A study of teacher effectiveness training upon secondary school teachers and their pupils

William Norwood Cox

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UPON SECONDARY SCHOOL TEACHERS AND THEIR
PUPILS.
THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA,
ED.D., 1978
A STUDY OF TEACHER EFFECTIVENESS TRAINING
UPON SECONDARY SCHOOL TEACHERS
AND THEIR PUPILS

A Dissertation
Presented to the
Faculty of the School of Education
College of William and Mary in Williamsburg

In Partial Fulfillment
Of the Requirements for the Degree
Doctor Of Education

by
William Norwood Cox
August 1978
A STUDY OF TEACHER EFFECTIVENESS TRAINING
UPON SECONDARY SCHOOL TEACHERS
AND THEIR PUPILS

by

William Norwood Cox

Approved July 1978

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To complete this study, and to complete the requirements for the doctoral degree, it was necessary to forego many of those responsibilities, both pleasant and unpleasant, which are generally ascribed to fathers and husbands. In that my family responded to the challenge with understanding and support, sincere gratitude is offered, particularly to my wife, Molly.

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>BACKGROUND OF THE STUDY</td>
<td>3</td>
</tr>
<tr>
<td>PROGRAM EXPLANATION</td>
<td>3</td>
</tr>
<tr>
<td>STATEMENT OF THE PROBLEM</td>
<td>5</td>
</tr>
<tr>
<td>SIGNIFICANCE OF THE STUDY</td>
<td>7</td>
</tr>
<tr>
<td>DEFINITION OF TERMS</td>
<td>13</td>
</tr>
<tr>
<td>HYPOTHESES</td>
<td>16</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>16</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>16</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>16</td>
</tr>
<tr>
<td>LIMITATIONS OF THE STUDY</td>
<td>17</td>
</tr>
<tr>
<td>ORGANIZATION OF THE REMAINDER OF THE STUDY</td>
<td>20</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>21</td>
</tr>
<tr>
<td>LITERATURE ON ATTITUDES AND ATTITUDE CHANGE</td>
<td>21</td>
</tr>
<tr>
<td>Characteristics of Attitudes and Attitude Change</td>
<td>23</td>
</tr>
<tr>
<td>Measurement of Attitudes</td>
<td>30</td>
</tr>
</tbody>
</table>
APPENDIX

A. TEACHER ATTITUDE SEMANTIC DIFFERENTIAL ........................................ 117
B. STUDENT ATTITUDE SEMANTIC DIFFERENTIAL ...................................... 124

SELECTED BIBLIOGRAPHY ................................................................. 131
LIST OF TABLES

Table                                                                                          Page

1. A Comparison of Posttest Scores on Certain Variables Measured by the Teacher Attitude Semantic Differential 88
2. Summary of Paired t Tests on Selected Variables Measured by the Teacher Attitude Semantic Differential 92
3. A Comparison of Overall Experimental and Control Group Scores on Two Statistically Significant Variables as Measured by the Student Attitude Semantic Differential 96
4. A Comparison of Attitude Ratings of Students Taught by Experimental Group Teachers Regularly Practicing Skills and Those of Students Taught by Control Group Teachers on Two Statistically Significant Variables Measured by the Student Attitude Semantic Differential 98
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thurstone Scale Example, Shortened Version</td>
<td>33</td>
</tr>
<tr>
<td>2.</td>
<td>Likert Scale Example, Shortened Version</td>
<td>34</td>
</tr>
<tr>
<td>3.</td>
<td>Guttman's Scalogram Example</td>
<td>35</td>
</tr>
</tbody>
</table>
ABSTRACT

A STUDY OF TEACHER EFFECTIVENESS TRAINING UPON SECONDARY SCHOOL TEACHERS AND THEIR PUPILS

COX, WILLIAM NORWOOD, Ed.D.

CHAIRMAN: ROBERT MAIDMENT, Ed.D.
THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA, 1978

Problem. The purpose of the study was to determine the effects of an interpersonal skills training program (Teacher Effectiveness Training) upon attitudes and self concept of secondary school teachers and upon attitudes of their students.

Method. There were seventeen teachers and thirty-eight students in the experimental groups. The control groups consisted of fourteen teachers and thirty-six students. This field experiment utilized the "two groups, no control" design as described by Kerlinger (1973). Adaptations of a semantic differential were administered to measure attitudes. The Tennessee Self Concept Scale was used to measure teacher self concept. Appropriate t tests were conducted on each variable to determine significance. Null was accepted or rejected at the .05 level of significance.

Results. Findings are as follows: (1) there were no significant differences in the expected direction in attitude scores for either the experimental or control groups of teachers or of students; (2) although the experimental group of teachers scored higher on eight of eleven self-concept variables, the results were not statistically different; (3) although only one of thirteen variables was significant when attitude scores of teachers reporting regular skills practice were compared to those of other teachers, most scores were higher for the experimental group; (4) there were no significant differences in the expected direction of student attitude scores based on the degree of teacher skill practice; (5) paired attitude scores on the post tests and delayed post tests reflected no significant differences among students, but five of thirteen attitude scores of experimental group teachers were significantly higher on the delayed measure; and (6) although all but two self-concept variables of experimental group teachers were higher on the delayed post measure, none was significant.

Conclusions. Based on the findings, it would appear that while change in attitude and self concept might not be immediately apparent, such change might occur in time, particularly for teachers. It would be inferred that for desired changes to take place, subjects must first internalize and use the skills learned. Although significance levels were not often reached, trends in the expected direction for teachers indicate the need for further study. The lack of significance might have been due to a small sample size or to a lack of precision in the measuring instruments. Further studies might focus on reinforcement, incentives, and trainer effectiveness as important variables in an Interpersonal skills training program.
A Study of Teacher Effectiveness Training

Upon Secondary School Teachers

And Their Pupils
Chapter 1

INTRODUCTION

Accountability is one of the most pressing public demands placed upon educators by school boards, community leaders, state boards of education, and state legislators. Educators are charged with cutting through the many problems contributing to student deficiencies in mastering basic skills and to student apathy toward schooling. In some states, including Virginia, it has been legally mandated that all teachers "humanize" instruction. The basic premise of such mandates is that for teaching-learning processes to work effectively, it is necessary for teachers to be effective in the use of communication skills. Rather than focusing on content, "humanizing" instruction rests basically on the assumption that the quality of the teacher-learner relationships is crucial if teachers are to be effective. Since teachers often complain that student problems take up a high percentage of time that could be "teaching-learning" time, it is assumed that if certain skills or methods could be utilized by teachers to reduce the problem areas with students, there would be more time to teach.

An interpersonal skills training program with particular emphasis on communication skills to enhance the pupil-teacher relationship provides one possibility for schools and school systems to help their teachers learn and improve their interpersonal skills. There is
considerable support in the literature for these kinds of programs for managers, administrators, supervisors, and teachers. Such a program is "Teacher Effectiveness Training (T.E.T.)," developed by Gordon and his associates.  

BACKGROUND OF THE STUDY

To provide its teachers with the knowledge of communication skills which might be used to improve pupil-teacher relationships, thus providing more time for teachers to teach in a more suitable classroom environment, the Newport News Public School Division chose as its vehicle the T.E.T. program. Teachers of grades six through twelve were given the opportunity to volunteer to receive the instruction. Those who did so received thirty-three hours of training by members of the professional staff in Newport News who became licensed trainers. In the 1976-1977 school year, roughly 500 of 1,500 teachers and administrators completed the program. At the beginning of the 1977-1978 school year, teachers again had the opportunity to volunteer and they had a choice of participating in either the fall cycle in 1977 or the spring cycle in 1978.

PROGRAM EXPLANATION

Courses were taught by certified T.E.T. instructors who employed a variety of instructional techniques, including

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role-playing, group discussion, lectures, analysis of prerecorded
tapes, and the use of workbooks and required outside reading to enable
the participants to learn communication skills, problem-solving
techniques, counseling skills, and methods for conflict resolution. An
important assumption was made that the professional staff members who
served as instructors were effective in that role.

Broadly stated goals of the program were:

1. Each participant will understand a humanistic philoso-
phy of education and will learn the skills necessary to implement that
philosophy while changing his/her self-perception as a teacher and the
perception of the role of the student as a learner.

2. Each participant will be able to use the skill of
effective classroom counseling.

3. Each participant will be able to send clear messages to
his/her students as an aid in establishing congruency.

4. Each participant will be able to use "no-lose" skills
of conflict resolution.

5. Each participant will be able to use those communica-
tions skills which foster student inquiry, exploration, and academic
freedom.

6. Each participant will be able to use skills which will
help ameliorate value conflicts.

Among the expected results were an improved climate which helps to
foster student self-esteem and self-confidence, improved empathetic
two-way communication, mutual respect between students and teachers,
and harmonious resolution of conflicts without the teacher being
either overly authoritarian or permissive.

While acknowledging that it is easier for most teachers to accept new methods for modifying students or the classroom environment than to make efforts to make changes in themselves, Gordon stated that self-modification is the only method over which the teacher has sole control. He also pointed out that modifying the self is not as difficult or as threatening as many teachers seem to think, and that teachers make significant changes in themselves during the T.E.T. course. Teacher messages to students which judge, criticize, show disagreement or blame tend to make students feel stupid, inadequate, inferior, unworthy, or bad. Since these evaluations and judgments are often made by their parents and teachers, the most significant adults in their lives, to a large extent the self-concepts of students are shaped accordingly. Negative evaluative statements chip away at student self-esteem and may also result in retaliation which the adult does not understand. Other forms of negative evaluation and criticism which can also have devastating effect on the self-images of students are name-calling, stereotyping, and ridiculing.

STATEMENT OF THE PROBLEM

The specific direction of the study was to explore the areas of attitude change and self-concept change. When one talks about

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3 Ibid., p. 302.
4 Ibid., p. 83.
perceptual changes, establishing congruency, using "no-lose" skills, fostering open classroom climates, and improving empathetic two-way communication, certain attitude changes toward certain "sources" or concepts are implied. Since the participants undergoing the T.E.T. training are teachers, they hold the key to facilitating attitude changes in themselves and in their students. If teachers are successful, student attitudes toward the teacher and other classroom sources might also be expected to change.

Self-concept or self-esteem change has been explicitly listed as an expected outcome of T.E.T., for both the teachers and their students. An assumption might be that success in this area would be dependent to some extent on the mutual dependence and mutual reinforcement implicit in a positive student-teacher relationship.

Regarding the effectiveness of interpersonal skills training, two basic questions might be asked:

1. Will interpersonal skills training have an effect on attitudes of teachers and their students toward certain concepts related to the classroom environment they share; and

2. Will interpersonal skills training bring about changes in self-concept of teachers, which may have implications for their students?

A related question which might be explored is, what would be the "staying power" over a period of time of changes which might initially be noted? These questions clearly indicate some possible hypotheses which will be discussed later.
SIGNIFICANCE OF THE STUDY

Describing the "progressive" movement, in 1938 Dewey wrote,

... it seems more in accord with the democratic ideal to which our people is [sic] committed than do the procedures of the traditional school, since the latter have so much of the autocratic about them. Another thing which has contributed to its favorable reception is that its methods are humane in comparison with the harshness so often attending the policies of the traditional school.⁵

In further clarification of this view, Dewey posed a rhetorical question:

... Can we find any reason that does not ultimately come down to the belief that democratic social arrangements promote a better quality of human experience, one which is more widely accessible and enjoyed, than do non-democratic and anti-democratic forms of social life?⁶

In reviewing Dewey's critique of public education in the United States in the late 1890s, Handlin wrote, "... The establishment of voluntary patterns of obedience not only facilitated the teacher's task; it also emphasized that which was most important in education--its moral purpose."⁷ Among other subsequent developments in the "progressive" movement was the trend toward greater "expression and cultivation of individuality."⁸

Related to these concepts espoused by Dewey, T.E.T. employs as

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⁶ Ibid., p. 25.
⁸ Ibid., p. 48.
one of its central themes the desirability of helping individuals strive to become "self-actualized" as described by Maslow and other psychologists. Rejecting the definition of motivation based upon concepts of equilibrium, homeostasis, or drive reduction, Maslow offered that human motivation is related to an inherent tendency to growth and self-perfection. Maslow conceived of human motivation as functioning along a hierarchy of needs. Since man's "inherent tendency" is to growth and self-perfection, his ultimate goal in this needs-hierarchy theory is self-actualization. According to the theory, each lower order need, in turn, must be substantially satisfied before the next need on the hierarchy becomes a motivating factor. A key point of the theory, related to this study, is that the growth of personality is directional, always evolving, and undergoing change. This seems to suggest that to a degree, by helping individuals meet their primary needs, educators can assist them in their pursuit of self-actualization.

Rogers' theory of personality centers around the development of the concept of self. He wrote, "... the most impressive fact about the individual human being seems to be his directional tendency toward wholeness." Frick reported that convincing evidence of Rogers' thesis concerning the self-consistent strivings of the personality has been obtained in the observation of clients undergoing change.

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10 Ibid., p. 145.
11 Ibid., p. 146.
psychotherapy. In the course of their therapy, many erratic changes and shifting characteristics in the personality were noted as clients explored significant dimensions of the self and struggled to reconstruct various aspects of their experience. Rogers, like Maslow, saw the "self-actualizing" tendency of man as the sovereign motive, encompassing all other discrete motives or drives. However, unlike Maslow, Rogers did not see fit to emphasize any sort of "hierarchy," but instead, stressed the need of the individual to maintain an internal order and consistency of the self and achieve a state of congruence; or an accurate matching of experience and awareness.

Translating his theory of personality into operational terms, Rogers suggested a plan for bringing about a self-directed change in an educational system. This plan consists of implementing an organized "group experience" for top administrators, followed by similar "group experiences," workshops or encounter groups, for faculty members who wish to become so involved. This latter suggestion, voluntary involvement, was included as a means of allowing individuals to choose when and if they were willing to "risk" themselves in a group setting which would involve a certain amount of revealing of feelings. Although not every faculty member might see fit to become an active participant, Rogers felt that it is quite sufficient that any participant will have peers with whom he or she can share experiences growing out of the

13 Frick, Humanistic Psychology, p. 154.
14 Ibid., p. 156.
15 Ibid., p. 154.
intensive workshop. Also, since many of the teachers' superiors will also have had the experience of such a workshop, the faculty member will be going back into a school environment which will be essentially responsive to any changes in his behavior, attitudes, purposes, and relationships. Whatever changes which are seen as desirable by the participant might be more likely to be implemented in practice because they are self-chosen.

Among the personal outcomes for the teacher after undergoing the "group experience," Rogers offered the following, which "... seem supported by experience":

The teacher--

a. will be more able to listen to students, especially to the feelings of students;

b. will be better able to accept the innovative, challenging, "troublesome," creative ideas which emerge in students, rather than reacting to those threats by insisting on conformity;

c. will tend to pay as much attention to this relationship with his students as to the content material of the course;

d. will be more likely to work out interpersonal frictions and problems with students, rather than dealing with such issues in a disciplinary or punitive manner; and

e. will develop a more equalitarian atmosphere in the classroom, conducive to spontaneity, to creative thinking, to

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Rogers, Freedom to Learn, p. 312.
independent and self-directed work. 18

Rogers' plan for implementing self-directed change in an educational system also extended to an intensive "group experience" for a class of students. While not expecting that more than a small fraction of classes could be afforded this type of "group experience," the effect upon students in those classes was predicted, as follows:

The student--

a. will feel more free to express both positive and negative feelings in class toward other students, toward the teachers, and toward content material;

b. will tend to work through those feelings toward a realistic relationship, instead of burying them until they are explosive;

c. will have more energy to devote to learning, because he will have less fear of continual evaluation and punishment;

d. will discover he has a responsibility for his own learning, as he becomes more of a participant in the group learning process;

e. will feel free to take off on exciting avenues of learning, with more assurance that his teacher will understand;

f. will find that both his awe of authority and his rebellion against authority diminish, as he discovers teachers and administrators to be fallible human beings, relating in imperfect ways to students; and

g. will find that the learning process enables him to

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18 Rogers, Freedom to Learn, p. 312.
grapple directly and personally with the problem of the meaning of his life. 19

Rogers placed a heavy responsibility upon the teacher in facilitating learning, as seen in these guidelines:

... 1. The facilitator has much to do with setting the initial mood or climate of the group or class experience.

2. The facilitator helps to elicit and clarify the purposes of the individuals in the class as well as the more general purposes of the group.

3. He relies upon the desire of each student to implement those purposes which have meaning for him, as the motivational force behind significant learning.

4. He endeavors to organize and make easily available the widest possible range of resources for learning.

5. He regards himself as a flexible source to be utilized by the group.

6. In responding to expressions in the classroom group, he accepts both the intellectual content and the emotionalized attitudes, endeavoring to give each aspect the approximate degree of emphasis which it has for the individual or group.

7. As the acceptant classroom climate becomes established, the facilitator is able increasingly to become a participant learner, a member of the group, expressing his views as those of one individual only.

8. He takes the initiative in sharing himself with the group--his feelings as well as his thoughts--in ways which do not demand or impose but represent simply personal sharing which students may take or leave.

9. Throughout the classroom experience, he remains alert to the expressions indicative of deep or strong feelings.

10. In his functioning as a facilitator of learning, the leader endeavors to recognize and accept his own limitations. 20

Many of Rogers' theories underlie the T.E.T. program which was examined in the study described in this report and provide additional support to the value of training programs which stress interpersonal communications. Considering the cost of implementing such programs in


20 Ibid., pp. 164-66.
a school system and the widespread implications if the outcomes approach those which are desired, the significance of the study can be readily seen. More specifically, if it can be shown that interpersonal skills training for teachers has a significant effect upon the self-concept of those who take the course and upon teacher attitudes about students and the classroom environment they share, as well as an effect upon attitudes of students about their classroom environment, the worth of the program can be ascertained.

DEFINITION OF TERMS

The following definitions and concepts were used:

A. Attitudes--The concept of attitudes, as used in the study as a dependent variable, refers to those opinions, judgments, or evaluations one holds for a specifically named object or concept. Subjects were asked to reflect on a measuring instrument their attitudes toward certain concepts. Thus, "attitudes," as used in the study, were defined in terms of responses to a semantic differential. Although many definitions of attitudes exist, not all of them compatible with others, perhaps Allport's definition could be considered highly influential:

"...An attitude is 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."21

Triandis suggested that two themes are common to most definitions of attitude:

1. an attitude is a predisposition to respond; and
2. an attitude is represented by consistencies in the responses of individuals to social situations.

B. Interpersonal Relations—A key objective of interpersonal skills training is to improve interpersonal relationships primarily through improved communications. Through the mastering of skills which enhance the quality of interpersonal relationships, it is anticipated that the learning environment will be positively affected by the teacher. Because man is a social animal, it has been said that most of his happiness and fulfillment rests upon his ability to relate effectively to other humans. In addition, the foundations of all civilizations rest upon man's ability to cooperate with other humans and to coordinate his actions with theirs. In that we must work effectively with other people in order to engage in our vocations and avocations competently, we might conclude that we are dependent upon other people for much of our personal happiness and fulfillment.

C. Self-Concept—Self theory holds that the self concept is the frame of reference through which the individual interacts with his world; it summarizes all that he is and may be a supramoderator of his

22 Triandis, *Attitude and Attitude Change*, pp. 6-7.
functioning. According to Coopersmith, "the self" is an abstraction that an individual develops about the attributes, capacities, objects, and activities which he possesses and pursues. This abstraction is represented by the symbol "me," which is a person's idea of himself to himself.  

Important to the study was the theory that self concept is a determinant of human behavior. Perceptual psychology now accepts the idea that the feelings and beliefs one holds about oneself motivate one's conduct: the antecedent for individual responses is the self concept.  

Other considerations of the self and self concept were included later in the study. For purposes of the study, the variable "self concept" was defined by the measures determined through the "Tennessee Self Concept Scale."

D. Teacher Effectiveness Training (T.E.T.)--T.E.T. is the name of the thirty-hour training course, designed in 1966 by Gordon and associates, which offers a variety of skills and methods to assist teachers in improving their interpersonal relationships.


HYPOTHESES

Drawing from the background of previous research studies, and considering the particular need for a study of this type on a current program in progress in Newport News Public Schools, several hypotheses were formulated as described.

Hypothesis 1

There will be a significant difference in attitude scores of a group of volunteer teachers, after undergoing T.E.T., compared to those of a group of volunteer teachers who have not yet undergone the training but plan to do so.

Hypothesis 2

There will be a significant difference in attitude scores of a random sample of students in second or third period classes of teachers who have undergone T.E.T., compared to scores of a random sample of students in second or third period classes whose teachers are planning to take T.E.T. but have not yet done so.

Hypothesis 3

There will be a significant difference in self concept scores of a group of volunteer teachers who have completed T.E.T. compared to those of a group of teachers who have volunteered, but have not gone through the training.

In addition to the main effects described, a check was made on the comparative effects as noted by teachers who reported regular
practice of the T.E.T. skills versus teachers who did not; also, similar comparisons on students were made based on their teachers' reports as to whether they regularly practiced skills associated with T.E.T. To check the effects over a period of time, following the post measure, another delayed post measure was carried out approximately two months following completion of the course, which was administered to the experimental groups only. In the case of students, separate analyses on the effects of independent variables sex and race on the dependent variable, scores, were conducted.

LIMITATIONS OF THE STUDY

Campbell and Stanley wrote that there are a number of factors which could jeopardize internal and external validity of various experimental designs. By internal validity, they were making reference to the basic minimum without which any experiment is uninterpretable: did in fact the experimental treatments make a difference in this specific experimental instance? External validity reflected on the question of generalizability: to what populations, settings, treatment variables and measurement variables can this effect be generalized?

On the question of internal validity, two limitations should be mentioned, both related to the delayed post measure:

1. The delayed post measure was administered to the

experimental groups only, teachers and students, since by the time of administration the control groups had begun their course in T.E.T. Therefore, following the delayed post measure, it was not possible to compare results with the control group; only the scores of the experimental groups could be examined.

2. The same measuring instruments were used for the post measures and for the delayed post measures, so some of the differences in scores might be attributable to this testing effect. However, the scores of the first tests were not disclosed to the subjects, nor was the method of scoring made known.

There were several points related to external validity which should be considered. First of all, the population consisted of the total group of public senior high school teachers in Newport News who volunteered to take T.E.T. in the fall of 1977 or in the spring of 1978. Those who volunteered to take the course in the fall were labeled the experimental group, while those who volunteered for the spring were labeled the control group. Therefore, since all who became subjects in the study were from the population of volunteers to take T.E.T., neither group could be considered a random sample of the total public senior high teaching population in Newport News.

Second, without randomization of selection of subjects or randomized assignment of subjects to groups from the total volunteer population, no concrete assumptions can be made about the equivalence of the experimental and control groups on these or other variables. However, since all of the teacher participants in the study were volunteers from the general population of senior high teachers in
Newport News and all might be assumed to have had relatively similar educational backgrounds in terms of professional preparation, occupational interests, and intelligence levels, these factors might offset the problems associated with lack of randomization. In addition, the students of the participating teachers were randomly selected to assure a representative sampling of students. The effects of grade level were minimized by selecting only those teachers who had assignments in grades ten through twelve, or senior high school.

Third, since this study centered on a real program, as compared to a contrived experimental study under laboratory conditions, there was another variable which could hamper the generalizability of the findings. Since the program was universally adopted, it was widely emphasized and promoted by the school board, superintendent, and principals. Teachers were strongly encouraged to take the course and many responded by doing so. The reactive effects of these experimental conditions, for both the experimental and control groups, both of whom were exposed to a general environment supportive of T.E.T. and to other teachers on the staffs who had already completed the program, applied the skills, and talked about the results, might be sufficient to cloud the results to some degree.

Considering what has been mentioned, generalizability can only be extended to similar groups of teacher volunteers and their students who have had T.E.T. under similar conditions as those present in the Newport News School System. Teachers who individually take T.E.T. without the encouragement and support of their local school division may not experience similar results.
ORGANIZATION OF THE REMAINDER OF THE STUDY

Chapter 2 of the study contains a review of the literature. Other areas of emphasis in Chapter 2 are a review of studies and theories on interpersonal relationships, the self concept, and attitudes. In Chapter 3, the methodology employed in the study is examined. Included are procedural details including an overview of the research instruments utilized and comments on validity and reliability checks. The fourth chapter covers the reporting of the findings, including an analysis of the data with appropriate interpretation. Chapter 5 provides a descriptive summary and conclusions plus a statement of the implications and recommendations for further research.
Chapter 2

REVIEW OF THE LITERATURE

Appropriate theory and research on attitudes and self concept undergird this review. Divergent opinions and conclusions throughout the literature, however, cloud the issue. In this chapter, an attempt will be made to review theories and studies related to attitudes and the self concept. In addition, some attention will be given to the literature on interpersonal relations. A review of related research studies will conclude the literature review of this chapter.

LITERATURE ON ATTITUDES AND ATTITUDE CHANGE

There are a number of attitude theories and models of attitude change, and there are a number of opposing views; yet, the subject continues to attract the interest of researchers. Suedfeld reports one dichotomy in the literature, between

\[ \ldots, \text{theories that propose that attitude change occurs because of a need for cognitive and emotional consistency, on one hand, and theories based on other psychological concepts, mostly learning and perception, on the other.}\]

Consistency theories are more widely used, have promoted the greater amount of research, and are usually considered as motivational theories

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of attitude change.

As cited by Suedfeld, Heider's balance theory "... analyzes systems consisting of two or three persons, or two persons and an object, with any two of these entities related to each other by either positive or negative sentiments, or not related at all." The sentiment relations are considered to be balanced if they provide a good Gestalt, or if a liked person agrees and a disliked person disagrees with one's own sentiments toward a third entity.

Osgood and Tannenbaum's congruence theory is integrally involved with a measurement technique known as the semantic differential, which is being used in this study. The theory proposes that attitudes tend to fall toward the extremes of the "good-bad" dimension. A second proposition states that when two objects that are rated differently become related, they are subsequently given ratings which tend to be more neutral or more alike. The principle of congruence is demonstrated through this second proposition.

Festinger's theory of cognitive dissonance has been termed the most lively of all attitude theories since it has generated the largest number of experiments, attracted the most adherents, and aroused the greatest controversy. This theory focuses on the consequences of incompatibility between two related cognitions, which may be thoughts,


31 Suedfeld, *Attitude Change*, pp. 16-17.
beliefs, memories, attitudes, or knowledge. Incompatibility, or dissonance, is aroused when two cognitions of a person come into conflict with each other. For example, if one knows smoking is bad for his health and he smokes anyway, dissonance is aroused. When faced with dissonance, an individual tends to change his behavior, his belief, or his attitude to reduce the dissonance. Thus, in the example, the individual might choose between alternatives such as:

1. discarding the advice of the surgeon general as being inaccurate,
2. using a filter which he feels will screen out the harmful effects of smoke, or
3. give up smoking.

Characteristics of Attitudes and Attitude Change

Before delving too extensively into the realm of attitude change, it might be helpful to consider how attitudes are formed. A Television Research Committee was assembled in Great Britain in the 1960s primarily to investigate the extent to which research techniques of the social sciences could be used to examine the influence of television on the formation or altering of attitudes and moral concepts of young people. Among the key questions the Television Research Committee sought to answer were: what are attitudes? How are they constituted? How are they related to other similar concepts such as

values and opinions? How are they formed? What are the various factors and processes involved in the formation? How do they relate to overt behavior? How are attitudes aroused, maintained, reinforced and changed? These questions are also applicable to this study and are deserving of some response.

What are attitudes? An area of general agreement among researchers is that attitudes are learned, and this in itself has implications for other responses on questions concerning attitudes. Hartley wrote that attitudes are also inferred from behavior, are relatively stable, are represented in personal imagery, have motivational, cognitive and affective facets, and integrate with the personality of the individual. However, Hartley warned of the trap he calls the "jangle" fallacy. He argued that other psychological functions, such as memories, thoughts, self concepts, personal goals and so forth also have these properties. Sherif and Sherif wrote that the concept of attitudes has several characteristics which differentiate it from other concepts referring to an individual's internal states. Those characteristics were:

1. "Attitudes are not innate, ..." but rather come under the category of social drives, needs, social orientations or

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the like. It is assumed they are learned.

2. "Attitudes are not temporary states but are more or less enduring, once formed. . . ." Attitudes do change, but not with every barely noticeable variation in the stimulus conditions.

3. "Attitudes always imply a relationship between the person and objects. . . ." Psychologically, they are not self-generated but are learned in relation to identifiable referents which could be persons, objects, institutions, or social issues.

4. "The relationship between person and object is not neutral, but has motivational-affective properties. . . ." These properties derive from the context of highly significant social interaction.

5. The subject-object relationship is accomplished through the formation of categories both differentiating between the objects and between the person's positive or negative relation to objects in the various categories. . . .

The referent of an attitude constitutes a set that may range, at least theoretically, from one to a large number of objects; in reality a positive or negative stand toward one object often implies differential attachment to others in the same domain.

How are attitudes formed? Allport, as cited by Ostrum, suggested that individual experiences with the attitude object combine through the process of integration to form a unified attitude. He further explained that an attitude which is initially gross and diffuse

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will become more differentiated with experience. A single traumatic experience, however, can bring about a rapid and forceful permanent attitude. In addition, according to Allport, initiation of attitudes expressed by friends, parents or admired others can be a source of "ready made" attitudes for the individual.

Triandis took the position that there are three components to attitudes: the cognitive, the affective, and the behavioral, and that attitudes are formed and developed in order to understand the surrounding world, to protect one's self-esteem, to adjust in this complex world, and to express one's fundamental values. Thus, one learns to evaluate different concepts and how to behave correctly in relation to various objects found in the environment. Attitudes of significant others often become guides as one develops one's own attitudes. Triandis, like Allport, suggested that attitudes are also learned through direct exposure to the attitude object, but he felt that only a small proportion of attitudes are developed through this direct experience.

Halloran, as a result of his work with the Television Research Committee, concluded that attitudes develop as humans develop, in interaction, in relationships with other people, particularly with significant others in the socialization process. The early years in the socialization process are seen as critical in the formation of attitudes,

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37 Ibid.
although the influence may be indirect and complex.

How are attitudes aroused, maintained, reinforced and changed? On this question, there have been numerous, often interrelated responses as theorists and researchers have sought to explain such a vital area as attitude change. Hovland, Janis, and Kelley, as cited by Insko, did much work on the reinforcement theory of attitude change while working with the Yale Communication Research Program. 39 This theory essentially offered that attitude change results from learning produced through reinforcement, and one of the main ways to give rise to attitude change by persuasive communication is through a related opinion change. Changes in attitude are thought to occur following a change of opinion. There are three important variables which have an impact on an individual deciding whether to change an opinion: his willingness to attend to the new communication, his comprehension of it, and finally his acceptance of it.

Zimbardo and Ebbesen suggested that other important variables in the attitude change process are: the communicator or source; the communication or message; the audience, recipients, or target population; and the response dimensions. 40 The source, or communicator, to be effective, would seemingly need to exhibit credibility, expertise, and trustworthiness. Sherif and Sherif shared in the belief that attempts at attitude change, either in interpersonal, group, or mass


communication situations, involve some form of communication. In predicting a person's reaction to a communication, according to Sherif and Sherif, the basic information needed is where he places the position of the communication and the communicator relative to himself and his own stand.

On the subject of the affective component of attitudes, Triandis wrote that this component is characterized by the presence of positive or negative emotion, and that physiologically, it involves mainly a state of arousal, becoming positive or negative when it is cognitively "interpreted." Triandis referred to the personality as a very complex field in which personality variables typically interact with other variables when attitudes change. In other words, people react to certain kinds of messages, which reach them through certain media, and which are produced by certain sources of messages, differently from other people.

Staats wrote that the human attitude or motivation system may be referred to as the attitude-reinforcer-discriminative (A-R-D) system. He felt that long- and short-term shifts in individual and group motivational stimuli, or attitudes, could be observed in greater

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42 Triandis, *Attitude and Attitude Change*, p. 113.
43 Ibid., p. 129.
detail by the employment of a learning analysis and that a stimulus that has come to elicit an attitudinal or emotional response will also function as a reinforcing stimulus. Lott and Lott used a learning system analysis as it applies to interpersonal attraction. They argued that the primary proposition relevant to the learning of liking is that if a person is rewarded in the presence of another, a positive attitude toward that other will be formed, based upon these assumptions:

1. Persons may be conceptualized as discriminable stimuli to which responses may be learned.
2. A person who experiences reinforcement or reward for some behavior will react to the reward, i.e., will perform some observable or covert goal response.
3. This response to a reward will become conditioned, like any other response, to all discriminable stimuli present at the time of reinforcement.
4. A person . . . who is present at the time that Individual X, for example, is rewarded thus becomes able in a later situation to evoke the goal response, or what is more likely, its fractional and anticipatory component, the anticipatory goal response.

For example, when a child receives a word of praise, the goal response will most likely include a smile of pleasure. Positive affect is assumed to accompany such observable responses as a smile, a laugh, an exclamation, and so forth. This primary hypothesis suggested has been tested and substantiated in a number of experiments. In one such study, Lott and Lott had sixteen same-sex groups of three children


46Ibid.
play a noncompetitive board game, "Rocket Ship," during which some children were rewarded for success while others were not. Each play group consisted of children from the same third- or fifth-grade classroom who had not chosen each other on either of two sociometric tests administered by their teacher. The game was played in two sessions by each group. Shortly before the close of the school day, the classroom teacher administered the dependent measure in the form of a sociometric test. It was found that those children who had been rewarded during the game made significantly more choices of play-group members who had been present when they obtained reward than children who had not been rewarded during the game.

How are attitudes and attitude changes measured? The experiment involving the noncompetitive board game, "Rocket Ship," gives one example of how attitudes related to interpersonal liking can be measured.

Measurement of Attitudes

In his treatment of the subject, Dawes made a distinction between representational measurement and index measurement. Representational measurement involves the establishment of a two-way correspondence between:

1. some property of things being measured, and

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47 Lott and Lott, Psychological Foundations of Attitudes, pp. 67-69.

2. Some property of the measurement scale.

For example, in a situation whereby the researcher wants to get a measurement on how certain subjects would judge the relative seriousness of certain crimes, the property of things being measured is the probability with which one is judged to be more serious than another; the property of the measurement scale is distance from one judged crime to another in terms of standard deviations. The correspondence is said to be two-way in that:

1. the property of the things being measured determines their value or position on the measurement scale, and
2. these values or positions may, in turn, be used to make inferences about the property of the things being measured.

Index measurement, on the contrary, is one-way correspondence. That is, index measurement occurs whenever a property of the thing being indexed determines a corresponding index, but not vice-versa. Whereas both representational measurement and index measurement are evaluated in terms of predictability, the main difference is that representational measurement is evaluated in terms of how well it can predict a certain specific property of the thing being measured, while index measurement is evaluated in terms of a much more vague standard of general usefulness.

Zimbardo and Ebbesen suggested that of several different paper and pencil tests which have been developed to measure attitudes, four have been fairly highly refined and have been used most extensively. Those four are: Thurstone's method of equal-appearing intervals, Likert's method of summed ratings, Guttman's scalogram, and Osgood's
semantic differential, which is described in detail elsewhere in this study. Thurstone, in 1929, developed what has been called the first major technique of attitude measurement and used it in his study of attitudes toward religion. His innovative technique introduced the metric to an area of research where it had never been used before. By obtaining statements of opinion about a particular issue and ordering them according to a dimension of expressed favorableness- unfavorableness toward the issue, he attempted to derive a subject's attitude on that particular issue. Figure 1 is an example of a shortened version of a Thurstone scale, which normally contains about twenty independent statements of opinion about a particular issue.

A drawback of the Thurstone scale is that its construction is laborious and time consuming. Likert developed a technique which could produce an equally reliable attitude scale with relative ease. The Likert scale consists of a series of opinion statements about some issue, and the subject is asked to indicate the extent of his agreement or disagreement with each item by rating each item on a five-point response scale (strongly agree, agree, undecided, disagree, strongly disagree). The sum of his individual ratings is what determines a person's attitude score. Figure 2 is an example of a single Likert scale item.

49 Zimbardo and Ebbeson, Influencing Attitudes and Changing Behavior, p. 123.
50 Ibid., p. 124.
51 Ibid., p. 125.
Trait: Attitude toward Open Housing

<table>
<thead>
<tr>
<th>Scale value</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Least favorable</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>Most favorable</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Figure 1. Thurstone Scale Example, Shortened Version.
"People should be allowed to move into any neighborhood they choose."

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a) Strongly agree</td>
</tr>
<tr>
<td>2</td>
<td>b) Agree</td>
</tr>
<tr>
<td>3</td>
<td>c) Undecided</td>
</tr>
<tr>
<td>4</td>
<td>d) Disagree</td>
</tr>
<tr>
<td>5</td>
<td>e) Strongly disagree</td>
</tr>
</tbody>
</table>

Figure 2. Likert Scale Example, Shortened Version

A third scaling technique, Guttman's scalogram, is based on the assumption that a single, unidimensional trait can be measured by a set of statements which are ordered along a continuum of "difficulty of acceptance," or statements which range from those which are easy for most people to accept to those which few persons would endorse. Scale items are considered to be cumulative, in that acceptance of one item implies acceptance of all other items before it. Figure 3 is an example of such a scale.

One of the most widely used rating scale techniques today is the semantic differential. Because it is discussed more thoroughly

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Trait: Attitude toward Open Housing

Acceptability Statement

Least difficult to accept
A. Generally speaking, people should be able to live anywhere they want.
B. Real estate agencies should not discriminate against minority groups.
C. The city should actively support the idea of open housing.
D. There should be a local review board which would pass on cases of extreme discrimination in housing.

Most difficult to accept
E. There should be federal laws to enforce open housing.

Figure 3. Guttman's Scalogram Example

in Chapter 3, suffice it to say at this point that it can be used in a variety of situations, it can be used to assess intraindividual changes in attitude, and it can provide considerable information about a concept.

LITERATURE ON THE SELF CONCEPT AND SELF CONCEPT CHANGE

In grasping the historical development of the self and in defining the meaning of the self concept, one is encouraged to consider a number of individuals who have made contributions to the understanding of the self. A review of the literature on the self reveals that the word itself has been used in a variety of ways. Gale suggested
that two general connotations have emerged: "... the self as a subject or agent, and the self as the individual who is known to himself." As Gale points out, the term self concept has been commonly used in the literature to denote the second meaning.

On the subject of the historical development of the concept of self in psychology, James, in 1890, included the topic as important in his psychological thinking. During the next thirty years, there is little evidence that the introspectionist (functionalist) and the behaviorist psychologies attended to constructs concerning the self: the functionalists because they seemed unable to deal with such a construct; and the behaviorists because they could not find acceptable such a "mentalistic" construct.

Meanwhile, as Freudians and neo-Freudians developed psychodynamic postulates, a self-referent was necessarily implied to make them understandable. Probably because Freud himself, in his early theorizing, strongly emphasized the role of the "Id" without explicitly formalizing a self construct and because his theory was largely ignored or denied by many psychologists in the United States, the psychodynamic theories did not immediately cause constructs concerning the self to rise to the forefront of psychology in the United States.

In more recent years, there has been a general proliferation

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55 Ibid.
56 Ibid.
of self theories which can be traced back to a number of influences.\textsuperscript{57}

In his later writings, Freud assigned greater importance to ego development and functioning. The neo-Freudians stressed the importance of the self-picture and the ego-ideal, and psychologists in the United States working in clinical settings found that behavioristic approaches were too limited to account for some of the phenomena they were observing. At the same time, the functionalists, with their introspective methods to elicit the subjects' own view of their behavior, and the Gestalt psychologists, who used their phenomenological or observable methods, made their contributions to the development of the concept of self in general psychology.\textsuperscript{58} Also being explored at this time was the possibility of an "operational behaviorism" which involved complex cognitive and motivational intervening variables. Thus, as the concept of self has developed, increased significance has been assigned to both a phenomenal or conscious and a nonphenomenal or unconscious self concept with cognitive and motivational attributes.\textsuperscript{59}

Among those who have made psychoanalytic contributions to self theories are Freud, with his construct of the ego; Adler, who felt that a person's interactions with his environment foster attitudes and values which develop his "life style"; and Jung, who stressed the 


\textsuperscript{58} Ibid., p. 27.

\textsuperscript{59} Ibid.
uniqueness of human motives and the striving toward individuation. 60

Neopsychoanalytical contributions to self theories were made by individuals such as Sullivan, who contributed a theory of interpersonal relationships which held that the self concept developed from the reflected appraisals of significant "others" in the child's life; Horney, who stressed the cultural determinants of behavior and who emphasized that maladaptive behaviors arise largely from disturbances in human relationships; and Fromm, who also was concerned with the social influences upon behavior and who was one of the first to use the term "self-realization" in a therapeutic context and "... viewing growth as an unfolding process of man's psychological powers." 61

There are those who see the developing human as involved in a process of constant striving toward self-actualization and who, in this process, perceives and conceptualizes. Past experiences enable him to make these perceptions and conceptualizations as he evaluates all of his experiences continually. The person's perception of self is dependent upon his perception of the reflected attitudes and judgments of those who make up his world, and his self concept is really the individual's anticipation of his acceptance or rejection in a given situation. 62 As used in the phenomenological sense, the "self" may include among its definitions, "... a system of ideas, attitudes, appraisals, concepts, value judgments, and commitments pertaining to

60 Gale, Developmental Behavior, pp. 27-29.
61 Ibid., pp. 30.
62 Ibid., p. 31.
one's own person." Among those who viewed the self in phenomenological terms are Combs, who referred to the "phenomenal" self as the individual's "... own unique organization of ways of regarding self. ..."; Kelley, who perceived the self as unique to each individual and built almost entirely through continuous social interchange; Maslow, who included as his ultimate level on a "needs hierarchy" the concept of "self-actualization" and who maintained that psychological health is not possible until a person's "inner core" is accepted, loved, and respected by others and himself; and Rogers, who collected much evidence from his clinical therapy and who suggested that humans work toward a state of congruent psychological self, although this state may never be fully realized in that one is involved in fluid change, sensitive to the environment, to other individuals, and to personal feelings and reactions.

While maintaining that what the self "really" is is an insoluble problem, Rosenberg offered that the self is simply "... an attitude or a cluster of attitudes toward an object." Further, just as individuals have attitudes toward countless numbers of objects, they also have attitudes toward themselves. Accepting such a premise could lead one to surmise that all the dimensions used to characterize or categorize attitudes toward objects are completely appropriate for

\[63\] Gale, Developmental Behavior, p. 31.

\[64\] Ibid., pp. 33-39.

study of attitudes about self. Rosenberg concluded, however, that self-attitudes do have certain distinctive qualities, among them the fact that the self is reflexive in that the person holding the attitude and the object toward which the attitude is held is the same; and that everyone is motivated to hold the same attitude toward the object, a favorable one. 66

Among a number of conclusions reached by Coopersmith in a series of studies intended to clarify the antecedents and consequences of self-esteem was that high parental self-esteem was closely related to high self-esteem of the child. 67 This finding would tend to indicate that unconscious identification coupled with conscious modeling may well underlie the self evaluations of many persons. Without too much difficulty one might make similar assumptions about the effects of self-esteem of significant "others," such as teachers, upon a child's self-esteem.

On the other hand, Coopersmith concluded that the parental, self and social expectations of individuals with low self-esteem are "... marked by lack of faith, expectations of failure, and the anticipation of rejection." 68 By relating to their children in such a way as to suggest that there is rejection, that they cannot learn, are not important, and have no power or privileges, parents unknowingly

68 Ibid., p. 251.
lead their children to believe that they deserve no better and are incapable of improving themselves in this regard. A person with low self-esteem is unlikely to feel that his personal actions can have a favorable outcome, and these anticipations of failure are apt to have debilitating effect upon his motivation.

Another interesting observation by Coopersmith is that children who are high in self-esteem are apt to display characteristics of independence, outspokenness, exploratory behaviors, and assertion of their rights; i.e., characteristics which are likely to cause considerable travail and disturbance to their parents, teachers, and other persons in authority. Children who are low in self-esteem are more likely to exhibit characteristics of obedience, conformity, helpfulness, and passivity; or characteristics which make them appear to be overtly submissive and accepting. 69

Interactionist notions about the self concept are explained in terms of one's interaction with those about him. The general notions of the interactionists' theory are: "... The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that individual." 70 Kinch, in offering a formalized theory of self concept based on these notions referred to these basic postulates:


Postulate 1. An individual's self concept (S) is based on his perception of the way others are responding to him (P).

Postulate 2. An individual's self concept functions to direct his behavior (B).

Postulate 3. An individual's perception of the responses of others toward him reflects the actual responses (A) of others toward him.\(^7^1\)

Through the use of his three basic postulates, Kinch demonstrated how one could deduce from them three more. As an example, by using Postulates 1 and 2, it can be concluded that the way an individual perceives the response of others toward him will influence his behavior, since Postulate 1 states that his perception determines his self concept and Postulate 2 holds that his self concept guides his behavior. Symbolically, this might be represented as follows:

\[
\text{if } P \rightarrow S \text{ (Postulate 1)} \\
\text{and } S \rightarrow B \text{ (Postulate 2)} \\
\text{then } P \rightarrow B \text{ (Postulate 4)}
\]

Therefore, such additional postulates or derived propositions might be stated as follows:

[Postulate 4.] The way the individual perceives the responses of others toward him will influence his behavior. . . .

[\(P \rightarrow B\)]

[Postulate 5.] The actual responses of others to the individual will determine his self concept. . . . [\(A \rightarrow S\)]

[Postulate 6.] The actual responses of others toward the

\(^7^1\)Kinch, *Symbolic Interaction*, p. 246.
individual will affect the behavior of the individual. . . .

[ A ——> B ]

72

The symbolic representation thus far would be: A ——> P ——> S ——> B.

Kinch, however, suggested that there is another postulate which should be stated, leading to the possibility of a number of other derived propositions which are interrelated.

[ Postulate 7. ] The behavior that the individual manifests influences the actual responses of others toward that individual. . . .

Putting the four basic variables of all his postulates together (A, P, B, S), we are dealing with a theory represented in these symbolic terms:

\[ P ——> S \\
\uparrow \downarrow \\
A ——> B \]

As can be seen, each variable can affect directly every other variable which is included in this theory.

In a later study conducted by Kinch on factors related to self-concept change, four hypotheses were tested:

[ Hypothesis 1—Frequency ] The more frequently the individual perceives others as responding toward him in a particular way, the more likely he is to align his self-concept with the perceived responses.

[ Hypothesis 2—Importance ] The more important the individual perceives the contact between himself and the others to be, the more likely it is that the individual's perceptions of the responses of the others will be used in defining his self image.

[ Hypothesis 3—Temporal Proximity ] The individual's concept of himself is a function of (a) the earliest evaluations he receives on a particular attribute and (b) the most immediate evaluations.

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73 Ibid., p. 248.
Hypothesis 4—Consistency] The more the individual perceives a consistent pattern in the responses of others, the more likely he is to let this affect his self-concept. In his research, Kinch employed a series of experiments, each using the classical design with pre- and post-tests on both the experimental and control groups. The dependent variable focused on changes in one aspect of an individual's self-concept, or leadership and the independent variables consisted of the four variables in the hypotheses tested, which were sequentially varied in the experimental situations. By comparing before-after changes in self concept ratings on leadership, evidence was reported by Kinch for three of the four hypotheses. No evidence was reported for Hypothesis 3.

In a comparison of those in the experimental group with those in the control group, significant differences were found (.05 level) in the expected direction for Hypothesis 1. On Hypothesis 2, the results were in the expected direction, but the difference between the two groups compared was small and not significantly different. Findings for Hypothesis 4 were in the opposite direction from that which was expected. Those subjects who were given about the same ratings by all the raters changed less than those subjects who were given more dispersed ratings.

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75 Ibid., pp. 266-67.
Educational Implications of Self Theory

Because of the nature of the study, it is important to consider the educational implications of self-concept theory, including the question, why is self concept so important? LaBenne and Greene concluded that the self concept is developed and nurtured through accumulated social contacts, in unstructured and structured situations, with significant "others" such as family, peers, and teachers during the growing-up process. They further suggested that it is important for teachers to realize that self concepts are not unalterably fixed, but are modified by life experiences. In a study involving emotionally handicapped children, LaBenne found a significant relationship between the teacher's self concept and that of the pupils in the classroom. This finding is of prime import to the current study.

In a series of studies reported by Purkey, several key conclusions were made regarding the self concept and academic achievement:

1. There is a persistent and significant relationship between self concept and academic achievement at each grade level, and change in one area seems to be related to change in the other.

2. There is no clear-cut evidence on which comes first: a positive self concept or academic success; or a negative self concept.


or academic failure. There is sufficient evidence to give reason to assume there is a strong reciprocal relationship and that enhancing the self concept is of importance in influencing improvement in academic performance. 78

In considering the impact of the school environment on the student, Purkey offered that, traditionally, the child is expected to adapt to the school, rather than the school adjusting to the child. To ensure that this is the case, the school is prepared to dole out rewards and punishments, successes and failures, on a massive scale. Further, schools are geared to grading students, grouping them, promoting or failing them, evaluating, encouraging competition, providing detention centers, and holding the threat of suspension or expulsion over their heads in order to "... mold the child to meet the school's expectations." 79 Purkey suggested that punishment, failure and deprecation characteristically lead to highly charged negative attitudes toward learning.

Purkey, in his review of numerous studies by researchers such as Berger, Fey, Luft, Trent, Omwake, Jersild, and Combs, also reported findings which concluded that a teacher's attitudes about himself are of importance if the teacher is to attempt to build positive and realistic self concepts in his students. 80 Davidson and Lang found that

79 Ibid., p. 40.
80 Ibid., p. 46.
students' perceptions of their teachers' feelings toward them are positively correlated to their self perceptions.

Much of the literature on the self concept as it relates to the educational setting makes reference to the self-fulfilling prophecy which holds, in essence, that a child will live up to, or down to, the expectations of significant "others." Rosenthal and Jacobson tested the hypothesis that students, more often than not, do what is expected of them. In an elementary school of 650 students, the two researchers told the teachers that certain students could be expected to evidence significant increases in mental ability during the year. Teachers were then given the names of this group of "high potential" students, who in fact had been randomly selected by the researchers. When intelligence tests and other measures were administered several months later, those identified as "high potential" tended to score significantly higher than those students not so identified. The "high potentials" were also described by their teachers as happier, more curious, more interesting, and as having a greater chance of future success than the other students. Rosenthal and Jacobson concluded that the teacher, through bodily gestures, facial expressions, verbal expressions and touch, had a subtle influence on the child's learning. They believed this may, in part, be due to modifications in the child's self concept brought about by the teacher's expectations and

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accompanying behavior. Purkey suggested six factors which he feels are particularly important in creating a classroom atmosphere which is conducive to developing favorable self images in students. This atmosphere, which he feels teachers are responsible to create, includes these factors: (1) challenge; (2) freedom; (3) respect; (4) warmth; (5) control; and (6) success.

Quandt applied knowledge gained by researchers on the self concept to reading and suggested that there is a positive correlation between the two. He also reported that in his research he found significant differences in self-concept scores between high and low achieving readers. Similar to the findings on the self concept and achievement, Quandt refers to a spiraling process where poor self concept interferes with learning to read and the resulting reading disability leads to an even poorer self concept.

A series of papers, delivered at Tufts University attended to special problems in the relationship of education to self concept in black children and youth. In her paper, Grambs wrote of the general tone of society which then had the majority insisting that blacks and whites were different; that blacks were inferior to whites; that

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83 Purkey, Self Concept and School Achievement, p. 50.

84 Ivan Quandt, Self-Concept and Reading (Newark, Delaware: International Reading Association, 1972), p. 7.

85 Ibid., p. 9.
blacks were lazy, stupid, ignorant, and incapable of success. The obvious implication is that the self-esteem of a black child is damaged by the overwhelming feeling in the world he lives in that "white is right; black is bad." At least until the recent past, there is evidence that in many black families, the parents did much to reinforce this feeling of inferiority among their children. Other crucial social forces which influence the development of the self concept of blacks are poverty, with many more blacks than whites on the lower economic rungs; joblessness, with its impact on parental self concept; and broken homes. All contribute to a lack of stability, warmth, and attention which are part of the necessary environment for healthy personality development.

Kvaraceus argued that in a large city, children entering public schools in heavily populated neighborhoods are immediately absorbed into a massive educational system which accepts students on its own terms. Often these terms place demands on students to renounce differences of a personal, cultural, and social nature, and to submit to a process of conformity and standardization. In striving to

87 Ibid., p. 15.
88 Ibid., pp. 17-19.
achieve its goals, the educational institution may cause some loss of privacy, personal identity, and individuality among its students and may produce an artificiality in the classroom which does not exist in everyday life outside of the school. Such demands were seen by Kvaraceus as being most destructive to the egos of the culturally deprived. Those students unwilling to submit to the demands, join the list of dropouts, failures, truants, discipline problems, and otherwise disturbed youngsters.

LaBonne and Greene offered some suggestions for consideration by teachers who might be inclined to "humanize" instruction, thus offsetting some of the traditional demands which take their toll on students. On the subject of discipline, they took the position that discipline used in school has a direct influence on the development of attitudes and that the purpose of discipline exerted on the student externally should be to guide him in his growth from "... thoughtless dependence to thoughtful independence." Thus, it is suggested that classroom discipline should come through facilitative behavior on the part of teachers as they assist students in the acquisition of self discipline and purposive behavior.

Boy and Pine wrote of teaching as being a personal expression of the self, and effective teaching is "... more than just doing something with students; it is being a fully functioning person, the

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90 Kvaraceus, "Negro Youth and Social Adaptation: The Role of the School as Our Agent of Change," p. 93.

91 LaBonne and Greene, Educational Implications of Self-Concept Theory, pp. 93-95.
most adequate person." These writers made the assumption that the teacher's role is transcended by his existence as a human and the teacher who can be the most "whole" person will make the most significant contribution to students who are striving for self actualization. It was suggested that as a result of his involvement with a skilled, competent, and psychologically whole teacher:

1. the student assumes responsibility;
2. the student is accepted because of the respect shown him by the teacher;
3. the student is motivated as a result of the teacher's interest and enthusiasm for his work;
4. the student is actively involved in the process of growth, because the teacher has focused upon the student and his needs;
5. the student interacts on a human level;
6. the student exists in a safe atmosphere, free from threat or coercion;
7. the student is understood by the teacher who is concerned with the student's frame of reference;
8. the student is self disciplined;
9. the student verbalizes with ease;
10. the student achieves insight;
11. the student is aware of appropriate attitudes;

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93 Ibid.
12. the student is valuing;
13. the student responds to genuineness; and
14. the student evaluates the interaction with the teacher.

Fitts concurred with other researchers in his belief that the "good" teacher facilitates the growth of students toward self actualization and further hypothesized that the behavior of teachers is "... related to, is associated with, and is an expression of their self concept." Referring to the relationship between self concept and performance in student teachers, teachers, school counselors and teacher aides, Fitts found that these groups tend to have quite normal self concepts in both central tendency and variance as measured by the Tennessee Self Concept Scale. Further, he found there is a clear relationship between self concept and performance when supervisor ratings are the performance criteria. In general, it was concluded that teachers' self concepts show a stronger relationship to their interpersonal behavior than to other types of behavior. Also of special interest was his conclusion that while attempts to enhance the self concepts of teachers are sometimes successful, it is also evident that successful job performance improves the self concepts of student teachers and teacher aides.

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95 William Fitts, The Self Concept and Performance, Research Monograph No. 5 on Studies on the Self Concept and Rehabilitation (Nashville, Tennessee: Counselor Recordings and Tests, 1972), p. 44.
96 Ibid., n. 61.
97 Ibid.
probably be variables which affect the self concept.

INTERPERSONAL RELATIONS

As has been suggested in much of the literature reviewed thus far, attitudes one holds toward certain objects and others, as well as self attitudes or self concept, are not innate; but rather, they are learned. They are also influenced to a great degree by significant "others" by way of interpersonal relationships which exist throughout one's life experiences. Kvaraceus suggested that the most direct and effective way to strengthen the school as an ego-supporting institution is to improve the interpersonal relationships between teacher and students. Because the teacher is in a position of becoming for many students the most significant "other" outside the home, through good interpersonal relationships with students, the teacher can do much to promote the educational growth of his students.

Just as attitudes appear to be learned as one gains new experiences, interpersonal relationships can be enhanced through the learning and practicing of effective interpersonal skills. Johnson wrote that these basic skills can be generally classified into four areas:

. . . (1) knowing and trusting each other, (2) accurately and unambiguously understanding each other, (3) influencing and helping each other, and (4) constructively resolving problems and conflicts in the relationship. 99

The first area, knowing and trusting, involves self-disclosure,

98 Kvaraceus, Negro Self-Concept, p. 110.

self-awareness, self-acceptance, and trust. To get to know each other implies the need to disclose to each other how one is reacting to and feeling about what is taking place, which, in turn, implies a self-awareness.

The second area of skill development requires communicating accurately and unambiguously one's feelings toward another in a manner which suggests warmth and liking. The third area of skill development necessitates responding, communicating acceptance and support, confronting, using reinforcement and modeling as means of helping and influencing another person's behavior. The fourth area implies the learning of techniques which facilitate problem solving and conflict resolution.

Rogers called the interpersonal relationship the core of guidance, meaning that in a wide variety of professional work experiences involving relationships with people such as psychotherapists, teachers, religious workers, guidance counselors, social workers, and clinical psychologists, it is the quality of the interpersonal encounter with the client which is the most significant element in determining effectiveness. On the basis of his professional experience as a counselor and psychotherapist, he reached that conclusion, and since then he has made use of that assumption in his interactions with classes.

100 Johnson, Reaching Out, p. 3.

101 Ibid., p. 4.

and seminars, in the training of teachers, in the administration of staff groups, and in the clinical supervision of professionals as they worked with their clients or patients.

Through the years, Rogers gradually developed some theoretical formulations, or some hypotheses, concerning the basis of effectiveness in relationships. In reflecting on how individuals with sharp differences in personality, orientation, and procedure can all be effective in a helping relationship and can each be successful in facilitating constructive change or development, he concluded that it is because they bring certain attitudinal ingredients to the helping relationship. Rogers hypothesized that these ingredients make for effectiveness in personal encounters, and while several are dependent upon the "counselor," he acknowledged that one condition must exist in the client. In summary, Rogers hypothesized that the counselor must exhibit congruence, empathy, positive regard, and unconditionality of regard, while the client must be able to perceive that which is being communicated by the counselor. Considering each hypothesis separately, they can be explored further.

On congruence, Rogers stated that personal growth is facilitated when the counselor "is" what he "is." When in the relationship with the client, he is genuine and without "front" or facade, and openly "being" the feelings and attitudes which at that moment are flowing within him, he has achieved congruency. To realize this state

103 Rogers and Stevens, Person to Person: The Problem of Being Human, pp. 89-96.
of congruence, the counselor must accept himself and understand and not be afraid to "be" the complexity of his feelings. Rogers suggested that congruence could be the most crucial of all the conditions described in his hypotheses, but possibly the most difficult to achieve.

A second essential condition in the relationship is empathy, in that the counselor must be able to experience an accurate empathetic understanding of his client's private world, and is able to communicate to him some significant fragments of that understanding. Rogers cautioned that empathetic understanding is very different from the type of understanding often offered; an evaluative understanding which implies, "I understand what is wrong with you." Empathetic understanding is based on acceptance of the other person as he is, as he feels, as he values, and on communicating to him that his feelings and meanings are worth understanding. Active listening is a skill which enhances the development of empathetic understanding.

In the third condition, positive regard, Rogers hypothesized that growth and change are more likely to occur the more a counselor is experiencing a warm, positive, acceptant attitude toward what "is" the client. He prizes the client in much the same way that a parent would a child, and does so regardless of his particular behavior at that moment. It involves an open willingness on the part of the counselor to allow the client to "be" whatever feelings are real within him at the moment, hostility or tenderness. This feeling respects the other person as a separate individual, and does not possess him; it is the kind of liking which has strength, and which is not demanding.
The fourth hypothesis, Rogers advanced tentatively, and that is "unconditionality of regard." By this, he meant that the relationship will be more effective the more the positive regard is unconditional. In other words, the regard for the client must be in a total rather than in a conditional way. It means an ongoing, positive feeling without reservations and without evaluation; not making judgments. It means, "I like you, regardless" rather than "I would like you if you would behave as I want you to."

The hypothesis which gives the condition which Rogers said must exist in the client is termed the client's perception. Unless the attitudes brought into the relationship by the counselor can be communicated, at least to some degree, to the client, and perceived by him, they cannot be effective since they do not exist in the client's perceptual world. Rogers stated that when the client perceives, to a minimal degree, the genuineness of the counselor and the acceptance and empathy which the counselor experiences for him, then personality development and behavior change are predicted. Thus, it is important that the counselor is sensitive to the way the client is receiving his communications.

Regarding his hypotheses, Rogers acknowledged that they might not be the final word and that it is entirely possible that there are other conditions which he did not include which are also essential. However, he remains firmly convinced that personal human qualities, or something the counselor experiences, not something he knows, are
uniformly found to be associated with personal growth and change.

In recent years, many school systems have recognized the importance of special training for teachers and students in order to have them learn more about interpersonal skills in their daily relationships. The school division in which this study was conducted is one such example. In 1974, the Maryland General Assembly passed a resolution which created a task force to identify programs for youth who cannot function in the contemporary school setting, or disruptive youth. Among the recommendations of the task force was that increased emphasis be placed on human relations and interpersonal skills training for both students and appropriate adults, including teachers. Additionally, it was recommended that for training teacher specialists to work with problem students, a training model be used to assist teachers to develop crisis-intervention skills.

RELATED RESEARCH STUDIES

At this point, it might be helpful to consider the impact of interpersonal skills training efforts on the subjects involved, by examining the conclusions of several studies. A review of research efforts made over the past few years reveals a range of effects from

104 Rogers and Stevens, *Person to Person: The Problem of Being Human*, pp. 89-96.


106 Ibid., pp. 19-20.
none to significant. An examination of some of these efforts, with appropriate critiques, follows.

Cleveland attempted to measure the impact of Teacher Effectiveness Training on teachers of social studies with specific emphasis on whether the training encouraged among participants a greater sensitivity in outlook and greater efforts to develop more humanistic classrooms. 107 Using a pre-, post-, and post-post test design, several tests were administered, and anecdotal information was gathered through audio-taped observations of classes, taped interviews with the treatment group, biographical information on each teacher, and researcher observations and perceptions. Cleveland concluded that his results would have to be considered invalid because of contamination by uncontrolled variables. No direct significant difference between the treatment and control groups was discernible through the statistical data.

A weakness of Cleveland's study may have been the small n (six teachers in the experimental group and six in the control group), along with a nonrandomized selection of a single class of each teacher to be tested. The time of day and the homogeneity or heterogeneity of the class could also have had an effect on the results. In addition, the reliance on non-objective measurements including biographical data and researcher perceptions might have been a source of contamination.

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Bailey attempted to determine the effects of T.E.T. on the attitudes of pre-student teachers in language arts as measured by scores on several reliable scales. Bailey used twenty-nine pre-student teachers with language arts majors or minors, enrolled in a secondary education course, as her population. From this population, she randomly selected twenty-four as participants and after pre-testing them, divided them into three groups of eight subjects each. One group received Teacher Effectiveness Training, a second group received Multicultural Curriculum Training, and the third group remained in the regular secondary education classes. Following forty hours of treatment, the three groups were administered post tests at the end of the fall semester. During the sixth week of the student teaching experience in the spring semester, the three groups were administered "A Questionnaire of Student Teacher Behavior in the Classroom." On the basis of statistical findings, following an analysis using the Kruskal-Wallis oneway analysis of variance by ranks, these conclusions were made:

1. for this study, Teacher Effectiveness Training produced no significant differences in attitudes between the groups as measured by the tests employed, and

2. Teacher Effectiveness Training produced no significant differences between the groups in student teacher scores on "A Questionnaire of Student Teacher Behavior in the Classroom."

Bailey's sample of teachers, broken into three groups of eight

each, may not have been significantly large to determine effects. A possible negating effect on variance which might otherwise have been detected could be attributed to propinquity. In that all of the subjects were undergraduates with the same career interests, it might be likely to assume that they shared in common experiences outside of the classroom. If discussions included the current happenings in class, it is possible that shared knowledge might have become shared practice and beliefs as well, thus contaminating the results. This effect of propinquity might be reduced somewhat if the subjects did not have as much informal contact.

A problem with the post-post measure may have been that as student teachers undergoing their practice teaching, the subjects had many more initial fears and other obstacles to overcome than experienced classroom teachers. Thus, anticipating change during one's initial contact with students as their teacher might not have been too realistic.

Steck conducted a study to determine the effects of in-service education (I.E.T.) on teachers' beliefs, attitudes and values. His n consisted of 109 teachers with sixty-four in the experimental group and forty-five in the control group. Results of his study indicated that T.E.T. had no significant effect on the experimental group's beliefs, attitudes or values, but there was a measurable impact on the total sample, both experimental and control. Steck speculated that

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109 Keith Steck, "A Study to Determine the Effects of In-Service Education on Teachers' Beliefs, Attitudes, and Values" (dissertation abstract, University of Utah, 1975). [ Reproduction. ]
this latter effect may have been caused by the teachers' feeling some subtle pressure from the superintendent and principals to be more flexible, open, and less authoritarian in working with their students. The fact that teachers in both groups saw each other daily and undoubtedly discussed T.E.T. may also have had some effect.

Other studies have indicated mixed results attributed to T.E.T. While Bryngelson's study was not limited to T.E.T. alone, the results suggested implications for its value. The study, motivated by the researcher's desire to enhance teacher-student relationships, was designed to investigate the effects of an experimental consultation program based on constructs from the techniques of: Transactional Analysis; Teacher Effectiveness Training; and Values Clarification. Six teachers were given a one-semester consultation program which utilized constructs from these techniques, and this program consisted of two phases. In phase one, the teachers received eight hours of group instruction on the techniques. Phase two consisted of each teacher receiving twelve one-to-one consultations.

A student self-esteem inventory measured eighty-three experimental group students and forty-seven control group students, while student achievement was measured by comparing standardized achievement tests of the students. Findings indicated teachers and students perceived increases in teacher empathy and human interaction skills. However, the data did not indicate student changes in self-esteem or

in school achievement as a result of the consultation program for their teachers. Once again, a criticism might be noted because of the small n of six teachers, as well as the measurement technique employed by the researcher to determine the effectiveness of the consultation program for the teachers themselves which included researcher ratings and perceptions.

Another researcher, Flake, examined the effects of T.E.T. as described by eight specific characteristics of open-informal education included in the Walberg and Thomas matrix.111 His sample was composed of volunteers drawn from a population of 385 teachers hired into the Mesa, Arizona School District during the 1971-1972 and 1972-1973 school years. The volunteers were assigned to groups through the use of a table of random numbers, and the experimental design was the completely randomized design with treatment and control groups, each at two levels of teaching experience. Baseline data were established through the use of a "Teacher Questionnaire" and through the completion of an "Observation Rating Scale" in the classroom of each participating teacher by a trained observer. At the end of the eight weeks of training, post data were similarly gathered.

Major findings were:

1. teachers exposed to T.E.T. exhibited higher mean scores than those not so exposed;

2. teachers exposed to T.E.T. showed significant improvement

with regard to the characteristics of "provisioning for learning" and "instruction or extension of learning";

3. secondary teachers exposed to T.E.T. show significant improvement with regard to the characteristics of "humaneness, respect, openness and warmth"; and

4. elementary teachers exposed to T.E.T. show significant improvement with regard to the characteristic of "self-perception."

Conversely, teachers exposed to T.E.T. did not exhibit significant differences from the control group on other characteristics measured.

Another study, conducted by Dillard, concerned an investigation of the effects of T.E.T. on the types of verbal responses and attitude change of pre-service teachers. Using an n of twenty-five graduate students in education, data collected through pre- and post-written responses to simulated problem situations, and twelve five-minute audio tapes of a problem-centered discussion with a student, provided the researcher with the data for his conclusions. Dillard indicated that as a result of T.E.T., pre-service teachers responded to problem messages from the child with fewer communication roadlocks, defined as nonfacilitative responses, and used more facilitative responses to problem messages. He concluded that teachers could be trained in relatively short periods of time to function at significantly higher levels on dimensions which have been shown in earlier research to be

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112 Jerry Dillard, "An Investigation of the Effects of Teacher Effectiveness Training on the Types of Verbal Responses and Attitude Change of Pre-Service Teachers" (dissertation abstract, George Peabody College for Teachers, 1974). [ Reproduction. ]
related to constructive gains in helping relationships and in teaching.

In studying the effects of an interpersonal skill training program on affective interpersonal behaviors of student teachers, Fine used an n of fifty-three student teachers. Her results indicated that T.E.T. improved student teachers:

1. core condition skills of congruence, empathy, and respect which are necessary to establish rapport between teachers and students;
2. affective initiating skills;
3. facilitating communications skills; and
4. ability to employ democratic problem-solving procedures.

The results also tended to support previous research findings that "understanding" skills can be taught in a relatively short training period.

Duncan used sixty subjects; thirty elementary and thirty secondary teachers, in a study of the humanizing effects of an in-service T.E.T. program. His subjects were randomly assigned to either the treatment or T.E.T. group, or the control or no-training group. They were pre- and post-tested using the "Classroom Observation Scale" and

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113Virginia Fine, "The Effects of an Interpersonal Skill Training Program on Affective Interpersonal Behaviors of Student Teachers" (dissertation abstract, University of Hawaii, 1975). [ Reproduction. ]

"Teacher Questionnaire." Whereas the pretest showed that the training factor for the treatment and the control groups was comparable prior to the "Treatment," there was a significant difference between the pretest scores of the elementary group entering the study compared to the secondary group. The elementary group was significantly above that of the secondary teachers.

Following the treatment, an analysis of the gain scores showed a significant gain in humanistic qualities as defined in the study for the entire group of teachers. Further analysis of the gain scores revealed that the secondary teachers reacted significantly different than did the elementary teachers. The secondary group gains were significantly different at or above the .001 level, while the elementary group had gains which were not significantly different when considered separate from the group as a whole.

Although not dealing directly with effects of T.E.T., there have been numerous other studies related to attitude change, self concept change, and classroom climate change as a result of "empathy" training, human relations training, "humanistic" training, or some other similar program. Fraser examined the effects of empathy training on prospective teachers' empathetic abilities, self concepts, and attitudes toward pupils. He found statistically significant increases in the level of empathetic ability for the experimental groups, and a significant reduction in discrepancy scores between real self concept

and ideal self concept for one experimental group. He also found no significant changes in attitudes toward pupils for any of the groups.

Clausell did a quasi-experimental study on the effect of a "humanistic" teacher training program on teacher attitudes, pupil affective learning, and classroom climate. Her findings indicated that:

1. "humanistically" trained teachers scored significantly higher on the "Minnesota Teacher Attitude Inventory" than did the traditionally trained teachers;
2. "humanistically" trained teachers maintained a statistically significant higher degree of openness in the classroom climate than did traditionally trained teachers; and
3. pupils taught by "humanistically" trained teachers scored higher on the "Faces Inventory" on pupil affective learning than did pupils taught by traditionally trained teachers.

SUMMARY

Given this background through the literature of theoretical considerations of attitudes, self concept, and interpersonal relations; and adding a review of several studies which relate to the possibility of changes which can be brought about in these areas, perhaps the framework is sufficient to embark upon the nature of the study itself. By this time, it should be apparent that attitudes, the self concept, and

Interpersonal relations are hopelessly intertwined and have significant bearing on each other.
Chapter 3

METODOLOGY

In September, 1977, all upper elementary and secondary public school teachers in Newport News were given an opportunity to volunteer for Teacher Effectiveness Training (T.E.T.) during the 1977-1978 school year. For those who volunteered there was a choice of taking an initial fall cycle or a second spring cycle. The survey of teachers indicated sufficient numbers to justify proceeding with both cycles.

THE SELECTION OF THE SAMPLE

Since the study was intended to explore the effects of T.E.T. upon the self concepts of senior high school teachers and the attitudes of these teachers and their pupils toward certain concepts, only those senior high school teachers of grades ten through twelve who volunteered to take the T.E.T. were selected for the sample. All seventeen teachers who volunteered for the fall cycle became the experimental group while those fourteen who volunteered for the spring cycle became the control group. Thus, the population from which the samples were drawn represented the total group of senior high school teacher volunteers. Rather than using a random sample of these volunteers, all were selected and subsequently confirmed their willingness to participate.

Students who participated in the study were randomly selected
using a table of random numbers. A total of forty students were selected for the experimental group and forty for the control group. By selecting second period classes of the respective groups of teachers as the population from which the student samples would be drawn, it was hoped that the time of day students came into contact with the teacher would not be an important variable. In those few cases where a teacher did not have a second period class, third period class pupils were selected. Computer printouts of class lists were used to place these names in a consistent order. Then, by using the table of random numbers, forty students for the experimental group and forty for the control group were identified. Within the sample of eighty, thirty-eight in the experimental group and thirty-six in the control group actually participated.

THE RESEARCH DESIGN

Since neither random selection of teachers from the total population nor random assignment of teachers to groups, experimental or control, was possible due to the field setting and the desire of school officials to allow teachers to choose a convenient time and place to take T.E.T., the basic approach fits Kerlinger's "two groups, no control" design. With a modification to allow a second post measure to measure the "staying power" of effects over a


period of time, the design might be shown as follows where

\[ X = \text{Treatment}, \]
\[ \sim X = \text{Without Treatment, and} \]
\[ Y_a = \text{Post Test:} \]

\[
\begin{array}{ccc}
X & Y_{a1} & Y_{a2} \\
\hline
\sim X & Y_{a1} \\
\end{array}
\]

(Experimental)

(Control)

The post measure for both groups was administered at the conclusion of the first cycle. However, since the delayed post measure \((Y_{a2})\) was scheduled for approximately two months following the completion of the first cycle, it was of no value to apply that measure to the control group, which had then begun to take the T.E.T. course. The delayed post measure only served to allow a check on changes among the experimental group itself over this two-month period to note if, during this time, the original scores on the post measure were sustained, regressed, or even enhanced.

In addition to checking the main effects of T.E.T. upon the self concept of teachers, as measured by the Tennessee Self Concept Scale; the attitudes of teachers, as measured by the Teacher Attitude Semantic Differential; and the attitudes of students, as measured by the Student Attitude Semantic Differential, efforts were made in this study to examine the influence of other variables on the scores. It was assumed that if teachers learned new skills through T.E.T., and if they put those skills into regular practice in the classroom, the results would be more in the expected direction for both teachers and
students than in those cases where teachers did not put into regular practice those skills learned. Additionally, it was assumed that receptivity of students of those efforts made by teachers practicing those interpersonal skills in the classroom might, to some degree, be affected by the sex or race of the student. Statistical analyses, as described later in this chapter, were performed to determine whether there were significant differences in each of these areas.

THE SEMANTIC DIFFERENTIAL

In measuring attitudes, the researcher employed a variation of Osgood's Semantic Differential Technique. The specific attitudes which are targeted for this study are those held by teachers and their students toward specified concepts related to the classroom environment they share, as measured by a semantic differential. A different form of the semantic differential was employed for teachers and students in an effort to include those areas of particular concern and relevance to T.E.T. skills from the perspective of those teachers and students. Since perceptual comparisons between teachers and students was not a part of the research design, it was felt that different concepts could best determine respective changes in attitudes of teachers and students. The instruments were labeled the Teacher Attitude Semantic Differential (TASD), and the Student Attitude Semantic

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120 See Appendix A and Appendix B for scales used.
The semantic differential is a method of observing and measuring the psychological meaning of concepts. Kerlinger observed that although everyone sees things a bit differently, there must be some common core of meaning in all concepts. In other words, people, to a great extent, share behavioral and verbal definitions of things. Osgood invented the semantic differential to measure the connotative meanings of concepts as points in what he calls "semantic space." To understand the semantic differential, as developed by Osgood, it is necessary to be familiar with what he terms concepts, scales, and dimensions or factors. By concept, reference is made to those objects, persons, or behaviors that the subject is asked to reflect upon, such as school, teacher, principal, and so on. Bipolar adjective pairs representing opposite poles on a seven-point continuum are referred to as scales. Through his research, Osgood found that when analyzed, adjective pairs like good-bad, bitter-sweet, large-small, and clean-dirty fall into clusters or dimensions. The most important cluster seems to consist of adjectives which are evaluative, such as good-bad and pleasant-unpleasant. The other clusters or dimensions are those which express potency, such as strong-weak and rugged-delicate, and activity, such as fast-slow and hot-cold.

In explaining the logic of the semantic differential, Osgood

121 Kerlinger, Foundations of Behavioral Research, p. 566.
123 Kerlinger, Foundations of Behavioral Research, p. 569.
and Suci stated their purpose was to devise a scaling instrument which gives representation to the major dimensions along which meaningful reactions or judgments vary. The logical basis was described as follows:

1. The process of description or judgment can be thought of as the allocation of a concept to an experimental continuum, which is defined by a pair of polar terms. Many complex linguistic assertions (e.g., "I do not think the Chinese Communists are to be trusted") can be reduced to the allocation of a concept to a scale; e.g.,

Chinese Communists:

Trustworthy Trustworthy

The respondent can indicate the degree of intensity of particular assertions by placing a mark toward one or the other of the polar terms. His judgment comes as a result of association, or stabilizing frames of reference based upon his lifetime of making such judgments. In other words, each mark on the scale might be seen as a comparative judgment against a multitude of previous concept scale allocations.

2. A single dimension, or factor, may represent many different experimental continua which are essentially equivalent. In the previous example, trustworthy-untrustworthy would be considered as an equivalent judgment, and the respondent might well have thought,

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"Chinese Communists are no good." Osgood and Suci argued that it is this characteristic of language and thinking that makes the development of a quantitative instrument feasible.

3. A limited number of such continua can be used to define a semantic space within which the meaning of any concept can be specified. Osgood and Suci used the seven-step scales, defined by the linguistic quantifiers "extremely," "quite," and "slightly," in both directions from a neutral midpoint because they felt such a system would yield nearly equal psychological units in the judgment process. The bipolar scales were defined by the verbal "opposites" because of their assumption that thinking in terms of opposites is "natural" to the human species; however, it was conceded that unidirectional scales might serve just as well as those selected. Adjectives were used as the verbal opposites because of the assumption that adjectives are the most general and natural quantifiers in the English language.

Considerable data have been accumulated on the reliability of the instrument. The evidence shows that for group data, such as used in this study, changes or differences in measured meaning as small as one half of a scale unit are significant at the .05 level. It would appear that for most applications of the instrument, these levels of reliability should be satisfactory.

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125 Snider and Osgood, Semantic Differential Technique, pp. 42-45.
126 Ibid., p. 78.
127 Ibid., p. 79.
On the question of validity, Osgood and Suci express little doubt about the general face validity of the semantic differential, because it obviously differentiates among concepts and clusters concepts the way many people do spontaneously. Each subject is responding to each concept in terms of his own definitions, using the bipolar adjectives as frames of reference. It is possible, however, that the differential forces the subject to attend to some dimensions he would not use otherwise in addition to those he would use spontaneously. Although more data are needed to demonstrate the validity of the instrument, it has already been applied to a variety of research problems and has been shown to be sufficiently reliable and valid for many research purposes.  

In using the semantic differential in research, Kerlinger specified two steps which should be taken, the first of which is to choose the concepts or other stimuli that will be rated with the bipolar adjectives. Of crucial importance is to select concepts which are relevant to the research problem. The concepts chosen should be of the nature to elicit varied responses from different individuals.

The second step is to select appropriate scales or adjective pairs. The two main criteria which should govern the selection are the factor representativeness, or the evaluation, potency or activity dimensions, and the relevance of the concepts used. In a study of

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attitudes, the usual practice is to use only the scales of the evalua-
tive factor. Osgood has developed a list of bipolar adjectives which
have been factor analyzed and most often, researchers have drawn from
this list.

PROCEDURAL STEPS IN THE DEVELOPMENT OF
THE SEMANTIC DIFFERENTIAL

To select the most appropriate concepts to be rated with
bipolar adjectives in the study, an effort was made to assure that the
concepts were relevant. Since T.E.T. is designed to provide specific
skills to teachers, and since there are specific expected outcomes, it
was important to specify those concepts toward which there might be a
differentiation of attitudes depending on the exposure of the subjects
to the T.E.T. influence.

To identify the concepts to be used on the Teacher Attitude
Semantic Differential, a sample of five T.E.T. instructors was first
asked to list five to ten concepts which "you think may represent
areas toward which a teacher's attitude might be expected to change
after undergoing T.E.T., assuming the skills are practiced." Once
these suggested concepts were returned, they were compiled, para-
phrased into concise terms, and returned again to the sample of
T.E.T. instructors. The specific verbal instructions of the researcher
were:

Please rate each item, or concept, by placing a check in
the appropriate column (significant, minimal, no change), to show
the degree to which you might expect to see an attitude change in
the teacher who is practicing those skills.

Of sixteen paraphrased concepts, twelve were identified by the
Instructors are most apt to evoke significant teacher attitude changes. These twelve concepts were selected as the concepts for the Teacher Attitude Semantic Differential.

The concepts used on the Student Attitude Semantic Differential were selected in a similar way by the same T.E.T. instructors. The instructors were asked: "Please list five to ten concepts which you think may represent areas toward which a student's attitude may change in the classroom of a teacher who has undergone T.E.T., assuming the teacher practices the skills." The subsequent compiled, paraphrased concepts were returned to the instructors to rate in the same way as were the teacher concepts. Of sixteen paraphrased concepts, fourteen were identified by the instructors as most likely to evoke attitude changes among students. Again, these fourteen concepts were selected for use on the Student Attitude Semantic Differential.

Since this portion of the study required an attitude measurement, a total of eight bipolar adjective scales were selected from Osgood's listing of adjectives associated with the evaluative dimension. These eight scales were used with each of the twelve concepts on the TASD and with the fourteen concepts on the SASD. To counteract response bias tendencies, the polar adjectives were reversed occasionally, and the order of the scales was changed from one concept to the next.

To ascertain the degree to which teachers acknowledged practicing five basic T.E.T. skills in the classroom, a final section, not included in the scoring, was listed on the TASD. Only those teachers who had completed T.E.T. were asked to respond on this section. An
average response rating of 2.5 on a 3-point scale was considered to represent regular practice of the skills, as reported by the teacher respondents.

THE TENNESSEE SELF CONCEPT SCALE

One of the hypotheses of the study required that the self concept of teacher participants be measured. The Tennessee Self Concept Scale (TSCS), a 100-item scale with a median completion time of thirteen minutes, was selected. The instrument addresses a need ". . . for a scale which is simple for the subject, widely applicable, well standardized, and multi-dimensional in its description of the self concept." 130

The Scale consists of 100 self-descriptive statements which the subject uses to portray himself. It is simple enough to be self-administered, and it can be completed by persons having a sixth grade reading ability. It has been described as an appropriate scale for healthy, well-adjusted people, as well as for psychotic patients. There are two basic forms of the TSCS, the "Counseling Form" and the "Clinical and Research Form." Both use the same test booklet and test items. The differences between the two forms are in the areas of the scoring and profiling systems. The "Counseling Form" was the one utilized in this study.

The TSCS yields an abundance of data related to how the

respondent sees himself as defined by the instrument itself. When considering the effects of T.E.T. upon the self concept, reference is made to the scores on the TSCS as indicative of the self concept. Those scores which are yielded by the Scale include:

1. The Self-Criticism Score, or SC--This scale is a listing of mildly derogatory statements which most people will agree apply to themselves. Reasonably high scores indicate a normal and healthy openness and capacity for self-criticism, while low scores indicate defensiveness and suggest that the Positive Scores are inflated by this defensiveness.

2. The Positive Scores, or P--On this scale, the statements seem to convey these three primary messages:
   a. this is what I am;
   b. this is how I feel about myself; and
   c. this is what I do.
This section has a series of subscores which are explained as follows:
   a. Total P Score. This has been called the most important single score on the Counseling Form. It generally reflects the overall level of self-esteem. High scores tend to indicate the respondent likes himself, feels that he is a person of value and worth, has confidence in himself, and acts accordingly. Low scores tend to indicate that the individual is doubtful about his worth, sees himself as undesirable, and has little confidence or faith in himself.
   b. Row 1 P Score--Identity. Here the individual is describing his basic identity, or what he is as he sees himself.
   c. Row 2 P Score--Self Satisfaction. The respondent
describes how he feels about the self he perceives. The score reflects how satisfied he is with himself.

d. Row 3 P Score—Behavior. The individual is describing his own behavior or the way he functions.

e. Column A—Physical Self. The individual describes his view of his own body, his state of health, his physical appearance.

f. Column B—Moral-Ethical Self. This score reflects the individual's self description from a moral-ethical frame of reference.

g. Column C—Personal Self. This score describes the individual's sense of personal worth, his feeling of adequacy as a person.

h. Column D—Family Self. This score indicates the individual's feelings of worth as a family member.

i. Column E—Social Self. This makes reference to the individual's perception of self in relationship to more general "others," beyond the family. It reflects his feelings of worth or adequacy in his social interaction with others in general.

3. The Variability Scores, or V—These scores reflect the degree of variability or inconsistency from one area of self perception to another. High scores indicate a high degree of variability; low scores indicate the opposite. Total V high scores mean that there is so much variability that there is little unity or integration in the respondent's perception of self. Well integrated persons generally score below the mean on these scores.
PSYCHOMETRIC DATA ON THE TENNESSEE
SELF CONCEPT SCALE

To establish normative data, the developers of the TSCS used a broad sample of 626 people from various parts of the country, ranging in age from twelve to sixty-eight, in approximately equal numbers of both sexes. They were racially mixed and representative of all social, economic, intellectual and educational levels beyond the sixth grade. Although the norm group did not reflect the population as a whole in proportion to its national composition, in that there was an overrepresentation of numbers of college students, white subjects, and persons in the twelve to thirty age bracket, the evidence suggested in subsequent studies that there was no need to establish separate norms in those categories.

Test-retest reliability coefficients of all major scores were obtained and reported in detail in the Tennessee Self Concept Scale Manual. Most of the reliability coefficients for the various profile segments fall in the .80 to .90 range.

In the same manual, four kinds of validation procedures were reported, having to do with:

1. content validity,
2. discrimination between groups,
3. correlation with other personality measures, and

---

132 Ibid., pp. 15-16.
4. personality changes under particular conditions. It would appear that the instrument has been appropriately validated.

PROCEDURES ON COLLECTION OF DATA

In January of 1970, immediately following completion of the first cycle of T.E.T., the researcher went to each of the four Newport News senior high schools, met with the participating teachers and administered the two instruments. Similar procedures were employed to administer the Student Attitude Semantic Differential to students.

In early April, slightly more than two months following completion of the first cycle of T.E.T., arrangements were made to have each participant of the original experimental group complete identical instruments in their schools. Again, this delayed post measure was administered only to the experimental groups since the original control group had already begun its own T.E.T. cycle.

STATISTICAL TREATMENT

The data were collected, scored, and arranged so as to provide eleven columns of variables measured by the Tennessee Self Concept Scale; thirteen columns of variables measured by the Teacher Attitude Semantic Differential; and fifteen columns of variables measured by the Student Attitude Semantic Differential. Separate t tests for independent samples were performed for each column variable to determine significant differences between groups which were measured.

To determine the effects over time on the experimental groups on each of the column variables, separate $t$ tests for paired samples were performed, using the post measure and the delayed post measure scores. These statistical procedures yielded $t$ values which were used to determine significance at the .05 level of confidence.
Chapter 4

FINDINGS

To perform the statistical analyses used in the study, the Statistical Package for the Social Science (SPSS), for OS/360, Version H, Release 7.0, March 1977, was utilized. In a series of $t$ tests on independent samples and on paired samples where appropriate, $t$-values were obtained to indicate the level of significance at which null was accepted or rejected.

ANALYSIS OF THE DATA ON TEACHER AND STUDENT ATTITUDES

The first major hypothesis was stated as: There will be a significant difference in attitude scores of a group of volunteer teachers after undergoing T.E.T. compared to those scores of a group of volunteer teachers who have not yet undergone the training but plan to do so. A two-tailed $t$ test for independent samples was performed, and the resulting $t$-values were considered significant, or null was rejected, if they were at or below the .05 level. As indicated previously, "attitudes" in this study refer to attitudes of subjects toward specific concepts as measured by the Teacher Attitude Semantic Differential (TASD). (TASDA--initial post test; TASDB--delayed post test.) Following is a listing of each of these specific concepts toward which the teacher was asked to indicate the direction of his
feeling, positive-negative, followed by the coding used to identify that concept as a variable in the arrangement of data for computer processing:

1. Concept 1--"The Worthiness of Your Students"--TASDA1/TASDB1.

2. Concept 2--"Confronting Student Misbehavior"--TASDA2/TASDB2.

3. Concept 3--"Accepting (not judging) Student Attitudes, Values, Opinions"--TASDA3/TASDB3.


5. Concept 5--"Resolving Conflicts with Students so No One Loses"--TASDA5/TASDB5.


8. Concept 8--"Your Students' Class Attendance Rates"--TASDA8/TASDB8.


10. Concept 10--"The Degree of Mutual Understanding of Teacher/Student 'Messages' in Your Classes"--TASDA10/TASDB10.

12. Concept 12--"The Need for Concern about Student Feelings"--TASDA12/TASDB12.


An analysis of the t values resulting from a comparison of the total experimental group with the total control group indicated no significant differences on any of the variables compared as measured by the post test. In seven of the thirteen variables, scores were actually higher for the total control group than for the total experimental group, though not significant. The overall results are indicated in Table 1.

By administering a delayed post measure, approximately two months following completion of the first cycle of T.E.T., it was possible to determine whether the original scores were sustained, enhanced, or regressed. After pairing the mean scores on each variable for the seventeen subjects in the experimental group, t tests were performed. For all thirteen variables, the mean scores were higher on the delayed post measure than on the original post test, and five of the thirteen were significantly higher at the .05 level of confidence. These were:

1. Concept 1--"The Worthiness of Your Students,"
2. Concept 2--"Confronting Student Misbehavior,"
3. Concept 7--"Providing Positive Feedback to Students,"
4. Concept 10--"The Degree of Mutual Understanding of Teacher/Student 'Messages' in Your Classes," and
5. Concept 13--Overall Mean Score.
Table 1
A Comparison of Posttest Scores on Certain Variables Measured by the Teacher Attitude Semantic Differential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>t value</th>
<th>Degrees of freedom</th>
<th>2-tail probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASDA\textsuperscript{a}</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.6871</td>
<td>0.553</td>
<td>0.134</td>
<td>-0.27</td>
<td>29</td>
<td>0.788</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>5.7536</td>
<td>0.810</td>
<td>0.216</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>TASDA2</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.2747</td>
<td>0.589</td>
<td>0.143</td>
<td>-0.13</td>
<td>29</td>
<td>0.894</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
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<td>0.196</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TASDA3</td>
<td>1 (experimental)</td>
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<td>5.6788</td>
<td>0.720</td>
<td>0.175</td>
<td>-0.40</td>
<td>29</td>
<td>0.693</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
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<td>TASDA4</td>
<td>1 (experimental)</td>
<td>17</td>
<td>6.1712</td>
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<td>29</td>
<td>0.602</td>
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<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>6.2957</td>
<td>0.445</td>
<td>0.119</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TASDA5</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.8335</td>
<td>0.866</td>
<td>0.210</td>
<td>-0.24</td>
<td>29</td>
<td>0.815</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>5.9029</td>
<td>0.739</td>
<td>0.190</td>
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<tr>
<td>TASDA6</td>
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<td>6.0241</td>
<td>0.762</td>
<td>0.185</td>
<td>0.24</td>
<td>29</td>
<td>0.815</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>5.9586</td>
<td>0.778</td>
<td>0.208</td>
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<td></td>
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</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>t value</th>
<th>Degrees of freedom</th>
<th>2-tail probability</th>
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<tr>
<td>TASDA 7</td>
<td>1 (experimental)</td>
<td>17</td>
<td>6.2153</td>
<td>.708</td>
<td>.172</td>
<td>-0.39</td>
<td>29</td>
<td>.702</td>
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<td>2 (control)</td>
<td>14</td>
<td>6.3057</td>
<td>.567</td>
<td>.152</td>
<td></td>
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<td>TASDA 8</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.0529</td>
<td>1.639</td>
<td>.397</td>
<td>-0.90</td>
<td>29</td>
<td>.374</td>
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<td></td>
<td>2 (control)</td>
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<td>5.5471</td>
<td>1.351</td>
<td>.361</td>
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<td></td>
<td></td>
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<tr>
<td>TASDA 9</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.6788</td>
<td>1.608</td>
<td>.390</td>
<td>-0.46</td>
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<td>.647</td>
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<tr>
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<td>2 (control)</td>
<td>14</td>
<td>5.8943</td>
<td>.731</td>
<td>.195</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TASDA10</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.4512</td>
<td>1.563</td>
<td>.379</td>
<td>-1.39</td>
<td>29</td>
<td>.175</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>6.0643</td>
<td>.573</td>
<td>.153</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>TASDA11</td>
<td>1 (experimental)</td>
<td>17</td>
<td>6.4865</td>
<td>.554</td>
<td>.134</td>
<td>1.09</td>
<td>29</td>
<td>.286</td>
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<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>6.2693</td>
<td>.553</td>
<td>.148</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TASDA12</td>
<td>1 (experimental)</td>
<td>17</td>
<td>6.3912</td>
<td>.597</td>
<td>.145</td>
<td>0.07</td>
<td>29</td>
<td>.942</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>6.3771</td>
<td>.427</td>
<td>.114</td>
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<td></td>
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</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>t value</th>
<th>Degrees 2-tail of proba- freedom bility</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASDA13</td>
<td>1 (experimental)</td>
<td>17</td>
<td>5.9241</td>
<td>.421</td>
<td>.102</td>
<td>0.22</td>
<td>29 .830</td>
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<tr>
<td></td>
<td>2 (control)</td>
<td>14</td>
<td>5.8900</td>
<td>.455</td>
<td>.122</td>
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</tr>
</tbody>
</table>

*TASDA (Teacher Attitude Semantic Differential--initial posttest) as differentiated from TASDB (Teacher Attitude Semantic Differential--delayed posttest).*
The least amount of change in mean scores was noted for Concept 6 and Concept 12, both of which were rated over six on both measures; and Concept 9, which remained in the five range. Table 2 represents a summary of results for those variables which reflected significant change.

Teachers in the experimental group were asked to indicate the degree to which they felt they were practicing in their classrooms five specific interpersonal skills taught in T.E.T.: regularly, seldom, or never. A mean score of 2.5 on a 3.0 scale was considered to indicate regular practice of the skills. Out of seventeen teachers, twelve reported regular practice of the skills. The fourteen teachers in the control group were not asked to indicate their degree of practice of the skills since, theoretically, they were unfamiliar with the T.E.T. terms used to describe the skills. The degree of practice of the skills of all control group teachers, therefore, was considered to be unknown. A test of independent samples, comparing the scores of the twelve experimental group teachers with the control group teachers, indicated that although eight of the thirteen variables measured on the Teacher Attitude Semantic Differential were in the expected direction, there was no significant difference for any of the variables.

To determine whether the degree of practice of the skills exclusively among the members of the experimental group would be reflected in differences in attitude scores, a separate test was administered to the twelve members who reported less than regular practice. Although seven of the thirteen variables measured were in
Table 2

Summary of Paired t Tests on Selected Variables Measured by the Teacher Attitude Semantic Differential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean difference</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>t value</th>
<th>2-tail probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASDA1/TASDB1</td>
<td>-.3300</td>
<td>.591</td>
<td>.143</td>
<td>-2.30</td>
<td>.035</td>
</tr>
<tr>
<td>TASDA2/TASDB2</td>
<td>-.4400</td>
<td>.661</td>
<td>.160</td>
<td>-2.74</td>
<td>.014</td>
</tr>
<tr>
<td>TASDA7/TASDB7</td>
<td>-.3165</td>
<td>.558</td>
<td>.135</td>
<td>-2.34</td>
<td>.033</td>
</tr>
<tr>
<td>TASDA10/TASDB10</td>
<td>-.4035</td>
<td>.661</td>
<td>.160</td>
<td>-2.52</td>
<td>.023</td>
</tr>
<tr>
<td>TASDA13/TASDB13</td>
<td>-.1947</td>
<td>.345</td>
<td>.084</td>
<td>-2.33</td>
<td>.033</td>
</tr>
</tbody>
</table>

\(^a\) TASDA1/TASDB1 ("The Worthiness of Your Students")

\(^b\) TASDA2/TASDB2 ("Confronting Student Misbehavior")

\(^c\) TASDA7/TASDB7 ("Providing Positive Feedback to Students")

\(^d\) TASDA10/TASDB10 ("The Degree of Mutual Understanding of Teacher/Student 'Messages' in your Class")

\(^e\) TASDA13/TASDB13 ("Overall Mean Scores")
the expected direction, in only one instance was the difference signif-
ificant at the .05 level of confidence. That variable was the con-
cept, "Classroom Rules Set by Student and Teacher Together."

The second major hypothesis of the study was stated: There
will be a significant difference in attitude scores of a random sample
of students in second- or third-period classes of teachers who have
undergone T.E.T., compared to scores of a random sample of students
whose teachers are planning to take T.E.T. but have not yet done so.
A two-tailed t test for independent samples was performed to determine
the level of significance, with .05 as the determining level. To
measure student attitudes and attitude change, the Student Attitude
Semantic Differential (SASD) was used. This instrument consisted of
fourteen concepts with eight scales for each concept plus a mean
overall score for the fourteen concepts. After each completed scale
was converted to a numerical value of one to seven, a mean score for
each concept was computed to show the overall positive-negative conno-
tations attached to the concept by the student respondent. The list
of each of the specific concepts and the coding used to identify that
concept as a variable for data processing is as follows:

1. Concept 1--"Attitude of the Teacher toward Students"--
SASDA1.
2. Concept 2--"Expressing Your Thoughts to the Teacher"--
SASDA2.
3. Concept 3--"Seeking the Help of Your Teacher"--SASDA3.
4. Concept 4--"The Value Your Teacher Places on Your
Attitudes, Values, and Opinions"--SASDA4.
5. Concept 5--"The 'Understanding' Shown by Your Teacher in Handling Discipline Problems in Class"--SASDA5.


7. Concept 7--"Amount of Student Participation in Class"--SASDA7.

8. Concept 8--"Your General Feeling about this Class"--SASDA8.

9. Concept 9--"Your Own Responsibility in Getting to this Class Everyday and On Time"--SASDA9.

10. Concept 10--"Sharing Your 'Personal' Feelings with Your Teacher"--SASDA10.


12. Concept 12--"Your Progress in This Class"--SASDA12.

13. Concept 13--"General Behavior in This Class"--SASDA13.


15. Concept 15--Overall Mean Score--SASDA15.

An analysis of the data resulting from the t test comparing the experimental group to the control group revealed that for nine of the fourteen variables plus the overall mean score, the control group students rated the concepts with higher scores than did the experimental group students whose teachers had undergone T.E.T. In two of those cases, the differences were significant at the .029 and .02 levels. The two variables found to be significant in the reverse direction
expected were "Sharing Your Personal Feelings with Your Teacher" and
"Your Relationship with Your Teacher." In no other cases were
differences found to be significant. Table 3 shows the statistical
data used to determine significance for these variables.

While assuming that after learning the skills to enhance the
interpersonal relationships, sufficient time for teachers to practice
these skills might be a crucial factor. A delayed post measure taking
the form of an Identical Student Attitude Semantic Differential was
administered to students in the experimental group approximately two
months following the post test. Scores for the two tests were paired
for each of the subjects completing both tests. Because of schedule
changes for some students and some students leaving school during this
two-month period, only twenty-nine of the original thirty-eight subjects
could be included in the paired t test. An analysis of the results
revealed that for only three of the fifteen variables, including the
overall mean scores, were the delayed post scores higher than those on
the post test. The other twelve scores were higher on the original
post test. There were no significant differences in any case.

A comparison was made between students of the twelve teachers
in the experimental group who reported regular practice of the skills
learned in T.E.T, and students of the control group teachers whose
degree of practice of the skills was unknown. There was an n of
twenty-two in the experimental group and an n of thirty-six in the
control group. Data provided by a t test for independent samples
indicated that in six of the fifteen variables, experimental group
students had higher mean scores than did control group students. None
Table 3

A Comparison of Overall Experimental and Control Group Scores on Two Statistically Significant Variables as Measured by the Student Attitude Semantic Differential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>t_value</th>
<th>Degrees of Freedom</th>
<th>2-tail probability</th>
</tr>
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<td>1.627</td>
<td>.264</td>
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<td>72</td>
<td>.029</td>
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<tr>
<td></td>
<td>2 (control)</td>
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<td>.255</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>38</td>
<td>5.0182</td>
<td>1.468</td>
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<td>5.7414</td>
<td>1.126</td>
<td>.188</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\)SASDA10 ("Sharing Your 'Personal' Feelings with Your Teacher")

\(^{b}\)SASDA14 ("Your Relationship with Your Teacher")
of the differences in scores in this direction, however, was significant. Of the nine variables in which the control group students had higher mean scores than the experimental group, only two were significant. These two variables, which were also significant when the total experimental and control groups were compared, were SASDA10 and SASDA13. Table 4 indicates the statistics used in determining significance for the two variables.

Comparing scores of students of experimental group teachers who reported regular practice of skills learned to scores of students of experimental group teachers who did not report regular practice of the skills, yielded similar results. None of the scores were statistically significant except for Concept 10, "Sharing Your 'Personal' Feelings with Your Teacher," and here the students of teachers not reporting regular practice of skills had the higher mean scores. The null hypothesis was rejected at the .054 level of confidence, thus indicating that differences in the mean scores on this variable were significant.

To determine whether the sex of the students would reflect any differences in mean scores on the variables, another t-test was computed using sex of the student as an independent variable. Results indicated that for ten of the fifteen attitude variables, experimental group males had higher mean scores than did experimental group females. Most of the differences were not significant. Males did score significantly higher, however, than females on SASDA11, "How Rules Are Set in Your Class," and females had significantly higher mean scores on SASDA13, "General Behavior in This Class." The null hypothesis for
Table 4

A Comparison of Attitude Ratings of Students Taught by Experimental Group Teachers Regularly Practicing Skills and Those of Students Taught by Control Group Teachers on Two Statistically Significant Variables Measured by the Student Attitude Semantic Differential

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>t value</th>
<th>Degrees of freedom</th>
<th>2-tail probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SASDA10a</td>
<td>1 (experimental)</td>
<td>22</td>
<td>3.7286</td>
<td>1.867</td>
<td>.398</td>
<td>-2.78</td>
<td>56</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>36</td>
<td>4.9806</td>
<td>1.530</td>
<td>.255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SASDA14b</td>
<td>1 (experimental)</td>
<td>22</td>
<td>4.8936</td>
<td>1.550</td>
<td>.330</td>
<td>-2.41</td>
<td>56</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>2 (control)</td>
<td>36</td>
<td>5.7414</td>
<td>1.126</td>
<td>.188</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aSASDA10 ("Sharing Your 'Personal' Feelings with Your Teacher")

bSASDA14 ("Your Relationship with Your Teacher")
SASDA11 was rejected at the .035 level of confidence and for SASDA13 at the .040 level.

Similar procedures were employed to note whether the race of the students would be associated with any mean score differences on the attitude variables. The data indicated that fourteen of the fifteen attitude variables were rated higher by whites than nonwhites, or all except for SASDA10, "Sharing Your 'Personal' Feelings with Your Teacher." Only for SASDA11, "How Rules Are Set in Your Class," was there any significant difference in mean scores, and for this variable, null was rejected at the .030 level of confidence with white students having the higher rating for the variable.

ANALYSIS OF THE DATA ON TEACHER SELF CONCEPT

The third major hypothesis of the study was, "There will be a significant difference in self-concept scores of a group of volunteer teachers who have completed T.E.T. compared to those of a group of teachers who have volunteered but have not gone through the training." The Tennessee Self Concept Scale was used to obtain the self-concept scores for the study.

As indicated in Chapter 3, the Tennessee Self Concept Scale (TSCS) yields a number of scores which reveals how a person sees himself. Scores were obtained in eleven categories, and these eleven categories might be termed variables, ranging from TSCSA1 to TSCSA11. In most cases, higher scores were seen as reflective of higher self concept; however on TSCSA1, "Self Criticism Score" and on TSCSA11,
"Total Variability Score," higher scores were not necessarily indicative of a higher self concept. The most important single score was the "Total P Score," or TSCSA2, which was considered to be an individual's overall, composite self-concept rating. The eleven categories, or variables, for which scores were obtained, and the coding used for those in the arrangement of data for computer processing are:

1. Self Criticism Score--TSCSA1
2. Total P Score--TSCSA2
3. Identify Score--TSCSA3
4. Self-Satisfaction Score--TSCSA4
5. Behavior Score--TSCSA5
6. Physical Self Score--TSCSA6
7. Moral-Ethical Self Score--TSCSA7
8. Personal Self Score--TSCSA8
9. Family Self Score--TSCSA9
10. Social Self Score--TSCSA10
11. Total Variability Score--TSCSA11

An analysis of the data provided by the t test on independent samples used to verify the hypothesis revealed that scores for the experimental group teachers who had been through T.E.T. were higher on eight of the eleven variables than were the scores of control group teachers. However, in no instance was the difference significant.

To determine effects over time, a delayed post test was given to experimental group teachers approximately two months following the initial post test. Again, the Tennessee Self Concept Scale was used.
All seventeen of the experimental group teachers who took the initial post test also took the delayed post test, and their scores on each variable were paired so that a paired *t* could be employed to determine statistical significance. On seven of the nine variables, not including the Self Criticism Score and the Total Variability Score, scores were higher on the delayed post measure than those on the initial post measure. The Self Criticism and Total Variability Scores were somewhat lower on the delayed post measure than they were initially. At least in the case of the Total Variability Score, reducing the variability is desirable. In no case was the difference statistically significant.

Previously, it was disclosed that twelve of the seventeen teachers in the experimental group reported regular practice of the skills learned. Based on their self reports, the other five teachers in the experimental group were considered not to be practicing regularly the skills learned. Teachers in the control group were not asked to indicate the degree to which they were practicing the skills since they were unfamiliar with the T.E.T. terminology. The degree of practice of the skills by the control group teachers was recorded as unknown.

A *t* test of independent samples was computed comparing the scores of the twelve experimental group teachers who reported regular practice of the skills with the control group teachers. The results indicated that for seven of the nine variables, not including the Self Criticism Scores and the Total Variability Scores, the experimental group teachers had higher scores. Control group teachers
scored slightly higher on two of the nine variables, the Self-Satisfaction Score and the Family Self Score. On only one variable were results statistically significant, in favor of the experimental group, and that was on the TSCSA5 or Behavior Score, in which the individual reveals his own perceptions of the way he acts. This variable was significant at the .05 level of confidence.

Another t test of independent samples was used to compare the scores of the twelve teachers in the experimental group reporting regular practice of the skills to the other five in the experimental group who reported less than regular practice. The resulting data suggests that for six of the nine variables, not counting the Self Criticism Scores and the Total Variability Scores, the experimental group teachers who reported regular practice of the skills had higher scores than did the other five experimental group teachers. In no case, however, was the difference significant.

SUMMARY

In this chapter, the findings of the study were reported, based on the original hypotheses, and the effects of other independent variables, such as the degree skills were practiced by teachers, the effects of time, sex and race of students were examined. The findings might be summarized as follows:

1. There were no significant differences in attitude scores on thirteen variables between the experimental group of teachers and the control group of teachers as measured by the Teacher Attitude Semantic Differential.
a. The experimental group teachers scored higher on the delayed post test than they did on the initial post test given two months earlier, on all thirteen attitude variables. Five of the thirteen differences in scores were significant at the .05 level of confidence as indicated by a paired $t$ test for dependent samples.

b. Experimental group teachers who reported regular practice of skills learned scored higher on eight of the thirteen variables than did control group teachers whose practice of the skills was unknown. There was no significant difference for any of the variables, as indicated by a $t$ test for independent samples.

c. Experimental group teachers who reported regular practice of skills learned had higher scores on seven of the thirteen variables than did experimental group teachers who did not report regular practice of the skills. On one variable, "Classroom Rules Set by Students and Teachers Together," the difference was significant at the .05 level.

2. Control group students of teachers who had not undergone T.E.T. had higher mean scores than did experimental group students of teachers who had taken T.E.T. on nine of fifteen variables, including the overall mean score. For two of those variables, "Sharing Your 'Personal' Feelings with Your Teacher," and "Your Relationship with Your Teacher," the differences were significant at the .029 and .021 levels, respectively.

   a. A paired $t$ test on the experimental group using the post test scores and the delayed post test scores of the experimental group, revealed no significant differences between the two sets
of scores.

b. In comparing students of the twelve experimental group teachers who reported regular practice of skills learned with students of teachers whose degree of skill practice was unknown, control group students had higher mean scores on nine of the fifteen variables; two of which were significant at the .05 level or better. The two variables were the same as those under the overall experimental and control group comparison.

c. Comparing only those students of experimental group teachers who reported regular skill practice with students of experimental group teachers not reporting regular practice, only one variable was statistically significant, "Sharing Your 'Personal' Feelings with Your Teacher." The group of students of teachers who did not report regular practice of skills had the higher scores.

d. It was found that experimental group males had higher mean ratings for ten of the fifteen variables than did experimental group females. Most of the differences were not significant. On the variables, "How Rules Are Set in Your Class," males scored significantly higher, at the .035 level, than females. Conversely, females rated the variable, "General Behavior in This Class," significantly higher than males at the .04 level of confidence.

e. The data also indicated that white experimental group students rated fourteen of the fifteen attitude variables higher than did non-white experimental group students. In one case, the difference was significant; "How Rules Are Set in Your Class."

3. Although in no case was the difference statistically
significant, seventeen experimental group teachers had higher mean scores than the fourteen control group teachers on eight of the eleven variables measured by the Tennessee Self Concept Scale.

a. A paired t test performed on scores of the experimental group provided by the Tennessee Self Concept Scale gave results which indicated that on seven of nine variables, not including the Self Criticism Score and the Total Variability Score, scores were higher on the delayed post measure than on the original post measure. None was significant.

b. A comparison of the scores of twelve experimental group teachers who reported regular practice of skills learned to the scores of the control group teachers, whose degree of skill practice was unknown, reflected that the experimental group scored higher on seven of nine variables, not including the Self Criticism Score and the Total Variability Score. On TSCSA5, the Behavior Score, the results were statistically significant at the .05 level of confidence, with the experimental group scoring the higher of the two groups. No other differences were significant.

c. Comparing the scores of the twelve experimental group teachers reporting regular practice to the five experimental group teachers reporting less than regular practice indicated that for six of nine variables, not including the Self Criticism Scores and the Total Variability Scores, those who practiced the skills regularly had higher scores than the other five teachers. None of the differences were statistically significant.
Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of the study was to examine the possible effects of interpersonal skills training, specifically Teacher Effectiveness Training, upon attitudes and self-concepts of teachers undergoing the training and upon attitudes of their students. Key questions which were dealt with were:

1. will this interpersonal skills training program have an effect on attitude changes of teachers and their students toward certain concepts related to the classroom environment they share, and

2. will the training program effect changes in self concept of teachers?

Major hypotheses advanced were:

1. there will be a significant difference in attitude scores of a group of volunteer teachers after undergoing T.E.T., compared to those of a group of volunteer teachers who have not yet undergone the training but plan to do so;

2. there will be a significant difference in attitude scores of a random sample of students in second- or third-period classes of teachers who have undergone T.E.T., compared to scores of a random sample of students in second- or third-period classes of teachers who plan to take T.E.T. but have not yet done so; and

3. there will be a significant difference in self concept
scores of a group of volunteer teachers who have completed T.E.T., compared to those of a group of teachers who have volunteered but have not gone through the training.

Other questions which were explored, which might be considered subhypotheses, were:

1. what are the effects over a two-month time period following completion of the training;

2. what are the effects upon scores of the degree to which teachers reported they were practicing the skills learned; and

3. what are the comparative scores of students, by sex and by race, on the attitude measure?

RESEARCH METHODOLOGY

Because of the field setting of the study, it was not possible to randomly select teachers from the total population or to randomly assign them to experimental or control groups. Kerlinger's "two groups, no control" design was used. With a modification to allow a second post measure to check the "staying power" of effects over a period of time, the design allowed for a post measure for experimental and control groups immediately following the first training cycle and a delayed post measure, two months later, for the experimental group only. Separate t tests for independent samples were computed to determine significance, if any, for each of the major hypotheses and

for the subhypotheses, except for the ones requiring the delayed post measure. To determine the significance, if any, of the score differences following the two-month delay, scores of the experimental groups were paired and $t$ tests for dependent samples were conducted.

Instruments used were the Tennessee Self Concept Scale to measure teacher self concept, the Teacher Attitude Semantic Differential to measure teacher attitude toward certain concepts, and the Student Attitude Semantic Differential to measure student attitudes toward certain concepts.

SUMMARY OF FINDINGS

The findings are summarized as follows for the major hypotheses:

1. On thirteen variables for which attitude scores were obtained, there were no significant differences between experimental group teachers and control group teachers.

2. Control group students actually had higher mean scores than did experimental group students on nine of fifteen variables for which attitude scores were obtained. On two of those variables, control group scores were significantly higher.

3. Experimental group teachers had higher scores on eight of the eleven variables for which scores were provided by the Tennessee Self Concept Scale, but none of the differences were significant.

Statistically significant findings were determined when post test scores of experimental group teachers on attitudes were compared with delayed post test scores of the same teachers. On the delayed
post test, scores were higher, indicating a more positive feeling, on all thirteen variables. Of these, five were statistically significant at the .05 level of confidence.

On the paired self-concept scores of experimental group teachers, there were no significant differences. However, of the nine variables for which higher scores might be considered indicative of improved self concept, seven were scored higher on the delayed post measure.

Comparing attitude scores of teachers in the experimental group who reported regular practice of the interpersonal skills learned to the control group, whose degree of skill practice was considered unknown, reflected no significant differences. Eight of the thirteen variables were rated higher by the experimental group. These same experimental group teachers, when compared to experimental group teachers who reported less than regular practice of the skills, scored higher on seven of the thirteen variables. On one of the variables, the difference was significant at the .05 level of confidence.

In comparing the self-concept scores of the experimental group teachers who reported regular practice of skills to the control group, whose degree of practice was unknown, it was found that the experimental group scored higher on seven of the nine variables for which higher scores might be considered desirable. On one variable the difference was significant at the .05 level. The same experimental group teachers, compared to the other experimental group teachers who reported less than regular practice of the skills, scored higher on six of the nine variables, although none of the differences were significant.
An analysis of the data provided by students on their attitudes resulted in findings which raised serious questions as to whether the degree of practice of interpersonal skills, as reported by the teachers, could have any effect on scores. Another question might be raised as to the accuracy of teacher self-reports on the degree of skill practice. For example, students of control group teachers, whose degree of skill practice was unknown, had higher mean scores on nine of the fifteen variables than students of the experimental group teachers who reported regular skill practice. In two of these cases, the differences in mean scores were significant at the .05 level. It was also found that there were no significant differences when comparing mean scores on the variables of students of experimental group teachers reporting regular practice to students of other experimental group teachers, except in one instance. The latter group had the higher scores on that variable which was significant at the .05 level. Pairing scores of students of teachers in the experimental group on the post-test and the delayed post-test revealed no significant differences in these scores resulting from the two-month time lapse.

Male students of experimental group teachers had higher mean scores for ten of the fifteen variables than female students of experimental teachers. Only two of the differences were significant: Males scored higher on the variable, "How Rules Are Set in Your Class" and females had the higher scores on "General Behavior in This Class."

White experimental group students rated fourteen of the fifteen variables higher than nonwhite experimental group students. Only one was significant, "How Rules Are Set in Your Class."
CONCLUSIONS

Although interpersonal skills can be learned by individuals desirous of improving their interpersonal relationships, and these skills can be taught in a relatively short period of time, the data collected for this study possibly suggest that changes in attitudes and self concept of those individuals learning the skills will take time to accomplish.

Based on the findings, it might be concluded that for teachers, one might not expect to see attitude changes toward variables related to the classroom environment until sufficient time has elapsed, following the learning of the skills, for the teachers to put into practice those skills learned. For example, on the post test given immediately following completion of the training course, there were no significant differences between scores of experimental and control group teachers. When scores of experimental group teachers on the post test were compared with their own scores on the delayed post test two months later, all scores on the variables had increased, and five of thirteen had increased significantly. However, another possibility might be that the paired t test for dependent samples provided a more sensitive measure of differences than the t test on independent samples, resulting in the significant findings.

By learning new interpersonal skills, it was felt that the self confidence of teachers would be positively effected, especially after these skills led to what teachers perceived as improved relationships with their students. If improved self confidence did occur, there would
be reason to suspect that this might be reflected in improved self-concept ratings, although the literature on the self concept reported earlier in this study would tend to indicate that such changes might be minimal over a short period of time. The data seemed to support these assumptions. On the initial post test, experimental group teachers had higher scores than control group teachers on eight of eleven variables and on the delayed post test, scores of experimental group teachers were higher on seven of nine variables for which higher scores were desirable. None were significant.

The secondary effects of an interpersonal skills training program for teachers on attitudes of students of those teachers may take longer to materialize and may rely on students being convinced that behavioral changes they notice in their teachers are real and not temporary or contrived. The data, which indicated control group students had higher mean scores than experimental group students on nine of fifteen variables, with two of them significant, should raise some serious questions, particularly regarding the validity of reports by teachers as to their regular practice of skills learned. If, in fact, these skills were being practiced on a regular basis, why would students not respond more positively? One explanation might lie in the way students were selected for the study. Since students in second-period class or third-period class of teachers were selected randomly by class lists, but without regard for the level of the class, academic or general studies, there may not have been an adequate balance of such students between experimental and control groups. Another explanation is that there may be no cause-effect relationship between the degree
of skill practice per se and scores. The data also reflected very little difference as accounted for by the independent variables of race and sex of students. The lack of significance in expected directions in the study might be explained by the small sample size or the lack of precision in the measuring instruments.

IMPLICATIONS

In view of the nature of attitudes, attitude change, and self concept change, it does seem that interpersonal skills training can positively effect those areas for individuals undergoing the training. Although the findings were often in the expected direction, in many cases they were insignificant. Therefore, it would be erroneous to proclaim the unqualified success of such training. However, the major finding of the study was that attitudes of teachers, as measured by a semantic differential, can change significantly upon completion of an interpersonal skills training course if accompanied by a two-month time lapse following that completion. This finding alone provides much room for optimism regarding the value of such training for teachers.

RECOMMENDATIONS FOR FURTHER RESEARCH

Several areas might be suggested for further investigation in view of the findings of this study. The major area which did not turn out as expected was that of the secondary effects of interpersonal skills training upon attitudes of students of teachers who underwent the training. An unanswered question would be: what would the effects
be upon students if teachers started the school year, practicing the skills acquired, rather than change approaches in dealing with students at mid-year after relationships have already been established? Also, would there be greater differences, more in the expected direction, in attitude scores if levels of students were controlled so that comparison groups might be more nearly alike; i.e., by college-bound groups, remedial groups, general courses? Would an increase in the number of subjects make a difference in results? In addition, if it is important that skills acquired be practiced to effect desirable changes, then perhaps it would be helpful to conduct a study where the degree of skill practice is determined through an impartial means, rather than by teacher self-report.

Based on the findings, one might imply that student perceptions differ from teacher self-reports in this area and thus the results are distorted. For interpersonal skills to have an effect on students, teachers must do more than learn the skills; they must internalize those skills and practice them. The key question would remain: what differences in students' attitudes, as reflected by scores on a measuring instrument, would be discernible between students of teachers regularly practicing the skills and those of students whose teachers do not practice the skills?

Since self-concept scores might be more difficult to change, what would be the results over a longer period of time for those teachers who regularly practice the skills? Also, what happens over a longer period of time, such as a full school year, to scores in all categories reported in this study? In a longitudinal study, what are
the effects on scores of periodic "refresher" courses which would enable the participants to share experiences as well as brush up on their skills? Would reinforcement of skills through these refresher courses and the use of incentives for teachers to become proficient in the skills prove to be important variables in the assessment of interpersonal skills training programs?

Finally, would results be different if some means of controlling the variable of the effectiveness of the T.E.T. trainers were utilized? It cannot be assumed that trainers are equally proficient in carrying out their responsibilities.
APPENDIX
Please read these instructions before continuing:

The purpose of this instrument is to determine how you feel about certain "concepts" related to your classroom environment. After reading each concept and relating it to your own classroom, use each set of bipolar adjectives to describe your feeling about that concept and place an X in the appropriate space to show the direction and strength of your feeling. For example:

Student Behavior (concept)
1. Good: ___: X: ___: ___: ___: ___: ___: ___: ___: Bad
2. Unpleasant: ___: ___: ___: ___: ___: ___: ___: ___: X: ___: Pleasant

The scales show the rater felt reasonably good toward the concept "student behavior" as it relates to his/her classroom, and also there was a reasonably pleasant attitude regarding the same student behavior.

Some adjectives might not "fit" the description of the concept as well as others. However, try to associate each pair of adjectives with the concept and give an answer.

Please give your first reaction, and work quickly. Each page should be completed in about three minutes or less.
TEACHER ATTITUDE SEMANTIC DIFFERENTIAL

Teacher I.D. No.: ______________

**CONCEPT I: THE WORTHINESS OF YOUR STUDENTS**


**CONCEPT II: CONFRONTING STUDENT MISBEHAVIOR**


**CONCEPT III: ACCEPTING (NOT JUDGING) STUDENT ATTITUDES, VALUES, OPINIONS**

3. Nice: __: __: __: __: __: __: __: __: Awful
4. Bitter: __: __: __: __: __: __: __: __: Sweet
5. Fair: __: __: __: __: __: __: __: __: Unfair
6. Worthless: __: __: __: __: __: __: __: __: Valuable
7. Pleasant: __: __: __: __: __: __: __: __: Unpleasant
8. Cruel: __: __: __: __: __: __: __: __: Kind

CONCEPT IV: THE VALUE OF LISTENING TO STUDENTS
1. Bad: __: __: __: __: __: __: __: __: Good
2. Unpleasant: __: __: __: __: __: __: __: __: Pleasant
3. Awful: __: __: __: __: __: __: __: __: Nice
4. Fair: __: __: __: __: __: __: __: __: Unfair
5. Worthless: __: __: __: __: __: __: __: __: Valuable
6. Bitter: __: __: __: __: __: __: __: __: Sweet
7. Unsuccessful: __: __: __: __: __: __: __: __: Successful
8. Kind: __: __: __: __: __: __: __: __: Cruel

CONCEPT V: RESOLVING CONFLICTS WITH STUDENTS SO NO ONE "LOSES"
1. Nice: __: __: __: __: __: __: __: __: Awful
2. Unfair: __: __: __: __: __: __: __: __: Fair
3. Worthless: __: __: __: __: __: __: __: __: Valuable
4. Sweet: __: __: __: __: __: __: __: __: Bitter
5. Unsuccessful: __: __: __: __: __: __: __: __: Successful
6. Kind: __: __: __: __: __: __: __: __: Cruel
7. Good: __: __: __: __: __: __: __: __: Bad
8. Unpleasant: __: __: __: __: __: __: __: __: Pleasant

119
CONCEPT VI: CLASSROOM RULES SET BY STUDENTS AND TEACHER TOGETHER

1. Fair: __: __: __: __: __: __: __: __: Unfair
2. Worthless: __: __: __: __: __: __: __: __: Valuable
3. Nice: __: __: __: __: __: __: __: __: Awful
4. Bitter: __: __: __: __: __: __: __: __: Sweet
5. Successful: __: __: __: __: __: __: __: __: Unsuccessful
6. Pleasant: __: __: __: __: __: __: __: __: Unpleasant
7. Bad: __: __: __: __: __: __: __: __: Good
8. Cruel: __: __: __: __: __: __: __: __: Kind

CONCEPT VII: PROVIDING POSITIVE FEEDBACK TO STUDENTS

1. Good: __: __: __: __: __: __: __: __: Bad
2. Unpleasant: __: __: __: __: __: __: __: __: Pleasant
3. Nice: __: __: __: __: __: __: __: __: Awful
4. Unfair: __: __: __: __: __: __: __: __: Fair
5. Worthless: __: __: __: __: __: __: __: __: Valuable
6. Sweet: __: __: __: __: __: __: __: __: Bitter
7. Unsuccessful: __: __: __: __: __: __: __: __: Successful
8. Kind: __: __: __: __: __: __: __: __: Cruel

CONCEPT VIII: YOUR STUDENTS' CLASS ATTENDANCE RATES

1. Unfair: __: __: __: __: __: __: __: __: Fair
2. Worthless: __: __: __: __: __: __: __: __: Valuable
3. Bitter: __: __: __: __: __: __: __: __: Sweet
4. Unsuccessful: __: __: __: __: __: __: __: __: Successful
5. Cruel: __: __: __: __: __: __: __: __: Kind
6. Bad: __: __: __: __: __: __: __: __: Good
<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IX:</strong></td>
<td>Student participation in class discussions</td>
</tr>
<tr>
<td>1. Successful:</td>
<td>Unsuccessful</td>
</tr>
<tr>
<td>2. Sweet:</td>
<td>Bitter</td>
</tr>
<tr>
<td>3. Worthless:</td>
<td>Valuable</td>
</tr>
<tr>
<td>4. Unfair:</td>
<td>Fair</td>
</tr>
<tr>
<td>5. Nice:</td>
<td>Awful</td>
</tr>
<tr>
<td>6. Unpleasant:</td>
<td>Pleasant</td>
</tr>
<tr>
<td>7. Good:</td>
<td>Bad</td>
</tr>
<tr>
<td>8. Kind:</td>
<td>Unkind</td>
</tr>
</tbody>
</table>

**X:** The degree of mutual understanding of teacher/student "messages" in your classes |
| 1. Good: | Bad |
| 2. Unpleasant: | Pleasant |
| 3. Nice: | Awful |
| 4. Unfair: | Fair |
| 5. Worthless: | Valuable |
| 6. Sweet: | Bitter |
| 7. Unsuccessful: | Successful |
| 8. Kind: | Unkind |

**XI:** Your rapport with students |
| 1. Successful: | Unsuccessful |
| 2. Sweet: | Bitter |
| 3. Worthless: | Valuable |
4. **Unfair:**  

5. **Nice:**  

6. **Unpleasant:**  

7. **Good:**  

8. **Kind:**  

**CONCEPT XII: THE NEED FOR CONCERN ABOUT STUDENT FEELINGS**

1. **Nice:**  

2. **Unfair:**  

3. ** Worthless:**  

4. **Sweet:**  

5. **Unsuccessful:**  

6. **Kind:**  

7. **Good:**  

8. **Unpleasant:**  

Only those teachers who have completed T.E.T. should respond to the following:

**CONCEPT XIII: On the checklist below, please indicate the degree to which you feel you are practicing in your classroom the T.E.T. skills listed:**

<table>
<thead>
<tr>
<th>Skills</th>
<th>Degree to which practiced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active Listening</td>
<td></td>
</tr>
<tr>
<td>2. Acceptance</td>
<td></td>
</tr>
<tr>
<td>3. Use of &quot;I--messages&quot;</td>
<td></td>
</tr>
<tr>
<td>4. No Lose Method of Conflict Resolution</td>
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<td>5. Allow Student Participation in Rule Setting</td>
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APPENDIX B

STUDENT ATTITUDE SEMANTIC DIFFERENTIAL

Please read these instructions before continuing:

The purpose of this instrument is to determine how you feel about certain "concepts" or conditions related to your _______ period class. Your responses will not be used to rate you, your teacher, or your classmates, but to provide general information on student attitudes about the classroom atmosphere. Your responses will be treated confidentially and no names will be used in the study.

To complete this instrument, first think about the "concept" which is stated and relate it to your _______ period class. Then, using each scale under the concept, you decide the direction of your "feeling" about the concept as it applies in your classroom. You can show any of seven degrees of "feeling" about the concept for each scale, and you indicate this by placing an X in the appropriate space. For example:

DISCIPLINE PRACTICES (Concept)

1. Good:  _____:  X:  ____:  ____:  ____:  ____:  ____:  Bad
2. Unfair:  ____:  ____:  ____:  ____:  ____:  ____:  X:  ____:  Fair

In this example, the rater felt pretty good about discipline practices in his/her class and also felt that the discipline practices
were reasonably fair. Note that stronger or weaker feelings could be expressed by placing the X at a different point on the scale.

Some adjectives might not "fit" the description as well as others. However, try to associate each pair of adjectives with the concept and give an answer.

Please give your first reaction and work quickly. Each page should be completed in about three minutes or less.

STUDENT ATTITUDE SEMANTIC DIFFERENTIAL

Student I, D, No.:__________________________

Sex: Male_________ Female__________

Race: Black_________ White__________ Other__________

CONCEPT I: ATTITUDE OF THE TEACHER TOWARD STUDENTS

1. Good: ____: ____: ____: ____: ____: ____: ____: ____: Bad
2. Unpleasant: ____: ____: ____: ____: ____: ____: ____: ____: Pleasant
3. Nice: ____: ____: ____: ____: ____: ____: ____: ____: Awful
4. Unfair: ____: ____: ____: ____: ____: ____: ____: ____: Fair
5. Worthless: ____: ____: ____: ____: ____: ____: ____: ____: Valuable
6. Sweet: ____: ____: ____: ____: ____: ____: ____: ____: Bitter
7. Unsuccessful: ____: ____: ____: ____: ____: ____: ____: ____: Successful
8. Kind: ____: ____: ____: ____: ____: ____: ____: ____: Cruel

CONCEPT II: EXPRESSING YOUR THOUGHTS TO YOUR TEACHER

1. Successful: ____: ____: ____: ____: ____: ____: ____: ____: Unsuccessful
2. Sweet: ____: ____: ____: ____: ____: ____: ____: ____: Bitter
3. Worthless: ____: ____: ____: ____: ____: ____: ____: ____: Valuable
4. Unfair: ____: ____: ____: ____: ____: ____: ____: ____: Fair
5. Nice: _______: _______: _______: _______: _______: _______: Awful

6. Unpleasant: _______: _______: _______: _______: _______: _______: Pleasant

7. Good: _______: _______: _______: _______: _______: _______: Bad

8. Kind: _______: _______: _______: _______: _______: _______: Cruel

CONCEPT III: SEEKING THE HELP OF YOUR TEACHER

1. Nice: _______: _______: _______: _______: _______: _______: Awful

2. Unfair: _______: _______: _______: _______: _______: _______: Fair

3. Worthless: _______: _______: _______: _______: _______: _______: Valuable

4. Sweet: _______: _______: _______: _______: _______: _______: Bitter

5. Unsuccessful: _______: _______: _______: _______: _______: _______: Successful

6. Kind: _______: _______: _______: _______: _______: _______: Cruel

7. Good: _______: _______: _______: _______: _______: _______: Bad

8. Unpleasant: _______: _______: _______: _______: _______: _______: Pleasant

CONCEPT IV: THE VALUE YOUR TEACHER PLACES ON YOUR ATTITUDES, VALUES AND OPINIONS

1. Fair: _______: _______: _______: _______: _______: _______: Unfair

2. Worthless: _______: _______: _______: _______: _______: _______: Valuable

3. Nice: _______: _______: _______: _______: _______: _______: Awful

4. Bitter: _______: _______: _______: _______: _______: _______: Sweet

5. Successful: _______: _______: _______: _______: _______: _______: Unsuccessful

6. Pleasant: _______: _______: _______: _______: _______: _______: Unpleasant

7. Bad: _______: _______: _______: _______: _______: _______: Good

8. Cruel: _______: _______: _______: _______: _______: _______: Kind
CONCEPT V: THE "UNDERSTANDING" SHOWN BY YOUR TEACHER IN HANDLING DISCIPLINE PROBLEMS IN CLASS

1. Unfair: ___: ___: ___: ___: ___: ___: ___: ___: ___: Fair
2. Worthless: ___: ___: ___: ___: ___: ___: ___: ___: ___: Valuable
3. Bitter: ___: ___: ___: ___: ___: ___: ___: ___: ___: Sweet
4. Unsuccessful: ___: ___: ___: ___: ___: ___: ___: ___: ___: Successful
5. Cruel: ___: ___: ___: ___: ___: ___: ___: ___: ___: Kind
6. Bad: ___: ___: ___: ___: ___: ___: ___: ___: ___: Good
7. Unpleasant: ___: ___: ___: ___: ___: ___: ___: ___: ___: Pleasant
8. Awful: ___: ___: ___: ___: ___: ___: ___: ___: ___: Nice

CONCEPT VI: YOUR WILLINGNESS TO LISTEN TO YOUR TEACHER

1. Good: ___: ___: ___: ___: ___: ___: ___: ___: ___: Bad
2. Nice: ___: ___: ___: ___: ___: ___: ___: ___: ___: Awful
3. Valuable: ___: ___: ___: ___: ___: ___: ___: ___: ___: Worthless
4. Successful: ___: ___: ___: ___: ___: ___: ___: ___: ___: Unsuccessful
5. Unpleasant: ___: ___: ___: ___: ___: ___: ___: ___: ___: Pleasant
6. Unfair: ___: ___: ___: ___: ___: ___: ___: ___: ___: Fair
7. Bitter: ___: ___: ___: ___: ___: ___: ___: ___: ___: Sweet
8. Cruel: ___: ___: ___: ___: ___: ___: ___: ___: ___: Kind

CONCEPT VII: AMOUNT OF STUDENT PARTICIPATION IN CLASSROOM

1. Good: ___: ___: ___: ___: ___: ___: ___: ___: ___: Bad
2. Unsuccessful: ___: ___: ___: ___: ___: ___: ___: ___: ___: Successful
3. Nice: ___: ___: ___: ___: ___: ___: ___: ___: ___: Awful
4. Bitter: ___: ___: ___: ___: ___: ___: ___: ___: ___: Sweet
5. Fair: ___: ___: ___: ___: ___: ___: ___: ___: ___: Unfair
CONCEPT VIII: YOUR GENERAL FEELING ABOUT THIS CLASS


CONCEPT IX: YOUR OWN RESPONSIBILITY IN COMING TO THIS CLASS EVERY DAY AND ON TIME


CONCEPT X: SHARING YOUR "PERSONAL" FEELINGS WITH YOUR TEACHER

### Concept XI: How "Rules" Are Set in Your Class

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### Concept XII: Your Progress in This Class

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CONCEPT XIII: GENERAL BEHAVIOR IN THIS CLASS

1. Unfair: __: ___: ___: ___: ___: ___: ___: ___: Fair
2. Worthless: __: ___: ___: ___: ___: ___: ___: ___: Valuable
3. Bitter: __: ___: ___: ___: ___: ___: ___: ___: Sweet
4. Unsuccessful: __: ___: ___: ___: ___: ___: ___: ___: Successful
5. Cruel: __: ___: ___: ___: ___: ___: ___: ___: Kind
6. Bad: __: ___: ___: ___: ___: ___: ___: ___: Good
7. Unpleasant: __: ___: ___: ___: ___: ___: ___: ___: Pleasant
8. Awful: __: ___: ___: ___: ___: ___: ___: ___: Nice

CONCEPT XIV: YOUR RELATIONSHIP WITH YOUR TEACHER

1. Successful: __: ___: ___: ___: ___: ___: ___: ___: Unsuccessful
2. Sweet: __: ___: ___: ___: ___: ___: ___: ___: Bitter
3. Worthless: __: ___: ___: ___: ___: ___: ___: ___: Valuable
4. Unfair: __: ___: ___: ___: ___: ___: ___: ___: Fair
5. Nice: __: ___: ___: ___: ___: ___: ___: ___: Awful
6. Unpleasant: __: ___: ___: ___: ___: ___: ___: ___: Pleasant
7. Good: __: ___: ___: ___: ___: ___: ___: ___: Bad
8. Kind: __: ___: ___: ___: ___: ___: ___: ___: Cruel
SELECTED BIBLIOGRAPHY
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BOOKS


PERIODICALS


DISSERTATIONS AND DISSERTATION ABSTRACTS


Steck, Keith. "A Study to Determine the Effects of In-Service Education on Teachers' Beliefs, Attitudes, and Values." Dissertation abstract, University of Utah, 1975. [Reproduction.]

**OTHER SOURCES**


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Newport News Schools, Assistant Superintendent for Instructional Services (1978--Present)