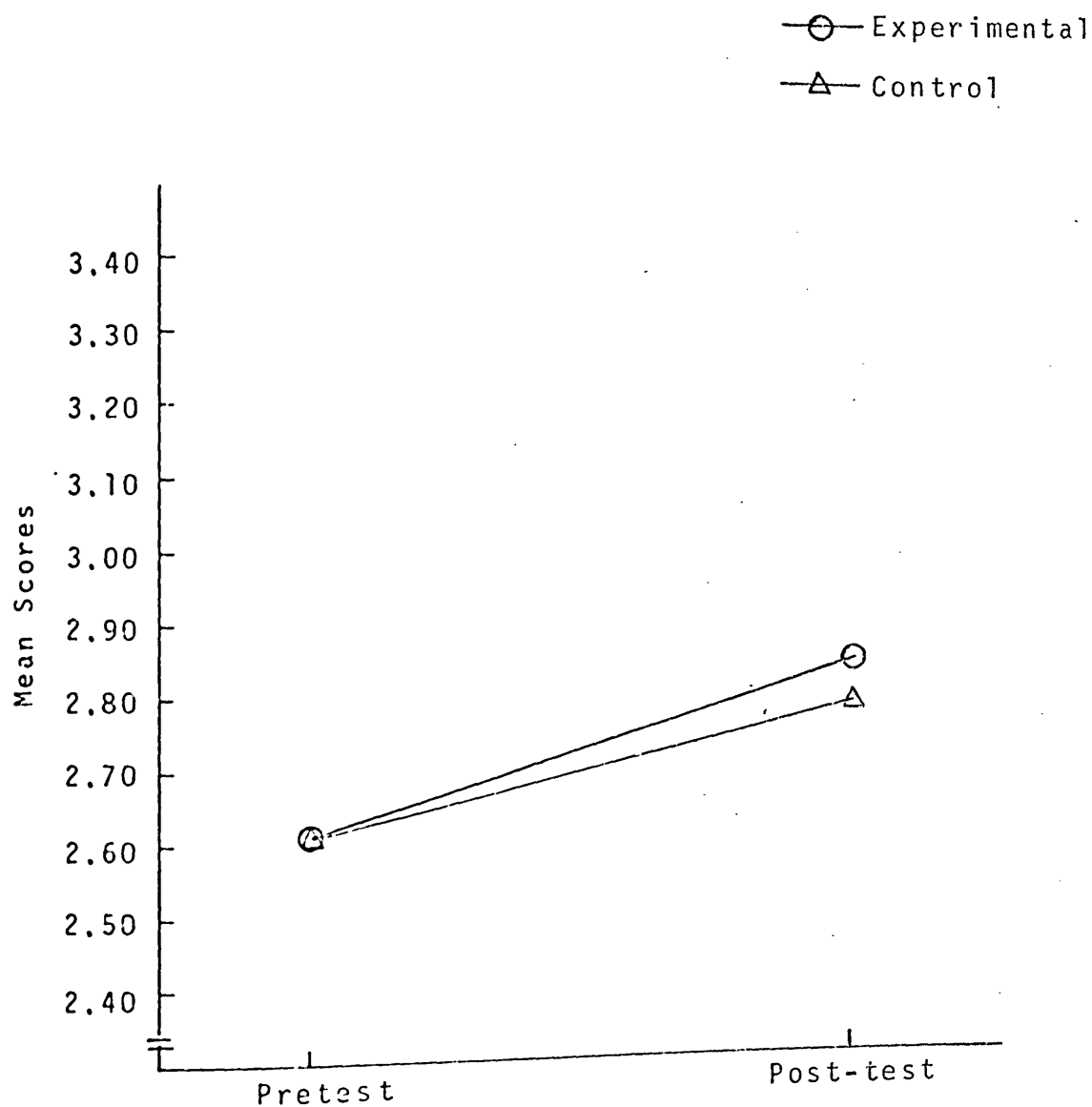


Figure 19
Mean Scores of Experimental and Control Subjects on
Scale 7 - Encouraging Independence and Initiative

DUNCAN'S NEW MULTIPLE RANGE TEST VIII
DIFFERENCES BETWEEN FOUR SCHOOLS FOR SCALE 7--
ENCOURAGING INDEPENDENCE AND INITIATIVE

	(1)	(2)	(3)	(4)	(5)
*School Means	4	1	3	2	**Shortest Significant Ranges
	2.436	2.564	2.629	2.762	
2.436		.128	.193	.326	R ₂ = .295
2.564			.065	.198	R ₃ = .307
2.629				.133	R ₄ = .314
	4	1	3	2	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*School
1) Arlington
2) El Paso
3) Ripon
4) Sun Valley

**.05 level of significance on
138 df

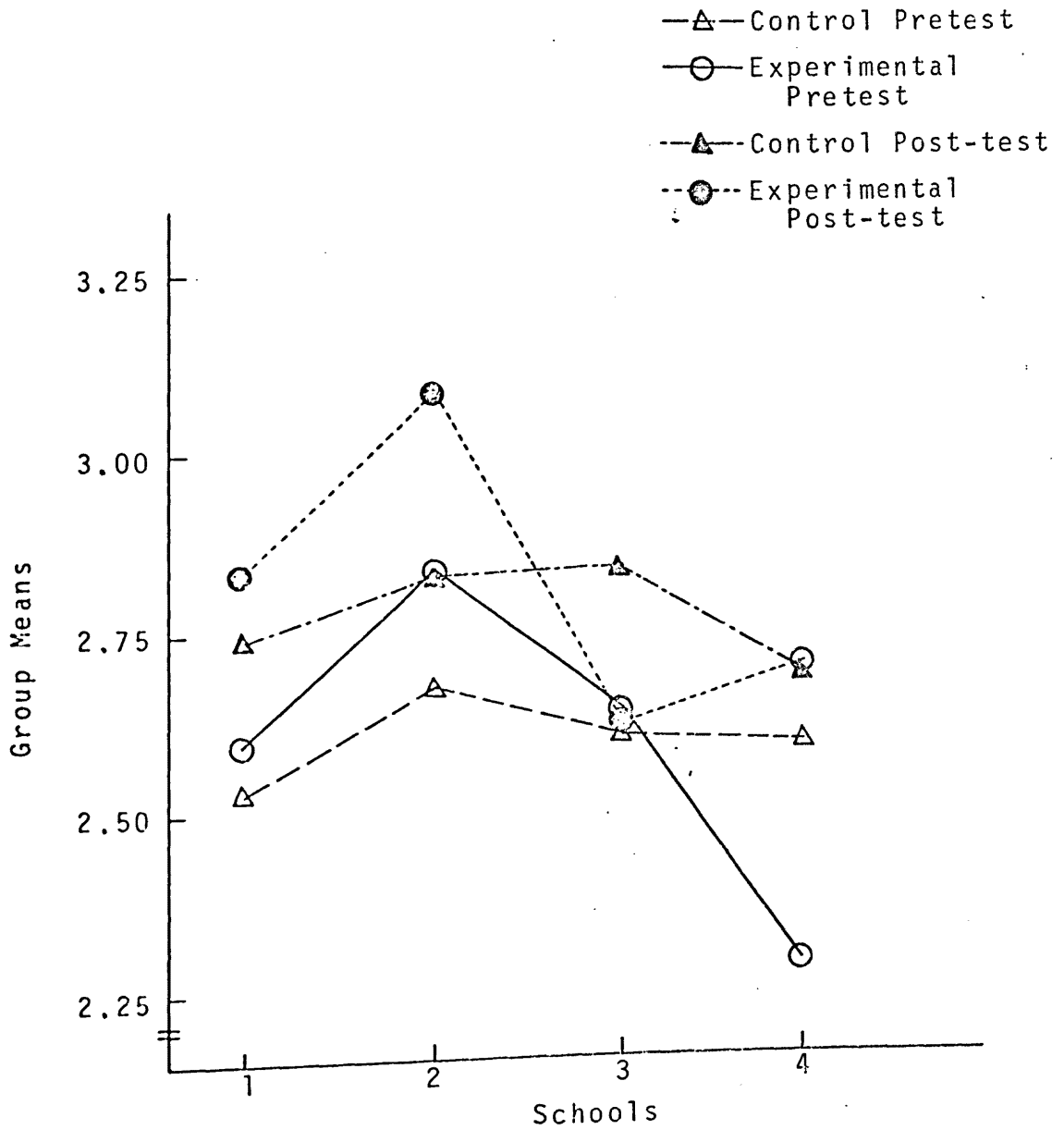


Figure 20
 Pretest and Post-test Means for Experimental and Control
 Groups in Four Schools for Scale 7 -
 Encouraging Independence
 and Initiative

Table III, Part VII, exhibits for control and experimental subjects, a difference among these groups at the .05 level of significance with the F ratio being 2.546 on 7, 138 df. Duncan's New Multiple Range Test results indicated this difference, at the .05 level (66 per cent Protection) to exist primarily because of the low score of 2.258 for the experimental group in School 4 at the pretest level. DNMRT IX differentiates these groups on the pretest and post-test levels. The null hypothesis that no difference will occur among experimental and control groups was rejected at the .05 level of confidence. Apparently, the magnitude of difference between the School 4 experimental pretest score of 2.258 and the several other groups with scores ranging from 2.644 to 3.091 is highly accountable for this rejection (Table IV, Part VII).

Between trials, pretest versus post-tests, statistically significant difference at the .01 level was computed with an F ratio of 33.24 on 1, 138 df. There was a gain in attitude scores over the trial periods when considering the experimental and control subjects as a composite group. The null hypothesis that no difference in attitudes will occur over the semester was rejected at the .01 level. With the exception being the experimental group in School 3, all other groups tended to gain in attitude scores over the semester.

DUNCAN'S NEW MULTIPLE RANGE TEST IX
DIFFERENCES BETWEEN EIGHT EXPERIMENTAL AND CONTROL GROUPS AT THE PRETEST AND
POST-TEST LEVELS FOR SCALE 7--ENCOURAGING INDEPENDENCE AND INITIATIVE

SGP Means	(1) 4E+	(2) 1C+	(3) 4C+	(4) 1E+	(5) 3C+	(6) 3E-	(7) 3E+	(8) 2C+	(9) 4C-	(10) 4E-	(11) 1C-	(12) 1E-	(13) 2C-	(14) 2E+	(15) 3C-	(16) 2E-	(17) **Shortest Significant Ranges
2.258	2.258	2.518	2.594	2.600	2.613	2.622	2.644	2.676	2.698	2.714	2.746	2.839	2.845	2.848	2.849	3.091	
2.258		.270	.336	.342	.355	.364	.386	.418	.440	.456	.488	.581	.587	.590	.591	.833	R ₂ .348
2.518			.066	.072	.085	.094	.116	.148	.170	.186	.218	.311	.317	.320	.321	.563	R ₃ .359
2.594				.006	.019	.028	.050	.082	.140	.120	.152	.245	.251	.254	.255	.497	R ₄ .367
2.600					.013	.022	.044	.076	.098	.114	.146	.239	.245	.248	.249	.491	R ₅ .373
2.613						.009	.031	.063	.085	.101	.131	.226	.232	.235	.236	.478	R ₆ .378
2.622							.012	.054	.076	.082	.124	.217	.223	.226	.227	.469	R ₇ .381
2.644								.032	.054	.070	.102	.195	.201	.204	.205	.447	R ₈ .385
2.676									.022	.038	.070	.163	.169	.172	.173	.415	R ₉ .388
2.698										.016	.048	.141	.147	.150	.151	.393	R ₁₀ .390
2.714											.032	.125	.131	.134	.135	.377	R ₁₁ .393
2.746												.093	.099	.102	.103	.345	R ₁₂ .395
2.839													.006	.009	.010	.252	R ₁₃ .396
2.845														.003	.004	.246	R ₁₄ .398
2.848															.001	.243	R ₁₅ .400
2.849																.242	R ₁₆ .401
	4E+	1C+	4C+	1E+	3C+	3E-	3E+	2C+	4C-	4E-	1C-	1E-	2C-	2E+	3C-	2E-	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

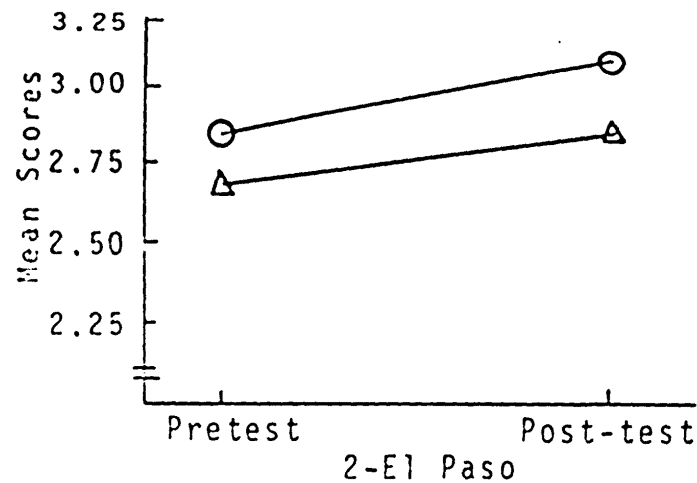
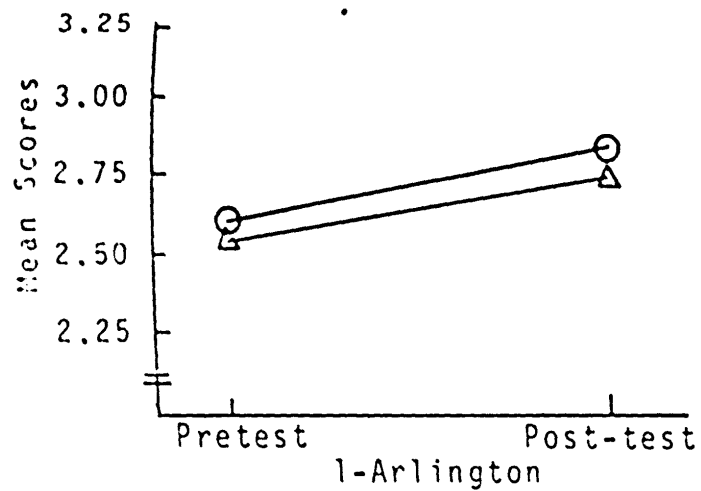
*SGP--School Group Period of Testing **0.001 level of significance on 138df
1) Arlington C--Control + Pretest
2) El Paso E--Experimental - Post-test
3) Ripon
4) Sun Valley

In retrospect, even though significant differences were computed for the main effects of conditions and trials, when these factors interacted, the combinations reflected no significant differences. The interaction difference seems likely qualified by the difference in School 4 experimental pretest score and the others previously reported by the Duncan's New Multiple Range Test.

Data indicate that Scale 7, Encouraging independence and initiative, reflects the effectiveness of the experiences with children in a preschool while studying in a child development course contrasted with the experiences of only the child development course. Figure 21 graphically displays the consistency of trends in attitude change for each school's experimental and control groups as a result of the experiment. With the exception of School 3, all groups gained in attitude scores, indicative of greater favorable agreement to work within a democratic-developmental framework when attempting to help children make choices and decisions which lead to development of independence and initiative.

Scale 8--Encouraging Creativity

The pretest data for the independent variable, Encouraging creativity, when analyzed for comparison of attitude



○ Experimental
 △ Control

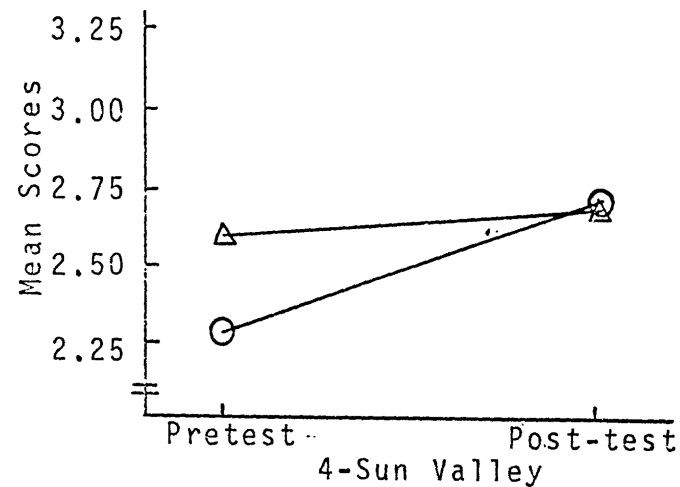
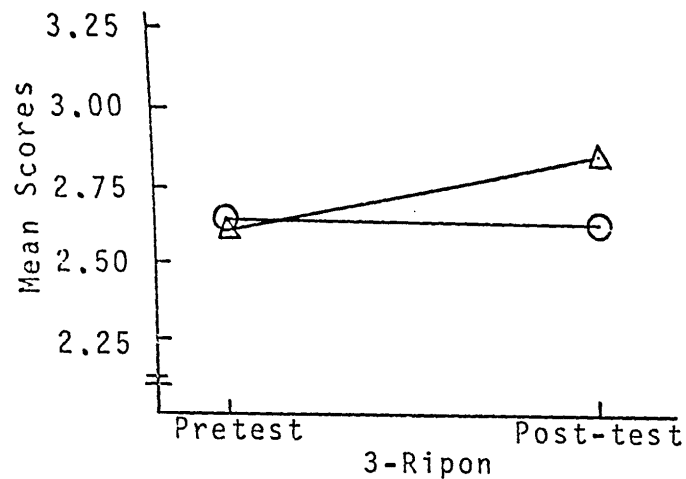


Figure 21

Means for Experimental and Control Groups for Each School Over the Period of Test-
 ing on Scale 7 - Encouraging Independence and Initiative

scores, revealed no significant difference between interaction effects of schools on experimental versus control groups, no difference between experimental and control subjects, and no difference between schools. Homogeneity of subjects was thus assumed for attitudes toward child guidance reflective of a tendency in the direction of mild agreement with the democratic-developmental philosophy at the beginning of the experiment. Table II, Part VIII, summarizes these data for the interaction and main effects initially measured by the analysis of variance. Means ranged from the lowest score of 2.551 for School 2 control group to 2.936 for School 1 control group. Figure 22 shows the similarities of attitudes at the pretest level for both experimental and control subjects. Natural variability accounts for any differences in the combined effects of a given school on its experimental versus its control subjects.

Analysis of variance following the experiment indicated no significant difference in effects of the experiences of control or experimental subjects over the testing period of one semester. However, the experimental groups in all four schools increased scores over the testing period, while the control groups, except for the one in School 3, remained relatively unchanged in attitude toward the democratic approach to encouraging creativity. The control group in

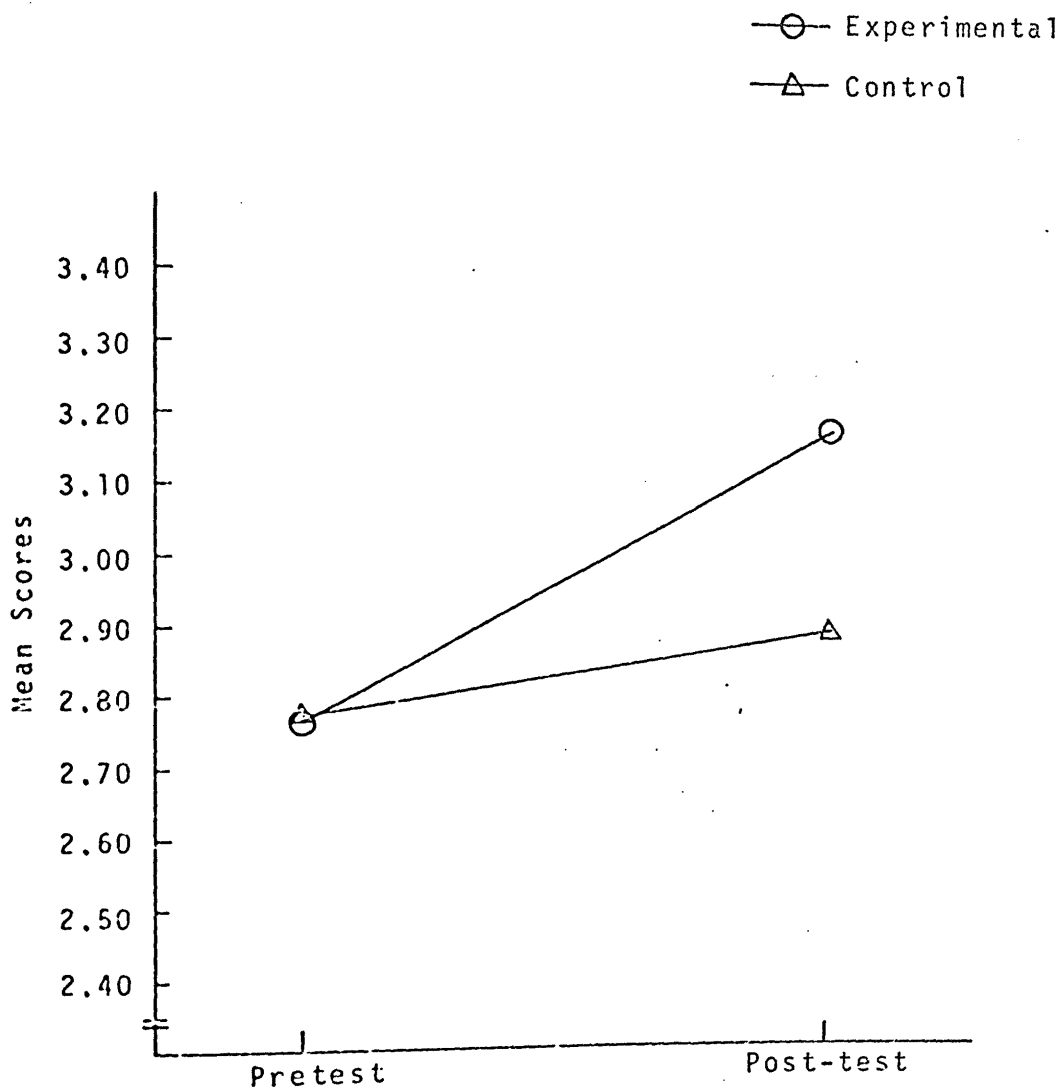


Figure 22

Mean Scores of Experimental and Control Subjects on
Scale 8 - Encouraging Creativity

School 3 increased from a pretest mean score of 2.736 to a post-test of 3.186. The control group in School 3 appeared to change over the semester in the same direction of favorable agreement with the philosophy comparable to the experimental groups from the other schools but without benefit of experience in working with children. The null hypothesis of no interaction effect was not rejected at the .05 level of significance. However, there was general improvement of all experimental subjects over the control subjects from beginning to conclusion of the semester.

Although the trend of scores from the pretest to post-test period was in an upward direction, the difference between these periods was not statistically significant. Failure to reject the null hypothesis of no difference between trial periods occurred at the .05 level.

There was a statistically significant difference at the .01 level among the control and experimental groups as a result of the two factor, mixed design, analysis of variance. In Table III, Part VIII is reported an F ratio of 2.886 on 7, 138 df for the treatment term. The null hypothesis of no difference among conditions for Scale 8 was rejected at the .01 level as a result of this experiment. The DNMRT X was computed in order to locate the differences among specific experimental and control groups. The only

DUNCAN'S NEW MULTIPLE RANGE TEST X .
DIFFERENCES BETWEEN EIGHT GROUPS OF EXPERIMENTAL AND CONTROL SUBJECTS
FOR SCALE 8--ENCOURAGING CREATIVITY

SG* Means	(1) 2C	(2) 2E	(3) 4E	(4) 1C	(5) 4C	(6) 3C	(7) 3E	(8) 1E	(9) **Shortest Significant Ranges
2.608	2.608	2.863	2.875	2.902	2.910	2.961	3.012	3.119	
2.608		.255	.267	.294	.302	.353	.404	.511	R ₂ = .370
2.863			.012	.039	.047	.098	.149	.256	R ₃ = .388
2.875				.027	.035	.086	.137	.244	R ₄ = .402
2.902					.008	.059	.110	.217	R ₅ = .411
2.910						.051	.102	.209	R ₆ = .419
2.961							.051	.158	R ₇ = .425
3.012								.107	R ₈ = .430
	2C	2E	4E	1C	4C	3C	3E	1E	

Any two treatment means not underscored by the same line are significantly different
Any two treatment means underscored by the same line are not significantly different

*SG--School

- 1) Arlington
- 2) El Paso
- 3) Ripon
- 4) Sun Valley

Group

- C--Control
E--Experimental

**.05 level of significance on 138 df

significant difference occurred between the control group in School 2, at the .05 level (66 per cent Protection), and the experimental group in School 1. The latter group had a mean score of 3.119 as compared with a lower score of 2.608 for the control group in School 2. The contrast in these scores is meaningful only as an indicant of range in scores depicting attitude differences between the schools' respective groups. Figure 23 graphically portrays the conceptualization of attitude performance by experimental versus control groups for all the schools.

Figure 24 illustrates the comparison of change which occurred between experimental and control groups for each school, identifying again the favorable change over the semester by all experimental groups and by School 3 control group. The consistent gains in scores (Table IV, Part VIII) by the experimental subjects appear to indicate some effectiveness, in all four schools, of experiences in working with children in order to change attitudes toward child guidance in the direction of the underlying philosophy.

Patterns of Attitude Change

The patterns of attitude change tend to be remarkably similar for the experimental and control groups, respectively, in all four schools as reflected by the IACG scale scores.

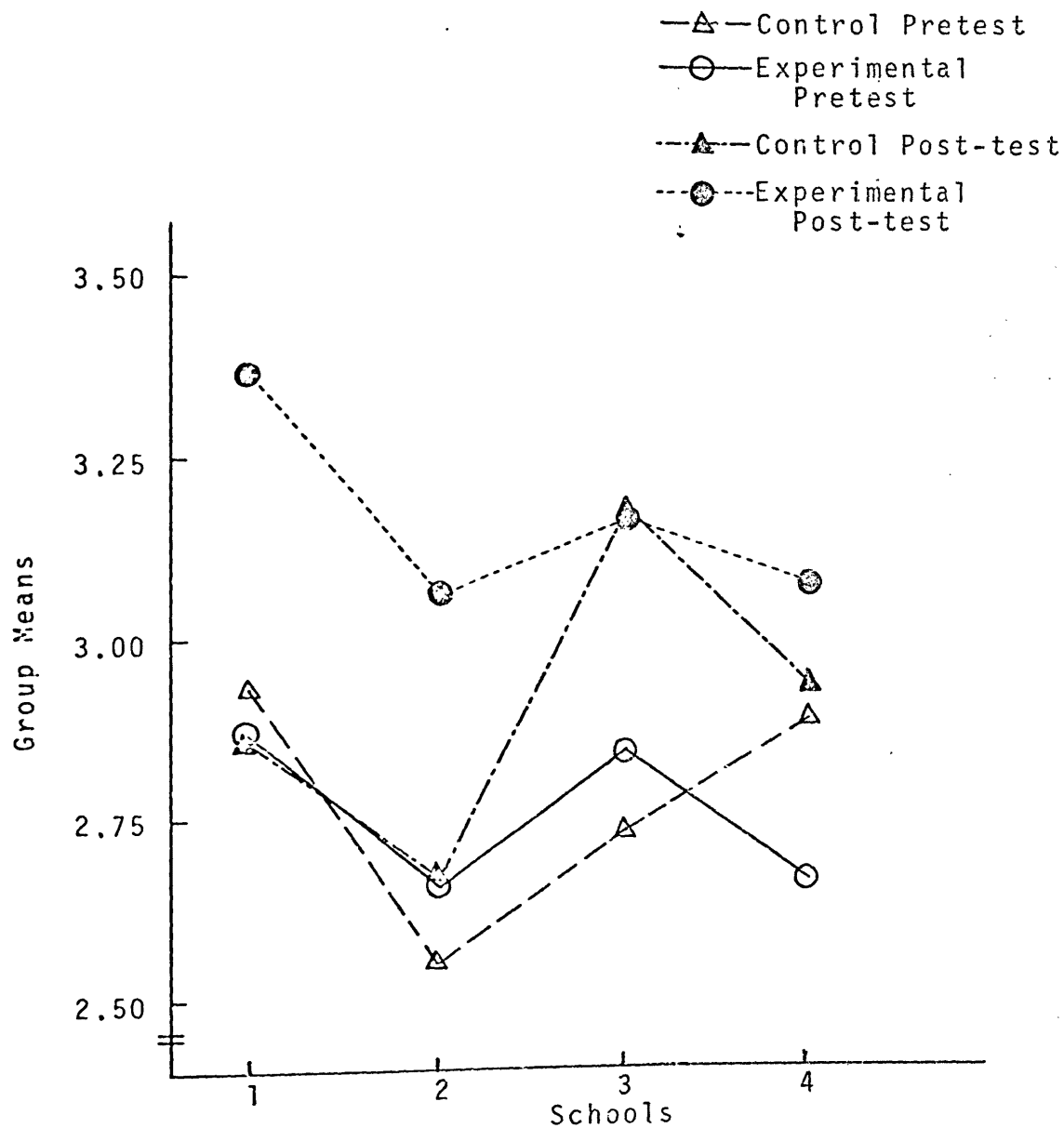
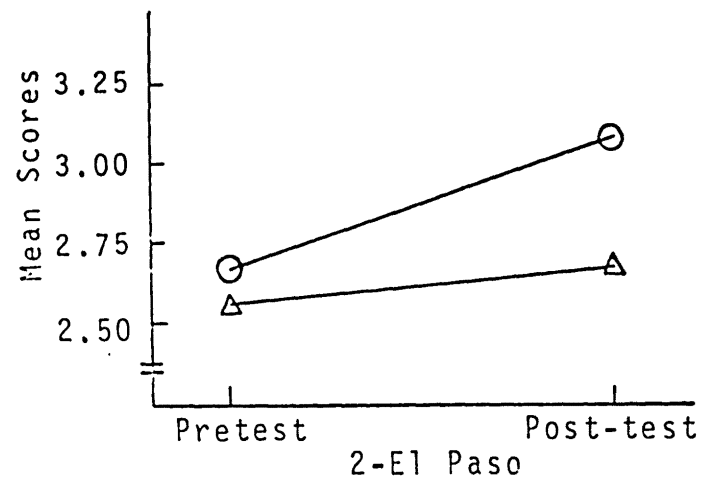
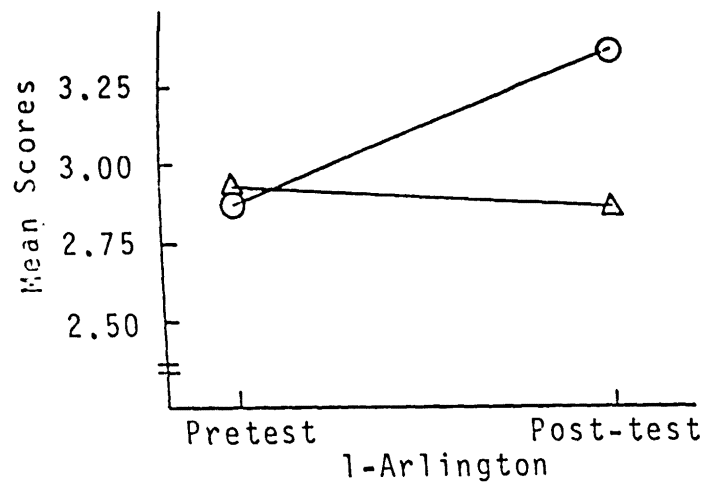


Figure 23

Pretest and Post-test Means for Experimental and Control
Groups in Four Schools for Scale 8 -
Encouraging Creativity



—○— Experimental
—△— Control

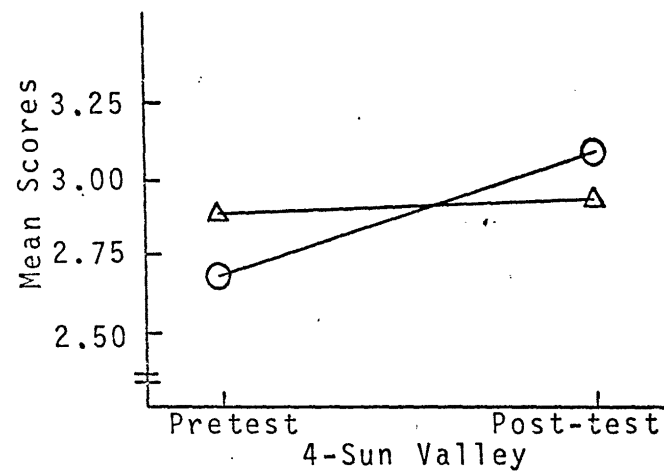
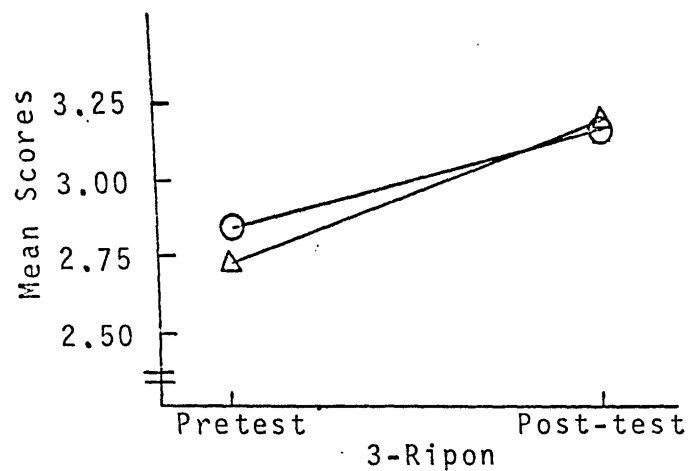


Figure 24

Means for Experimental and Control Groups for Each School Over the Period of Testing on Scale 8 - Encouraging Creativity

Figures 25 through 28 illustrate the similar trends of attitudes for subjects of experimental and control groups in the four respective schools. On all independent variables, with the exception of Scales 7, Encouraging independence and initiative, and 8, Encouraging creativity, which indicate more fluctuation between group scores, the scores were held relatively constant throughout the experiment.

The following summary of experimental and control group comparisons reflects numerical scores, not significantly different, but, which reflect the trends of attitude change over the semester. These numerical scores are noted for experimental and control groups in each school.

In summarizing the experimental groups' attitude changes over the semester, those in Schools 1, 2, and 3 increased scores over the trial period for Scale 8, Encouraging creativity. Scale 7, Encouraging independence and initiative, measured an increase by experimental and control groups in Schools 1, 2, and 4 with the scores remaining relatively unchanged for School 3.

Scales 3, Reflecting the child's feelings, and 6, Encouraging verbalization, measured an increase in scores by the School 1 experimental group only. This group increased scores over the semester on all scales. School 2 increased on six scales; School 3 on four; and School 4 on two scales.

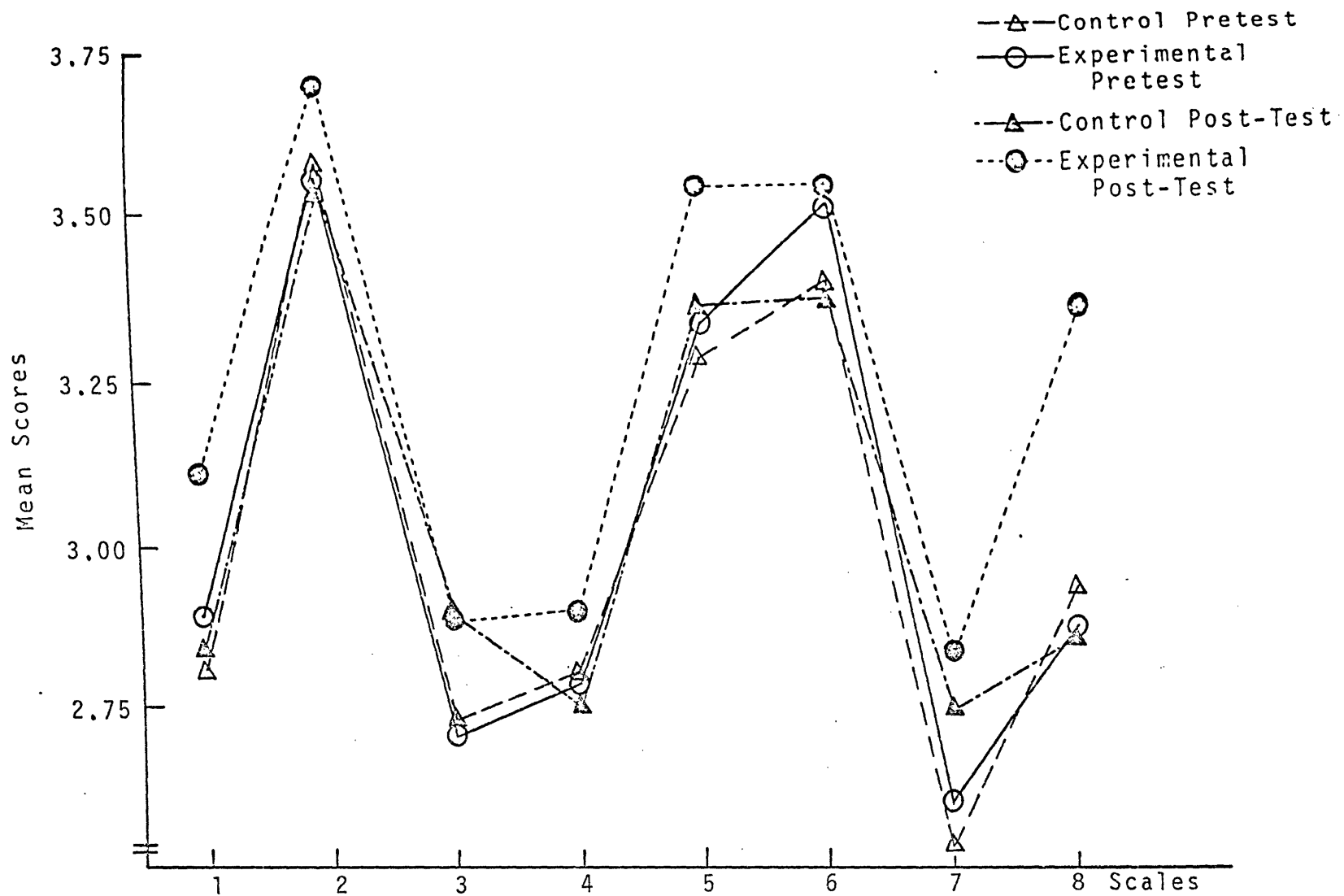


Figure 25

School 1, Mean Scores on IACG for the Experimental and Control Groups

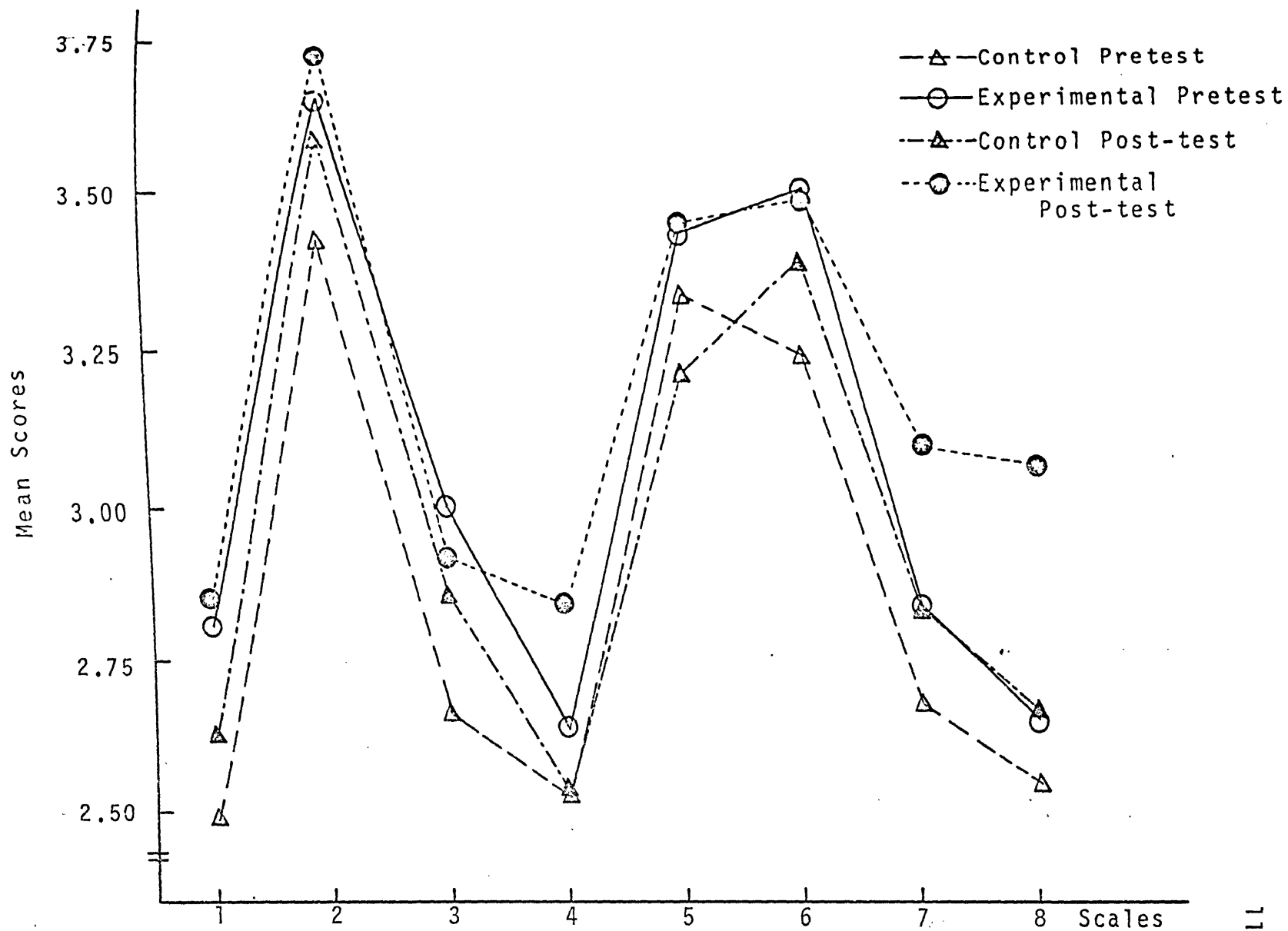


Figure 26

School 2, Mean Scores on IACG for the Experimental and Control Groups

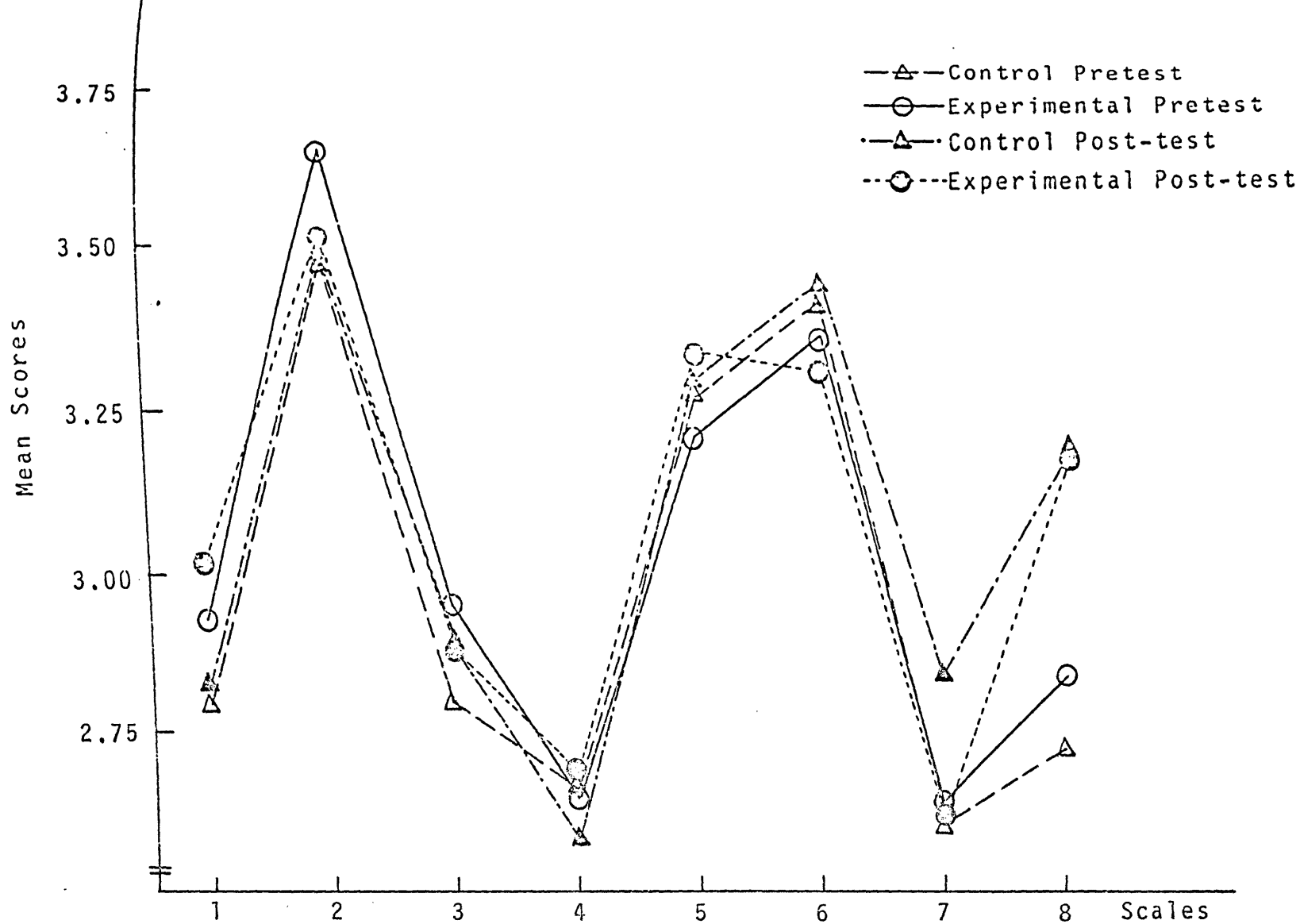


Figure 27
School 3, Mean Scores on IACG for the Experimental and Control Groups

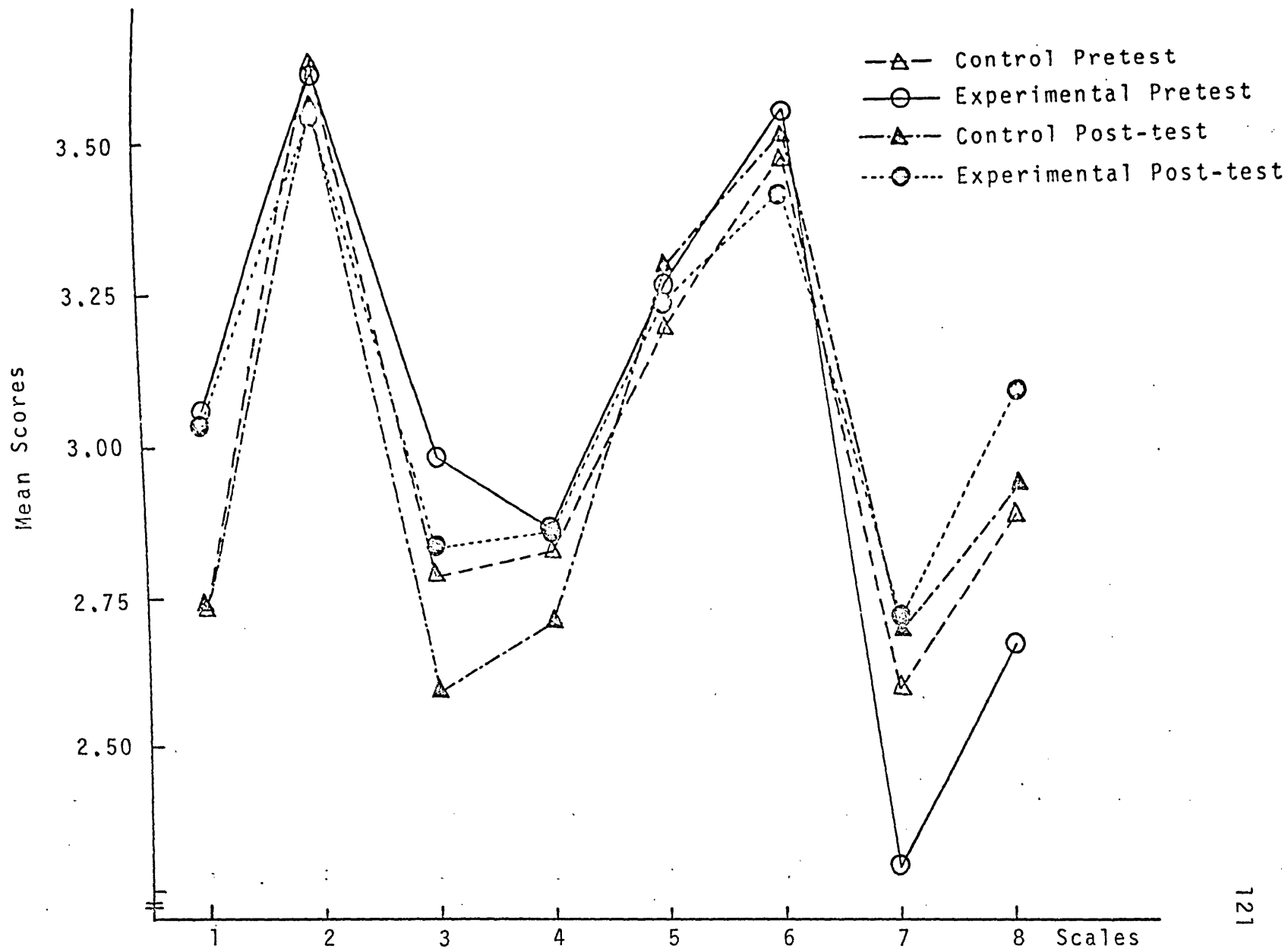


Figure 28

School 4, Mean Scores on IACG for the Experimental and Control Groups

In comparing experimental and control groups at the post-test level, the experimental group scores exceeded those scores of control groups in all schools for Scales 1, Accepting the child as he is, and 4, Accepting the child's feelings. Scale 2, Understanding the child's feelings, reflected this same trend with the exception of School 4, in which both experimental and control groups held about the same scores at the end of the semester. Scale 3, Reflecting the child's feelings, indicated higher experimental group scores for Schools 2 and 4 with approximately the same scores for Schools 1 and 3. Scale 8, Encouraging creativity, measured favorable scores for experimental groups except for School 3 in which the experimental and control groups had about the same scores.

Scale 5, Redirecting undesirable behavior, reveals the control group exceeding the experimental group in School 4; whereas Scale 6, Encouraging verbalization, reflects this trend for both Schools 3 and 4. Scale 7, Encouraging independence and initiative, measured the control group as exceeding the score of the experimental group in School 3. Approximately the same scores were reflected by School 4 experimental and control groups. A majority of scales reflected some increase in scale scores of control groups from pretest to post-test periods in all four schools.

The greatest overall change in attitudes toward child guidance appears to have occurred on Scales 7, Encouraging independence and initiative, and 8, Encouraging creativity. With the exception of School 3, all groups increased scores on these scales in the direction of more agreement with the democratic-developmental philosophy of child guidance.

Attitude Change in Schools

The following summary of attitudes for groups of subjects in each school is based on numerical scores which are not statistically significant. The discussion is presented in order to reflect trends and patterns of attitude change within each respective school.

School 1--Arlington, Virginia.--The experimental group in School 1, at the post-test level, exhibited an increase in attitude scores over the semester on each scale. Experimental group scores were also higher than control group scores, at the post-test level, on all except Scale 3, Reflecting the child's feelings, which indicated the same score for both groups. The control group scores indicated similar attitudes held from pretest to post-test for Scales 1, Accepting the child as he is, 2, Understanding the child's feelings, 3, Reflecting the child's feelings, 4, Accepting the child's feelings, 7, Encouraging independence and initiative, and 8, Encouraging creativity, when observing both

experimental and control groups over the entire semester with the exception of the experimental group which increased its score on Scale 1, Accepting the child as he is, to indicate mild agreement following the experiment. In each case, experimental group scores increased in the direction toward mild agreement by the end of the semester.

On Scale 3, Reflecting the child's feelings, the experimental and control groups at the pretest level were similar with scores between 2.700 and 2.750 indicating a tendency toward mild agreement with the democratic-developmental approach to child guidance. Both groups, at the post-test level on this scale, indicated slightly higher scores between 2.850 and 2.900 by the end of the semester. The experience with children apparently had no effect on the experimental group's attitudes toward reflecting the child's feelings when compared with the control group at the post-test level.

Scales 2, Understanding the child's feelings, 5, Redirecting undesirable behavior, 6, Encouraging verbalization, and 8, Encouraging creativity, measured attitudes reflective of mild agreement by experimental groups following the experiment. These four scales were indicative of mild agreement by both experimental and control subjects with tendencies toward strong agreement with the underlying philosophy.

Scale 6, Encouraging verbalization, indicates the experimental group was initially slightly higher than the control group, both having tendencies toward strong agreement with the philosophy. By the conclusion of the experiment, there was little change in the experimental group scores attributable to the experience with children and relatively no change between control group scores for pretest and post-test periods as measured by the independent variable, Encouraging verbalization.

Encouraging creativity, Scale 8, reflects the greatest change by Arlington's experimental group at the post-test level. Increasing from 2.872 at the beginning of the course to 3.367 at the end of the course, this group appears to have been influenced by the preschool program.

School 2--El Paso, Texas.--Experiences with children appear to have had some favorable influence on the experimental group's attitudes over the trial period on Scales 1, Accepting the child as he is, 2, Understanding the child's feelings, 4, Accepting the child's feelings, 7, Encouraging independence and initiative, and 8, Encouraging creativity. Scales 7, Encouraging independence and initiative, and 8, Encouraging creativity, reflected greater increases in favorable change over the semester than did the other scales. Scales 3, Reflecting the child's feelings, and 6, Encouraging

verbalization, measured less change by the experimental group at the post-test level while Scale 5, Redirecting undesirable behavior, measured no change in attitude when compared with pretest scores.

The experimental group's post-test scores resulted in more attitude change in a favorable direction for every scale when compared with control group scores at the post-test level. However, Scales 1, Accepting the child as he is, 3, Reflecting the child's feelings, and 4, Accepting the child's feelings, continued to reflect less agreement with the philosophy after the course, whereas Scales 2, Understanding the child's feelings, 5, Redirecting undesirable behavior, 6, Encouraging verbalization, 7, Encouraging independence and initiative, and 8, Encouraging creativity reflected mild agreement with a tendency toward strong agreement with the democratic-developmental approach to child guidance.

School 3--Ripon, Wisconsin.--Over the semester, the experimental group in Ripon evidenced slight increases in attitude scores on Scales 1, Accepting the child as he is, 4, Accepting the child's feelings, and 5, Redirecting undesirable behavior, with a greater increase on Scale 8, Encouraging creativity. However, on Scales 2, Understanding the child's feelings, 3, Reflecting the child's feelings,

6, Encouraging verbalization, and 7, Encouraging independence and initiative, the experimental group scored slightly less favorably after the course was completed. The control group maintained approximately the same attitudes from pre-test to post-test periods on all scales except 7, Encouraging independence and initiative, and 8, Encouraging creativity, in which cases attitude scores increased by the end of the semester.

On Scale 7, Encouraging independence and initiative, control subjects remained in less agreement with the democratic approach to encouraging children but with a tendency toward more agreement as indicated by an increase in group scores from 2.613 to 2.849 over the semester. Scale 8, Encouraging creativity, measured an increase from 2.736 at the pretest level to 3.186 at the post-test level for the control group, thus reflecting greater agreement with the underlying philosophy without benefit of the children's program while studying child development. The experiences with children appear to have had little or no influence in affecting attitude change toward child guidance in this school's child development program.

School 4--Sun Valley, California.--Independent variable measurements indicate the only gains in attitude scores from pretest to post-test period were by the experimental group

on Scales 7, Encouraging independence and initiative, and 8, Encouraging creativity. On Scale 7, Encouraging independence and initiative, attitude changed, for the experimental group, from mild disagreement at a score of 2.258 toward mild agreement with a score of 2.714. Scale 8, Encouraging creativity, on the other hand, measured change from a score of 2.669 to a score of 3.080 indicating a tendency toward greater agreement.

Little or no change was evidenced by the control group over the semester for Scales 1, Accepting the child as he is, 2, Understanding the child's feelings, 6, Encouraging verbalization, and 8, Encouraging creativity. Scales 3, Reflecting the child's feelings, and 4, Accepting the child's feelings, measured attitudes on the post-test level indicative of less agreement by the control group than before the child development course was taught. Scales 5, Redirecting undesirable behavior, and 7, Encouraging independence and initiative, measured attitudes indicative of very slight change in a favorable direction over the semester for the control group without the influence of experiences in a children's program.

CHAPTER IV

C O N C L U S I O N S A N D R E C O M - M E N D A T I O N S

The central problem of this study was to determine change of high school students' attitudes toward child guidance influenced by experiences with young children in pre-school settings while studying child development as compared to students not receiving this experience while studying child development. The specific objectives of the investigation were:

- 1) To test the underlying hypothesis that high school students studying child development will have greater favorable changes in attitudes toward child guidance, reflective of the democratic-developmental philosophy, if they have experiences in observing and working with children in a preschool program during the child development course;
- 2) To determine the extent of effect that experiences with children in preschool programs have on students' attitudes toward children;
- 3) To compare attitude changes between experimental and control group subjects in four schools prior to and following the child development course experiences; and
- 4) To report findings and formulate implications and recommendations for further study and for planning learning experiences for individuals preparing to assume roles as teachers, aides, and/or parents of young children.

The hypothesis underlying this investigation was that students having an experience with children in a preschool program while studying child development will have greater favorable change in attitudes toward child guidance, reflective of the democratic-developmental philosophy, than students not having this experience while studying child development.

Three null hypotheses were formulated to test the hypothesis. These were:

- 1) There will be no difference between the respective schools' experimental and control groups' attitudes from the pretest to the post-test period of the experiment.
- 2) No change in attitudes will occur over the trial period of one semester.
- 3) The experiment will effect no difference in agreement and/or disagreement with the philosophy among experimental and control groups in the four schools.

Data for this study were obtained from 146 female subjects. The participants were high school students enrolled in child development courses offered by schools in Arlington, Virginia, El Paso, Texas, Ripon, Wisconsin, and Sun Valley, California.

The Inventory of Attitudes on Child Guidance (IACG) was utilized for the collection of data to measure attitudes

reflective of the democratic-developmental philosophy of child guidance. Subjects were tested prior to and following the experiment in order to achieve a more complete analysis of the problem.

The overall objective was to determine whether experiences in working with children in a preschool program would effect greater change in student attitudes toward child guidance in the direction of favorable agreement with the underlying philosophy of the course and the children's program. Evaluation of the experiment in terms of this objective included determining to what extent attitudes changed between experimental and control groups of subjects, the experimental subjects having experience with young children in a preschool program while studying in a child development course and the control subjects having the same course without the additional experience with children. This evaluation was based on eight independent variables of the Inventory of Attitudes on Child Guidance used to measure attitudes in given areas of child guidance.

CONCLUSIONS

Conclusions are summarized for these eight areas:

Scale 1--Accepting the Child as He Is

The first null hypothesis was not rejected at the .05 level of significance. The combined factors of a child

development course incorporating a preschool component with a time period of one semester did not make a difference, statistically, in the experimental students' attitudes when compared with students having the same course over the same period of time but without the preschool component.

The second null hypothesis of no difference between the two types of experiences was rejected, thus inferring that students working with children while studying child development exhibited attitudes different from those of students without this experience. However, rejection occurred as a result of the real difference between a control group in one school and one experimental group in another school. Apparently, within the respective schools, the differences between the attitudes of students with and without the children's component were not sufficient to be statistically significant.

Results of the overall experiment supported rejection of the null hypothesis of no difference in attitudes from the pretest to the post-test period. However, with the exception of the experimental group in one school, there were no significant favorable changes in attitude over the semester. The child development course, exclusive of the experiences with children, appears to have had some favorable influence on student beliefs and evaluative responses toward acceptance of the child as he is.

Scale 2--Understanding the Child's Feelings

There were no significant measured changes in attitudes of students for Scale 2, Understanding the child's feelings, thus none of the three null hypotheses were rejected. Although the child development experiences evidenced little or no influence on students' attitudes, agreement with the philosophy was maintained throughout the semester by all groups with a tendency toward relatively strong agreement.

Scale 3--Reflecting the Child's Feelings

The three null hypotheses were not rejected for the variable measuring attitudes toward reflection of children's feelings. Students' experiences apparently had little or no effect upon changing attitudes toward children to reflect greater agreement with the democratic-developmental approach to child guidance. The control subjects, taken as a whole evidenced some favorable change in the direction toward mild agreement while the experimental subjects, taken as a whole, actually evidenced slightly less agreement with the philosophy than prior to the experiment.

Scale 4--Accepting the Child's Feelings

The null hypothesis of no differences between conditions of the learning experiences over the semester was not

rejected. No real attitude differences were found after four and one-half months between students working with children and students not working with children while studying about them.

The null hypothesis of no difference among the respective experimental and control groups was rejected on the basis of a significant difference in attitudes between only two of the eight groups. Students having experiences with children consistently maintained more favorable attitudes over the semester than did students without these experiences.

Scale 5--Redirecting Undesirable Behavior

After one semester, group scores between students in the child development course having experiences with children and students in the same course without this experience were sufficient to reject the null hypothesis of no difference. However, the investigator believes this conclusion was reached on the basis of attitude differences of only one control group in one school; thus, the rejection may have been a Type I error, in which case no real change can be attributed to the experiences in the preschool program.

The null hypothesis that students will have the same degree of agreement and/or disagreement with the philosophy, whether they work with children or not while studying child

development was rejected. This difference occurred, however, only as a result of the attitudes held by the students not having experiences with children in only one school, thus placing little validity in the rejection of this null hypothesis.

No change in attitudes was exhibited from the pretest to the post-test period, thus, the null hypothesis of no difference was not rejected. The child development course, with or without the children's program incorporated, appeared to have no real influence on changing students' attitudes related to redirecting children's behavior.

Scale 6--Encouraging Verbalization

None of the three null hypotheses were rejected for this independent variable. Students' attitudes toward the democratic-developmental approach to language development were changed by neither the child development course per se, the course with the additional experience of working directly with children, nor by the time period of one semester's training.

Scale 7--Encouraging Independence and Initiative

Over the semester, taken as a whole, students working with young children, while studying the area of helping the child to gain independence, changed attitudes in the same

direction and approximately by the same degree as students not working with children while studying this area. The null hypothesis of no difference between pretest and post-test periods was not rejected. Both groups of students evidenced relatively the same amount of favorable change toward mild support of the philosophy, indicating that the change was probably due to the child development course rather than the opportunity to work directly with children.

Rejection of the null hypothesis of no difference among experimental and control groups occurred on the basis of a real difference in attitudes between only one experimental group in one school and several other groups. Viewing the total experiment, no significant change in attitudes was apparent between the students engaged in the children's program and those engaged in the course only.

In support of the above conclusions, a comparison of the children's program influence and course influence on students over one semester revealed no significant difference, thus, the null hypothesis of no difference was not rejected. The course alone appears to have been an influencing factor on attitude change over the semester for all students.

Scale 8--Encouraging Creativity

In general, the students working with children improved attitudes in the direction of greater agreement with the philosophy over the semester while students not working with children remained relatively unchanged in their attitudes. The null hypothesis of no difference between these groups over the semester was not rejected.

Although the trend from pretest to post-test period was toward more favorable attitudes, the change in attitudes was not statistically significant. The null hypothesis of no difference between trials was not rejected.

The null hypothesis of no difference among experimental and control groups of students was rejected as a result of a real difference between attitudes of only one school's group of students in the course without the children's program, which evidenced less favorable attitudes, and another school's group of students with the children's program which evidenced more favorable attitudes. However, the consistent trend toward gain in favorable attitudes by students working with children does seem to indicate some effectiveness in all schools as a result of the children's program experiences. The students' recognition of need for encouraging creativity in a manner conducive to the child's

attainment of the greatest benefit from self expression through various media and processes of the child's choice rather than through focusing on the finished product appears to have been slightly promoted by working with children while studying child development.

The patterns of attitude change, resultant of the findings of this study, infer similarity and consistency between the four schools' child development courses and involvement with the children's programs. In terms of attitude change, there appears to be little influence which can be ascribed to the experiences with children while studying child development when measured against the influence of the course without the additional experience. Thus, in general, the findings of this study do not support the underlying hypothesis that significant changes would occur.

A ceiling effect could possibly apply to the lack of change exhibited on some scales where attitudes of students were already at relatively high levels. The lack of attitude change by subjects in the experimental groups may also be attributed to factors beyond the scope of this study. However, this investigator urges consideration of the following assumptions concerning the nature of attitudes as reported by Chien (11) and agreed upon by many researchers:

- 1) A person is not born with his attitudes.

- 2) The learning process plays a major role in the development of attitudes.
- 3) Attitudes involve problems of perception and motivation.
- 4) As a result of a particular attitude a person may be more likely to perceive certain objects than others.
- 5) Some attitudes affect perceptions after their arousal even though they may not have oriented the person originally in the direction of the perceived objects.
- 6) Specific behavior can not be safely predicted from a knowledge of attitude alone.
- 7) People may act contrary to their attitudes.

Fishbein (20) reported that while investigators have argued that traditional attitude measures will not predict behavior, they have usually questioned the measure of attitude rather than the assumption of an attitude-behavior relationship. They have also argued that most traditional measures of attitude are oversimplified and fail to consider the individual's cognitions and conations--thus, attempting to resolve the attitude-behavior problem by expanding the definition of attitude to include affective, cognitive, and conative components. The present study is limited to the concept of behavior toward a given object as a function of many variables, of which attitude toward the object is only one.

RECOMMENDATIONS

The investigator believes that in order to effect attitude change to a significant degree, courses and experiences must be planned with clearly defined goals and in the context of behavioral objectives. Based on the assumption that beliefs and opinions are symbols of attitude and that these serve as a means for measuring attitude change, learning experiences planned to effect change in beliefs and preconceived ideas toward an object or situation become imperative. Attitudes involve both affective and cognitive components, thus the interaction of these must be given consideration as activities are planned in the realms of both theoretical and practical application.

Beliefs and behavioral intentions, as part of attitude, become indicants of an individual's evaluative response. Attitude scores will likely not improve until experiences provide the media for changing the beliefs and behavioral intentions or for activating those which may exist.

Well defined objectives for children's programs are recommended to assist in identifying the philosophical framework within which the program is functioning. Theoretical and philosophical orientations must be given greater priority and attention by teachers involved with child development and child guidance learning experiences.

Dreikurs (16) commented that the American society is in a predicament of ineffective approaches to guidance of children. He attributed this dilemma to lack of a tradition in child rearing practices and to no definite patterns for working with children. This situation could result in each generation being apt to elicit a different approach to child rearing based on no particular philosophical orientation.

Rather than rely upon the often used "insight" approach to working with children, some alternative frameworks for understanding children's development and behavior and for guiding children need to be established. Programs in child development need to be based on theoretical and philosophical assumptions which are clearly identified at the outset of the course or program and which are continuously illustrated throughout the period of preparation for guidance of young children. Flexibility in learning experiences must be maintained but with well defined objectives and a conceptual framework in order to make the experiences more meaningful.

One semester may be too limited a period of time in which to change beliefs and opinions which support a given philosophy. The developmental aspects of the child's life may be too complex for more than acquisition of knowledge and comprehension by students on the high school level.

Progress within the cognitive domain in the areas of child guidance may be limited to such an extent that the affective domain is not activated at this point in the learning experience.

The inculcation of philosophical principles may require greater maturity than that of high school students. However, this author is of the belief that a philosophical foundation can be utilized, in a simplified fashion, to assist high school students in developing competencies needed to work effectively with children as teacher aides and assistants in children's programs and later as parents. The stages of growth and the levels of development coupled with those philosophical principles most closely allied to today's societal intentions seem significant in helping individuals prepare to function effectively in daily living and in guiding young children during the early years of development and personality formation.

Further research in attitudes of youth seem not only appropriate but essential if high school programs are to continue with the investment of resources for the training of students in areas of child development and child guidance. Measurement of the changes in cognitive and psycho-motor domains seem appropriate and necessary in addition to measuring change in affective areas of learning. National

norms need to be established in philosophical as well as psychological areas in order to facilitate the research capability of more complete analysis of attitude change related to the democratic-developmental philosophy of child guidance.

This author recommends that institutions of higher education give special attention to professional development opportunities through courses and institutes designed especially to assist professional personnel in providing more effective learning situations through which students can develop competencies needed in working with and guiding young children. A further recommendation is continuous evaluation, including research components, for assessing the effectiveness of teacher training programs and high school courses and programs focusing on child development and child guidance.

Educators have arrived at a point in time when they must accept the greater challenge to go beyond measuring and understanding attitude change to that of using knowledge in order to produce attitude change. Programs based on orientations supportive of democratic ideology coupled with developmental phases of personality formation appear basic to the American way of life. Thus, assisting individuals

to more effectively guide young children in developing, to the greatest extent possible, recognized capabilities and potentialities continues to be a challenge and a responsibility for educators in areas of social-psychological endeavors.

B I B L I O G R A P H Y

1. Allport, G. W. "Attitudes," A Handbook of Social Psychology, edited by C. A. Murchison. Worcester, Massachusetts: Clark University Press, 1935.
2. Allport, G. W. The Nature of Prejudice. New York: Doubleday and Company, 1954.
3. Baldwin, Alfred L., J. Kalhorn, and F. H. Breeze. Patterns of Parent Behavior," Psychological Monographs, Vol. 58, No. 3 (1945)
4. Barker, Roger G. "Child Psychology and Societal Reconstruction," Journal of Consulting Psychology, Vol. X, No. 1 (1946)
5. Baruch, Dorothy. New Ways in Discipline. New York: McGraw-Hill, 1949.
6. Berelson, B., P. F. Lazarsfeld, and H. Gaudet. The People's Choice. (2nd Edition) New York: Columbia University Press, 1948.
7. Bernard, Harold W., and Wesley C. Huckins (editors). Readings in Human Development. Boston: Alan and Bacon, Inc., 1967.
8. Berrien, F. K. Practical Psychology. New York: The Macmillan Company, 1945.
9. Bogardus, E. S. "Measuring Social Distance," Journal of Applied Sociology, Vol. 9 (1925).
10. Campbell, John D. "Studies in Attitude Formation: The Development of Health Orientations," Attitude, Ego-Involvement and Change, edited by Carolyn Sherif and Naser Sherif. New York: John Wiley and Sons, Inc., 1967.
11. Chein, I. "The Genetic Factor in a Historical Psychology," Journal of General Psychology, Vol. 36 (1947)

12. Coast, L. C. "A Study of the Knowledge and Attitudes of Parents of Preschool Children," University of Iowa Studies in Child Welfare, Vol. 17 (1939).
13. Combs, Arthur, and Donald Snygg. Individual Behavior. New York: Harper and Brothers, 1959.
14. Courtney, E. Wayne. Implications for the Training of Teachers. Stout State University, Menomonie, Wisconsin, 1965.
15. Doob, L. S. "The Behavior of Attitudes," Psychological Review, Vol. 54 (1947).
16. Dreikurs, Rudolf. The Challenge of Parenthood. New York: Sloan and Pearce, 1948.
17. Festinger, L. A Theory of Cognitive Dissonance. Evanston, Illinois: Row, Peterson, and Company, 1957.
18. Fishbein, Martin. "A Behavior Theory Approach to the Relations Between Beliefs About an Object and the Attitude Toward the Object," Readings in Attitude Theory and Measurement, edited by M. Fishbein. New York: John Wiley and Sons, Inc., 1967.
19. Fishbein, Martin. "A Consideration of Beliefs, Attitudes, and Their Relationships," Current Studies in Social Psychology, edited by Steiner and Fishbein. New York: Holt, Rinehart and Winston, 1965.
20. Fishbein, Martin. "Attitude and the Prediction of Behavior," Readings in Attitude Theory and Measurement, edited by Martin Fishbein. New York: John Wiley and Sons, Inc., 1967.
21. Fisher, M. S. "Helping Young America to Responsible Parenthood Through Changing Psychological Attitudes," Journal of Heredity, Vol. 33 (1942).
22. Fisher, Virginia Lee. "Role Conceptions of Head Start Teachers." Unpublished Doctoral dissertation, University of Missouri, 1967.
23. Gerald, M. W. "Direct Treatment of the Preschool Child," American Journal of Orthopsychiatry, Vol. 12 (1942).

24. Hartley, Eugene L. "Attitude Research and the Jangle Fallacy," Readings in Attitude Theory and Measurement, edited by M. Fishbein. New York: John Wiley and Sons, Inc., 1967.
25. Heider, F. "Social Perception and Phenomenal Causality," Psychological Review, Vol. 51 (1944).
26. Hovland, C. I., A. A. Lunsdaine, and F. D. Sheffield. Experiments on Mass Communication. Princeton: Princeton University Press, 1949.
27. Ilg, Frances L., and Louise Bates Ames. Child Behavior. New York: Harper and Brothers, 1955.
28. Ingram, Christine P. Education of the Slow-Learning Child. New York: The Ronald Press Company, 1960.
29. Insko, C. A. Theories of Attitude Change. New York: Appleton-Century-Crofts, 1967.
30. Johnson, Ronald C., and Gene R. Medinnus. Child Psychology--Behavior and Development. New York: John Wiley and Sons, Inc., 1969.
31. Kinzie, Lois Miller. "The Inventory of Attitudes on Child Guidance: A Validation Study." Unpublished Master's thesis, University of Georgia, 1963.
32. Koslin, B. L. "Laboratory Experiments and Attitude Theory," Attitude, Ego-Involvement and Change, edited by Sherif and Sherif. New York: John Wiley and Sons, Inc., 1967.
33. Krech, D., and R. Crutchfield. Theory and Problems of Social Psychology. New York: McGraw-Hill, 1948.
34. Lane, Dorothy. "Certification of Teachers. . . A Part of Improving the Quality of Education of Young Children," Young Children, Vol. 33 (1967).
35. Laws, Gertrude. "Parent-Child Relationships: A Study of the Attitudes and Practices of Parents Concerning the Social Adjustment of Children," Contribution to Education, Vol. 283 (1927).
36. Leonard, G. B. Education and Ecstasy. New York: Delacourte Press, 1968.

37. Marshall, H. R., J. G. Hobart, B. J. Cox, L. Magruder, and J. W. Ringo. "Modification of Student Attitudes on Guidance of Children Scales Through Classroom Teaching," Journal of Home Economics, Vol. 52 (1960).
38. Mental Health in Child Care Centers. The University of Georgia, 1960-1963.
39. Miles, Katherine A. "The Relationships Between Certain Factors in the Home Background and the Qualities of Leadership Shown by Children." Unpublished Doctoral dissertation, University of Minnesota, 1945.
40. Noll, Victor H., and Rachel P. Noll. Readings in Educational Psychology. New York: Macmillan Company, 1962.
41. Read, Katherine. The Nursery School. Philadelphia: W. B. Saunders, 1960.
42. Rogers, Carl R. On Becoming a Person: A Therapist's View of Psychotherapy. Boston: Houghton Mifflin, 1961.
43. Rollins, Boyd C. "Modifying Child Guidance Attitudes of Teachers." Unpublished study, University of Georgia, 1962.
44. Rosenberg, M. J., C. I. Hovland, W. S. McGuire, R. P. Abelson, and J. W. Brehm. Attitude Organization and Change: An Analysis of Consistency Among Attitude Components. New York: Yale University Press, 1960.
45. Schaefer, E. S., and R. Q. Bell. "Development of a Parental Attitude Research Instrument," Child Development, Vol. 29 (1958).
46. Scott, Owen, and S. G. Brinkley. "Attitude Changes of Student Teachers and the Validity of the Minnesota Teacher Attitude Inventory," Journal of Educational Psychology, Vol. 51 (1960).
47. Shalloo, J. P. "Understanding Behavior Problems of Children," Annals of the American Academy of Political and Social Science, Vol. 212 (1940).

48. Sherif, Carolyn, and Naser Sherif. Attitude and Attitude Change: The Social Judgment--Involvement Approach. Philadelphia: W. B. Saunders Company, 1965.
49. Sherif, M. A., and H. Cantril. "The Psychology of Attitudes," Psychological Review, Vol. 52 (1945).
50. Shoben, E. J. "The Assessment of Parental Attitudes in Relation to Child Adjustment," Genetic Psychology Monographs, Vol. 39 (1949).
51. Smith, M. B., J. S. Bruner, and R. W. White. Opinions and Personality. New York: John Wiley, Inc., 1966.
52. Stedman, Louise A. An Investigation of Knowledge of and Attitudes Toward Child Behavior. Purdue University, Lafayette, Indiana, March, 1948.
53. Stogdill, Ralph M. "Attitudes of Parents, Students and Mental Hygienists Toward Children's Behavior," Journal of Social Psychology, Vol. 4 (1933).
54. Stogdill, Ralph M. "Experiments in the Measurements of Attitudes Toward Children: 1899-1935," Child Development, Vol. 7 (1936).
55. Symonds, P. M. The Psychology of Parent-Child Relationships. New York: Appleton Century Company, 1939.
56. Thomas, W. I., and F. Znaniecki. The Polish Peasants in Europe and America, Vol. 1. Boston: Badger, 1918.
57. Thurstone, L. L. "Attitudes Can Be Measured," Readings in Attitude Theory and Measurement, edited by M. Fishbein. New York: John Wiley and Sons, Inc., 1967.
58. Videen, Darleen. "Report of the Day Care Training Center: Pueblo High School." Research Department, Tuscon Public Schools, Tuscon, Arizona, 1968.
59. Volaw, David F. A Test on Adult Attitudes Toward Children. Austin, Texas: The Steck Company, 1957.

60. Walters, James. "Changes in the Attitudes of Young Women Toward Child Guidance Over a Two-Year-Period," Journal of Educational Research, Vol. 52 (1958).
61. Walters, James. "The Effects of an Introductory Course in Child Development on the Attitudes of College Women Toward Child Guidance," Journal of Experimental Education, Vol. 27 (1959).
62. Waring, Ethel. "Principles for Child Guidance," Cornell Extension Bulletin, No. 420 (1955).
63. Wiley, J. H. "A Scale to Measure Parental Attitudes Toward Certain Aspects of Children's Behavior." Unpublished Doctoral dissertation, University of South Carolina, 1950.
64. Zajonc, R. B. "Structure of the Cognitive Field." Unpublished Doctoral dissertation, University of Michigan, 1954.

A P P E N D I C E S

A P P E N D I X A

FACTUAL INFORMATION ABOUT YOURSELF

FACTUAL INFORMATION ABOUT YOURSELF

1. Name: _____
 (Last) (First) (Middle initial)
2. Sex: _____ Male _____ Female
3. When were you born? _____ (Year)
4. In what country were you born? _____ United States
 _____ Other country:
 Which? _____
5. Circle the grade in which you are presently enrolled:
 9 10 11 12
6. Present marital status of parents:
 _____ Single
 _____ Married
 _____ Divorced
 _____ Widowed
7. Age and sex of children (if any) in your family:

Age	Sex
_____	_____
_____	_____
_____	_____
8. Your permanent residency: Check type of community:

_____ Urban	_____ Rural
_____ Suburban	_____ Small town
9. Check any specific experiences you have had with children:

_____ Nursery school	_____ Summer recreational program
_____ Day care center	_____ Infant and/or child care
_____ Head Start	_____ in private homes
	_____ Church related children's programs

A P P E N D I X B

I N V E N T O R Y O F A T T I T U D E S O N
C H I L D G U I D A N C E

INVENTORY OF ATTITUDES ON CHILD GUIDANCE (31)

Read each of the statements below and then rate them as follows:

A
strongly
agree

a
mildly
agree

d
mildly
disagree

D
strongly
disagree

Indicate your opinion by drawing a circle around the "A" if you strongly agree, around the "a" if you mildly agree, around the "d" if you mildly disagree, and around the "D" if you strongly disagree.

There are no right or wrong answers. Answer according to your opinion. It is very important to the study that all questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

- | | Agree | Disagree |
|--|-------|----------|
| 1. No matter what a child does he ought to be accepted by his parents and teachers. | A a | d D |
| 2. Understanding a child's feelings is necessary for guidance to be most effective. | A a | d D |
| 3. If an adult lets a child know that he accepts the child's "bad" feelings, it will make the child feel guilty. | A a | d D |
| 4. If parents and teachers really accept a child's feelings, they must also accept his actions. | A a | d D |
| 5. When children do things in ways that society doesn't approve, an adult should help the child find acceptable ways of achieving his original purposes. | A a | d D |
| 6. A child should be told what is expected of him. | A a | d D |

	Agree	Disagree
7. A child should not be forced to "account for his actions."	A a	d D
8. If a parent or teacher sees that the child is going very slowly with an activity, she should show him how immediately.	A a	d D
9. The pictures they paint are meaningless to a preschool child.	A a	d D
10. Accepting a child as he is makes him feel secure.	A a	d D
11. Voice quality and speech offer clues to a child's feelings.	A a	d D
12. An adult should try to say aloud to a child what the child is feeling.	A a	d D
13. A child should be allowed to express his feelings and the adult should accept them even though they are bad.	A a	d D
14. When a child is angry, he should be given a chance to work off "steam" in some harmless activity.	A a	d D
15. Parents and teachers should not say "No" to a child.	A a	d D
16. Children should be allowed to explain why they disagree if they feel their own ideas are better.	A a	d D
17. A parent or teacher should help a child when he asks for it, even though he could accomplish the task alone.	A a	d D
18. If a child is to acquire skill in creative expression he needs to have carefully prepared models to follow.	A a	d D
19. Boys should be taught early to "take it like a man" when they are hurt.	A a	d D

	Agree	Disagree
20. If an adult really understands how a child feels, the adult-child relationship will be more difficult.	A a	d D
21. If a child knows that an adult understands how he feels it makes him less anxious.	A a	d D
22. Neither parents or teachers should accept the feelings of the child who is deliberately bad.	A a	d D
23. An adult should help children find acceptable ways of expressing negative feelings.	A a	d D
24. The only restrictions placed on a young child should be those necessary to preserve his life and the lives of people around him.	A a	d D
25. A child has a right to his own point of view and ought to be allowed to express it.	A a	d D
26. Little arguments and fights that break out among children are best handled by the children themselves.	A a	d D
27. The adult should ask the child what he is painting.	A a	d D
28. Adults should be alert to a child's capabilities so they will not expect too little from him.	A a	d D
29. In guiding a child, an adult should try to understand the situation from the child's point of view.	A a	d D
30. When a child gets a bump or bruise, it is helpful to tell him quietly that you know it hurts.	A a	d D
31. Accepting a child's feelings helps him to realize that his feelings are all right.	A a	d D

	Agree	Disagree
32. When it is necessary to change a child's behavior, the adult should suggest behavior that is similar to the child's basic desired behavior.	A a	d D
33. Children should have limits set for them to protect them from acting in ways which will have damaging consequences or which will frighten them.	A a	d D
34. A child's ideas should be seriously considered when making decisions that affect him.	A a	d D
35. Children should be kept away from hard jobs which might be discouraging.	A a	d D
36. A child should be encouraged to produce a nice finished product in his art work.	A a	d D
37. If adults really accept a child as he is they will find it difficult to help him change his undesirable behavior.	A a	d D
38. An adult can better guide a child if he does not become aware of the child's real feelings.	A a	d D
39. When a child's behavior reveals strong feelings, it is helpful to the child to have an adult put these feelings into words.	A a	d D
40. Accepting a child's feelings is necessary for effective guidance.	A a	d D
41. A child's misbehavior is usually a result of misunderstanding, anger, fear, or hurt.	A a	d D
42. Explaining to a child what is expected of him, just confuses him.	A a	d D

	Agree	Disagree
43. Parents and teachers should pay attention to a child when he talks to them.	A a	d D
44. A child should be taught to always come to his parents or teachers rather than fight when he is in trouble.	A a	d D
45. Patterns should be provided for the child to use in art work.	A a	d D
46. Adults should not permit frequent crying in a child.	A a	d D
47. Parents and teachers should try to concentrate on what a child is doing rather than how he feels.	A a	d D
48. When an adult puts a child's feelings into words it helps the child understand what he is feeling.	A a	d D
49. If an adult accepts a child's true feelings, this will magnify their importance and create tension in the child.	A a	d D
50. Shaming and blaming are effective ways of changing a child's undesirable behavior.	A a	d D
51. A child will usually know and do what is best if adults do not restrict him.	A a	d D
52. When a child is in trouble, he ought to know he won't be punished for talking about it with his teachers or parents.	A a	d D
53. If a child is permitted a choice, adults should honor the choice no matter what the outcome.	A a	d D
54. Whatever a child creates has meaning for him if he is permitted to freely express himself.	A a	d D

	Agree	Disagree
55. There are so many individual differences in children that it is foolish to anticipate typical behavior at certain stages of development.	A a	d D
56. Children have feelings, just as adults have feelings.	A a	d D
57. It will make a child too dependent on the adult if she puts the child's feelings into words.	A a	d D
58. If a child has ugly feelings toward others, parents and teachers should try to impress upon the child how wrong their feelings are.	A a	d D
59. Punishment may teach a child what not to do, but it does not teach him what to do.	A a	d D
60. A small child should not be expected to learn and remember what he is permitted to do unless he is shown or told how many times.	A a	d D
61. A child can get rid of some of his "bad" feelings by being allowed to talk about them.	A a	d D
62. It is better for a child to fall from a tree and break a leg than to be afraid of doing anything without the approval of an adult.	A a	d D
63. Children need to be shown how to use rhythm instruments.	A a	d D
64. If an adult accepts a child as he is this helps the child accept himself.	A a	d D
65. By expecting adult behavior from a small child, we encourage the development of maturity.	A a	d D

	Agree	Disagree
66. Too much acceptance of a child encourages him to continue his "bad" habits.	A a	d D
67. If the teacher or parent knows and accepts how the child feels, the child will be insecure.	A a	d D
68. A child should be permitted to say "I hate you" to his parents and teachers.	A a	d D

NOTE: Scale Number 6, consisting of items 6, 15, 24, 33, 42, 51, and 60, was not considered valid and scores of these items were excluded from the data.

SCORING THE IACG

Scale Numbers		Item Numbers								
1	1	10	19*	28	37*	46*	55*	64	65*	66*
2	2	11	20*	29	38*	47*	56			
3	3*	12	21	30	39	48	57*			
4	4*	13	22*	31	40	49*	58*	67*	68	
5	5	14	23	32	41	50*	59			
6	7	16	25	34	43	52	61			
7	8*	17*	26	35*	44*	53	62			
8	9*	18*	27*	36*	45*	54	63*			

* Reverse score

Note: Scale 6 of the original inventory was excluded for this study and scales 7, 8, and 9 were renumbered as 6, 7, and 8 respectively.

A 4-point scale was utilized in computing scores for items on the attitude inventory:

4	3	2	1
Strongly	Mildly	Mildly	Strongly
Agree	Agree	Disagree	Disagree

Scores were reversed on items where disagreement with the statement indicated agreement with the philosophy.

A P P E N D I X C

TABLES

TABLE I
PERCENTAGE OF SUBJECTS RELATIVE TO
BACKGROUND INFORMATION

Factors	School							
	1		2		3		4	
	Group		Group		Group		Group	
	C N=20	E N=20	C N=22	E N=22	C N=14	E N=14	C N=18	E N=16
Years of age								
15		25					6	
16		40	23	18			77	
17	50	20	41	64	44	57	17	69
18	45	15	36	14	44	31		25
19	5			4	12	12		6
Grade level								
Ninth		50						
Tenth		30	23	36	7		88	
Eleventh	90	20	72	64	64	93	12	
Twelfth	10		5		29	7		100
Marital status of parents								
Married	95	80	73	73	93	86	83	69
Divorced		10	27	23	7	7	11	25
Widowed	5	10		4		7	6	6
Residence								
Urban				9			17	
Suburban	90	95	100	91			83	100
Rural	10	5			36	36		
Small town					64	64		
Experiences with children								
Nursery school	25	10	9	18				
Day care	5		5	9		7	6	
Head Start	5	15						
Summer recreation	25	10	23	23	14		11	19
Church activities	40	25				50	11	19
Private homes	80	75	81	77	86	100	89	81

TABLE II
ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part I: Scale 1--Accepting the Child As He Is

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Experimental versus Control	1	1.820	1.820	14.560	<.01
Schools	3	1.333	.444	3.552	<.05
School X Experimental versus Control	3	.479	.160	1.280	n.s.
Residual	138	17.298	.125		
Total	145	20.930			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part II: Scale 2--Understanding the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Experimental versus Control	1	.332	.332	3.223	n.s.
Schools	3	.137	.046	.447	n.s.
School X Experimental versus Control	3	.485	.162	1.573	n.s.
Residual	138	14.197	.103		
Total	145	15.151			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II (Continued)
ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part III: Scale 3--Reflecting the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Probability
Experimental versus Control	1	1.024	1.024	4.633	.05
Schools	3	.619	.206	.932	n.s.
School X Experimental versus Control	3	.714	.238	1.077	n.s.
Residual	138	30.455	.221		
Total	145	32.812			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part IV: Scale 4--Accepting the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Prob- ability
Experimental versus Control	1	.051	.051	.451	n.s.
Schools	3	1.618	.539	4.770	.01
School X Experi- mental versus Control	3	.131	.044	.389	n.s.
Residual	138	15.540	.113		
Total	145	17.340			

F 1,138 (.01) 6.84

F 3,138 (.01) 3.94

TABLE II(Continued)
ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part V: Scale 5--Redirecting Undesirable Behavior

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Experimental versus Control	1	.084	.084	.542	n.s.
Schools	3	.606	.202	1.303	n.s.
School X Experimental versus Control	3	.090	.030	.194	n.s.
Residual	138	21.388	.155		
Total	145	22.168			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II (Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part VI: Scale 6--Encouraging Verbalization

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Experimental versus Control	1	.478	.478	4.085	.05
Schools	3	.402	.134	1.145	n.s.
School X Experimental versus Control	3	.400	.133	1.137	n.s.
Residual	138	16.096	.117		
Total	145	17.376			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part VII: Scale 7--Encouraging Independence and Initiative

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Experimental versus Control	1	.000	.000	.000	n.s.
Schools	3	2.140	.713	3.733	.05
School X Experimental versus Control	3	1.347	.449	2.351	n.s.
Residual	138	26.363	.191		
Total	145	29.850			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE II(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES PRIOR TO
THE CHILD DEVELOPMENT EXPERIMENT

Part VIII: Scale 8--Encouraging Creativity

Source	df	Sum of Squares	Mean Square	F Ratio	Probability
Experimental versus Control	1	.006	.006	.004	n.s.
Schools	3	1.927	.642	.448	n.s.
School X Experimental versus Control	3	.635	.212	.148	n.s.
Residual	138	197.862	1.434		
Total	145	200.430			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 3,138 (.05) 2.68; F 3,138 (.01) 3.94

TABLE III

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part I: Scale 1--Accepting the Child As He Is

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Between all subjects	145	31.477			
Experimental versus Control groups	7	6.795	.971	5.425	.01
Error	138	24.682	.179		
Within all subjects	146	8.715			
Pretest versus post-test	1	.392	.392	6.877	.01
Groups X trials	7	.411	.059	1.035	n.s.
Error	138	7.912	.057		
Total	291	40.192			

F 1,138 (.01) 6.84
F 7,138 (.01) 2.79

TABLE III(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part II: Scale 2--Understanding the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Probability
Between all subjects	145	24.870			
Experimental versus Control groups	7	1.383	.198	1.165	n.s.
Error	138	23.487	.170		
Within all subjects	146	8.832			
Pretest versus post-test	1	.018	.018	.310	n.s.
Groups X trials	7	.810	.116	2.000	n.s.
Error	138	8.004	.058		
Total	291	33.702			

F 1,183 (.05) 3.92; F 1,138 (.01) 6.84
F 7,138 (.05) 2.08; F 7,183 (.01) 2.79

TABLE III (Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part III: Scale 3--Reflecting the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Between all subjects	145	55.533			
Experimental versus Control groups	7	2.282	.326	.845	n.s.
Error	138	53.251	.386		
Within all subjects	146	18.274			
Pretest versus post-test	1	.048	.048	.211	n.s.
Groups X trials	7	1.594	.228	1.884	n.s.
Error	138	16.632	.121		
Total	291	73.807			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 7,138 (.05) 2.08; F 7,138 (.01) 2.79

TABLE III (Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part IV: Scale 4--Accepting the Child's Feelings

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Between all subjects	145	28.514			
Experimental versus Control groups	7	3.316	.474	2.590	.05
Error	138	25.198	.183		
Within all subjects	146	12.888			
Pretest versus post-test	1	.038	.038	4.320	n.s.
Groups X trials	7	.751	.107	1.216	n.s.
Error	138	12.099	.088		
Total	291	41.402			

F 1,138 (.05) 3.92
F 7,138 (.05) 2.08

TABLE III(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part V: Scale 5--Redirecting Undesirable Behavior

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Between all subjects	145	34.653			
Experimental versus Control groups	7	4.379	.626	2.858	.01
Error	138	30.274	.219		
Within all subjects	146	16.658			
Pretest versus post-test	1	.002	.002	.019	n.s.
Groups X trials	7	1.705	.244	2.259	.05
Error	138	14.951	.108		
Total	291	51.311			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 7,138 (.05) 2.08; F 7,138 (.01) 2.79

TABLE III(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part VI: Scale 6--Encouraging Verbalization

Source	df	Sum of Squares	Mean Square	F Ratio	Prob- ability
Between all subjects	145	29.877			
Experimental versus Control groups	7	1.782	.255	1.250	n.s.
Error	138	28.095	.204		
Within all subjects	146	13.398			
Pretest versus post-test	1	.001	.001	.011	n.s.
Groups X trials	7	.345	.049	.516	n.s.
Error	138	13.052	.095		
Total	291	43.275			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 7,138 (.05) 2.08; F 7,138 (.01) 2.79

TABLE III(Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part VII: Scale 7--Encouraging Independence and Initiative

Source	df	Sum of Squares	Mean Square	F Ratio	Prob-ability
Between all subjects	145	45.702			
Experimental versus Control groups	7	5.222	.746	2.564	.05
Error	138	40.480	.293		
Within all subjects	146	17.346			
Pretest versus post-test	1	3.158	3.158	33.24	.01
Groups X trials	7	1.010	.144	1.516	n.s.
Error	138	13.178	.095		
Total	291	63.048			

F 1,138 (.05) 3.92; F 1,138 (.01) 6.84
F 7,138 (.05) 2.08; F 7,138 (.01) 2.79

TABLE III (Continued)

ANALYSIS OF VARIANCE COMPARING EXPERIMENTAL AND CONTROL
SUBJECTS FROM FOUR SCHOOLS ON ATTITUDES OVER THE
TRIAL PERIOD OF THE CHILD DEVELOPMENT EXPERIMENT

Part VIII: Scale 8--Encouraging Creativity

Source	df	Sum of Squares	Mean Square	F Ratio	Probability
Between all subjects	145	48.767			
Experimental versus Control groups	7	6.221	.889	2.886	.01
Error	138	42.546	.308		
Within all subjects	146	192.075			
Pretest versus post-test	1	5.058	5.058	3.792	n.s.
Groups X trials	7	2.953	.422	.316	n.s.
Error	138	184.064	1.334		
Total	291	240.842			

F 1,138 (.01) 6.84
F 7,138 (.01) 2.79

TABLE IV
 AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
 IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part I: Scale 1--Accepting the Child As He Is

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	2.805	20	2.895	20	2.840	20	3.115
El Paso	22	2.491	22	2.818	22	2.632	22	2.859
Ripon	14	2.793	14	2.929	14	2.821	14	3.021
Sun Valley	18	2.722	16	3.050	18	2.733	16	3.031

TABLE IV (Continued)

AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part II: Scale 2--Understanding the Child's Feelings

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	3.575	20	3.553	20	3.546	20	3.704
El Paso	22	3.423	22	3.653	22	3.585	22	3.722
Ripon	14	3.471	14	3.654	14	3.419	14	3.511
Sun Valley	18	3.624	16	3.618	18	3.551	16	3.544

TABLE IV (Continued)

AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part III: Scale 3--Reflecting the Child's Feelings

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	2.729	20	2.707	20	2.892	20	2.877
El Paso	22	2.669	22	3.008	22	2.865	22	2.922
Ripon	14	2.807	14	2.951	14	2.897	14	2.889
Sun Valley	18	2.779	16	2.974	18	2.581	16	2.839

TABLE IV (Continued)
 AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
 IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part IV: Scale 4--Accepting the Child's Feelings

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	2.801	20	2.783	20	2.752	20	2.904
El Paso	22	2.527	22	2.647	22	2.545	22	2.849
Ripon	14	2.660	14	2.652	14	2.579	14	2.683
Sun Valley	18	2.822	16	2.869	18	2.708	16	2.855

TABLE IV (Continued)

AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part V: Scale 5--Redirecting Undesirable Behavior

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	3.287	20	3.329	20	3.360	20	3.546
El Paso	22	3.332	22	3.429	22	3.216	22	3.436
Ripon	14	3.266	14	3.216	14	3.296	14	3.329
Sun Valley	18	3.189	16	3.251	18	2.867	16	3.228

TABLE IV (Continued)

AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
 IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part VI: Scale 6--Encouraging Verbalization

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	3.393	20	3.515	20	3.367	20	3.539
El Paso	22	3.248	22	3.491	22	3.353	22	3.484
Ripon	14	3.409	14	3.359	14	3.443	14	3.308
Sun Valley	18	3.459	16	3.543	18	3.509	16	3.401

TABLE IV (Continued)
 AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
 IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part VII: Scale 7--Encouraging Independence and Initiative

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	2.528	20	2.600	20	2.746	20	2.839
El Paso	22	2.676	22	2.848	22	2.845	22	3.091
Ripon	14	2.613	14	2.644	14	2.849	14	2.622
Sun Valley	18	2.594	16	2.258	18	2.698	16	2.714

TABLE IV (Continued)

AVERAGE MEAN SCORES FOR EXPERIMENTAL AND CONTROL GROUPS
 IN FOUR SCHOOLS FROM INVENTORY OF ATTITUDES
ON CHILD GUIDANCE

Part VIII: Scale 8--Encouraging Creativity

School	Pretest				Post-test			
	Control		Experimental		Control		Experimental	
	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$	n	$\bar{X}$
Arlington	20	2.936	20	2.872	20	2.868	20	3.367
El Paso	22	2.551	22	2.659	22	2.664	22	3.068
Ripon	14	2.736	14	2.849	14	3.186	14	3.175
Sun Valley	18	2.882	16	2.669	18	2.938	16	3.080