

Effects of Human Relations Training on the
Personal, Social, and Classroom Adjustment of
Elementary School Children with Behavior Problems

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By
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Abstract of Dissertation Presented to the
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EFFECTS OF HUMAN RELATIONS TRAINING ON THE
PERSONAL, SOCIAL, AND CLASSROOM ADJUSTMENT OF
ELEMENTARY SCHOOL CHILDREN WITH BEHAVIOR PROBLEMS

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There is an increasing concern in educational and psychological literature for school programs that prevent and treat behavior adjustment problems in elementary school children. The focus of this study was on the idea that successful adjustment in school is enhanced by educational experiences in the affective domain (Ojemann, 1967; Bessell and Palomares, 1967; Jones, 1968). Human relations training, one form of affective education, provides children experiences that center on feelings, here-and-now behavior, and interpersonal relationships (Miles, 1964; Thelen, 1967). These areas have been cited as problematic for behavior disordered children (Bower, 1960).

Several hypotheses predicted changes in observed classroom behavior, classroom adjustment as perceived by teachers, self-concept, and peer status as a result of participation in human relations training. The predictions were that the Ss in this experimental group would show more positive changes along each of these dimensions than Ss in a control group which had special activities or Ss in a

second control group which received no special treatment. Another set of hypotheses was derived from Gibb's (1964) theory of group process. These hypotheses predicted that the human relations training group would show more acceptance of the Ss, would allow the Ss to express more verbal and non-verbal affect, would be more effective in making group decisions, would decrease the amount of control directed toward the Ss.

Each group contained eight children with three children in each group being Ss. The Ss were selected from two third grade classes and one fourth grade class in the same school with the Bower-Lambert (1961) screening device which locates children with low levels of social and emotional adjustment. The other five children in each group were selected at random from each respective class. During the treatment period the experimental and first control groups met for twenty-four thirty-minute sessions over a period of nine weeks. The second control group remained in their regular class and received no special treatment.

Pre- and post-treatment scores on the criterion instruments showed significant differences ($p = .05$) among the three groups on the measure of maladaptive classroom behavior as perceived by the teachers and on the self-concept scale. These differences were directly in line with the hypotheses. The number of adaptive and maladaptive changes in classroom adjustment as perceived by the teacher was significantly different ($p < .02$) and was in the predicted direction. No significant differences were found in observed class-

room behavior or peer status changes. Group process data gathered by the trained observers only partially supported three of the hypotheses derived from Gibb's theory and a fourth was contradicted. Contrary to the hypothesis, the experimental group decreased their rates of affective behavior during the treatment period while the first control group increased its rates. This result suggested that human relations training may have allowed these children who usually display a great deal of affect to decrease their rates of these behaviors.

While not providing strong support for Gibb's theory of group process, the study was congruent with other research (Ojemann, 1967; Bruce, 1958; Muss, 1960) which demonstrated the mental health benefits for children in affective education. It supported the positions taken by Rhodes (1967), Bower and Hollister (1967), and Dennison (1969) that children with behavior adjustment problems in school need help in understanding and dealing with feelings and interpersonal relationships.

INTRODUCTION

The focus of this study is on the effects of human relations laboratory training on the behavior and mental health of elementary school children who are identified as having behavior problems. There is a growing concern in the literature for planned educational experiences in the affective domain for all elementary school children but especially for those with emotional and social adjustment difficulties (Rhodes, 1967a; Glasser, 1969; Hollister, 1967a; Bessell and Palomares, 1967; Bradford, Gibb, and Benne, 1964; Brown, 1968; Ojemann, 1967). Recent research has raised serious questions about the efficacy of special class placement for children identified as having behavior disorders (Morse, Cutler, and Fink, 1964; Rubin, Simson, and Betwee, 1966; Dunn, 1968). Dunn (1968) suggests that these children may be better served when they are given special remedial and re-educational experiences while they remain members of regular classes. He emphasizes that the interaction with normal children is a very important factor in helping these children remain in the mainstream of our educational system.

As these students remain in regular classrooms, their problems will obviously have to be approached from a number of different positions. The high incidence of academic retardation among behaviorally disordered youngsters (Bower, 1960; Maes, 1966) exemplifies the need for developmental and remedial approaches to teaching basic skills in the cognitive subjects. In addition to

academic subject matter instruction these children need training in appropriate social behavior and self-confidence (Bower and Hollister, 1967; Jones, 1968; Dennison, 1969). Lambert (1965) listed several types of interventions needed in the schools. She included interventions that build personality, reinforce personality strength, and assist in relationship building. Gladwin (1967) discussed the need to increase social competence through developing the ability to learn to use a variety of behavioral responses to reach a given goal and the ability to test reality both cognitively and affectively. Hollister (1967b) holds that schools will soon be able to develop a double-purpose curriculum for the development of specific ego capacities, as well as for the usual educational purposes.

Several programs have been developed in recent years to provide planned educational experiences in the affective domain for elementary school children. Ojemann (1967) devised a curriculum for children based on the idea that a causal orientation is associated with positive mental health. This program contains stories, discussion guides, and workbooks to help children understand the relationship between feelings, behavior, and the consequences which follow various types of behavior. Bessell and Palomares (1967) have created a human development program based on neo-Freudian concepts and on notions of mastery and competence which are similar to those of White (1959). The small group exercises in this program focus on the identification and communication of feelings and on different aspects of social

interaction. Brown (1968) reported a variety of educational strategies for integrating cognitive and affective learnings. Brown provided classroom teachers extensive experience in sensitivity training. These teachers then developed and evaluated a wide assortment of affective, experiential lesson plans with their classes. Faust (1968) described "feelings classes" for the regular classroom where children can share their experiences and participate in group counseling.

Each of these programs, in varying degrees, utilizes concepts and group processes which are similar to human relations training. This method, which uses as material for discussion the behaviors and feelings that occur during group interaction, has been compared with the typical classroom (Miles, 1964). In his study, Miles found most classrooms lacking in experiences which helped the child to recognize his feelings, to understand human behavior as it occurs, and to experiment with new behaviors. Miles said the typical classroom is usually centered on cognitive change, sometimes on attitudinal change, but almost never on behavioral change. The laboratory training group, on the other hand, provides a setting where the participants interact with one another, express feelings and attitudes, and provide support for gaining insight and for achieving behavior change. This method has been widely used with leaders in business and education since 1947 (Bradford, Gibb, and Benne, 1964). Its use in elementary and secondary schools has only recently begun (Lippitt, Fox, and Schmuck, 1967; Thelen, 1967).

The early development of sensitivity training was based on the

theories of group process developed by Lewin (1951). As more diverse uses of the laboratory model in applied behavioral science were discovered, modifications of Lewin's original theories took place (Bradford, 1964; Blake, 1964; Whitman, 1964; Argyris, 1967). In a review of some of these theories, Gibb (1964) pointed to the diversity of the theories and the difficulty in deriving testable hypotheses from them. Gibb's own theory centers on four modal concerns of a group and provides a basis for understanding personality change. These four modal concerns are most relevant to the needs of behavior disordered children and lend themselves easily to testable hypotheses.

Gibb's four modal concerns are acceptance, data-flow, goal formation, and control. His studies indicate that there is a consistent sequence in the rise of these concerns in a group. Regarding the first, acceptance, he states that members come to a group with unresolved feelings of fear and distrust. These feelings are frequently denied and deeply buried. Many feelings are rooted in a lack of acceptance of self and others. Symptoms of this distrust in a group include persistent defense of one's public image, attempts to change the attitudes and beliefs of others, attempts to make decisions for others, avoidance of feelings, and cynicism about the power of the group. These symptoms are reduced by experiences which produce trust and loss of fear. Aspects of personality change are implicit in this first concern of a group. Gibb states that a major block to personal growth is the defense

level--in the lack of acceptance of self and others. A number of studies have indicated that behavior disordered children have problems in this area. These children are usually described as having low self-concepts, high discrepancies between ideal and real self, low status among peers, and difficulty in becoming participating members of peer groups (Bower, 1960; Quay, Morse, and Cutler, 1966). By looking at Gibb's theory of groups and his ideas about personality change, hypotheses can be derived about the needs of behavior disordered children and possible treatment procedures. This pattern is true for the other modal concerns as well.

Closely related to the process of gaining acceptance is a group's second modal concern of data-flow. How can members express feelings and attitudes toward themselves, other members of the group, and the concerns of the group? Gibb states that the socialization process in our society has caused people to develop great skills at covering up data-output. In addition, defensiveness causes individuals to create screens that prevent one from seeing the data that are present. Through training and growth, a group learns to collect data more effectively; members can learn to listen, to express feelings, to be more spontaneous in their actions, and to integrate emotionality into their work. In the terms of personality theory, Gibb believes that individuals are able to change when they are free to exchange feelings with others. The data which are available regarding one's behavior and its effects allow one to form new and more realistic perceptions of himself and others. Regarding behavior disordered

children, several authors have noted that they express their feelings in very uneven patterns--often not showing emotion until it erupts in a crisis situation (Redl and Jacobson, 1958; Bower, 1959; Verville, 1967). Others have noted the lack of spontaneity in the behavior of these children (Bower, 1960). In short, behavior disordered children need help in communicating their feelings in adaptive ways and in achieving a greater flexibility in their behavior patterns.

Gibb's third modal concern centers on the problem of decision-making and goal formation in a group. He states that in natural, high defense groups the goals are always to some degree imposed by the leader or high status peers. Members who do not participate in the selection of the group goals are often apathetic or bored. In sensitivity groups that have already dealt with the concerns of acceptance and data-flow, goals are created by the group with all members sharing in the decision-making process. He says that high interest, interdependence, and greater spread of participation accompanies this type decision-making. The decisions are based on both cognitive concerns and also on the feelings and subjective perceptions of the group members. Thus, instead of feelings being a handicap in choosing appropriate goals, they are utilized and incorporated. Gibb's theory of personality parallels this modal concern as well. He says that the healthy personality accepts himself and his feelings. In making decisions, this person uses his feelings, is able to receive information from others regarding alternatives, and can work effectively with others in the choosing process. How-

ever, behavior disordered children frequently have great difficulty in making decisions. Some of these children are very dependent and rely on others to make important decisions for them. Others are extremely impulsive and will choose the first attractive alternative that arises (Bower, 1959). These children have a need to learn how to choose, how to work with others, and how to incorporate their feelings with on-going activities (Hobbs, 1966).

Gibb's last modal concern is control. In natural groups control problems develop in which members try to persuade and coerce one another or to seek direction from an authority figure. Gibb says that in sensitivity groups, where data-collection and interpersonal acceptance problems are solved and where people are able to know what they want to do, they are able to act on the basis of their desires and feelings within an atmosphere of trust and acceptance. In this setting, organizational problems become relatively simple or disappear. Gibb says that the healthy personality is able to impose his own controls from within with a minimum of external controls. This person can live with the authority problem, is flexible in the roles he can take, and works well with or without organizational structure. Many of these positive characteristics are lacking in the behavior disordered child. He is frequently in conflict with authority figures, may seek to control other people's behavior with force, and has trouble shifting roles from leader to follower (Bower, 1959; Quay, Morse, and Cutler, 1966; Verville, 1967). The behavior disordered child has little internal control of his behavior, and

thus schools frequently turn to structured classes where the behavior controls are explicitly external (Hewett, 1968; Haring and Phillips, 1962). This approach to treatment has been successful in some cases but may not be the only method of achieving long-term behavioral changes. The laboratory method may provide some useful clues for treatment of behavior disorders in school age children.

Research on the effects of programs dealing with affective behavior is both scarce and imprecise (Lambert and Hartsough, 1968). In reviewing measurement procedures in relation to mental health programs in the schools, Lambert and Hartsough found that most studies have relied heavily or exclusively on tests which assess the knowledge and attitudes acquired by elementary school children in curriculum projects such as Ojemann (1967), Muss (1960), and Bruce (1958). These studies have neither indicated the degree to which their modifications of the curriculum affected the status of the school population relative to mental health criteria nor whether these efforts reduced rates of maladaptation in the schools. Kellam and Schiff (1967) have pointed to the problems inherent in the use of subjective teacher ratings of behavior as measures of school mental health status and of the effects of treatment programs. Behavior ratings by trained observers have been infrequently used, and baseline data on behavior have been conspicuously absent from studies (Muss, 1960; Snider, 1957; Limbacher, 1967; Simmons, 1965; Field, 1966). An additional problem has been the lack of adequate control groups in most studies. Kerlinger (1964) has criticized this type research on

the grounds that it has neglected the power of the Hawthorne effect to induce change in children who are treated differently from other children in the same class or school.

As a result of these deficiencies, a number of writers discussed the need for more precise research on the effects of educational experiences in the affective areas of behavior and attitudinal changes (Lambert and Hartsough, 1968; Bradford, Gibb, and Benne, 1964; Miles, 1965). Miles clearly delineated the problems which are encountered in measuring the effects of treatment procedures. His list of problems included vagueness of outcomes, imprecisely described processes, absent or non-comparable control groups, small numbers of subjects, measures which sensitize the subjects, and failure to specify a clear theoretical basis for the predictions which are made. Miles argued for careful criterion measurement, predictive analysis of the components thought to cause change on the criterion measurements, and the use of a large number of measures.

The present study attempted to avoid as many of these pitfalls as possible and also to adopt many of Miles's suggestions for measuring behavior change. The study was designed to assess the effects of human relations training on the personal, social, and classroom adjustment of third grade students identified as behavior disordered. The hypotheses were derived from Gibb's theory of group process and personality change adapted for this type child.

Hypotheses

The first five hypotheses concern changes in individual behaviors and adjustments which were predicted to follow participation in a human relations training group.

1. Behavior disordered children who participate in human relations training (Group E) will show greater increases in positive classroom behavior than behavior disordered children (Group 1C) who participate in an activities group or similar children (Group 2C) who receive no special treatment. These behaviors include task-oriented behaviors, positive affective behaviors, and positive interactions with their teacher and peers.

2. Behavior disordered children who receive human relations training (Group E) will show greater decreases in negative classroom behavior than similar children (Group 1C) who participate in an activities group or those (Group 2C) who receive no special treatment. These behaviors include non-task-oriented behaviors, negative affective behaviors, and negative interactions with their teacher and peers.

3. Children with behavior problems who participate in a human relations training group (Group E) will be perceived by their teacher as exhibiting more adaptive behaviors and fewer maladaptive behaviors than similar children (Group 1C) who are in an activities group or those (Group 2C) who remain in the classroom.

4. Emotionally disturbed children who receive human relations training (Group E) will have more positive changes in their self-concept scale scores than similar children (Group 1C) who participate in group activities or those (Group 2C) who receive no special treatment.

5. Behavior disordered children (Group E), following experiences in a human relations training group, will increase their measured social status among their classroom peers more than similar children (Group 1C) who participate in an activities group or those (Group 2C) who have no small group experience.

The next four hypotheses concern process variables in a human relations training group and a small activities group. These hypotheses were derived from Gibb's theory regarding the four modal concerns of laboratory training groups. Since these concerns are a part of the continuing group process, the hypotheses focus on changes that occur over time.

6. The acceptance of behavior disordered children in a human relations training group (Group E) by their group peers will be greater than the acceptance of similar children in a small activities group (Group 1C) as the total time in the group increases.

7. Children with emotional and behavioral problems will show more affective behavior in a human relations group (Group E) than similar children in an activities group (Group 1C).

8. Behavior disordered children in a human relations group (Group E) will participate more in the decisions of their group

than those in an activities group (Group 1C) as the total time in the group increases.

9. In a human relations training group (Group E), behavior disordered children will be the object of fewer controlling behaviors than in an activities group (Group 1C) as the total time in the groups increases.

METHOD

Subjects

The study used three groups of eight children with each group containing three Ss who were identified as having behavior problems in school. The Ss in each group had a sex ratio of two boys and one girl. The other five children in each group were selected through a stratified random sample, using a table of random numbers, so that each group would have a total of four boys and four girls. All eight children in each group were classmates in one of three classes in the same elementary school in Gainesville, Florida. The Ss in the experimental group (Group E) and in the first control group (Group 1C) were selected from two comparable third grade classes. The Ss in the second control group (Group 2C) were selected from a fourth grade class. Since a number of comparisons were to be made between the group processes of the experimental and the first control group, it seemed crucial for these two groups to be of the same grade level. A flip of a coin determined which third grade group would receive the experimental treatment. Since this elementary school only contained two third grade classes, a fourth grade class in the same school was used as the second control group. This procedure avoided the contamination of factors that would have been associated with a different elementary school.

The Ss were selected from summary scores on the Bower-Lambert screening device (1961) which utilizes teacher evaluation, peer

perceptions, and self-report in locating children with emotional and behavioral handicaps. Research studies have reported that this screening procedure identified 87% of a criterion group of children who had known emotional and behavioral problems (Bower, 1960). In the present study, each classroom teacher filled out a "Behavior Ratings of Pupils" on all of the children in her class. The primary investigator administered the peer rating form, "A Class Play," and the self-report instrument, "Thinking About Yourself," to each of the three classes.

The total number of nominations received by each child in the class on each section of the screening device was recorded. It was decided beforehand that the target Ss in each group would have the sex ratio of two boys and one girl. The three Ss chosen from each class received high criterion scores on at least two of the screening instruments but not necessarily the highest three scores on each instrument. Table 1 indicates how each of the Ss was screened. It may be important to mention that all Ss were white except for one Negro male--the second subject in the second control group (2C-2). The first subject listed in Table 1 in each group was female.

Parental permission was obtained for participation in the two groups which received special treatment. All of the parents consented to have their children participate. Neither the parents nor the teachers were told which group was the experimental or control, and they did not know the hypotheses of the study.

Table 1. Method of Screening for Each Subject on the Bower-Lambert Screening Device

Group and Subject	Teacher Rating	Self-Report	Peer Rating
<u>Experimental</u>			
E-1	X		X
E-2		X	X
E-3	X	X	
<u>First Control</u>			
1C-1		X	X
1C-2	X	X	
1C-3	X		X
<u>Second Control</u>			
2C-1		X	X
2C-2		X	X
2C-3	X	X	

Materials and Measurement Procedures

The materials and procedures used with the experimental group included: 1) exercises developed at the National Training Laboratories; 2) group interactions designed by Bessell and Palomares in the Human Development Program (1967); 3) stories created by Ojemann and others in the Preventive Psychiatry Program; and 4) similar materials and procedures designed by the principal investigator and the leader of the groups. A record of each day's exercises for this group is contained in Appendix B.

The exercises used in the experimental group were aimed at helping the children identify their feelings, to express these feelings in acceptable ways, to understand the causal relationship between feelings and behavior, and to increase acceptance and communication between the children. In the group the children were led to focus on here-and-now feelings and behavior as is typical in human relations laboratory training groups.

The materials and procedures used with the control group (Group 1C) included a number of activities designed to promote social interaction in the group. These activities included recreational games, discussions about topics suggested by the children, stories which encouraged group discussion, and art activities. A record of each day's activities is contained in Appendix C. Care was taken in planning the experiences for this group to organize the activities in conceptual units in order to approximate the directional structure of the experimental group.

In the control group (Group 1C) the discussion of feelings and behavior was not initiated by the group leader but was allowed to occur when the children discussed these topics. The group was designed to give these children special attention, to allow the children to interact and to know one another better, and to participate in activities different from the regular classroom.

In order to control for the effects of the group leader's personality and skills in working with children, both treatment groups were led by the same person. The leader was a 24-year-old first year graduate student in special education--teaching behavior disordered children. She had had two years of teaching experience in the third grade, personal experience in sensitivity training, and had led other groups of children in human relations laboratory training. Although she was aware that the research study was comparing the effects of the two approaches, she did not know the nature of the hypotheses.

Pre- and Post-Treatment Measures

The measurement procedures for this study included classroom observations of the Ss' behavior by trained observers, a self-concept scale, a behavior rating form completed by teachers, and a measure of sociometric status. All of these measures were used before and after the treatment period in order to determine what changes occurred in the personal, social, and classroom adjustment of the Ss.

The classroom observations were recorded by using a modified version of the Florida Affective Categories Scale (FLAC scale)

developed by Soar (1969). A copy of this instrument is in Appendix D. The observation scale contained fifty-seven specific behaviors which were divided into six categories. These included task-oriented behaviors, non-task-oriented behaviors, verbal positive affect, non-verbal positive affect, verbal negative affect, non-verbal negative affect, and "I feel" statements. The scale allowed the observers to record not only the behavior of the Ss but also the response which that behavior elicited from the teacher and other class members. These responses were grouped into nine categories which included approval-acceptance, disapproval-rejection, control, neutral responses, and no response. Each of these responses, except the last one, was divided into two categories for responses by the teacher and by the class peers. Thus, the scale allowed the recording of the frequency of the child's behavior in each of the behavior categories and the various types of interactions he had with other people in the school environment.

The classroom observations were conducted by three female first year graduate students in special education--teaching behavior disordered children. These observers were not aware of the hypotheses of the study. Prior to the beginning of the classroom observations, the observers were trained by the principal investigator in the use of the modified FLAC scale. Videotapes of children in a classroom setting were used in the training sessions. Inter-observer reliability scores were calculated using the Pearson product moment correlation coefficient. The coefficients ranged from .86 to .95 and

had a mean of .91.

The modified version of the FLAC scale allowed the observers to use point-time sampling in categorizing the behavior of the Ss. During the observation periods, the observers rotated between the three subjects, observing each S for thirty seconds, and recording all of the observed behavior in the succeeding fifteen seconds. Each observer recorded data in each of the three classes before and after the treatment period. Observations were made at various times during the school day in order to obtain a representative sample of the Ss' classroom behavior. Each of the three classes was observed for a total of approximately five hours in both the pre- and post-treatment periods. Thus each child was observed for approximately fifty minutes in each of the observation periods.

Other instruments used in the pre- and post-treatment evaluations included the Devereux Elementary School Behavior Rating Scale (Spivack and Swift, 1967), the Piers-Harris Children's Self Concept Scale (1969), and sociometric procedures which measured peer preferences in the classroom. The first of these, the Devereux Elementary School Behavior Rating Scale, contains eleven factors which are significantly related to achievement in both normal and special classes. These factors include classroom disturbance, impatience, disrespect-defiance, external blame, achievement anxiety, external reliance, comprehension, inattentive-withdrawn, irrelevant-responsiveness, creative initiative, and need for closeness to teacher. The Piers-Harris Children's Self Concept Scale provides

one score which is a measure of the positiveness of a child's self-esteem. Sociometric procedures, described by Gordon (1966) were used to measure the status of the Ss among their classroom peers. These descriptive data were gathered by asking all members of the class to list three class members with whom they would like to be during certain types of activities. In this study the students were asked to list their preferences to the following questions:

1) Whom would you like to play a game with? 2) Whom would you like to work with on a class project? 3) Whom would you like to invite to your birthday party? 4) Whom would you like to sit with at a school assembly? 5) Whom would you like to help with their homework? 6) If you were angry about something, whom would you like to talk with about your feelings? 7) If you were very happy, whom would you like to share your feelings with? Peer status was determined by totaling the number of times a child was listed by his peers.

Process Data for Treatment Groups

In order to gather data to test the hypotheses regarding the group processes of the two treatment groups, each treatment session of Groups E and 1C was observed by one of the three trained observers. Each observer recorded data in eight of the twenty-four sessions of each group. As in the classroom observations, the observers used the modified FLAC scale and recorded both the behavior of the Ss and the responses of the group leader and the group peers. Point-time sampling was used with thirty seconds for

observation and fifteen seconds for recording. In a thirty-minute treatment session, each S was therefore observed for a total of 6.6 minutes.

Procedure

In the week prior to the treatment period, baseline data on the classroom behavior of the nine target Ss were obtained by the trained observers using the modified version of the FLAC scale. The Piers-Harris Children's Self Concept Scale was administered to all Ss by the primary investigator. He also administered the sociometric measure to each class during this week. The three classroom teachers completed the Devereux Elementary School Behavior Rating Scale for each S in their respective class.

During the treatment period, each group met three times a week for thirty minutes. The students were removed from their regular class at times arranged by the regular classroom teachers, generally when the children would have been engaged in individual work while other children were in reading groups. The treatment period lasted from March 9, 1970, until May 8, 1970. During that time the groups met three times a week for a total of twenty-four sessions or twelve hours.

During two of the group meetings, specific emphasis was placed on the decision-making process. The leader offered opportunities for the groups to choose the type of activity they would engage in on particular days. One of the days came in the middle of the treatment period during session eleven, while the other was near

the end during session twenty. All of the decision-making exercises were conducted in front of the same observer who evaluated the effectiveness of each group in completing the assignment.

During the week following the treatment period, the trained observers once again recorded the classroom behavior of the Ss. During this week the Piers-Harris scale and the sociometric measure were readministered. The three teachers again completed the Devereux scale on all Ss in their classes. When all of the data were gathered and analyzed, all three teachers were given a full explanation of the study and were shown the results.

RESULTS

Tests of the Hypotheses

Pre- and Post-Treatment Comparisons

The data gathered in the pre- and post-treatment periods were used to test the first five hypotheses which predicted greater changes in the experimental group on a number of different dimensions. The analysis of these data indicated that some significant differences did exist between the gain scores of the three groups on the self-concept measure and on the behavior rating scale completed by teachers. These differences favored the experimental group over the two control groups. Trends were evident in the peer status data, but no significant differences were found. The classroom observations of the children's behavior did not indicate any significant differences among the groups but did point to some interesting interrelationships between various classroom behaviors and responses. The results of testing each hypothesis are presented in the following pages.

Hypothesis 1. The Ss in the experimental group will show greater increases in positive classroom behavior than the Ss in the two control groups. These behaviors include task-oriented behaviors, positive affective behaviors, and positive interactions with teacher and peers.

Increases in positive classroom behaviors
and interactions

Experimental Group > First Control Group > Second Control Group

Both this hypothesis and the one that follows were tested with the data gathered by the trained observers who used the modified FLAC scale. Since the children were observed for different amounts of time and during different types of classroom situations, it was necessary to transform the frequencies of the various behaviors into percentages of each child's total observed behaviors. This allowed one to observe, for example, what percentage of a child's total observed behavior was task-oriented or what percentage had elicited rejecting behaviors from his fellow students. These percentages were calculated separately for the pre- and post-treatment data. The change in the percentage score was then calculated for each behavior category. Finally, in order to correct for the differences in the amount of observation time in the two observation periods, these changes were then multiplied by a correction factor. This factor was the amount of observation time in the pre-treatment period over the amount of time in the post-treatment observation period for each individual S.

Table 2 indicates that none of the behavior categories or response categories showed significant differences among the three groups. The Kruskal-Wallis one way analysis of variance by ranks (Siegel, 1956) was used in comparing the three groups on each of these variables. In performing this analysis of variance by ranks with three groups of three subjects each, it was necessary for all of the Ss in one of the groups to receive the highest three scores in order to produce an H value (the statistic used in the Kruskal-

Table 2. Changes in Percentages of Total Observed Behavior for Positive Classroom Behaviors and Interactions¹

Group and Subjects	Task-Oriented Behavior	Verbal Positive Affect	Non-Verbal Positive Affect	Teacher Accepts	Student Accepts
<u>Experimental</u>					
E-1	3.27	-5.45	5.45	4.36	-2.18
E-2	3.38	-5.63	-11.20	0.0	-13.52
E-3	19.00	-1.05	-1.58	-5.52	-1.05
<u>First Control</u>					
1C-1	16.60	-2.80	-.93	.83	-5.09
1C-2	-16.9	-.09	9.79	-5.65	0.0
1C-3	35.90	-8.98	-10.20	-1.02	-6.28
<u>Second Control</u>					
2C-1	8.96	-3.36	-2.76	-1.24	-4.07
2C-2	18.00	1.40	-24.00	-.21	-14.08
2C-3	2.12	.39	-9.18	-1.10	9.92

p > .05 p > .05 p > .05 p > .05

¹Scores corrected for differences in amounts of observation time between the pre- and post-treatment measurement periods.

Wallis test) that was significant at the .95 level of confidence. By visual inspection, one can see that none of these variables contain significant differences among the groups.

Hypothesis 2. The Ss in the experimental group will show greater decreases in negative classroom behavior than the Ss in the first control group or the Ss in the second control group. These behaviors include non-task-oriented behaviors, negative affective behaviors, and negative interactions with teacher and peers.

Decreases in negative classroom behaviors
and interactions

Experimental Group	>	First Control Group	>	Second Control Group
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Table 3 indicates that none of the behavior categories or response categories showed significant differences among the three groups. The scores in this table are the changes in the percentages of total observed behavior multiplied by a correction factor based on the amount of observation time. Again the Kruskal-Wallis one way analysis of variance by ranks was used in testing the hypothesis. Although there were no significant differences among the groups, there was a consistent decrease in the percentages for the three experimental subjects in the response category "Student Controls." It is interesting to note the general lack of controlling responses from other students toward the Ss in the two control groups.

Another trend is seen in the category "Teacher Controls" where two of the three experimental Ss showed decreases while only one S

Table 3. Changes in Percentages of Total Observed Behavior for Negative Classroom Behaviors and Interactions¹

Group and Subjects	Non-Task-Oriented Behaviors	Verbal Negative Affect	Non-Verbal Negative Affect	Teacher Rejects	Teacher Controls	Student Rejects	Student Controls
<u>Experimental</u>							
E-1	3.49	-2.18	-3.27	0.0	-1.41	-0.76	-0.65
E-2	12.39	-22.08	2.25	.90	1.12	1.46	-7.88
E-3	-16.90	.52	.52	0.0	-0.73	-0.73	-0.73
<u>First Control</u>							
1C-1	-13.50	0.0	0.0	0.0	.73	0.0	0.0
1C-2	5.60	1.69	1.69	1.69	.84	0.0	0.0
1C-3	-2.56	-4.23	-7.69	-0.64	-1.28	-1.70	0.0
<u>Second Control</u>							
2C-1	-1.95	-0.81	0.0	0.0	0.0	0.0	0.0
2C-2	3.10	4.60	-2.90	-0.21	.64	.85	-9.6
2C-3	6.96	0.0	-0.22	1.46	-3.94	0.0	0.0

p > .05 p > .05

¹Scores corrected for differences in amounts of observation time between the pre- and post-treatment measurement periods.

in each of the control groups decreased in this category. Other trends of this same nature were in the behavior categories "Verbal Negative Affect" where the experimental Ss showed greater decreases with one S having a decrease of 22% between the pre- and post-treatment observations. In "Non-Verbal Negative Affect" the experimental Ss had two small increases while the second control group had two decreases of approximately the same magnitude. Yet, these trends did not allow acceptance of the experimental hypothesis that there are differences among the three groups along the dimensions of decreased negative classroom behavior as observed by the trained observers.

Hypothesis 3. Following the treatment period, the Ss in the experimental group will be perceived by their teacher as exhibiting more adaptive behaviors and fewer maladaptive behaviors than the Ss in the first control group or the Ss in the second control group.

Changes in adaptive and maladaptive classroom behaviors
as perceived by the classroom teacher

Experimental Group	>	First Control Group	>	Second Control Group
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The authors of the Devereux Elementary School Behavior Rating Scale (Spivack and Swift, 1967) designed the instrument so that it could be used to assess the significant changes in an individual child's behavior. By achieving a small standard error of measurement, they were able to state that if a child's gain score between two ratings by the teacher exceeds the standard deviation of the normative, then that change can be considered significant at the .95 level of confi-

dence. Since the sample size in the present study was small, this method of evaluating the significance of the change scores was employed.

Table 4 shows the number of significant positive and negative changes recorded for the Ss in each group. The three groups were about the same in regard to significant changes toward more adaptive behavior. The experimental and second control groups had a total of four each, and the first control group had three. However, the number of significant changes toward more maladaptive behavior indicated a significant difference among the three groups. The second control group had five significant changes toward more maladaptive behavior, the first control group had two such changes, and the experimental group had none. The Mann-Whitney U test (Siegel, 1956) was used to test the significance of these differences. With these data the test indicated that the experimental group had significantly fewer changes toward maladaptive behavior than either control group and that the first control group had significantly fewer changes than the second control group. The significance level for each of these tests was .05. These differences were directly in line with the prediction of the hypothesis.

In order to utilize more of the data from the Devereux scale, a Chi square test was performed on the direction of changes of the gain scores for the three groups. In determining the cell values for this test, each individual's change score on each of the eleven factors was categorized as indicating a change to either more

Table 4. Gain Scores on the Eleven Factors of the Devereux Elementary School Behavior Rating Scale

Group and Subject	Classroom Disturbance	Impatience	Disrespect	Defiance	External Blame	Achievement Anxiety	External Reliance	Comprehension	Inattentive-Withdrawn	Irrelevant-Responsiveness	Creative Initiative	Need Closeness to Teacher	Number of Changes Toward Adaptive Behavior	Number of Changes Toward Adaptive Behavior	No Change in Factor Score
E-1	-5*	-4	-1	-4	-3	-5	1	-8*	-2	4*	0	10	0	1	
E-2	0	0	-1	-4	-4	1	1	0	-1	3	-3	6	2	3	
E-3	-1	-1	-1	-1	1	5	0	1	-1	-1	0	5	4	2	
1C-1	0	3	-1	-1	-2	0	-2	1	-4*	-6*	-2	4	5	2	
1C-2	-1	-2	-5*	-2	-2	-2	-1	-3	1	2	-6*	8	3	0	
1C-3	0	-1	-6*	-4	-1	2	-1	-4	0	1	-2	6	3	2	
2C-1	0	4	1	4	4*	5	-1	4	3*	-1	-1	0	10	1	
2C-2	3	-5*	4*	5*	2*	-1	4*	-4	-1	0	7*	6	4	1	
2C-3	0	3	-1	-1	-8*	-3	1	6*	1	2	-3	6	4	1	
Standard Deviation of Normative Sample	4.9	4.7	2.9	4.5	3.9	7.0	3.9	5.5	3.0	3.9	4.9				

* Change between the pre- and post-treatment evaluation is significant ($p < .05$).

adaptive or more maladaptive classroom adjustment. Thus, negative gain scores on factors which are indicative of maladjustment were considered as a change toward adjustment. According to the authors of the Devereux scale, factors seven, ten, and eleven measure adaptive classroom behaviors; therefore, a positive gain score on these three factors was a sign of improved adjustment.

Table 5 contains the results of this tally and of the Chi square test which was performed. The results of this test were significant ($p < .02$). An examination of the table reveals that the differences among the three groups are in line with the hypothesis. The order of the positive changes favors the experimental group over both control groups while the order of the negative changes shows more maladaptive changes occurring in the two control groups than in the experimental group. Figure 1 provides a graphic picture of the differences among the three groups on these dimensions.

Table 5. Distribution of Adaptive and Maladaptive Changes on the Eleven Factors of the Devereux Scale

	Group E	Group 1C	Group 2C	Row Sums
Number of Changes Toward Adaptive Behavior	21	18	12	51
Number of Changes Toward Maladaptive Behavior	6	11	18	35
Column Sums	27	29	30	86
Chi square 8.4872 $p < .02$ df = 2				

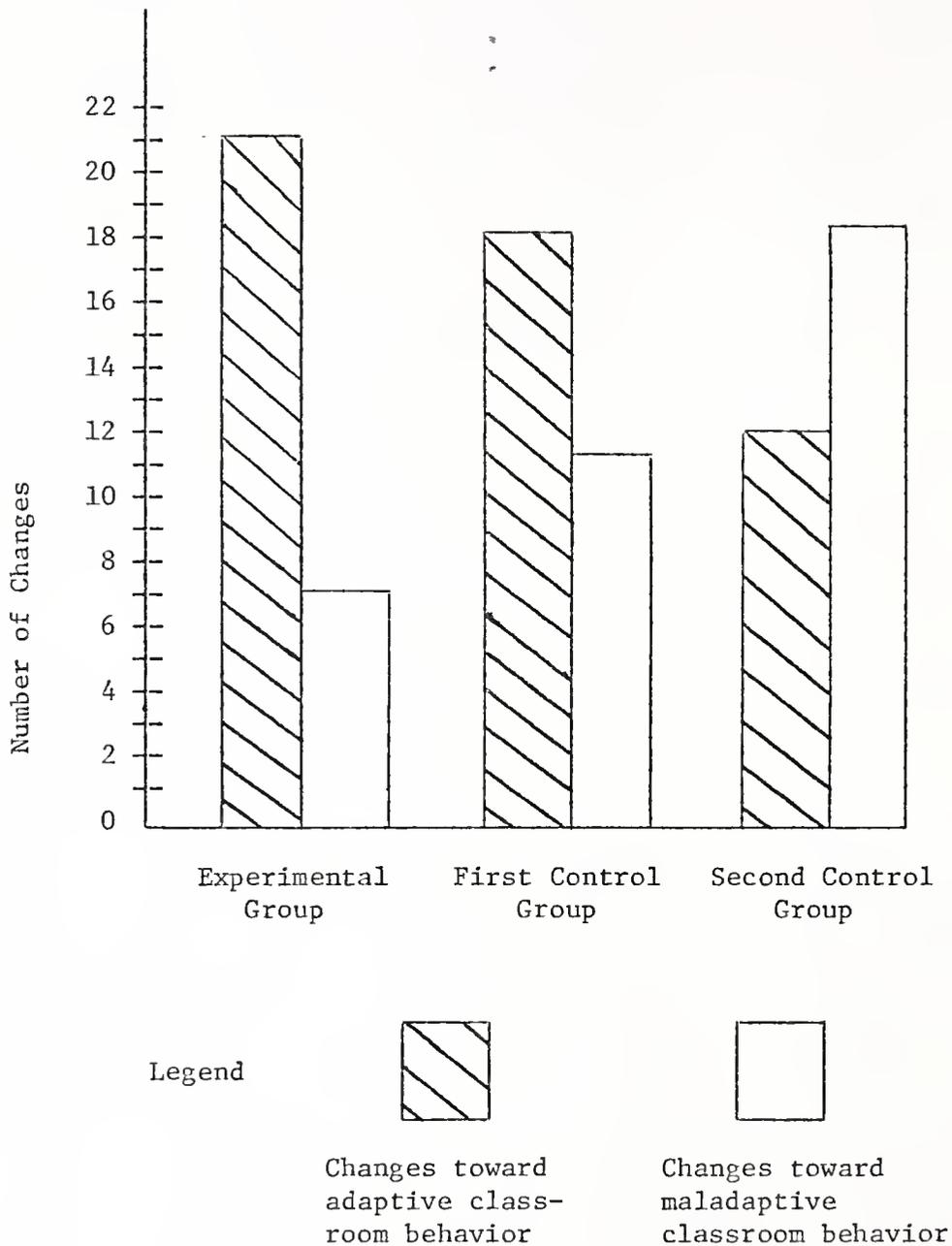


Figure 1. Direction of change in teachers' evaluations of children's behavior as measured by the Devereux Elementary School Behavior Rating Scale.

As a result of these tests, the hypothesis can be partially accepted. The prediction that there would be more positive changes in classroom behavior was not substantiated when only the significant changes of individual factor scores on the Devereux scale were evaluated. When the significant negative changes were considered, the hypothesis was supported with the experimental group having fewer changes toward more maladaptive behavior than the first control group and the second control group. The hypothesis was also supported when the criterion was the direction of change on the eleven factors of the instrument.

Hypothesis 4. The Ss in the experimental group will have more positive changes in their self-concept scale scores than the Ss in the first control group or the Ss in the second control group.

Changes in self-concept scores

Experimental Group	>	First Control Group	>	Second Control Group
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Table 6 contains the gain scores for each S on both the Piers-Harris Children's Self Concept Scale and the sociometric measure. The Kruskal-Wallis one way analysis of variance by ranks indicated that there were significant differences among these groups ($p = .05$) for the self-concept scores. In addition, the Mann-Whitney U test was performed on the scores of the groups, taking two at a time. The results of these tests indicated that the experimental group's gain scores were significantly greater ($p = .05$) than those of either control group. However, the differences between the first

Table 6. Gain Scores Between Pre- and Post-Treatment Testings for the Piers-Harris Children's Self Concept Scale and the Sociometric Measure of Peer Status

Group and Subject	Piers-Harris Self Concept Scale	Sociometric Measure of Peer Status
<u>Experimental</u>		
E-1	16	3
E-2	7	15
E-3	7	0
<u>First Control</u>		
1C-1	-13	-8
1C-2	-5	-18
1C-3	-7	4
<u>Second Control</u>		
2C-1	-3	-2
2C-2	-6	-2
2C-3	-6	-3
Results of the Analysis of Variance		
	Significant p = .05 E > 1C = 2C	Not Significant p > .05 E = 1C = 2C

and second control groups were not significant ($p > .05$). On the basis of these tests the fourth hypothesis can be accepted in part. Namely, the experimental Ss, as predicted, did evidence more positive changes in their self-concept scores than did either group of control Ss. Figure 2 provides a visual demonstration of these differences.

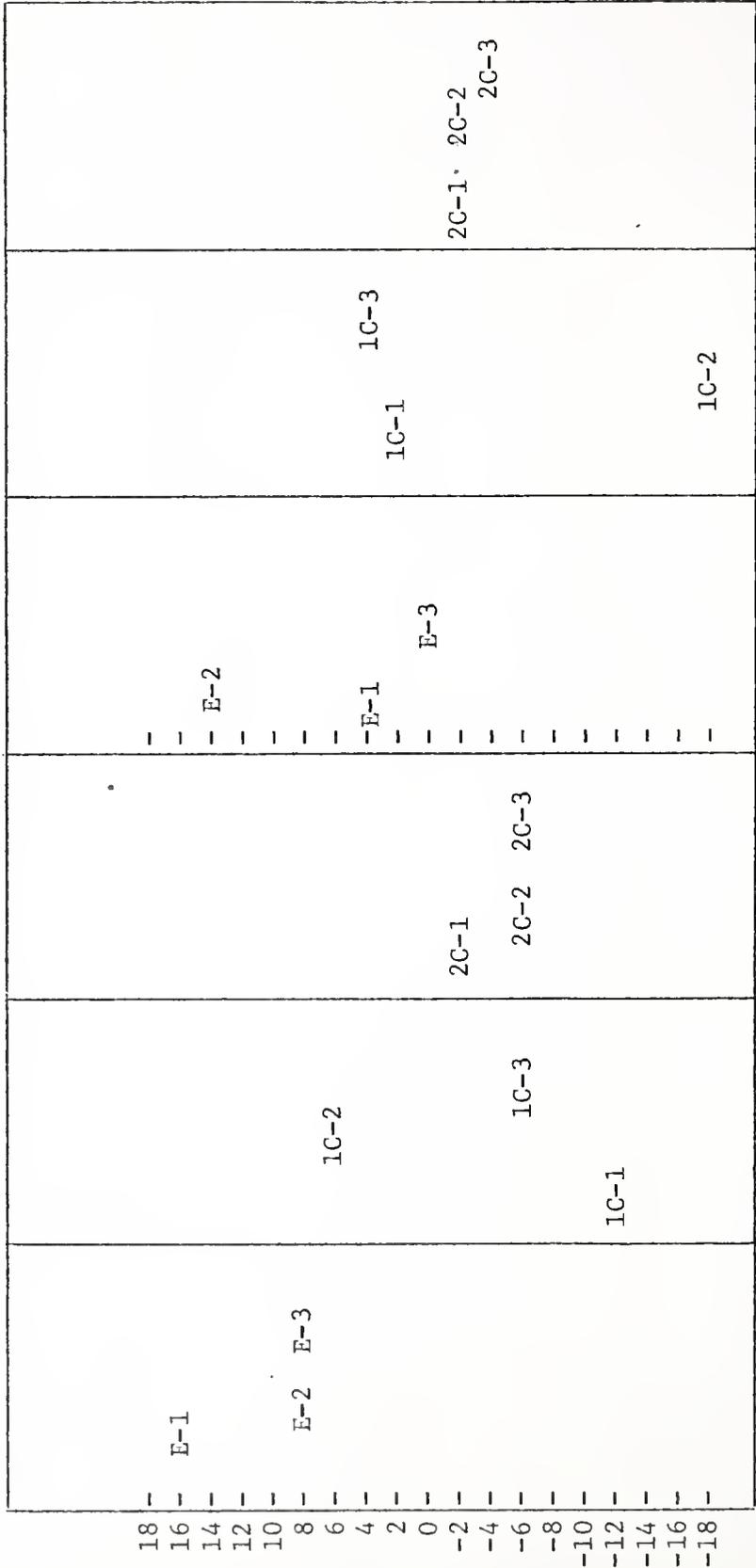
Hypothesis 5. The Ss in the experimental group will increase their measured social status among their classroom peers more than the Ss in the first control group or the Ss in the second control group.

Increases in peer status

Experimental Group > First Control Group > Second Control Group

Table 6 (see page 34) contains the gain scores for each of the Ss and indicates that there were no significant differences among the three groups on this dimension. The Kruskal-Wallis one way analysis of variance by ranks was used in testing the hypothesis. Figure 2 shows the distribution of the gain scores for the Ss on the peer status measure. It is interesting to note that the children in the second control group had very similar scores on both the peer status measure and on the self-concept instrument. Their negative scores reflected decreases in self-concept and peer status. On the peer status measure, one of the children in the experimental group had the largest positive change while a child from the first control group had the largest negative change. While

Piers-Harris Children's Self Concept Scale Sociometric Measure of Peer Status



Experimental Group First Control Group Second Control Group Experimental Group First Control Group Second Control Group

Figure 2. Gain scores between the pre- and post-treatment testings for the self-concept and peer status measures.

the hypothesis cannot be accepted on the basis of the data, the trends are in the predicted direction.

Process Variable Comparisons

Four hypotheses of the study were concerned with the process variables that may have differentiated between the two groups that received treatment. The purpose of these hypotheses was to test Gibb's theory of the group processes in a human relations training group involving children. The hypotheses centered on four modal concerns which Gibb proposed as focal issues in these groups. The concerns are acceptance, data-flow, decision-making, and control. The predictions were that, over time, the experimental group would have more acceptance of Ss, more expression of feelings, more efficient and democratic group decisions, and less evidence of controlling behavior.

Tests of these hypotheses failed to support the notion that consistent differences would occur over time in each of these process variables. Some differences were found between the experimental and first control groups on variables relevant to each hypothesis, but these differences were inconsistent and not always in the predicted direction.

Before reporting the results of testing each individual hypothesis, it is appropriate to outline the manner in which the data were treated for these tests. The raw data were in the form of frequencies of behavior as recorded by the trained observers using the modified Florida Affective Categories Scale. In addition to the frequencies

of various behaviors, a careful record was kept of the amount of time each individual was observed. Thus, it was possible to compute each S's rates of behavior in each of the behavior categories and the rates of the responses from the other members of the group. Since the treatment sessions lasted thirty minutes, the rates were computed on the basis of this amount of time.

In order to focus on the over-time aspect of the hypotheses, the twenty-four treatment sessions were divided into four units of six sessions each. These units were equivalent to two weeks of the treatment period. The mean rates for each S for each of these four units of time were computed. Then the means for the first six sessions were subtracted from the means of the second six in order to determine the change in rates that occurred between those two periods of time. These difference scores were calculated for each successive period of time. In addition, the difference scores between the first six sessions and the final six were calculated in order to observe the differences between the rates at the beginning and at the end of the treatment period.

The data in Tables 7, 8, and 10 are the difference scores between these various units of time. The Mann-Whitney U test was employed to test the differences between these difference scores for the two groups. With six subjects it was necessary for all three Ss in one group to have scores larger than those of the three Ss in the other group in order to achieve a significant difference at $p = .05$.

Hypothesis 6. The acceptance of the Ss in the experimental group by their group peers will be greater than the acceptance of the Ss in the first control group by their group peers as the total time in the groups increases.

Acceptance in the group

Experimental Group	>	First Control Group
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Table 7 contains the differences between the mean rates of acceptance and rejection by the group members and the leader for the various units of the treatment period. The table also contains the results of the Mann-Whitney U tests which evaluated the significance of these differences. Although the hypothesis focused on the acceptance of the Ss by their peers, it seemed appropriate to look at the acceptance of the Ss by the group leader as well. In addition, increased acceptance should be accompanied by a decrease in the rates of rejection responses by group members and the group leader. Thus, the change scores for the rejection responses are included in Table 7.

The table indicates that there were three significant differences among the difference scores of the two groups. Two of these occurred in the response category "Leader Accepts." These differences, interestingly enough, favored the control group. The differences occurred between the first and second six sessions and between the third and fourth six sessions. The only other significant difference between these two groups on these process variables occurred between

Table 7. Differences Between Mean Rates of Acceptance and Rejection by Students and Leader During Four Units of the Treatment Period

Group and Subjects	Student Accepts	Student Rejects	Leader Accepts	Leader Rejects
(Second six sessions - first six sessions)				
<u>Experimental</u>				
E-1	-6.48	-.63	-1.74	1.87
E-2	-.44	-.71	-1.20	2.11
E-3	-.48	2.42	-7.79	-1.43
<u>First Control</u>				
1C-1	2.14	3.00	5.14	0.0
1C-2	-1.46	-1.82	-.71	.71
1C-3	-.39	-4.64	.05	4.85
	p >.05	p >.05	p =.05	p >.05
(Third six sessions - second six sessions)				
<u>Experimental</u>				
E-1	8.62	1.57	.33	-.87
E-2	5.52	-.95	-1.31	-1.11
E-3	-.01	-1.67	2.41	0.0
<u>First Control</u>				
1C-1	-1.28	3.00	2.23	0.0
1C-2	-4.54	6.53	-.10	-.71
1C-3	-.75	-1.70	-5.16	-4.85
	p =.05	p >.05	p >.05	p >.05

Table 7. (continued)

Group and Subjects	Student Accepts	Student Rejects	Leader Accepts	Leader Rejects
(Fourth six sessions - third six sessions)				
<u>Experimental</u>				
E-1	-5.91	-3.11	-3.14	-1.00
E-2	-3.71	3.77	-1.43	-.14
E-3	2.01	1.67	-5.08	0.0
<u>First Control</u>				
1C-1	7.11	-3.00	5.50	-7.37
1C-2	4.27	4.27	3.49	0.0
1C-3	.04	-2.15	1.03	0.0
	p >.05	p >.05	p =.05	p >.05

(Fourth six sessions - first six sessions)				
<u>Experimental</u>				
E-1	-3.76	-2.17	-4.55	0.0
E-2	1.37	2.11	-3.94	.86
E-3	1.52	2.42	-10.46	-1.43
<u>First Control</u>				
1C-1	7.95	0.0	5.50	0.0
1C-2	-1.73	.44	2.68	0.0
1C-3	-1.09	-2.49	-4.08	0.0
	p >.05	p >.05	p >.05	p >.05

the second and third six sessions along the dimension "Student Accepts." This difference indicated there were more accepting responses toward the Ss in the experimental group by the other children in that group. This finding was in line with the prediction of the hypothesis. The rest of the data, however, did not support the notion that the behavior disordered children in the human relations training group would be more accepted than similar children in the activities group.

Hypothesis 7. The Ss in the experimental group will show more affective behavior in their group than the Ss in the control group as the total time in the group increases.

Rates of affective behavior

Experimental Group > First Control Group

This hypothesis was based on Gibb's idea that experience in a human relations group increases data-flow between individuals. This means that the participants are better able to express and to communicate their feelings.

The change scores between the various two-week units are contained in Table 8 for the behavior categories of verbal positive affect, non-verbal positive affect, verbal negative affect, and non-verbal negative affect. An inspection of this table indicates that there were two significant differences between the two groups along these dimensions as tested by the Mann-Whitney U test. There was a significant difference ($p = .05$) in the change scores of non-

Table 8. Differences Between Mean Rates of Affective Behaviors During Four Units of the Treatment Period

Group and Subjects	Verbal Positive	Non-Verbal Positive	Verbal Negative	Non-Verbal Negative
(Second six sessions - first six sessions)				
<u>Experimental</u>				
E-1	1.19	3.30	-1.30	-.25
E-2	4.78	-1.44	8.02	-13.85
E-3	2.47	1.46	-8.00	-10.81
<u>First Control</u>				
1C-1	0.0	19.29	0.0	0.0
1C-2	2.45	-2.24	2.03	.66
1C-3	-.40	1.41	10.28	6.04
	p >.05	p >.05	p >.05	p =.05
(Third six sessions - second six sessions)				
<u>Experimental</u>				
E-1	-.45	3.82	3.23	.22
E-2	-1.49	4.32	-14.18	-.98
E-3	-4.99	1.75	-5.25	-2.68
<u>First Control</u>				
1C-1	0.0	-5.37	1.09	0.0
1C-2	-3.02	3.39	6.18	4.19
1C-3	-3.16	2.14	-20.09	-10.74
	p >.05	p >.05	p >.05	p >.05

Table 8. (continued)

Group and Subjects	Verbal Positive	Non-Verbal Positive	Verbal Negative	Non-Verbal Negative
(Fourth six sessions - third six sessions)				
<u>Experimental</u>				
E-1	-3.52	-1.27	-7.06	-4.31
E-2	1.76	2.29	12.89	1.07
E-3	.85	0.0	.46	-2.36
<u>First Control</u>				
1C-1	3.77	1.69	0.0	-1.09
1C-2	.69	-2.68	.39	-1.25
1C-3	4.00	.60	23.24	7.59
	p >.05	p >.05	p >.05	p >.05
(Fourth six sessions - first six sessions)				
<u>Experimental</u>				
E-1	-2.78	-5.85	-5.13	-4.34
E-2	5.05	5.17	6.17	-13.76
E-3	-1.67	3.21	-12.78	-15.85
<u>First Control</u>				
1C-1	3.77	15.61	0.0	0.0
1C-2	.12	-1.53	8.60	2.28
1C-3	.45	4.15	13.43	2.89
	p >.05	p >.05	p >.05	p =.05

verbal negative affect between the first and second units and between the first and fourth units. Both differences show sizeable decreases in this behavior for the experimental subjects and mild increases for the control group. These differences were not in the predicted direction since the hypothesis indicated that there would be an increase in the affective behaviors of the experimental group.

This unexpected finding led to an inspection of the change scores between the first and last six sessions in all of the affective categories. The first control group seemed to have more increases in affective behaviors, and the experimental group appeared to have more decreases. A tally of the number of increases and decreases in rates of affective behaviors for both groups was made, and a Chi square test was conducted. The results of the test were significant ($p < .05$). Table 9 contains the contingency table and the results of the Chi square test.

Table 9. Frequency of Increased and Decreased Mean Rates of Affective Behavior Between the First and Last Units of the Treatment Period

	Experimental Group	First Control Group
Number of Increases in Affect	4	9
Number of Decreases in Affect	8	3
Chi square = 4.142 ($p < .05$)		

As a result of these tests, it was not possible to accept the hypothesis. In fact, the data led to the acceptance of an opposite hypothesis; namely, that behavior disordered children who participate in human relations training will decrease their rates of affective behavior as compared with similar children in an activities group as the total time in the group increases. Finding this opposite effect may indicate that for behavior disordered children who already show a great deal of affective behavior, the achievement of decreases in the rates of these behaviors may be an adaptive change. This idea will be discussed more fully in the next section of this report.

Hypothesis 8. The Ss in the experimental group will participate more in the decisions of their group than those in the activities group as the total time in the group increases.

Participation in group decisions

Experimental Group	>	First Control Group
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In order to test this hypothesis, the leader of the groups offered the children the opportunity to choose the activity they would engage in on two different days. The first day came near the middle of the treatment period (session number eleven) while the second choice was presented to the children during session number twenty. Both of these decision-making exercises were observed by the same trained observer who wrote a description of the manner in which the decisions were reached in each group.

This descriptive manner of measuring the differences obviously did not yield any quantitative data which could be tested statistically. However, during the first exercise in session eleven the observer did note that the experimental group was much more efficient in making their choice. Her description of how each group approached the task follows:

Experimental Group. This group was given five minutes to agree upon one of three tasks they would like to do the next day. They immediately started discussing the three choices and stating preferences. Subject E-2 was pretty much running things in a good way. Two in the group (one of them being subject E-1) withdrew and occupied themselves with other concerns, but the rest of the group insisted that they take part in the decision and vote with the rest. They voted several times as different members kept changing their minds. Everyone in the group agreeably abided by the decision that was reached even though they did not all vote for that task.

First Control Group. This group was also given five minutes to choose one of three tasks for the following day. They did not seem to know how to go about making the decision. There was a lot of arguing and whining. They finally voted, and those who lost did not accept the decision well. Subjects 1C-2 and 1C-3 were the worst in the group as far as cooperating.

The second time this exercise was used was near the end of the treatment period during session twenty. The differences between the two groups were not as striking this time although there seemed to be a greater degree of cooperation in the experimental group. The observer's descriptions follow:

Experimental Group. The decision-making was not as successful as last time. One factor may have been that there was no really strong feeling

about wanting a specific decision. Half of the group went away from the table and did not take part in the process. Of the three subjects, the two males (subjects E-2 and E-3) remained at the table and cooperated in the process while the female subject left the table. The group that remained voted on the choices, and all accepted the majority decision with no voiced displeasure.

First Control Group. This group voted and reached a quick decision. They were choosing between three outdoor games. Everyone went along with the decision except subject 1C-3. He whined and cried the entire time because his choice was not the winning one.

These observations led to a partial acceptance of the hypothesis. There did appear to be differences in the manner in which the decisions were made and accepted in the two groups. These differences favored the experimental group over the first control group as predicted. However, the efficiency of the decision-making process did not appear to increase as the total amount of time in the group increased. These two samples of group behavior pointed to a need for more systematic measurements of this variable and for repeated measures over time.

Hypothesis 9. The Ss in the experimental group will be the object of fewer controlling behaviors than the Ss in the activities group as the total time in the group increases.

Rates of controlling behaviors from others

Experimental Group	<	First Control Group
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Table 10 contains the gain scores for the response categories "Student Controls" and "Leader Controls." As in Tables 7 and 8,

these gain scores are the differences between the mean rates of each individual for four six-session units of time. The Mann-Whitney U test was used to test the significance of the differences between the two groups. An inspection of the table indicates that there were two significant differences, and both occurred in the response category "Leader Controls." Between the second and third units the rates of the leader controlling behavior went up for all three Ss in the experimental group, and the rates for two of the three Ss in the control group went down. The opposite pattern existed between the third and fourth units with the experimental subjects showing decreases and the control subjects increases.

In the response category "Student Controls" both groups tended to follow the same pattern. Increases in rates between the first and second time units were followed by decreases between the second and third units. Then, both groups showed increased rates of student control for two of the three Ss between the final two time units. In looking at these trends, one will notice that subject 1C-1 in the control group was never the recipient of any controlling behavior from the group leader or the other children. The lack of any variance in the rates of these responses to her decreased the probability of finding significant differences between the two groups over time.

These tests of the hypothesis provided only partial support for the notion that behavior disordered children in a human relations training group will be the object of fewer controlling responses

Table 10. Differences Between Mean Rates of Controlling Behaviors by Students and Leader During Four Units of the Treatment Period

Group and Subjects	Leader Controls	Student Controls
(Second six sessions - first six sessions)		
<u>Experimental</u>		
E-1	.91	-.03
E-2	4.79	2.51
E-3	-2.00	.71
<u>First Control</u>		
1C-1	0.0	0.0
1C-2	3.04	1.01
1C-3	1.43	3.21
	p >.05	p >.05
(Third six sessions - second six sessions)		
<u>Experimental</u>		
E-1	1.67	-1.19
E-2	1.65	-1.51
E-3	.71	-.71
<u>First Control</u>		
1C-1	0.0	0.0
1C-2	-3.04	-1.54
1C-3	-1.83	-4.54
	p =.05	p >.05

Table 10. (continued)

Group and Subjects	Leader Controls	Student Controls
(Fourth six sessions - third six sessions)		
<u>Experimental</u>		
E-1	-.63	-1.33
E-2	-1.89	1.67
E-3	-.71	.86
<u>First Control</u>		
1C-1	0.0	0.0
1C-2	.67	.08
1C-3	7.15	3.54
*	p = .05	p > .05
(Fourth six sessions - first six sessions)		
<u>Experimental</u>		
E-1	1.94	-1.37
E-2	4.56	2.57
E-3	-2.00	.86
<u>First Control</u>		
1C-1	0.0	0.0
1C-2	6.67	-.45
1C-3	6.75	2.22
	p > .05	p > .05

than similar children in an activities group as the total amount of time in the groups increases. The support for the hypothesis came from the significant differences between the groups in the response category "Leader Controls." The experimental subjects moved from a high rate of leader control to a lower rate while the control subjects moved from relatively low rates to higher rates. However, when the rates of student controlling behaviors were used as the criterion measure, there did not appear to be any differences between the two groups.

Additional analysis

The primary approach of this study was a deductive analysis of hypotheses which were derived from Gibb's theory of group process and personality change. Another approach that could be utilized is that of inductive reasoning by using the interrelationships which exist in the data. Correlational analysis displays the interrelationships between the various measures used in the pre- and post-treatment evaluation, between the various process variables, and between the process variables and the pre- and post-treatment measures. Through this analysis the associations that existed between various classroom behaviors and the responses of the teacher and peers were observable. Finally the associations that existed between various types of behavior in the treatment groups and in the classroom were shown.

The first part of this analysis focused on the pre- and post-treatment gain scores on the various instruments. The scores of

the Ss in all three groups were used in this analysis. Spearman rank order correlation coefficients (Hotelling and Pabst, 1936) were computed. The thirty variables in the intercorrelation matrix included the self-concept measure, the sociometric instrument, eleven factors from the Devereux scale, two measures of direction of change on the Devereux scale, and fifteen variables from the modified FLAC scale. The two categories for "I feel" statements were not included in the matrix because of the extremely low frequency of this behavior in the subjects. Table 11 contains all of the intercorrelations which equaled or exceeded the critical values of 0.600 ($p = .05$) and 0.783 ($p = .05$) (Siegel, 1956). An intercorrelation matrix containing thirty variables has 450 different correlations. Using the .05 level of significance, 22.5 significant correlations were expected by chance. The data from this study produced 48 significant correlations at that level. Using the .01 level of significance, 4.5 significant correlations were expected by chance while the matrix contained 13 significant correlations at that level.

An inspection of Table 11 reveals that there were relationships between various of the factors of the Devereux scale for this sample. Factors which the authors of the scale designate as indicators of maladaptive behavior correlated positively with one another and negatively with factors which represent adaptive classroom behavior. The sum of the positive changes on this scale also correlated negatively with maladaptive behavior and positively with adaptive behavior.

Table 11. Significant Intercorrelations Between the Difference Scores on the
Pre- and Post-Treatment Measures

The interrelationships between the factors from the Devereux and the behavior categories of the modified FLAC scale provided some interesting results. For example, the factor Disrespect-Defiance was positively correlated with "Verbal Positive Affect" and "Verbal Negative Affect." In addition these two behavior categories were correlated with each other at .91 which was significant at the .99 level of confidence. These results indicate that the children who were observed as showing a great deal of verbal affect were perceived by their teachers as being disrespectful and defiant.

It was also interesting, and somewhat surprising, to observe the correlations between the response categories on the FLAC scale and the other variables. For instance, "Teacher Accepts" was positively associated with increases in peer status while "Student Accepts" was negatively correlated with this same variable. It appears from these data that the rates of teacher acceptance were a better predictor of peer status increases than rates of student acceptance.

The response category "Teacher Rejects" was negatively correlated with the Devereux factor "External Reliance" and with "Task Relevant Behavior." Thus, students who relied on the teacher and others for help in the classroom or who had high rates of task relevant behavior had low rates of being rejected by the teacher. This idea is substantiated by the positive correlation between teachers' rejecting responses and non-task-oriented behaviors.

Finally, the positive correlation between teachers' rejecting responses and the Devereux factor "Creative Initiative" indicates that not all adaptive classroom behaviors are accompanied by reinforcing behaviors from the teacher.

Table 11 also contains some interesting correlations between behavior and response categories of the FLAC scale. For example, verbal positive affect was positively associated with student acceptance. Non-verbal positive affective behaviors were negatively correlated with the category "No Response." It therefore appears that children who showed positive affect in the classroom were not likely to be ignored by others in their environment. As far as negative affect was concerned, the verbal and non-verbal affective behaviors were not associated with many other variables. Verbal negative affect was only significantly correlated with the neutral, teacher response and verbal positive affect. The absence of a definite pattern of response to negative affect raises some interesting questions about the way feelings are handled in the classroom.

In addition to this correlational analysis, a 40 x 10 inter-correlation matrix was generated to display the types of behavior in the treatment groups which were associated with positive and negative changes in personal, social, and classroom adjustment. This matrix also provided the intercorrelations between the various group process variables. Table 12 contains the correlations which were significant at the .05 and .01 levels of significance. With an N of six, the critical values for the Spearman rank correlation

coefficient were .83 and .94 for these respective levels of significance (Siegel, 1956). Using the .05 level, the expectation was that ten significant correlations would occur by chance. The matrix contained sixteen at that level. Using the .01 level, four significant correlations were calculated while only two were expected by chance.

These results indicated that increases in verbal and non-verbal positive affect during the treatment sessions were associated with increases in scores on the "Classroom Disturbance" and "Impatience" factors of the Devereux scale. It is important to remember at this point that the experimental group decreased in the expression of affect during the treatment period while the control group increased. Added to these complex relationships was the finding that the "Impatience" factor was positively correlated with the response category "Student Accepts" from the group process variables. Expressions of verbal negative affect in the treatment groups were positively correlated with observed student control in the classroom. These relationships seemed to indicate that the children who increased their rates of positive affective behaviors in the treatment groups were perceived by their teacher as increasing in maladaptive classroom behavior. In addition, the children who increased their expression of verbal negative affect in the groups were the object of more student controlling behavior in the classroom.

Student acceptance of the Ss in the treatment groups was correlated with several of the Devereux factors. Significant positive

Table 12. Significant Intercorrelations Between the Difference Scores of Pre- and Post-Treatment Measures and Group Process Data in the Experimental and First Control Groups

FLAC scale	<u>Pre- and Post-Treatment Data</u>							<u>Group Process Variables</u>						
	Devereux scale	Classroom Disturbance	Impatience	Inattentive-Withdrawn	Creative Initiative	Number of changes toward adaptive behav.	FIAC scale	Non-Verbal Positive	Non-Verbal Negative	Student Controls	FIAC scale	Verbal Positive	Non-Verbal Positive	Verbal Negative
Verbal Positive	.93	.84												
Non-Verbal Pos.	.93	.99												
Verbal Negative														
Non-Verbal Neg.														.83
Teacher Accepts														
Teacher Controls														.94
Student Accepts		.90	.93	-.83	-.96									.83
Student Rejects														
Student Controls														

correlations were found between student acceptance and the factors of "Impatience" and "Inattentive-Withdrawn." Significant negative correlations were found between student acceptance and both "Creative Initiative" and the number of changes toward adaptive classroom behavior as perceived by the teachers. These four correlations are consistent in that increased rates of student acceptance in the treatment groups were inversely related to changes toward adaptive classroom behavior as perceived by the teachers. These relationships are not consistent with the theoretical notion that increased acceptance by peers in the small group setting results in more adaptive classroom behavior.

Three relationships between the responses to the Ss in the treatment groups and observed classroom behavior are of interest. The rejection of the Ss by the group peers was positively correlated with expressions of non-verbal negative affect in the classroom. Student control of Ss' behavior in the groups was negatively correlated with expressions of non-verbal positive affect in the classroom. Finally, leader acceptance of the Ss in the groups was positively correlated with student control of the Ss in the classroom. These correlations point to the possibility that a child's behavior in the classroom may influence his relationships with others in a small group setting.

Table 12 also contains four significant correlations between several group process variables. Verbal positive affect and verbal negative affect were correlated at .88 ($p < .05$). This relationship

indicated that children who expressed positive affect verbally also expressed negative feelings in the same manner. The positive correlation between verbal and non-verbal affect indicated that increases or decreases in one form of negative affect were paralleled by similar changes in the other form. Leader control was positively correlated with verbal negative affect while student acceptance was positively correlated with non-verbal positive affect. The interrelationships between these variables indicated that children may have different styles of communicating their feelings and that these styles may elicit different types of responses from adults and peers.

DISCUSSION

The results of this study provided some evidence that there are benefits for behavior disordered children in the small group experience which focuses on the affective domain. In this study these benefits appeared in the form of more positive self-concepts and in improved classroom adjustment as perceived by the classroom teacher. On the other hand, the study only partially supported the major tenets of Gibb's theory of group process and personality change. The study pointed to the need to revise certain portions of the theory to make it more applicable to children with behavior problems.

The results of the study were congruent with the research findings of Ojemann (1967), Bruce (1958), and Muss (1960). These studies all pointed to the mental health benefits for children in elementary school programs that center on feelings. Jahoda's (1958) categories of positive mental health included attitudes toward self, and one of the significant findings of the present study was the positive changes in the self-concepts of the experimental Ss. The differences among the three groups on the measure of classroom adjustment as perceived by the teacher have important implications for the types of interventions in schools (Lambert, 1965). Lambert suggested that children with behavior problems at times need to be removed from the classroom for participation in a small group. The current study seemed to indicate that the content of these experiences may be an important variable in achieving

appropriate changes in classroom behavior. The trends in the peer status data gave mild support to the notion that experiential learnings about feelings and behavior result in an increase in social effectiveness as proposed by Bessell and Palomares (1967).

While the differences among the three groups of Ss on the outcome variables were generally in line with theory and other research, the group process data provided only weak support of Gibb's theory of group process. A portion of the theory was contradicted by the results, indicating that revisions may be necessary to make the theory relevant to this type child. The hypothesis which predicted greater acceptance of the Ss in the experimental group was partially supported. Student acceptance of the Ss increased in the experimental group early in the treatment period. However, leader acceptance was greater in the first control group when the differences between the first and last six sessions were tested. The hypothesis concerning decision-making was mildly supported with the experimental group using more democratic procedures and reaching decisions which were acceptable to all members of the group. However, these differences did not increase over time as predicted. The prediction that behavior control would be less focal in the experimental group was supported near the end of the treatment period. However, leader control in the first control group was significantly less early in the treatment period. The most surprising finding in the study concerned Gibb's idea that the expression of affect increases over time in a human relations

group. The results of the study indicated that the Ss in the activities group (Group 1C) showed more increases and that the experimental Ss showed more decreases in the expression of affect during the treatment period. This finding was somewhat confusing, especially in the light of the differences which were found among the three groups on two of the four pre- and post-treatment measures. It was anticipated that these differences would be based, in part, on an increase in the expressions of affect in the experimental group. The results of the analysis of the process data thus presented a dilemma in interpreting the outcome.

One possible explanation of these results centers on the differences between behavior disordered children and the adults that Gibb's theory was describing. Human relations laboratory training has often served the purpose of allowing over-socialized adults to communicate feelings and attitudes in an atmosphere of trust and understanding (Gibb, 1964). Behavior disordered children, on the other hand, frequently exhibit hyperactive behavior and express a great deal of emotion at inappropriate times (Bower, 1960). The human relations training group may have served to provide these children with a small group experience where their behavior was accepted by their peers, where feelings were respected and understood, and where attention was focused on the effects of affective behavior on others. It is possible that these factors could have resulted in a decrease in the expressions of affect by the experimental Ss. Further research is obviously needed to clarify the relationship

between the rates of affective behavior in a small group that centers on feelings and the changes that occur in the self-perceptions and behavior of children with behavior adjustment difficulties in school.

Further study is needed also to investigate the possibility that human relations training might have different effects on acting-out children and withdrawn children. A hint of this was seen in one of the subjects in the first control group. This girl (subject 1C-1) was very quiet and exhibited very little affect in the early sessions, but as the total amount of time in the activities group increased, she began to increase her rates of showing feelings. Table 8 shows the changes which occurred in this child's rates of affective behavior. Future studies could concentrate on the question of whether an activities group or a feelings-oriented group is more effective with a child of this type.

Personal Adjustment

One of the goals of human relations training is increased self-esteem (Gibb, 1964). The significant differences between the experimental group's change scores on the self-concept measure and those of each of the control groups indicate this goal was achieved in this study. Self-concept theories usually assume that one's concept of self varies predictably with the reactions of significant others (Ludwig and Maehr, 1967). Gibb's theory proposes that increases in acceptance in the human relations group are reflected in changes in one's attitude toward self. In the present study two

types of acceptance were observed--acceptance by the group peers and by the group leader. Significantly greater increases in peer acceptance were found in the experimental group while significantly greater increases in leader acceptance were found in the first control group. If, as Gibb's theory suggests, the acceptance of the Ss in the treatment groups affected their self-concept scores, then one would conclude that the acceptance by the group peers was more influential than the acceptance by the group leader. This was seen also in the fact that the gain scores of the first control group on the self-concept measure were not significantly different from those of the second control group which received no special treatment.

Social Adjustment

The hypotheses contained a prediction that increased peer status would be a logical consequence of increased rates of acceptance in the human relations group. This measure, however, did not reveal any significant differences between the three groups. A trend was observed in Table 6 where only one of the six Ss who received treatment decreased in measured social status in the classroom while all three Ss in the second control group had small decreases.

The relationship between the group process variables regarding acceptance and the changes in peer status was shown in the results of the correlational analysis. A significant positive correlation was found between teacher acceptance and increased status while a significant negative correlation was found between student acceptance and increased status. These results may have important implications

for the differential effects of increased student acceptance and teacher acceptance on peer status. Although peer acceptance, rather than leader acceptance in the groups, was associated with positive changes in self-concept, teacher acceptance in the classroom was related to increases in peer status. Acceptance by an adult figure in the classroom appeared to be more important for status among peers but not for increased self-esteem.

Classroom Adjustment

Changes in classroom behavior were expected to result from participation in the human relations training group. The pre- and post-treatment evaluations of classroom behavior by the teachers revealed significant differences among the three groups. The experimental Ss had fewer significant changes toward more maladaptive behavior than the two control groups. Also the total number of increases in adaptive behavior and decreases in maladaptive behavior followed the prediction of the hypothesis. While the pre- and post-treatment observations of classroom behavior revealed no significant differences among the three groups, these data did correlate in meaningful ways with the teacher ratings.

"Disrespect-Defiance" as rated by teachers was positively correlated with both verbal positive and verbal negative affect. The fact that the experimental Ss decreased their expressions of affect in the treatment sessions may have contributed to the changing of their teacher's perceptions. The data also contained some puzzling relationships. For example, increases in "Creative

Initiative," which is considered an adaptive classroom behavior, were positively correlated with teacher rejection in the classroom. Moreover, increases in this factor were negatively correlated with student acceptance in the two treatment groups. These relationships indicate that creative behavior may not be reinforced by significant others in the school setting. An alternative explanation is that children who exhibited creative behaviors also exhibited other behaviors which elicited rejection from the teacher and non-acceptance from peers. The disparity between teacher and student perceptions was observed in the positive correlations which were found between increased student acceptance in the groups and increased maladaptive classroom behavior as rated by the teachers. Also negative correlations were found between increases in student acceptance in the groups and changes toward adaptive classroom behavior. Teachers and students may value different types of behavior and thus create difficulties for children who have problems discriminating between appropriate and inappropriate times for various behaviors. Bower (1960) has pointed to this problem in his study of behavior disordered children.

Future Research

Hopefully, this study will stimulate more research on educational experiences in the affective domain for all children but especially for those with behavior adjustment difficulties. Studies that follow might utilize some of the findings and inadequacies of the current study in their design. Clearly, future research studies in this area need to employ a larger number of subjects. However, it is

suggested that the numerous measures of change, which were employed in this study, be repeated. Another warning is to differentiate the types of behavior disordered children being studied. Acting-out and withdrawn children may respond to experiences in the affective area very differently. If classroom observations of behavior are used as a criterion of the treatment's effectiveness, these observations probably need to be conducted over a longer period of time than one week. The fact that the teachers perceived the children differently following the treatment period with the classroom observers detecting no significant differences suggested that the observers may have taken too small a behavior sample. In addition, the limited changes which were effected in the experimental subjects over a nine-week period of time raised a question as to the effects which can be achieved when the treatment period is extended.

Finally, the correlational analysis produced some questions which deserve attention in future studies. First, the correlations between different types of affect which were expressed in the same mode (for example, verbal) raised questions about communication styles in children. The different types of responses by teachers and peers to these expressions of affect may influence the child's adjustment in school. Another interesting relationship which emerged concerned changes in peer status and accepting responses by the teacher and peers. The effects of these different responses on both peer status and self-concept deserve further study. The

number of issues raised by the current study and the positive changes in children's behavior and adjustment which occurred indicated that the affective domain should receive more attention in both the elementary schools and research studies.

SUMMARY

The purpose of this study was to evaluate the effects of human relations training on the personal, social, and classroom adjustment of elementary school children with behavior problems. The study focused on the idea that successful adjustment in school is enhanced by educational experiences in the affective domain (Ojemann, 1967; Bessell and Palomares, 1967; Jones, 1968). Several hypotheses predicted changes in observed classroom behavior, classroom adjustment as perceived by teachers, self-concept, and peer status. The predictions were that the Ss in a human relations training group would show more positive changes along each of these dimensions than Ss in a control group which had special activities or Ss in a control group which received no special treatment. Another set of hypotheses was derived from Gibb's (1964) theory of group process. These hypotheses predicted that the human relations training group would show more acceptance of the Ss, would allow the Ss to express more verbal and non-verbal affect, would be more effective in making group decision, and would decrease the amount of control directed toward the Ss. It was hypothesized that the differences along these dimensions would increase as the total amount of time in the groups increased.

Each of the three groups contained eight children with three children in each group being Ss. The nine Ss were selected from two third grade classes and one fourth grade class in the same

elementary school. The Bower-Lambert (1961) screening device was used to locate those children in each who had low levels of social and emotional adjustment. Three Ss, two boys and one girl, were selected from each class and placed in a group with five other children who were selected at random from their respective classes. A flip of the coin determined which of the third grade classes would be the experimental group and which would serve as the control group which participated in the activity sessions.

Prior to the treatment period, trained observers recorded the rates of classroom behavior of the Ss in various behavior categories and the rates of responses to this behavior from teachers and peers. The observers used a modified version of the Florida Affective Categories Scale (Soar, 1969). Each classroom teacher completed a Devereux Elementary School Behavior Rating Scale (Spivack and Swift, 1967) on the Ss in her class, and each S completed the Piers-Harris Children's Self Concept Scale (Piers and Harris, 1969). Finally, each class completed a sociometric instrument designed to measure peer status. All of these measures were repeated at the end of the treatment period.

During the treatment period the experimental group and the first control group met for twenty-four thirty-minute sessions over a period of nine weeks. Each of these sessions was observed by one of three trained observers who recorded the frequencies of various behaviors in the Ss. The experimental group was led in a number of exercises designed to heighten the children's awareness of feelings, to facili-

tate communication, and to increase understanding of the relationships among feelings, behavior, and their effects. The first control group was led by the same person in various activities designed to encourage group interaction. These activities were organized in conceptual units in order to simulate the structured form of the experiences in the experimental group.

Non-parametric statistical tests of pre- and post-treatment differences showed significant differences ($p = .05$) among the three groups on the measures of maladaptive classroom behavior as perceived by the teacher and on the self-concept scale scores. These differences were directly in line with the hypotheses. The number of adaptive and maladaptive changes in classroom adjustment as perceived by the teacher were significantly different ($p < .02$) and were in the predicted direction. No significant differences were found among the three groups in observed classroom behavior or peer status changes. However, trends in the peer status data favored the experimental group over the two control groups. Three of the hypotheses which focused on the differences in the group processes were only partially supported, and a fourth hypothesis was contradicted. The hypotheses concerning increased acceptance, decreased control, and improved decision-making were partially supported; however, the differences between the two treatment groups were not unilateral and did not increase over time. The most surprising finding in the analysis of the group process data was that, contrary to the hypothesis, the experimental group decreased

their rates of affective behavior during the treatment period while the first control group increased their rates. This result suggested that human relations training may have allowed these children who usually display a great deal of affect to decrease their rates of these behaviors. The correlational analysis suggested the Ss had different communication styles and that behaviors indicative of classroom adjustment are not always positively associated with acceptance from the teacher and other students. The study indicated that future research needs to explore the differential effects of human relations training on acting-out children who exhibit a great deal of affect in school and withdrawn children who have low rates of expressing feelings.

While not providing strong support for Gibb's theory of group process, the study was congruent with other research (Ojemann, 1967; Bruce, 1958; Muss, 1960) which demonstrated the mental health benefits for children in affective education. It supported the positions taken by Rhodes (1967a), Bower and Hollister (1967), and Dennison (1969) that children with behavior adjustment problems in school need help in understanding and dealing with feelings and interpersonal relationships.

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APPENDIX A

REVIEW OF THE LITERATURE

REVIEW OF THE LITERATURE

Historical Perspective

Educators have long been concerned about the feelings and emotions of children. One of the early editions of the Pedagogical Seminary included an article by Wiltse (1895) which discussed the importance of allowing children to talk about their fears. She argued that ". . . by exploring a child's fears, the act of telling them by the child tends to somewhat diminish them" (Wiltse, 1895, p. 212). However, Wiltse acknowledged that some teachers had expressed the fear that child study would make children self-conscious and too introspective.

Between 1894 and 1903 Hall conducted a number of studies aimed at understanding the content of children's minds. He developed 102 questionnaires which sampled a wide range of topics including anger, lies, dolls, religious experience, sense of self, crying, and laughing (Boring, 1957). This concern for individual differences, emotions, and mental health in children was an integral part of the child-centered approach of progressive education (Dewey, 1916).

Prescott's book Emotion and the Educative Process (1938) was widely read and discussed in educational circles (Miles, 1964). Bullis (1942) worked to establish human relations classes in the Delaware schools where children could discuss their feelings toward school, their peers, and their future. These classes were viewed as both a form of help for children with problems and as a type of

preventive treatment. These early efforts at incorporating feelings and learning, however, did not evoke widespread acceptance or extension in their day.

Contemporary Trends

The contemporary concern for providing planned, educational experiences in the affective area emerged from a number of overlapping trends in public education during the past two decades. Two of the most important factors have been the debate over the structure and content of the new curriculum and the growing utilization of the schools in the mental health movement. The advocates of blending cognitive and affective learnings and of promoting mental health in the schools have provided distinct, and sometimes unified, influences on the direction of the American educational system.

The first of these influences arose with the revolutionary changes in the school curriculum during the decade following Sputnik. Bruner (1960) provided a new educational psychology for this revolution which centered on the development of cognitive skills in children. The widespread acceptance of Bruner's work prompted critical responses from those who believed that emotions, imagination, and other subjective experiences were important aspects of a child's development and education (Jones, 1968; Rhodes, 1967b; Biber, 1967).

Jones (1968) praised Bruner's contributions to the changes taking place in the schools. However, he sought to blend affective

experiences into Bruner's system. Jones stated that emotional and imaginal responses of children should be cultivated in the classroom to give curricular issues personal significance and to aid the assimilation of new experiences. He believes that modern curriculum developers are dealing honestly with the minds of children and suggests the schools can deal honestly with their hearts as well. He stated that the schools have a responsibility to help the child deal with both a complex outer world and an equally complex inner world of feelings and fantasies.

Rhodes (1967b) described the need to change both public policy and organizational design in our educational system in order to meet the psychosocial needs of children. He stated that social-personal learnings are a vital part of each child's development and are necessary for the individual to succeed in our society. The educators who design the learning experiences in this area need to be precise in defining goals, evaluating children's current status, choosing appropriate reinforcers, designing sequential experiences, and anchoring the experiences in the child's internal, emotional life. Rhodes believes that this type of reorganization and redirection of our educational system is most essential to the socialization of children from disadvantaged communities.

Biber (1967) developed a paradigm for integrating intellectual and emotional processes. She discussed four educational goals--sensitivity, discovery, mastery, and synthesis--and examined the relevant teaching methods and the related psychological processes.

The effects of school experiences on the personality of the child are a major concern for Biber. She argued that learning experiences in every area of the curriculum should be put to the service of ego-strength. Agreeing with Jones (1968), Biber stated that the curriculum changes now being made in the schools need to include an incorporation of affective and intellectual processes.

In an earlier work Biber (1961) attempted an integration of mental health principles in the school setting. She denied the dichotomy between the cognitive-mastery-adaptive aspects and the affective-expressive-integrative aspects of the learning experience. She recognized these as on-going reciprocal processes. She proposed seven goals for healthy personality: 1) positive feeling toward the self; 2) realistic perception of self and others; 3) relatedness to people; 4) relatedness to environment; 5) independence; 6) curiosity and creativity; and 7) recover and coping strength. In this work one can see the merger of curricular and mental health concerns.

The second major influence leading toward the inclusion of affective education in the public schools has been the utilization of the schools in the mental health movement. The schools have gradually come to face the magnitude of the learning problem resulting from emotional stress and social maladjustment in the pupil population (Morse, Cutler, and Fink, 1964). A review of the research since 1922 indicated that over the years approximately 35% of the school population had some emotional problems and that

10% were in need of special help (Glidewell and Swallow, 1968). Accompanying this awareness of the problem have been reports on the manpower shortage in the mental health field (Joint Commission on Mental Illness and Health, 1961; Albee, 1959). Child guidance clinics have faced long waiting lists for a number of years, and children with severe problems have not received treatment. Thus, the schools have become the logical source for providing much needed assistance in the mental health crisis (Stickney, 1967).

Lambert (1965) conceptualized the nature of interventions needed in the schools. She argued for the following interventions: 1) specific activities for children who are subject to or threatened by stress which can be modified or eliminated; 2) specific activities for children who need to be isolated from stress which cannot be modified; 3) specific interventions for children under immediate stress who need mental health first aid; 4) interventions that build personality by increasing psychological safety; 5) interventions that reinforce personality strength; and 6) interpersonal and group interventions that assist in relationship building. These interventions are aimed at both the treatment and prevention of behavior and emotional problems in children.

The concern for preventing emotional problems is what Hobbs (1964) called the third revolution in mental health--the penetration of the mental health movement by the concepts of public health. The prevention model has resulted in several types of interventions in the schools. Bower (1960) and Cowen and others (1963) have pioneered

in the area of early detection and treatment of problems. Accompanying these efforts have been various studies in child development which pointed to crucial variables in the development of positive mental health.

Bower's work (1959, 1960) has centered on the screening of children with emotional and behavior difficulties in the public schools by using the perceptions of those closest to the children. Teacher evaluations, peer ratings, and self-report comprised the principal tools of Bower and Lambert's screening procedure (1961). The importance of these variables has been demonstrated in various child development studies. Coopersmith (1959) found a significant correlation of .37 between self-esteem and sociometric status. Guardo (1969) studied this relationship in sixth graders and used the Piers-Harris Children's Self Concept Scale in conjunction with four sociometric scores. The strongest relationship was found between self-concept and nominations for least popular (-.57 for girls and -.38 for boys).

The relevance of Bower's use of peer ratings is reflected in the use of sociometric status as a criterion measure in studies dealing with elementary school group counseling. Hansen, Niland, and Zani (1969) demonstrated that changes in peer status of low sociometric students were dependent upon being placed in a counseling group with students with high sociometric scores. A study by Williams and Cole (1968) found that a student's self-appraisal was significantly related to the group's appraisal of him. These

researchers concluded that this relationship suggested the feasibility of altering the self-concept by changing the conditions of social status.

The work of Cowen and Zax (1968) has extended Bower's innovations and incorporated the child development findings in a treatment program. They devised methods of identifying high risk children which included psychological evaluations, social work interviews with parents, classroom observations, and reports by the teachers. Trained housewives were used in the schools as mental health aides to work with the children individually or in small groups. College undergraduates were used to lead after-school activities for the children, and inner-city teenagers were trained to tutor children with emotional problems. Research on this treatment program after three years indicated that there were significant differences between the children who had received this special attention and those who were identified as behavior problems but received no treatment.

In this program one can see the influence of the child development research which indicated that one's concept of self varies predictably with the reaction of significant others (Videbeck, 1960; Haas and Maehr, 1965). The small groups in Cowen and Zax's program are similar to the type of group which Schmuck (1962, 1963, 1966) found most conducive to changing self-concept and social status. Schmuck showed that classroom groups with diffuse patterns of friendship and influence, compared with those with more hierarchical

patterns, had greater cohesiveness and more supportive norms for learning. These studies exemplify the growing concern in the schools for programs that facilitate children's mental health.

In summary, the present-day awareness of the need for educational programs in the affective domain has arisen from a number of different trends in public education. Two of these are the need to achieve a balance between cognitive and affective learnings and the growing involvement in the schools in the treatment and prevention of emotional and behavioral problems in children.

School Programs in the Affective Domain

Despite the apparent need for new methods, materials, and procedures to achieve a balance between the cognitive and affective concerns of schools, only a handful of programs have been developed, and the research on these programs has been inadequate (Lambert and Hartsough, 1968). In the 1950's Ojemann (1964) and others developed the Preventive Psychiatry Program at the State University of Iowa. This program was designed to investigate the extent to which causal orientation contributes to mental health. Curriculum materials, workbooks, stories, and guides were developed to provide the elementary school with a systematic mental health curriculum.

Research on the effects of this curriculum indicated that experimental subjects show a reduction in the tendency to resort to arbitrary punitive procedures, show less anti-democratic attitudes, show less manifest anxiety and more tolerance for ambiguity (Ojemann, 1967). Bruce (1958) reported less manifest anxiety in

experimental subjects with high self-ideal discrepancy scores after two years in the causally oriented program. Snider (1957) reported that children at the lower third of the range of scores on a security-insecurity test gained as much in causal orientation as those in the upper third. The positive results of these studies have been obtained with normal children, and no research has been reviewed which reported the use of these materials with children who had been identified as having behavior problems.

In conjunction with the Esalen Institute in California, Brown (1968) and his staff have devised a set of techniques to be used by teachers to blend cognitive and affective learning experiences in the on-going conventional curriculum. Their work has grown out of the humanistic education movement and represents an effort to introduce more awareness to feelings in the classroom. No research data have been reported on these methods.

Another newly developed approach to the affective domain is the Human Development Program of Bessell and Palomares (1967). These authors are developing materials and methods of working with children based on the principles of group dynamics and child development. They have already completed teacher guides for pre-school, kindergarten, and first grade levels and are continuing to develop materials for higher elementary grades. Their exercises utilize some laboratory training principles as they attempt to develop awareness of self and others, as well as discovering the dynamics of social interaction.

A similar approach is found in Faust's (1968) description of feelings classes. In these classes the children are encouraged to be able to identify feelings, in pictures, in themselves, and in one another. These classes use drama, discussion, and art in order to learn more from personal experiences and interpersonal associations. In discussing these classes, Myrick (1969) claimed that since feelings are an essential part of human existence they should play a major role in every child's education.

Dennison (1969) organized a private elementary school in New York City for lower class children with severe learning and behavioral problems. The school is based in part on Dewey's philosophy of education, Neill's (1960) concepts of freedom, and a number of concerns shared with human relations training. In describing the school's philosophy, Dennison wrote, ". . . the mind does not function separately from the emotions, but thought partakes of feeling and feeling of thought. An active moral life cannot be evolved except where people are free to express their feelings and act upon insights of conscience . . ." (Dennison, 1969, page 6). The school uses small group interactions to promote experiential learnings about trust, honesty, friendship, and responsibility. Dennison's description of the effects of the school on the children's attitudes and behavior is quite impressive even though no systematic measurements were used in evaluating the school.

Glasser (1969) applied his theories of reality therapy to the classroom and proposed a program to increase involvement and relevance

in the schools. He proposed that the class become a counseling group at regular times when the teacher can help the children examine their own feelings, motives, and goals. This group, which resembles the human relations training group in many respects, attempts to develop social responsibility in the children and to solve behavioral and educational problems. These meetings allow the children to experience acceptance when they express their feelings and attitudes toward their school experiences. Glasser's program is an example of an innovation in the regular classroom organization designed to prevent the development of behavior problems and school failure.

A recent attempt to actualize the ideas and programs of Glasser (1969) and Ojemann (1967) is the Living School which is supported by the Institute for Advanced Study in Rational Psychotherapy (Ellis, 1970). This school, which currently contains only six- and seven-year-olds, is designed to prevent youngsters from becoming neurotic adults by training the children to understand their feelings, to accept responsibility for their behavior, and to be effective in interpersonal relationships. The staff of the school is trained in the principles of rational-emotive therapy, and the teachers use these principles in leading the daily therapy sessions with the children. Every part of the school day is seen as an opportunity to help the children understand and modify their reactions and behaviors. The school has plans for developing methods and materials for regular classroom teachers and for training other professionals in what they call "emotional education."

Research in Group Process with Children

Lambert (1965) indicated that certain children have specific needs which require interventions by the schools. She listed six types of interventions, and three of these fall in the realm of human relations training. These are interventions that build personality by increasing psychological safety, interventions that reinforce personality strength, and interpersonal and group interventions that assist in relationship building. Despite this apparently widespread awareness of the need for interventions of this type, the literature is noticeably lacking in research reports on the effects of these approaches with elementary children with behavior adjustment difficulties.

A few reported studies which are related to human relations training have uniformly lacked a strong data base. Field (1966) described an ego-programmed group treatment approach for emotionally disturbed boys. In the group setting a latitude of behavior was permitted to allow the child to learn to satisfy his needs in socially acceptable ways. Regressive behavior was accepted but was never encouraged. Twenty-two boys were treated with this method, and ten were discharged. The methods used in the research were subjective judgments of therapists, parents, and teachers.

Simmons (1965) described his use of role playing as a method of teaching psychology in the elementary school. During these sessions stories were read and discussed, and the children's feelings were explored. However, no evaluation of the effects of this method was

reported except the subjective judgment that the sessions seemed to sharpen the children's psychological awareness. Limbacher (1967) reported an approach to elementary training in mental health that emphasized the importance of self-concept, social needs, drives, defense mechanisms, and other psychological concepts. This program was aimed at the normal child and did not attempt to solve significant emotional problems or disturbances in the classroom.

Lippitt, Lippitt, and Fox (1965) discussed a laboratory approach to social science education which used behavior specimens, role playing, data gathering, causal dynamics, and consequences of behavior. The report, however, did not contain any data on the effects of such a method on any particular group of children.

Minuchin, Dollarhide, and Graubard (1969) reported a project which used the laboratory method to teach learning skills to disturbed delinquent children. Their study did not focus directly on affective behavior but on the skills of listening, communicating, categorizing, and paying attention. This project was similar in form to human relations training in its use of behavior samples, role playing, children's observations of each other, and experimentation with various communication styles. The success of the project indicated that the laboratory method was an effective teaching procedure.

The only study reviewed that applied human relations training below the college level was conducted by Orsburn (1966). He compared the effects of sensitivity training and group lectures on high school students' classroom behavior and congruence of real and

ideal self. The results showed sensitivity training was more effective than either lecture sessions or no treatment for improving classroom behavior. Sensitivity training was also better than the lecture or no treatment in influencing congruence between real and ideal self. The lecture sessions resulted in greater immediate behavior change, yet sensitivity training had long-term effects which the lectures did not have.

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APPENDIX B

EXERCISES USED IN THE EXPERIMENTAL GROUP

EXERCISES USED IN THE EXPERIMENTAL GROUP

Session One

The purpose of the first exercise was to give the children an opportunity to use their imaginations in creating an experience that involved positive feelings. The children were asked to get comfortable and to close their eyes. They were told to imagine a real or make-believe friend and to try to see exactly what their friend looked like. Then they were told to take their friend to a special place they really liked and then to take their friend home. Following these instructions, a discussion was attempted in which the children were asked to tell about their friends and where they had taken them.

This exercise was not very successful. It was very difficult for the children to keep their eyes closed for even a few seconds. The children had difficulty in concentrating on imagining at all. The leader stated that the activity might have worked better after the children became more accustomed to the group.

Session Two

As a result of the experiences in session one, it was decided to have the children play a nonthreatening, group interaction game in order to allow the children to feel comfortable with the leader and with each other. A relay race was used which required the members of each team to cooperate with one another in order to win.

This game tended to split up the group instead of bringing it together. The children became very excited and competitive during the activity.

Sessions Three and Four

Due to the absence of group unity, it seemed impossible to begin talking about feelings at this point. The children were not comfortable around each other or the group leader. A quiet task was needed to allow the children to make these adjustments. Thus, the leader had the children fold Japanese origami figures which the children in the control group were doing also. These two sessions seemed to facilitate group integration and to allow a return to the affective exercises.

Session Five

Since the children seemed more comfortable in the group, it seemed safe to begin talking about feelings--as long as the feelings were not personal and were related to a concrete task. The children were asked to make a collage out of pictures cut from magazines. They were told to select pictures of people whose expressions showed that they were excited, sad, happy, or scared. The children were eager to participate in this task.

Session Six

Each child completed his collage during this session. Near the end of the session, the group members guessed the feelings which were contained in each other's work. This exercise was nonthreatening, and the children willingly participated.

Session Seven

After the concrete task of identifying the feelings in pictures, the next step was to begin verbalizing feelings. The children listened to a short story entitled "Billy, the Helper." Before the story was read, they were told to listen for some part of the story in which someone was feeling good about something. The children readily identified these parts of the story. They were encouraged to explain their choices. Then the group was asked to listen to the story again and to identify a part where someone did not feel good about something. These choices were discussed. During a third reading of the story the children listened for feelings of pride and then discussed them. At the end of the session the children were asked to make up their own stories about feelings. These stories were to be shared with the entire group during the next session. The story "Billy, the Helper" follows.

Billy was sitting in the livingroom and watching his favorite television program. His mother came in the room and said, "I have much to do today. Grandmother is coming for supper tonight, and I have to go to the grocery store. Billy, your baby sister is asleep. Would you stay inside until I come back?" Billy said he didn't mind because he wanted to watch the rest of the cartoon.

In a little while the program was over, and Billy turned off the television. He started to go outside to play with the other boys but remembered that his mother had asked him to stay with his sister until she returned from the store. He sat down to wait. As he waited, he thought to himself, "Mother certainly seemed upset before she left. I wonder why?" Then he remembered that his grandmother was coming for supper. He thought about how much his mother liked to have the house all cleaned and straight when grand-

mother came. Then he looked at the livingroom. There were toys all over the floor. His baby sister never picked up her toys when she finished playing with them. Mother said she was too little to clean up by herself. Billy saw that two of his toys were also on the floor--a ball and a plastic boat. He thought to himself, "Maybe I should pick up my two toys before Mother comes back."

So Billy picked up his toys and took them to his room. When he came back to the livingroom, he saw that the room still was not ready for his grandmother's visit. His sister's toys were still everywhere. He thought to himself, "I do not like to clean up for my sister. They are her toys. She played with them. Why should I have to pick them up for her?" Then he remembered his mother and how busy she was that day. He thought, "Mother will really be happy if I got the livingroom cleaned up. She would have more time for cooking supper and for doing other things." Then Billy got busy, and in just a few minutes he had all of the toys picked up and put in another room.

Just when he finished, his mother came in the door with an armful of groceries. She said, "Billy, has your sister waked up yet?" He told her that his sister was still asleep. Mother went to the kitchen and put up the groceries. Billy was very excited while he waited for her to come back to the livingroom. When she came back to the room, she noticed that all of the toys were gone. She said, "Billy, did you help Mother by picking up all those toys?" Billy said that he had. "I knew grandmother was coming and you wanted to have the house cleaned up, so I thought I would help you while I waited." Billy's mother was so happy and proud of her son. She picked him up and gave him a big hug. She said, "Billy, you are very nice to help me. Thank you so much. Now I will have a lot of time to fix a good supper for everyone." Billy smiled, hugged his mother, and ran outside to play.

Session Eight

The children were very eager to tell the stories they had made up about feelings. Each child was given a turn to tell his story

while the others listened for good and bad feelings in the story. After each story, the children were given a chance to point out the feelings they recognized. These different feelings were then discussed.

Session Nine

The children listened to a story entitled "A Rough Day." Then, using the categories of good and bad feelings, they listed some of the "feeling" words in the story. Following this activity, the children tried to make the lists as long as possible with their own words. They were encouraged to listen for these words in class and after school.

"A Rough Day" Jane was not feeling well this afternoon. Everything had seemed to go wrong. In the school cafeteria she had accidentally spilled her milk. She had been late getting to class and the teacher was not pleased. On the way out of the school she fell down and scraped her knee. All the way home Jane thought to herself, "This day has been pretty rough for me. All I want to do is to go home and rest." Soon after Jane had gone into her house, Betty, her friend who lived across the street, came over to play with Jane. She knocked on the door. Jane came to the door. Betty said, "Jane, would you like to come outside to play with me?" [At this point the teacher says, "Children, we are now going to try to guess what will happen in this story. You know how Jane feels about her day and what she has been thinking. Do you think she will want to go outside to play with Betty?" The teacher should encourage the children to give reasons for the outcomes they predict.] Jane thought for a minute and then said, "I don't want to play right now, Betty." Betty thought to herself, "I wonder why Jane doesn't want to play with me." Then Jane saw that Betty looked sad and so she explained, "Betty, I would like to play with you later. But I have had a bad day and need to rest for a while. Do you understand?" Betty felt better because she did understand why Jane did not want to play right then.

Session Ten

The success of the exercises dealing with the identification of feelings led to a laboratory exercise that focused on here-and-now feelings. The exercises concerned the feelings which accompany immediate and delayed gratification. Two conditions were created for the children. First a box of crayons was dumped on the table. When the leader gave the signal, each child picked up two crayons and was given a piece of candy as soon as he completed the task. In the second condition the children had to wait for two minutes after completing the task before they received a reward. Each child was given a chance to be the leader. A discussion followed in which the children shared how they liked each condition and discussed the times in their lives when they had to wait for attention and rewards.

Session Eleven

Continuing the theme of behavior, rewards, and feelings, the children were asked to listen to one of the group members reading a paragraph. Rewards were given for listening. A discussion was held about how it felt to be recognized for just listening to someone else. During this session a decision-making exercise was also used in which the children were given three choices for the following session's activities. The group was asked to decide which activity they preferred without any direction from the leader. A time limit was imposed. When the decision was reached, the group discussed the things that happened during the decision-making process.

Session Twelve

As a result of the group's decision, the children made masks out of paper bags. A feeling was depicted by the expression on each child's mask. The group discussed the feeling depicted on each of the masks.

Session Thirteen

A short story, "The Funny Monkey Who Had No Friends," was read to the children. Following the story, the group discussed trusting in friendship, and the children gave different examples. Then the group was divided into pairs of children to plan short plays about friendship and trusting. Little direction was given by the leader regarding the subject matter, characters, or outcomes of the plays.

"The Funny Monkey Who Had No Friends" Bopi was a funny monkey who was always playing tricks on all of the other animals. Sometimes the other animals would laugh at him, and he thought they were all his friends. But Bopi was never sure that the other animals really liked him. This made him feel bad, and so he did things to try to get the other animals to pay attention to him.

One day Hara, another monkey, was playing in the tree across from where Bopi lived. He called over to her, "Hey Hara, why don't you come over to play with me?" Hara called back, "My vine will not swing all the way over to your tree." Bopi yelled, "It's okay, I will catch you when you come close to this limb." Hara said, "Are you sure you will catch me? You're not joking are you Bopi?" "Of course not," said Bopi. He was really planning to catch Hara for he did want to play with someone.

Just as Hara started to swing on her vine, some other monkeys came walking by and yelled to Bopi, "Do you know any new tricks today Bopi?" And they all laughed. Bopi thought quickly, "I'll give Hara a scare

and the other monkeys will think it is funny, and maybe they will like me better." So just as Hara reached Bopi's limb and held out her hand for his, Bopi pulled his hand back very quickly. Poor Hara lost her hold on the vine and started to fall. Fortunately, there was a big pile of leaves on the ground, and Hara fell into them. All of the other monkeys ran over to see if Hara was all right. She was frightened and crying, but she was not hurt.

Bopi thought this would be a funny trick, but no one was laughing. In fact one of the other monkeys yelled at Bopi in an angry voice, "That was not very nice Bopi. Hara could have been hurt." Bopi felt very sad. Hara was unhappy, and the other monkeys seemed very angry at him too. He sat in his tree and tried to think of another trick that might be funny.

Bopi sat in his tree, and all of the other monkeys walked down the path and saw Mr. Elephant who was eating leaves from a tree. They told Mr. Elephant about what had just happened. He was a wise animal and usually understood the problems of other animals. Mr. Elephant said, "Bopi is a very unhappy monkey. He does not have many friends and does not know what to do. He thinks that if people laugh at his tricks, they will like him." Hara said, "What can we do to help him?" Mr. Elephant said, "Bopi is really afraid that other animals will play tricks on him. If he sees that he can trust other animals, he would feel better and maybe he would learn to let you trust him too."

In a few days all of the monkeys were playing on the ground under Bopi's tree. Bopi sat on a limb and watched. He wanted to play with them but was not sure the other monkeys wanted him to. Hara looked at her friends, and they all nodded their heads. They had decided to see if Mr. Elephant was right. Hara said, "Bopi, we want you to come play with us. Climb down to the bottom limb." Bopi was not sure it was safe. He was afraid they were going to play a trick on him. But he wanted to play so he jumped down to the lowest limb. Then Hara said, "We are going to get in a circle. We want you to jump down, and we will catch you." Bopi was afraid. He was not sure he could trust the other monkeys. He thought Hara was going to play a trick on him. But the other monkeys all yelled together, "It's okay Bopi. We will catch you."

You can trust us." So Bopi jumped. It was not far to the ground, but the other monkeys caught him. He was so happy. The other monkeys really liked him. He liked to trust others and wanted them to trust him. The other monkeys really liked him. He now had some friends. He knew he did not have to play tricks on anyone again. When the other monkeys saw how happy Bopi was, they felt very good and smiled together.

Session Fourteen

During this session the pairs of children presented their plays about trusting and friendship. A short discussion followed each play as the children tried to explain how each play related to their own experiences.

Session Fifteen

During the past several sessions behavior control had been a growing problem. The leader brought this problem to the attention of the group. It was decided that each child would write down some rules for better group behavior and the consequences of rule-breaking. Individual ideas were discussed and a permanent list was decided upon. The children seemed satisfied that they had developed a fair set of rules and consequences.

Session Sixteen

The group reviewed the list of rules they had developed. Then the children participated in role-playing, taking turns being the rule-breaker and the group leader. The feelings of the leader and rule-breaker in different situations were discussed.

Session Seventeen

This session's exercise was designed to move the children toward being able to talk about their personal feelings. The story

"The Funny Monkey Who Had No Friends" about friendship and trusting was reviewed and discussed. The children were then asked to choose a partner they trusted. One child in each pair closed his eyes, and the other child led him around the school yard without either one talking. The leader in each pair was allowed to present his partner with interesting things to touch. Then the partners switched roles. At the end of the session the group came together to discuss the different feelings which were experienced in each role.

Session Eighteen

Since all of the children did not have a chance to play both roles in the trust walk, these were continued. The children discussed their experiences and compared their feelings with those during the previous session.

Session Nineteen

The theme of trust was continued. The group was shown a small, smooth pebble and a piece of candy the same size. Two children volunteered to participate in an "experiment." One child closed his eyes after seeing the pebble and candy in the other child's hand. The child with his eyes closed then opened his mouth and allowed his partner to place something inside. He was asked to describe his feelings while he waited to see if the partner would give him the candy or the pebble. Each child in the group was given the opportunity to try both roles. A discussion followed.

Session Twenty

The decision-making exercise was repeated with the group choosing between three alternatives. They chose a game called "Mirror-Response." The group was divided into pairs. One child in each pair pretended he was a mirror and followed the other child's movements and expressions. After each child played both roles, the group discussed the feelings experienced during the exercise.

Session Twenty-one

This session's exercise dealt with the feelings which accompany success and failure and the effects of group pressure. Each child tried to toss a paper cup into a large paper bag. The rest of the group stood near the child and gave supporting or teasing responses according to a signal from the group leader. The children experienced both group support when they succeeded and unfriendly teasing when they failed. After each child had a turn, the group discussed their feelings and the effects of their friends' responses on their feelings.

Session Twenty-two

The group played a game called "Prisoner's Dilemma" in which two teams must learn to cooperate in order for both sides to gain positive points. Each team was given two cards labeled "with" and "against." At the end of each round, the teams submitted one of the cards to the leader, and points were given on the basis of various combinations. The game teaches that if both teams cooperate and submit the "with" card, both teams can increase their points.

But if one team submits "against," and the other "with," the first team gains points while the other loses points. The game involves trust and decision-making. After the game was completed, the children discussed what had happened and how they felt towards each other.

Session Twenty-three

This session focused on emotionally laden situations which occur in the classroom. Role playing was used as the children took turns being the teacher and students in class. Various problem situations were acted out, and the children discussed the different feelings which they had.

Session Twenty-four

During this last session the group participated in some short recreational games and then sat down to discuss what they had learned during these different sessions. The leader led the children in examining their attitudes toward the group and their feelings about the group not meeting any more.

APPENDIX C

ACTIVITIES USED IN THE CONTROL GROUP

ACTIVITIES USED IN THE CONTROL GROUP

Sessions One through Four

During these sessions the group engaged in a special studies enrichment program which centered on Japan. A world map was used to locate each country which was to be studied. Japan was located, the customs of the people discussed, and the children folded origami figures. These figures were carried back to the classroom and were proudly displayed before the rest of the class.

Sessions Five and Six

The social studies enrichment approach focused on Ireland. This country was marked on the world map, the St. Patrick legend was discussed, and the children made a collage with green pictures from magazines. All of session six was devoted to the completion of the collage as the children all worked together.

Sessions Seven through Nine

Group activities continued to be centered on foreign countries and their customs. France was located on the map and compared with other countries which had been studied. The children learned French words by playing a guessing game. They looked up words in a French-English dictionary and made flashcards. A great deal of enthusiasm was shown for this activity. Bingo was played using French words. English words were called out and the children put a marker on equivalent French words. Sweetened cereal was used for markers and for prizes.

Sessions Ten through Twelve

During these sessions activities were organized to promote group interaction and the awareness of the individual as a group member. In the tenth session the children drew portraits of each other with crayons, and then they guessed who they were supposed to be. During session eleven a decision-making exercise was used. The group was given three choices of activities for the next day. A time limit on the decision was imposed, and the group was allowed to make the decision in any way they chose. The group decided to make masks of one's own face or of someone they would like to be.

Sessions Thirteen through Fifteen

Group interaction, cooperation, and competition were the themes of this week. The children divided into teams and played charades using the titles of favorite books. Other group games included "red-light" and "statues" which the children suggested. The children enjoyed these games very much and asked for more opportunities to play such games.

Sessions Sixteen through Eighteen

This week included both outdoor games and story-telling by the children. "Capture the Flag" was a game which the children especially liked. This game involves two teams that attempt to secure each other's flag. All of the children participated in this game with enthusiasm. The story-telling activity was used to prepare the children for the following week's art activities.

Sessions Nineteen through Twenty-one

The children were asked to use their imaginations in picturing a scene which they could draw. A symphony was played while they drew their individual scenes. In session twenty the decision-making exercise was repeated. Three games were offered as choices, and a quick decision was reached. Not all the children were pleased with the choice. During session twenty-one the children made sculptures with pencils and balloons.

Sessions Twenty-two through Twenty-four

The final week included art work, group games, and group discussions. The art work included the creation of a construction paper collage and of balloon sculptures. The last session included group games and a discussion about what the activities had meant to the children. The children expressed regret that they were not going to be meeting any longer.

APPENDIX D

MODIFIED FLORIDA AFFECTIVE CATEGORIES SCALE

MODIFIED FLORIDA AFFECTIVE CATEGORIES SCALE

Instructions

Whenever the observer sees a behavior that is to be recorded, he should also note the type of response which follows the behavior. The response may be given by the teacher or another student. Instead of using a tally mark beside the behavior and under the appropriate child's name, the observer will use a number between one and nine which corresponds to the response to the particular behavior. Since many behaviors of children during a school day elicit no response from others, the number "1" has been assigned to that condition. Thus, if a child is observed sitting quietly and doing his work, the number "1" will be placed beside the category "Absorbed in Work" when no response is given this behavior by the teacher or his fellow students. The other categories of responses are listed below with examples of the responses which are to be included in each category.

2. Teacher approval-acceptance

- compliments
- smiles
- nods reassuringly
- says she understands
- listens carefully

3. Teacher disapproval-rejection

- criticizes
- frowns
- humiliates
- intentionally ignores

4. Teacher attempts to control

uses threatening tone
says, "Stop it," etc.
pushes or pulls
gives command

5. Teacher's response is neutral

answers question without feeling
looks at child without feeling

6. Student approval-acceptance

agrees with other
compliments other
sympathizes with other
shares and cooperates
pats or hugs

7. Student disapproval-rejection

laughs at other
teases
makes disparaging remark
aggressive physical behavior

8. Student attempts to control

commands or demands
threatens
pushes or pulls
says, "Stop it," "Shut up," etc.

9. Student's response is neutral

response shows neither approval, rejection,
nor control

Behavior Categories

Task-Oriented

absorbed in work
collaborative work-play
gives information
intermittent work
parallel work-play
seeks information
seeks reassurance-support

Non-Task-Oriented

shy-timid (watches others)
quiet--no work or play
irrelevant activity

Verbal Positive Affect

agrees with another
asks permission in a
friendly manner
chooses another
defends another
enthusiastic-happy
offers to compromise,
share, or cooperate
praises another
says, "Thank you," etc.

Non-Verbal Positive Affect

agreeable-cooperative
chooses another
does something for someone
enthusiastic-happy
helpful, shares
leans close to another
pats, hugs another
smiles, laughs with
another
sympathetic

Verbal Negative Affect

blames
commands or demands
curses
cries
laughs at another
makes disparaging
remark
says, "No," etc.
starts fight
tattles
teases
threatens

Non-Verbal Negative Affect

aggressive physical
contact
damages property of
others
frowns, pouts, withdraws
interferes
makes face
takes property of others
threatens
uncooperative, resistant

"I feel" Statement--
Positively Toward

self
other people
things

"I feel" Statement--
Negatively Toward

self
other people
things

APPENDIX E

RAW DATA

Pre- and Post-Treatment Scores for Self-Concept, Peer Status,
and Classroom Adjustment Measures

		Piers-Harris Self Concept Scale	Peer Nominations	Devereux Scale	Classroom Disturbance	Impatience	Disrespect- Defiance	External Blame	Achievement Anxiety	External Reliance	Comprehension	Inattentive- Withdrawn	Irrelevant- Responsiveness	Creative Initiative	Need Close- ness to Teacher
<u>Experimental</u>	E-1	40	10	19	17	7	10	9	17	11	21	11	9	23	
	Pre	56	13	14	13	6	6	6	12	12	13	9	13	23	
	E-2	63	31	16	18	10	8	9	10	14	15	10	11	8	
	Pre	70	46	16	18	9	4	4	11	15	15	9	14	5	
	E-3	66	13	11	15	5	5	6	9	12	12	6	10	13	
	Pre	73	13	10	14	4	4	7	14	12	13	5	9	13	
<u>First Control</u>	1C-1	43	6	7	13	7	8	12	16	12	13	11	11	21	
	Pre	30	9	7	16	6	7	10	16	10	14	7	5	19	
	1C-2	44	18	20	22	15	19	19	29	8	20	13	8	14	
	Pre	49	0	19	20	10	17	17	27	7	17	14	10	8	
	1C-3	34	6	22	25	19	19	18	29	7	23	16	7	15	
	Pre	27	10	22	24	13	15	17	31	6	19	16	8	13	
<u>Second Control</u>	2C-1	30	6	4	6	4	4	15	13	12	4	5	10	22	
	Pre	27	4	4	10	5	8	19	18	11	8	8	9	21	
	2C-2	52	17	16	14	6	11	21	21	11	10	6	9	9	
	Pre	46	15	19	9	10	16	23	20	15	6	7	9	16	
	2C-3	31	13	22	23	9	12	12	28	3	18	14	6	18	
	Pre	25	10	22	26	8	11	4	25	4	24	15	8	15	

FREQUENCIES OF OBSERVED CLASSROOM BEHAVIOR FOR ALL SUBJECTS

	Time Observed In Minutes	Task-oriented Behaviors	Non-task-oriented Behaviors	Verbal Positive Affect	Non-verbal Posi- tive Affect	Verbal Negative Affect	Non-verbal Neoa- tive Affect	"I Feel" Positive Statements	"I Feel" Negative Statements	No Response	Teacher Accepts	Teacher Rejects	Teacher Controls	Teacher Neutral	Student Accepts	Student Rejects	Student Controls	Student Neutral	
<u>Experimental</u>																			
E-1	Pre 63	91	24	12	7	5	6	0	0	116	6	0	3	4	5	0	1	1	
	Post 58	90	27	4	14	2	2	0	1	127	11	0	1	0	2	1	0	0	
E-2	Pre 56	74	20	14	22	3	2	0	0	102	0	0	2	1	21	1	0	10	
	Post 50	71	32	6	7	3	4	0	0	113	0	1	2	0	5	2	0	0	
E-3	Pre 61	70	44	6	12	2	2	0	0	121	3	0	2	1	6	1	1	0	
	Post 58	92	22	4	10	2	2	0	1	126	2	0	1	0	4	0	0	0	
<u>First Control</u>																			
1C-1	Pre 63	77	54	4	8	0	0	0	0	131	1	0	0	4	7	0	0	0	
	Post 61	90	33	0	6	0	0	0	0	125	2	0	1	1	0	0	0	0	
1C-2	Pre 34	67	18	1	4	0	0	0	0	84	5	0	0	1	0	0	0	0	
	Post 36	59	28	1	16	2	2	0	0	108	0	2	1	2	0	0	0	0	
1C-3	Pre 65	77	43	13	23	7	10	0	2	175	5	1	3	5	13	4	0	5	
	Post 51	101	32	0	7	1	0	0	0	141	3	0	1	2	3	1	0	0	
<u>Second Control</u>																			
2C-1	Pre 34	46	8	5	6	1	0	0	0	66	2	0	0	0	5	0	0	0	
	Post 63	131	13	2	6	0	0	0	0	152	1	0	0	0	0	0	0	0	
2C-2	Pre 59	56	7	8	36	6	8	0	0	121	1	0	1	0	24	1	11	13	
	Post 55	95	13	12	11	14	6	0	0	151	1	1	0	0	10	0	0	0	
2C-3	Pre 22	20	3	2	12	0	2	0	0	39	1	0	4	0	0	0	0	0	
	Post 50	84	35	9	15	0	7	0	0	150	0	5	2	0	10	0	0	3	

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BIOGRAPHICAL SKETCH

Howard Glenn Garner was born February 23, 1941, in Greenville, North Carolina. In June, 1959, he was graduated from Junius H. Rose High School. In June, 1963, he received the degree of Bachelor of Arts with a major in European History from the University of North Carolina at Chapel Hill. From 1963 until 1964 he worked as a trade assistant in the U. S. Department of Commerce in Washington, D. C. He then taught U. S. Government for three years at Fort Hunt High School in Fairfax County, Virginia. In 1967 he enrolled in the Graduate School of the University of Florida and was awarded an N.D.E.A. Title IV Fellowship. In August, 1968, he received the degree of Master of Education with a major in Special Education--teaching behavior disordered children.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Education and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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