Effects of Rational-Emotive Group Therapy Upon Anxiety and Self-Esteem of Learning Disabled Children

Donna J. Meyer
Andrews University

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A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Donna J. Meyer
June 1981
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ABSTRACT

EFFECTS OF RATIONAL-EMOTIVE GROUP THERAPY
UPON ANXIETY AND SELF-ESTEEM OF
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by

Donna J. Meyer

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Date completed: June 1981

Previous research has indicated the effectiveness of rational-emotive education techniques in reducing anxiety and building self-esteem with regular classroom children. The purpose of this study was to investigate the effects of rational-emotive group therapy on anxiety and self-esteem of learning-disabled children.

One hundred ten learning-disabled children (ages 8-13) were assigned to one of three experimental conditions: rational-emotive therapy (N=32), recreational-educational programming (N=31), or no-contact (N=47). Within the two experimental treatments that actually met, groups of seven to nine members, similar in chronological age, were formed. The rational-emotive groups received
therapy based on rational-emotive theory. The recreational-educational programming groups engaged in such activities as arts and crafts, table-top games, gym activities, sports, auditory center, and hiking. The no-contact group did not meet. A total of nine sessions over a ten-week period were conducted with the children who were in the rational-emotive and recreational-education groups. Pre- and posttest measures of self-esteem (SEI) and anxiety (TASC) were obtained.

In this quasi-experimental study, a non-equivalent control-group research design was employed. The data were studied statistically by univariate and multivariate analysis of covariance and discriminant analysis. Results indicated significantly lower mean anxiety scores for the rational-emotive therapy group (p < .0005) after treatment. No significant difference was obtained in mean self-esteem estimates.

It was concluded that rational-emotive group therapy shows potential for use in reducing anxiety in learning disabled children. This study supports the findings of earlier research that rational-emotive therapy is highly effective in reducing anxiety. It is suggested that self-esteem may be less susceptible to change over relatively short-term therapy periods. Recommendations for further research are offered.
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CHAPTER I

INTRODUCTION

Background of the Study

With the advent of P. L. 94-142 (Education for All Handicapped Children Act), attention to remediation of learning disabilities has increased. Special classes for learning-disabled students; learning-disability support service; and one-to-one tutoring with itinerant learning-disability teachers are some of the more common intervention approaches being provided for learning disabled children (Sheldon, 1977).

In addition to observed academic difficulties, children with learning disabilities have been described in various ways. Most often some reference to "poor self concept" and poor emotional and social adjustment is implied (Sheldon, 1977). School psychologist Gary Ledebur (1977) characterizes learning-disabled children as generally having "a long history of academic failure, peer ridicule, pressure to succeed, and low self-esteem" (p. 62).

School experience more often than not is competitive. Learning-disabled children exhibit average intelligence and frequently their difficulties are not diagnosed either before or immediately when they begin school. They see their classmates progressing academically while they fall behind. Thus learning-disabled children may begin to feel different or incapable, and
even more complex problems may be propagated in their attempts to compensate for their weaknesses (Golden, 1970). Since learning-disabled children exhibit more ability than they actually demonstrate in achievement, parents and teachers may expect and even demand academic progress that is prodigious and unreasonable. Hence, learning-disabled children generally become anxious concerning their school performance and their adequacy. They begin to think poorly of themselves and their self-esteem declines.

A variety of strategies and therapeutic procedures have been suggested or described for use with learning-disabled children to help improve social and emotional adjustment (Blom, 1967; Golden, 1970; Zitani, 1975; Schact, 1971; Knaus, 1977; Ledebur, 1977; Shelton, 1977).

Much evidence for successful therapeutic use of one theory employed with children experiencing general social and emotional adjustment problems—rational-emotive therapy—is presented in Handbook of Rational Emotive Therapy (Ellis, 1977). Albert Ellis' rational-emotive therapy is based on the premise that thought controls feelings and actions. Human beings are unique in their ability to think and reason, and what a person thinks (or tells himself) about an event is what determines his or her feelings or actions (Ellis, 1962). Rational-emotive therapy endeavors to change irrational thinking.

Rational-emotive education, based on Ellis's rational-emotive therapy, has been found to have beneficial effects in reducing anxiety and in building self-esteem of children in regular fifth- and sixth-grade classrooms (Brody, 1974; Knaus & Bokor,
Rational-emotive education is a "preventative-interventionist approach by which children can be taught sane mental health concepts and the skills to use these concepts" (Knaus, 1974). This type of affective education was designed to be used by regular classroom teachers to present general principles of emotional health in the course of regular schooling. Its main goal is to help children at an early age to understand and consistently apply these principles to and with self and others. Its use has been largely confined to regular classroom children and not to disabled learners.

There appears to be a call for more than just remediation for learning-disabled children. Psychologists frequently state among their recommendations for youngsters identified as learning disabled the suggestion that counseling be sought to relieve anxiety and build self-esteem. Various investigations have suggested individual or group psychotherapy, affective education, play therapy, rational-emotive therapy, and other strategies; but there is conflicting evidence for support, and no one technique seems to have been widely employed or systematically investigated for use with learning-disabled children specifically.

Studies (Brody, 1974; Knaus & Bokor, 1975) indicate the effectiveness of rational-emotive education in reducing anxiety and building self-esteem in regular classroom students. Thus the question arose, Would rational-emotive group therapy reduce anxiety and build self-esteem in children identified as learning disabled?

**Purpose of the Study**

Since the studies of Brody (1974) and Knaus and Bokor (1975) demonstrated the effectiveness of rational-emotive education in
building self-esteem and reducing anxiety of students in regular fifth- and sixth-grade classrooms, it was hypothesized that rational-emotive techniques would also have beneficial effects upon learning-disabled children. The purpose of this study was to investigate the effectiveness of rational-emotive group therapy conducted with learning-disabled children. It attempted to expand and build upon the previously mentioned studies but had the following modifications: (1) the sample size was increased; (2) the sample was selected from the learning-disabled student population instead of the student population of regular classrooms; (3) the sample was extended to include ages eight through thirteen; and, (4) a therapeutic approach was employed rather than classroom instruction.

Significance of the Study

Documentation supports the effectiveness of rational-emotive affective education in lessening anxiety and building self-esteem in fifth- and sixth-grade students (Brody, 1974; Knaus & Bokor, 1975). The use of rational-emotive affective-education techniques with learning-disabled children has been reported (Knaus & McKeever, 1977), but no empirical evidence was included. Thus, this study attempted to extend and carry forward the work of the above studies by using a rational-emotive therapeutic approach with learning-disabled children. It also attempted to lend empirical support to the Knaus and McKeever study.

If the effectiveness of rational-emotive group therapy with learning-disabled children can be demonstrated empirically, then support for its use with learning-disabled children can be
established. Specifically, if learning-disabled children exposed to rational-emotive therapy exhibit less anxiety, then: (1) Teachers, parents, counselors, and therapists may want to consider this approach when dealing with learning-disabled children. (2) Teacher and therapist training institutions may want to include rational-emotive principles and strategies in their preparatory programs. (3) Mental-health institutions may want to use rational-emotive therapy when treating children with learning difficulties.

If learning-disabled children exposed to rational-emotive therapy demonstrate higher self-esteem than learning-disabled children not exposed to rational-emotive group therapy, then teachers, parents, and clinicians may want to consider rational-emotive theory principles when working with children with poor self concepts. School systems may want to institute rational-emotive group-therapy programs along with their learning-disability academic support programs.

Finally, if empirical support for rational-emotive therapy with learning-disabled students can be established in this study, it is possible that additional studies may be generated and interest in the emotional and social adjustment of learning-disabled children will be further stimulated.

**Research Questions**

This study was designed to explore the use of rational-emotive therapy techniques with groups of learning-disabled children. It was intended to consider whether learning-disabled
children exposed to rational-emotive group therapy demonstrate less test anxiety than learning-disabled children not exposed. Further, it was aimed to investigate whether learning-disabled children exposed to rational-emotive group therapy demonstrate higher self-esteem than learning-disabled children not exposed. Three treatment conditions were employed: (1) rational-emotive therapy; (2) recreational-educational programming; and, (3) no-contact. The recreational-educational programming treatment was included to serve as a control for the attention factors of willingness and desire of parents to enroll children in outside-of-school assistance programs and to transport children to such programs. Additionally, the recreational-educational programming treatment was included to serve as control for the actual attention children participating in rational-emotive therapy groups would receive.

**Assumptions and Limitations**

1. It was assumed that low self-esteem and excessive anxiety are often associated with and observed in learning-disabled children.

2. It was also assumed that evaluative attitudes towards the self in social, academic, family, and personal areas of experience are accessible to measurement by self-report.

3. It was further assumed that test anxiety is measurable by self-report.

4. The measurement of self-esteem and test anxiety was limited to items included on the Coopersmith Self-Esteem Inventory and the Test-Anxiety Scale for Children.
5. It was assumed that responses given truly reflected the situation of each child at that time.

6. Participation in the study was limited to children with signed parent permission. Selection of students for participation in rational-emotive therapy groups and recreational-educational program groups was not randomized. Rather, all children whose parents indicated ability to transport children to outside-of-school sessions during the fall of 1979 were included in rational-emotive and recreational-educational program groups.

7. This research was limited to identified elementary learning-disabled children who attended South Bend Community School Corporation schools.

Delimitations

1. Due to practical considerations, the population of this study was confined to learning-disabled children, aged eight through thirteen, who attended public schools within the South Bend Community School Corporation, South Bend, Indiana.

2. Only children identified as learning disabled by State of Indiana certified school psychologists or psychometrists were included.

Definition of Terms

Anxiety is an unpleasant feeling of apprehensiveness and fear together with increased physiological stimulation. Test anxiety is anxiety in test-like situations such as reciting, performing at the blackboard, attempting to understand teacher explanations, etc. (Sarason, 1960).
Group Therapy is a method of treating several individuals simultaneously by a single therapist.

Learning-Disabled Children are those children who demonstrate marked discrepancies in achievement and/or perceptual motor development and intelligence. Their I.Q. estimates indicate average or above-average learning potential. Difficulties with visual-perceptual motor tasks, mathematics, and/or reading may be noted.

Rational-emotive Therapy is that psychotherapy based on the premise that thoughts and beliefs produce feelings and actions. Irrational thinking can be examined and refined to produce rational thoughts, feelings, and actions.

Rational-emotive Education is a preventative affective education program based on rational-emotive theory and designed to be used by regular classroom teachers.

Recreational-educational Programming is a program conducted by the Children's Dispensary of South Bend, Indiana, and designed to aid learning-disabled children in developing positive self-concepts and in strengthening perceptual-motor, language, conceptual, visual, and auditory skills.

Self-Esteem is an individual's personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself/herself (Coopersmith, 1967).

South Bend Community School Corporation, in September of 1979, served 27,004 students in Center, Clay, Green, Liberty, Portage, and Warren townships located in and around South Bend, Indiana.
Outline of the Study

This chapter has included the statement of the problem, the purpose of the study, the significance of the study, the questions raised, a definition of terms, limitations of the study, and basic assumptions of the study.

Chapter two contains a selected review of literature and research relevant to learning disabilities, emotional and social adjustment, group therapy, and rational-emotive therapy.

Chapter three outlines the methodology of the study and describes the procedure employed and instruments used. The population is defined and the method of statistical analysis described.

Chapter four presents the findings of the study.

Chapter five summarizes the results of the study, indicates conclusions, and suggests recommendations for further research.
CHAPTER II

REVIEW OF LITERATURE

Very little research has been undertaken concerning the effects of rational-emotive therapy in reducing anxiety and building self-esteem specifically in learning-disabled children. However, literature relevant to this topic was reviewed and is presented in this chapter. Major areas of discussion are organized under the following headings: (1) literature related to the definition of learning disabilities; (2) literature related to social and emotional adjustment of learning-disabled children with emphasis on self-esteem; (3) literature related to anxiety in children; (4) literature related to therapy for learning-disabled children; (5) literature related to group therapy; and, (6) literature related to rational-emotive theory and therapy.

Learning Disabilities

Through many decades a variety of terms have been used to describe children with learning problems, but Egeland and Schrimpf (1978, p. 188) report that Dr. Samuel Kirk first used the term "learning disabilities" in 1963 when addressing a group of parents concerning problems of the perceptually handicapped child. Since that time, the term "learning disabilities" has become widely accepted and has been used to encompass all sorts of learning
difficulties, for example, visual-motor problems, perceptual problems, dyslexia, neurological handicaps, and minimal brain dysfunction. Much controversy remains over its definition. Egeland and Schrimpf (1978) suggest that much debate over devising a learning-disabilities definition continues due to the fact that agreement has not been forthcoming on what function the label and definition are to serve. For instance, a definition might be formulated to provide an etiological explanation, relevant treatment characteristics, or a basis for a classification system. Thus many definitions exist, and efforts at clarification and revision continue. For this study the State of Indiana's definition of a learning-disabled child as stated in Rule S-1 (1978) will be utilized. It reads:

A learning-disabled child is a child with a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage.

A child who is learning-disabled shall exhibit, when first identified, a severe discrepancy between normal or near normal potential and academic achievement in at least one of the areas of basic reading skills, reading comprehension, written expression, expressive language, mathematical reasoning or calculations, or listening comprehension.

Emotional and Social Development--Self-Esteem

As learning is an ego function, Golden, Chirlin, and Shone (1970) proclaim that "its breakdown can indicate other areas of
maladjustment" (p. 599). Learning-disabled children exhibit not only academic deficits but also generally display deficient social and emotional development and are often described as having a poor self-concept (Bush & Waugh, 1976; Lerner, 1976; Sheldon, 1977). In a study designed to investigate the actual existence of any difference in self-concept between learning-disabled children and normally achieving students, Larsen, Parker, and Jorjorian (1973) found that learning-disabled students do, in fact, demonstrate significantly greater discrepancies between actual and ideal self, supporting their hypothesis that children with learning problems have more negative self-concepts than normally achieving children.

In her study of dyslexic elementary-school children, Griffiths (1975) found that only five of 131 subjects indicated a desirable self-concept. There were three strongly negative traits which the children in this group thought they had. They felt that they were not intelligent, did poorly in school work, and were especially poor readers.

In characterizing individuals with low self-esteem, Coopersmith (1967) claims that they "have come to believe they are powerless and without resource or recourse" (p. 250). They feel alone and unlovable and powerless in expressing and defending themselves (Coopersmith, 1967). This attitude has further implications. Eisenberg (1964) explains:

How the child thinks about himself has a major influence on his behavior. The child's image of himself has two main sources: the way he sees others viewing him and what he sees himself as able to do—and hence to be. . . . Even with the good fortune of having sympathetic parents and companions, he must daily face the painful realization of his incompetence at play and at work. No 'reassurance' will satisfy him that he is capable as a person when he sees that he is not. (p. 70)
Anxiety

Since children spend almost one-half of their waking hours, nine months a year, in school, it does seem evident that those children who experience problems with learning might also encounter problems of emotional adjustment. Lerner (1976) suggests that learning-disabled children may be caught up in repeated failure to learn and experience emotional reaction to the failure. Lerner (1976, p. 336) explains, "In this cycle the failure to learn leads to adverse emotional responses--feelings of self-derision, poor ego perception, and anxiety, which augment the failure to learn syndrome." Anxiety may be experienced concerning performance as compared to other students and concerning parent, teacher, and self-expectations. Sarason et al. (1960), admitting influence of psychoanalytic theory, conceptualize the anxious response as:

... a danger signal associated not only with an external danger but also with unconscious contents and motivations the conscious elaboration of which is inhibited or defended against because such elaboration would place the individual in an even more dangerous relation to the external world. (p. 6)

Gaudry and Spielberger (1971) report on research evidence on behavioral correlates of anxious children. Their review of studies done by Lippsitt (1958), Rosenberg (1953), and Suinn and Hill (1964) generally indicates highly significant negative correlations between anxiety and self-concept (self-esteem, self-acceptance). Thus it appears that higher levels of anxiety may be accompanied by self-demeaning thoughts or lower levels of self-esteem. Sarason et al. (1960, p. 166) found that children who score high on anxiety scales manifest greater interference in
problem solving than peers who score low. The factor of intelligence was controlled in the study with all subjects involved scoring within the same range on an intelligence test. Sarason et al. (1960, p. 167) report further support for the hypothesis that in test-like situations

... the HA (high anxiety) child experiences most difficulty in the evaluation problem solving situation in which his strong dependency needs will apparently not be gratified. In such a child the evaluative factor acts as an initial cue for the arousal of anxiety, and the knowledge that he cannot depend on the evaluator for the gratification of his needs has the effect of increasing the strength of anxiety. (p. 167)

**Learning Disabilities and Therapy**

In investigating treatment modalities for learning-disabled children, Gilmore (1971), in his review of an unpublished dissertation by Dr. Bruce E. Baker, suggests that as an adjunct to learning-disability class placement or one-to-one learning-disability support tutoring, counseling therapy with the child proves to be a valuable treatment. Special class placement, one-to-one tutoring, or therapy alone did not indicate significant differences in the child's improvement, but when used in combination--special class placement and therapy or one-to-one tutoring and therapy--gains were noted in cognitive, affective, environmental, and psychomotor dimensions. Lerner (1976) proposes counseling therapy for learning-disabled children to redirect the failure to learn and the resulting emotional-reaction-to-failure cycle. She suggests utilizing techniques of Dreikurs (1971), Ellis (1972), or Ohlsen (1973) in working with children in groups to develop healthier emotional attitudes. Abrams and Belmont (1969) report

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significantly greater improvements on all evaluations of reading instruction for children who received specialized instruction and individual or group psychotherapy as compared to children who received individual or group therapy alone.

Gordon (1970), in his plea for self-concept enhancement and social-adjustment emphasis in the education of exceptional children, claims that the loss of intellectual development during the formative years may never be recovered. He further states:

But more important for optimal functioning in adulthood than any combination of academic skills is the enhancement of self-concept and the ability to adjust socially. These factors must receive priority in the education of all handicapped individuals. (p. 253)

**Group Therapy**

Treating several children simultaneously has several benefits. Friedland (1974) in a study of group counseling with the mentally retarded cites several advantages of the group-counseling approach: (1) Economical considerations, such as time and money, make group counseling more practical. One counselor can work with several clients in a session in place of a single individual. Thus the group technique makes more efficient use of both funds and trained personnel. (2) The group approach is advantageous in improving the client's social adaptation for a social milieu is provided by the group itself. Social adjustment is often a problem for exceptional children. Often they feel alienated and "different" and have difficulties in their relationships with others (Kronick, 1974). The group setting can provide experience in social situations. (3) Peer-group acceptance is more effective
than being accepted by an individual counselor. Problems of others may be observed and similar feelings, needs, and problems are usually revealed. Some self-esteem may be gained by associating with peers who have similar problems and to whom the child can relate. The individual ego strength derived from such interpersonal sharing and support may provide the individual with a basis for further growth. 

(4) The group furnishes a setting where feelings about labels may be aired and options for managing problems may be explored. Friedland (1974) states, "In the process, the group members learn how to give and receive emotional support" (p. 2).

(5) Observations of the individual's group behavior provide real-life information concerning social-situation conduct. From this information recommendations to parents and teachers may be formulated concerning effective ways of dealing with the individual.

Levine (1979, p. 3) indicates three major considerations when organizing therapy groups: (1) group purpose, (2) group structure, and (3) group membership. In general, short-term therapy groups require a definitive purpose while long-term therapy groups may pursue several divergent purposes. In structuring therapy groups, Levine (1979) proposes considering the following aspects:

(1) number of meetings the group will have  
(2) how often the group will meet  
(3) how long each meeting will last  
(4) where the group will meet  
(5) whether the group will be open ended or closed  
(6) what degree of political control will be retained by the therapist  
(7) format meetings will have—predetermined or spontaneous. (p. 6)

Selection of group participants can have much bearing on
group progress. Levine (1979, p. 12) states, "In general, groups aimed at short term and/or supportive treatment should consist of people who share significant similarities; groups aimed at interpersonal or genetic insight should have a balance of people who are similar and different."

Thus in selecting group participants, group purposes should be considered. Common fate or common problems can serve as a viable basis for grouping in either long- or short-term groups (Levine, 1979). Age and sex of group members should also be considered. During adolescence, sex of group members can create difficulties (Sugar, 1975). However, age similarity is noted as very significant by Levine (1975). He reports that age similarity was found to be the one factor most related to interpersonal attraction and freedom of expression in a study conducted with members of twenty-four outpatient adult psycho-therapy groups. Depending on group purpose, personality and behavioral factors may also be taken into account in group membership selection.

Rational-emotive Theory and Therapy

Rational-emotive theory and therapy were formulated by Albert Ellis in 1955 (Ellis, 1977). Ellis had been trained in psychoanalytic techniques but, with clinical experience, he began eliminating and revising his techniques searching for more effective and lasting methods of dealing with emotionally disturbed individuals. As Ellis explains:

... I realized more clearly that although people have remarkable differences and uniquenesses in their tastes, characteristics, goals, and enjoyments, they also have remarkable sameness in the ways in which they disturb themselves 'emotionally'. (p. 4)
Rational-emotive theory suggests that behavior is influenced by the interpretation the person places on a particular event. Thus, the message a person gives himself/herself about an event, not the event itself, determines his/her behavior. In explaining the personality in action, what must be considered is the cognitive process: how the individual interprets reality. Thoughts produce feelings which often produce actions. Thus, Young (1974) states, "The objective of Rational Counseling is to teach people to recognize inaccuracies in their thinking and arrive at a more realistic view of themselves and their surroundings" (p. 14). Corsini (1977) has extracted several theoretical statements from Ellis' writings on rational-emotive therapy:

1. "Humans have the potential to be rational or irrational" (p. 418). Ellis believes that people are equally susceptible to thinking that is reasonable or unreasonable.

2. "People largely create their emotional difficulties, but with significant help from their environment" (p. 418). From infancy to adulthood, individuals must begin to take more and more responsibility for their actions. Granted, the individual is affected by family and friends, but ultimate responsibility for thoughts, feelings, and acts rests with that individual.

3. "The total individual functions holistically in the areas of cognition, affection, and action" (p. 418). Ellis suggests that effective therapy will take into account thinking, feeling, and acting in changing the total person.

4. "Because humans are singularly cognitive creatures, they have the capacity to understand their irrational thinking"
Ellis (1977) describes an A-B-C framework. At point A something happens (activating event or experience); at point B, beliefs, ideas, thoughts, or evaluations about A, the activating event or experience, are considered; and at point C, the individual reacts emotionally and/or behaviorally. However, A, the event, does not cause C, the reaction. Rather, B, the individual's beliefs, ideas, thoughts, or evaluations actually lead to C, the emotional reaction. The following example is presented for illustration:

A. Activating event--A student makes a mistake while working an arithmetic problem on the blackboard.

B. Beliefs or thoughts--"It's horrible that I made a mistake. I shouldn't have done that. I'm so stupid."

C. Emotional reaction--The student experiences feelings of inferiority, anxiety, and frustration.

Examining irrational thinking by adding D and E to the format can aid individuals in self-understanding and lead to overcoming emotional and/or behavioral difficulties. At point D the individual can question point B, beliefs and thoughts by debating, disputing, and challenging them. At point E, a new effect or philosophy is acquired based on rational considerations. Thus, in the above example:

D. Dispute, question, and challenge--"Why is it horrible that I made a mistake? Why shouldn't I have made a mistake? Why does making a mistake make me stupid?"

E. New effect or philosophy--"Why is it horrible that I made a mistake? It isn't horrible. It's unfortunate. No one
really likes to make mistakes, but it's no big deal. It's too bad but there is no sense stretching it to horrible."

"Why shouldn't I have made a mistake? Requiring myself to be perfect is silly. I would rather not make mistakes, but nowhere is it written that I absolutely, positively must not make a mistake."

"Why does making a mistake make me stupid? It doesn't unless I say so. Making a mistake does not make me stupid. I am not my behavior. Just like a broken window does not make a whole house worthless, a mistake does not make me a stupid idiot. I better get on with correcting my mistakes instead of wasting all this time and energy putting myself down. As long as I live and breathe, I'll be making mistakes from time to time, so I better get used to it and quit exaggerating and making such a big deal over this one."

5. "When people change dysfunctional thinking, behavior, and emoting, they frequently return, at least temporarily, to their former patterns" (p. 418). Ellis proposes that all individuals have a tendency to think, act, and feel irrationally; that this "has a strong biological as well as significant learned element" (p. 32); and that constant vigilance is called for to refrain from self-defeating emotion and behavior.

6. "People get habituated to self-defeating patterns" (p. 418). Individuals become accustomed to feeling, thinking, and acting in various ways, and Ellis believes that they often struggle to maintain these practices even with the realization that their perceptions are faulty.
7. "To achieve optimal living, people should not evaluate themselves but only change their behavior" (p. 418). Ellis suggests that self-evaluation and self-rating cannot be done legitimately; that it is done on the basis of various acts or behaviors; and thus, does not take the total uniqueness and separateness of the individual into account. Ellis suggests inner direction and authenticity for each individual (Corsini, 1977). Thinking about self, others, and the world in a rational manner and then acting sensibly leads to less self-defeating behaviors.

Summary

Learning disabled children do not achieve academically as expected when estimates of potential are considered. Not only do they exhibit academic deficits but also deficient social and emotional adjustment. Learning-disabled children may get caught up in a cycle of repeated failure to learn and emotional reaction to the failure. Negative self-evaluations and anxiety may result. Research indicates that learning-disabled children who receive learning-disability support services and counseling are able to adjust more positively and progress farther academically than learning-disabled children who receive only learning-disability support service or only counseling.

Rational-emotive therapy aims at teaching individuals to identify and examine irrational thinking and then to change or modify such thinking. It is based on the premise that thoughts produce feelings which often produce actions. By changing dysfunctional thinking and feeling, self-defeating emotion and behavior
may be reduced. It is suggested that the failure to learn and corresponding emotional reaction cycle may be halted in learning disabled children who receive rational-emotive therapy.
CHAPTER III

METHODOLOGY

Type of Research
This study was quasi-experimental in nature as full experimental control was not possible. Its intent was to test the effectiveness of rational-emotive group therapy in influencing learning-disabled children to develop more positive self-concepts and to reduce test anxiety.

Research Design
A non-equivalent control-group research design was used (Campbell & Stanley, 1966). This design was employed because children participating in the study were not randomly selected. Pretests were required to ensure initial equivalence of groups. Three experimental treatments were employed: (1) rational-emotive therapy, (2) recreational-educational programming, and, (3) no-contact. The independent variable was the treatment received by the learning-disabled children and dependent variables were scores on measures of anxiety and self-concept.

Selection of Subjects
The population for this study consisted of all elementary children (128 in number) in grades one through six receiving learning-disability support services in the South Bend Community
School Corporation at the beginning of the fall semester, 1979. Learning-disability support-service programs were housed in eight different school buildings. Learning-disability support service consisted of prescribed instructional strategies developed to meet needs identified in an individualized educational plan designed specifically for the child. One-to-one or small-group remediation techniques along with regular classroom instruction with appropriate modification were employed. The children's previous educational evaluation indicated average or near average intellectual capacity. Achievement and/or perceptual motor measures showed a two-year or more discrepancy between the expected (considering the intelligence estimate) and actual level of achievement or between age and level of perceptual motor development.

The sample for this study consisted of all learning-disabled children for whom parent permission was obtained for inclusion in the study.

Instrumentation

Two instruments were used in this study, the Self-Esteem Inventory (Coopersmith, 1967) and the Test-Anxiety Scale for Children (Sarason, 1960).

The Self-Esteem Inventory (SEI--see appendix A) was first published in 1967 and was designed to measure evaluative attitudes towards the self in social, academic, family, and personal areas of experience. Children are asked to mark such items as "I'm pretty sure of myself," or "Most people are better liked than I am," as "Like me" or "Unlike me." Form A, which contains fifty-eight items and five subscales, was used in this study. It can be self-
administered and completed in ten to fifteen minutes.

A scoring key is provided and scores are reported as the total number of responses indicating a positive self-evaluation on all scales excluding Lie items. Scores on each of the five subscales, General self, Social self-peers, Home-parents, Lie scale, and School-academic may also be computed.

Evidence for convergent validity has been reported by several investigators. Correlations of .45 between the CPI Self-Acceptance Scale and the SEI; .63 between Soares scale and SEI; .60 with Rosenberg Scale; and .60 with a derived picture test have been reported (Coopersmith, 1975).

Split-half reliability for Form A has been reported at .87 (Fullerton, 1972) and .90 (Taylor & Reitz, 1968).

The Test-Anxiety Scale for Children (TASC—see appendix B) was first published in 1960. The TASC was designed to measure test anxiety or anxiety in "test-like" situations. It consists of thirty items such as "When the teacher says that she is going to find out how much you have learned, does your heart beat faster?" or "Do you think you worry more about school than other children?" The scale is read to the group with children instructed to answer by circling "yes" or "no," and can be completed in fifteen minutes. Scores are reported as the total number of "yes" answers, a higher score indicating greater anxiety.

A test-retest reliability coefficient of .78 was obtained with a group of forty sixth graders after a four-month interval (Sarason, 1960). Much of Sarason's 1960 book is devoted to validity, and overall evidence for validity is considerable. A
number of findings from the use of the scale have been in the ex­
pected direction, suggesting construct validity. Negative corre­
lations between TASC scores and IQ and achievement test scores have
been demonstrated when tests contained evaluative cues (Sarason,
1960). When evaluative cues are minimal (appears game-like),
performance of test-anxious children shows little or no inter­
ference at all (Sarason, 1960). Positive correlations of .47 to
.67 have been demonstrated between TASC and GASC (Sarason, 1960)
scores supporting the hypothesis that "the greater the degree of
anxiety experienced in test and test-like situations the greater
the number of non-test situations in which anxiety will be ex­
perienced" (Sarason, 1960, p. 158).

Treatment

Three experimental treatment conditions were employed in
this study: (1) rational-emotive therapy, (2) recreational-
educational programming, and (3) no contact.

Rational-emotive therapy groups received counseling therapy
based on rational-emotive therapy theory. Self-help and human
problem-solving skills were emphasized. The art of identifying
rational and irrational beliefs and challenging irrational self-
talk was stressed. The groups met once a week for sixty-minute
sessions for a total of nine sessions over a ten-week period. A
predetermined format for each session was used. At the outset of
therapy, very little "talking time" (unstructured) was included.
In later sessions, increased time was allotted for unstructured
discussion. Strategies used were combinations of approaches
employed in earlier studies of Brody (1974) and Knaus (1974) and other materials found in the process of study and training preparation. A complete description of procedures for each session are included in appendix C. This program was given the name "I Like Being Me!"

Recreational-educational programming groups met once a week over the same ten-week period. The children were engaged in such activities as arts and crafts, table-top games, gym activities, sports, auditory center, and hiking. The major goal of the program was to develop in each child a positive self-concept through success-oriented activities. In addition, perceptual-motor, expressive and receptive language, conceptual, and visual and auditory skills were emphasized in special activity groups. The researcher did not develop or provide input in the program. This program was entitled "Fun and Learn."

The no-contact group did not meet.

**Procedure**

The following procedure was employed in completing the study.

1. Parental permission was obtained for inclusion in the study.

2. Children were assigned to treatment groups in the following manner: All children whose parents indicated ability to transport them, if need be, to outside-of-school sessions during the fall of 1979 were assigned to the rational-emotive therapy groups, provided they were not also planning to enroll in
the recreational-educational program. Children enrolled or planning
to enroll (fall of 1979) in the recreational-educational program
were assigned to that treatment group. All other children were
assigned to the "no-contact" treatment group. (Samples of regis­
tration and program information materials are included in
appendix D.)

3. A total of 111 students with parental permission were
included in the study. Thirty-three children were enrolled in the
rational-emotive treatment condition, thirty-one in the recreational-
educational program, and forty-seven in the no-contact treatment
group. Age similarity was a goal in forming groups within the
treatment conditions that would actually meet. Also groups fairly
equal in the number of members were sought. Grouping children by
age—(1) eight- and nine-year-olds, (2) ten-year-olds, (3) eleven-
year-olds, and (4) twelve- and thirteen-year-olds—afforded groups
of approximately equal size (seven to nine members each) for those
who actually met for treatment.

4. The parents of children comprising the groups that
actually met were given times, dates, and location for sessions
(appendix E).

5. All children participating in the study were pretested
with the SEI and the TASC prior to initiation of treatment in
October 1979. Tests were administered by South Bend Community
School Corporation guidance counselors. As learning-disabled
children frequently demonstrate difficulty with reading, both in­
struments were read to the children as they completed them.
6. The experimenter who conducted the rational-emotive therapy groups had been employed as a school counselor (K through 8) for seven years, had been using rational-emotive techniques for the last four of those years, but had had no formal training in rational-emotive therapy practice. Thus in August 1979 she obtained individual instruction from Ken Peiser, Ph.D., at the Chicago Institute for Rational Living, Ltd., concerning techniques and practice of rational psychotherapy and rational therapy for couples, families, and children. In September 1979 she attended a "Rational-Emotive Therapy and Counseling" workshop conducted by Albert Ellis, Ph.D., at the Institute for Rational-Emotive Therapy in New York City. The Institute for Rational-Emotive Therapy is a non-profit organization chartered by the Regents of the University of the State of New York and affiliated with the World Federation of Mental Health. Area special-education teachers trained in the field of learning disabilities and related areas conducted the recreational-educational program.

7. It was determined that no child attending less than eight sessions would be included in the results of the study. The following of Brody's (1974) suggestions for future use of techniques were heeded in encouraging attendance. Portions of sessions were stopped when a high point in enthusiasm was reached. Attempts were made to end sessions on an enjoyable note. Treats were served at all sessions.

8. In January 1980, three weeks after all treatment sessions had been concluded, the SEI and the TASC were again administered by the same school guidance counselors who conducted
pretesting. After the measures were completed, they were checked to determine that they had been completely filled out. Any found lacking answers were returned to the child for completion.

**Hypotheses for the Study**

The following hypotheses were stated in the null form:

1. There is no significant difference among the means of the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

   1a. There is no significant difference among the means of the eight- and nine-year-old children in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

   1b. There is no significant difference among the means of ten-year-old children in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

   1c. There is no significant difference among the means of eleven-year-old children in each of the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

   1d. There is no significant difference among the means of twelve- and thirteen-year-olds in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

2. There is no significant difference among the means of
the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

2a. There is no significant difference among the means of eight- and nine-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

2b. There is no significant difference among the means of ten-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

2c. There is no significant difference among the means of eleven-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

2d. There is no significant difference among the means of twelve- and thirteen-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

3. There is no significant difference among the centroids of the three treatment groups with respect to posttest scores of self-esteem and anxiety when pretest scores on these variables are used as covariates.

Data Processing and Analysis

Completed pretests and posttests were coded for identification and group participation. They were delivered to the Andrews
University Computer Center for key punching and scoring. Univariate analysis of covariance and multivariate analysis of covariance were utilized in data analysis. Analysis of covariance was used to test Hypotheses 1 and 2 (and their subhypotheses). Analysis of covariance compares the criterion (posttest) means with the effect of the covariate (pretest) removed. That is, the analysis compares the posttest means as it is predicted (by regression analysis) that they would be if the pretest means of the three groups were equal. Multivariate analysis of covariance was used to test Hypothesis 3 to study the differences among the groups taking account of the inter-correlations of the dependent variables. Discriminant analysis was undertaken to identify the direction and strength of differences found. Discriminant analysis seeks a linear combination of variables that maximally discriminates among treatment groups. An alpha level of .05 was used to test all hypotheses.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter presents information concerning the data-producing sample. The test data yielded by the three treatment groups are reported, and the hypotheses are tested for statistical significance.

Data-Producing Sample

Of the 128 identified learning-disabled children receiving learning-disability support service in the South Bend Community School Corporation's elementary learning-disabilities program, parental permission was obtained for 111 (89 boys and 22 girls) to participate in the study. One child was dropped from the rational-emotive treatment as the minimum attendance criterion was not met due to illness. Table 1 presents data for participants in each of the three treatment conditions. Participants were classified into age-level groupings using the following delineations: The eight- and nine-year-old classification included children between the ages of seven years and ten months to nine years and nine months. The ten-year-old classification included children between the ages of nine years and ten months to ten years and nine months. The eleven-year-old classification included children between the ages of ten years and ten months to eleven years and nine months.
The twelve- and thirteen-year-old classification included children between the ages of eleven years and ten months to thirteen years and nine months.

Interpretations of results should take into account the relatively small cell sizes at each age level grouping.

### TABLE 1

<table>
<thead>
<tr>
<th>Treatment Condition</th>
<th>Age 8-9</th>
<th>Age 10</th>
<th>Age 11</th>
<th>Age 12-13</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>No Contact</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>27</td>
<td>22</td>
<td>38</td>
<td>110</td>
</tr>
</tbody>
</table>

**Basic Data for Analysis**

Table 2 presents the means on the Coopersmith Self-Esteem Inventory and the Test Anxiety Scale for Children for the sample as a whole and for each of the treatment conditions. Henceforth, the Coopersmith Self-Esteem Inventory is referred to as the SEI, and the Test Anxiety Scale for Children is referred to as the TASC. Raw scores on each of the measures are included in appendix F.

**Analysis of Data**

In this section analysis of data is presented hypothesis by hypothesis.
### TABLE 2

GROUP MEANS ON THE SEI AND TASC

<table>
<thead>
<tr>
<th>Treatment</th>
<th>N</th>
<th>General Self (SEI)</th>
<th>Social Self (SEI)</th>
<th>Home (SEI)</th>
<th>School (SEI)</th>
<th>Total Self Esteem (SEI)</th>
<th>Total Anxiety (TASC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
</tbody>
</table>
Hypothesis 1

There is no significant difference among the means of the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

Table 3 presents the pretest means, the posttest means, and the adjusted posttest means for each of the three treatment groups. Adjusted means were computed by regression analysis to predict what posttest means would be if all groups had had equal pretest means.

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>28.2187</td>
<td>29.1250</td>
<td>29.1926</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>29.0968</td>
<td>28.6774</td>
<td>28.3077</td>
</tr>
<tr>
<td>No Contact</td>
<td>27.9574</td>
<td>29.2553</td>
<td>29.4531</td>
</tr>
</tbody>
</table>

Table 4 gives the results of univariate analysis of covariance for all subjects on the SEI. The obtained F-ratio with 2 and 106 degrees of freedom is 1.047 with a probability level of .356. Therefore, Hypothesis 1 is retained. There is no significant difference in mean self-esteem scores of the three treatment groups.

Hypothesis 1 is further subdivided into four sub-hypotheses, one for each age-level grouping.
**Table 4**

**Univariate Analysis of Covariance for All Children on the SEI: Hypothesis 1**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>25.0063</td>
<td>12.5032</td>
<td>1.047</td>
<td>.356</td>
</tr>
<tr>
<td>Error</td>
<td>106</td>
<td>1266.1499</td>
<td>11.9448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>1291.1562</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 1a:** There is no significant difference among the means of the eight- and nine-year-old children in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

Table 5 gives the pretest means, posttest means, and the adjusted posttest means for eight- and nine-year-olds in the three treatment groups.

**Table 5**

**Pretest, Posttest, and Adjusted Posttest Means of Eight- and Nine-Year-Olds on the SEI: Hypothesis 1a**

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>25.4286</td>
<td>26.1429</td>
<td>26.8346</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>29.1250</td>
<td>30.0000</td>
<td>29.3890</td>
</tr>
<tr>
<td>No Contact</td>
<td>27.3750</td>
<td>28.3750</td>
<td>28.3807</td>
</tr>
</tbody>
</table>
Table 6 gives the results of univariate analysis of covariance for eight- and nine-year-olds on the SEI. The obtained F-ratio with 2 and 19 degrees of freedom is .754 with a probability level of .487. Thus, the null hypothesis is retained. There is no significant difference in mean self-esteem scores of eight- and nine-year-olds in the three treatment groups.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>21.5525</td>
<td>10.7762</td>
<td>.754</td>
<td>.487</td>
</tr>
<tr>
<td>Error</td>
<td>19</td>
<td>271.4646</td>
<td>14.2876</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>293.0171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 1b**: There is no significant difference among the means of ten-year-old children in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

Table 7 gives the pretest means, posttest means, and the adjusted posttest means on the SEI for ten-year-olds in the three treatment groups.

Table 8 gives the results of univariate analysis of covariance for ten-year-olds on the SEI. The obtained F-ratio with 2 and 24 degrees of freedom is .959 with a probability level of .399. The null hypothesis is retained. There is no significant
difference in self-esteem means of ten-year-olds in the three
treatment groups.

TABLE 7

PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF
TEN-YEAR-OLDS ON THE SEI: HYPOTHESIS 1b

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>27.5555</td>
<td>30.2222</td>
<td>30.2691</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>28.2500</td>
<td>29.5000</td>
<td>29.1737</td>
</tr>
<tr>
<td>No Contact</td>
<td>27.2727</td>
<td>27.7273</td>
<td>27.9262</td>
</tr>
</tbody>
</table>

TABLE 8

UNIVARIATE ANALYSIS OF COVARIANCE FOR TEN-YEAR-OLDS
ON THE SEI: HYPOTHESIS 1b

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>27.3381</td>
<td>13.6691</td>
<td>.959</td>
<td>.399</td>
</tr>
<tr>
<td>Error</td>
<td>24</td>
<td>341.9568</td>
<td>14.2481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>369.2930</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 1c: There is no significant difference among the
means of eleven-year-old children in each of the three treat-
ment groups with respect to posttest scores of self-esteem as
measured by the SEI when pretest scores are used as covariates.
Table 9 gives the pretest means, posttest means, and the adjusted posttest means for eleven-year-olds on the SEI in the three treatment groups.

**TABLE 9**

**PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF ELEVEN-YEAR-OLDS ON THE SEI: HYPOTHESIS 1c**

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>29.7500</td>
<td>29.3750</td>
<td>29.2724</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>30.4286</td>
<td>29.0000</td>
<td>28.5571</td>
</tr>
<tr>
<td>No Contact</td>
<td>28.4286</td>
<td>28.5714</td>
<td>29.1315</td>
</tr>
</tbody>
</table>

Table 10 gives the results of univariate analysis of covariance for eleven-year-olds on the SEI. The obtained F-ratio with 2 and 18 degrees of freedom is .166 with a probability level of .849. The null hypothesis is retained. There is no significant difference in self-esteem means of eleven-year-olds in the three treatment groups.

**Hypothesis 1d:** There is no significant difference among the means of twelve- and thirteen-year-olds in the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates.

Table 11 gives the pretest means, posttest means, and the adjusted posttest means on the SEI for twelve- and thirteen-year-olds in the three treatment groups.
TABLE 10
UNIVARIATE ANALYSIS OF COVARIANCE FOR ELEVEN-YEAR-OLDS ON THE SEI: HYPOTHESIS 1c

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>2.0631</td>
<td>1.0315</td>
<td>.166</td>
<td>.399</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>111.7824</td>
<td>6.2101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>113.8455</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 11
PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF TWELVE- AND THIRTEEN-YEAR-OLDS ON THE SEI: HYPOTHESIS 1d

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>29.8750</td>
<td>30.2500</td>
<td>29.7020</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>28.7500</td>
<td>26.2500</td>
<td>26.2670</td>
</tr>
<tr>
<td>No Contact</td>
<td>28.3810</td>
<td>30.6190</td>
<td>30.8213</td>
</tr>
</tbody>
</table>

Table 12 gives the results of univariate analysis of covariance for twelve- and thirteen-year-olds on the SEI. The obtained F-ratio with 2 and 33 degrees of freedom is 5.301 with a probability level of < .01. The null hypothesis is rejected. There is a significant difference in self-esteem means of twelve- and thirteen-year-olds in the three groups. Comparison of group means by the Newman-Kuhls method indicated significantly higher mean self-esteem scores for both the rational-emotive and no-contact
groups. These two group means did not differ significantly from each other.

TABLE 12
UNIVARIATE ANALYSIS OF COVARIANCE FOR TWELVE- AND THIRTEEN-YEAR-OLDS ON THE SEI: HYPOTHESIS 1d

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>120.1492</td>
<td>60.0746</td>
<td>5.301</td>
<td>P &lt; .01</td>
</tr>
<tr>
<td>Error</td>
<td>33</td>
<td>373.9817</td>
<td>11.3328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>494.1309</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2

There is no significant difference among the means of the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

Table 13 gives the pretest means, posttest means, and the adjusted posttest means for all children on the TASC in the three treatment groups.

Table 14 gives the results of univariate analysis of covariance for all children on the TASC. The obtained F-ratio with 2 and 106 degrees of freedom is 12.554 with a probability level of < .0005. The null hypothesis is rejected. There is a significant difference in the mean anxiety scores among the three treatment groups. Comparison of group means by the Newman-Kuhls method indicated significantly lower mean anxiety scores for the rational-emotive treatment groups.

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TABLE 13
PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF ALL CHILDREN ON THE TASC: HYPOTHESIS 2

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>17.6250</td>
<td>9.4688</td>
<td>8.0816</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>13.6774</td>
<td>12.5161</td>
<td>13.7971</td>
</tr>
<tr>
<td>No Contact</td>
<td>15.4255</td>
<td>13.7660</td>
<td>13.8654</td>
</tr>
</tbody>
</table>

TABLE 14
UNIVARIATE ANALYSIS OF COVARIANCE FOR ALL CHILDREN ON THE TASC: HYPOTHESIS 2

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>731.7705</td>
<td>365.8853</td>
<td>2.554</td>
<td>P &lt; .0005</td>
</tr>
<tr>
<td>Error</td>
<td>106</td>
<td>3089.2773</td>
<td>29.1441</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>3821.0479</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2 is further subdivided into four sub-hypotheses, one for each age-level grouping.

**Hypothesis 2a:** There is no significant difference among the means of eight- and nine-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

Table 15 gives the pretest means, posttest means, and the
adjusted posttest means for eight- and nine-year-olds on the TASC in the three treatment groups.

Table 15 gives the results of univariate analysis of co-variance for eight- and nine-year-olds on the TASC. The obtained F-ratio with 2 and 19 degrees of freedom is 3.188 with a probability level of .063. The null hypothesis is retained. There is no significant difference in the mean anxiety scores among eight- and nine-year-olds in the three treatment groups.
Hypothesis 2b: There is no significant difference among the means of ten-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

Table 17 gives the pretest means, posttest means, and the adjusted posttest means for ten-year-olds on the TASC in the three treatment groups.

**TABLE 17**

**PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF TEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2b**

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>16.7778</td>
<td>7.6667</td>
<td>8.1135</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>16.5000</td>
<td>14.2500</td>
<td>14.8293</td>
</tr>
<tr>
<td>No Contact</td>
<td>19.3636</td>
<td>14.4545</td>
<td>13.6676</td>
</tr>
</tbody>
</table>

Table 18 gives the results of univariate analysis of covariance for ten-year-olds on the TASC. The obtained F-ratio with 2 and 24 degrees of freedom is 2.893 with a probability level of .073. The null hypothesis is retained. There is no significant difference in mean anxiety scores of ten-year-olds in the three treatment groups.

Hypothesis 2c: There is no significant difference among the means of eleven-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.
TABLE 18
UNIVARIATE ANALYSIS OF COVARIANCE FOR TEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2b

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>228.1172</td>
<td>114.0586</td>
<td>2.893</td>
<td>.073</td>
</tr>
<tr>
<td>Error</td>
<td>24</td>
<td>946.2024</td>
<td>39.4251</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>1174.3196</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19 gives the pretest means, posttest means, and the adjusted posttest means for eleven-year-olds on the TASC in the three treatment groups.

TABLE 19
PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF ELEVEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2c

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>19.8750</td>
<td>13.1250</td>
<td>10.7650</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>13.2857</td>
<td>13.2857</td>
<td>15.4721</td>
</tr>
<tr>
<td>No Contact</td>
<td>15.7143</td>
<td>15.4286</td>
<td>15.9393</td>
</tr>
</tbody>
</table>

Table 20 gives the results of univariate analysis of covariance for eleven-year-olds on the TASC. The obtained F-ratio with 2 and 18 degrees of freedom is 2.255 with a probability level of .132. The null hypothesis is retained. There is no significant
difference in mean anxiety scores for eleven-year-olds in the three treatment groups.

**TABLE 20**

UNIVARIATE ANALYSIS OF COVARIANCE FOR ELEVEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2c

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>108.8794</td>
<td>54.5397</td>
<td>2.255</td>
<td>.132</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td>434.6396</td>
<td>24.1466</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>543.5190</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2d: There is no significant difference among the means of twelve- and thirteen-year-old children in the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates.

Table 21 gives the pretest means, posttest means, and the adjusted posttest means for twelve- and thirteen-year-olds on the TASC in the three treatment groups.

Table 22 gives the results of univariate analysis of covariance for twelve- and thirteen-year-olds on the TASC. The obtained F-ratio with 2 and 33 degrees of freedom is 6.432 with a probability level of .005. The null hypothesis is rejected. There is a significant difference in mean anxiety scores of twelve- and thirteen-year-olds. Comparison of group means by the Newman-Kuhls method indicated significantly lower mean anxiety scores for the rational-emotive treatment groups.
**TABLE 21**

PRETEST, POSTTEST, AND ADJUSTED POSTTEST MEANS OF TWELVE- AND THIRTEEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2d

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>17.7500</td>
<td>8.6250</td>
<td>7.1120</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>14.7500</td>
<td>11.0000</td>
<td>11.7337</td>
</tr>
<tr>
<td>No Contact</td>
<td>15.3333</td>
<td>14.4286</td>
<td>14.7254</td>
</tr>
</tbody>
</table>

**TABLE 22**

UNIVARIATE ANALYSIS OF COVARIANCE FOR TWELVE- AND THIRTEEN-YEAR-OLDS ON THE TASC: HYPOTHESIS 2d

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Adjusted Sums of Squares</th>
<th>Adjusted Mean Square</th>
<th>Calculated F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>336.5913</td>
<td>168.2957</td>
<td>6.432</td>
<td>.005</td>
</tr>
<tr>
<td>Error</td>
<td>33</td>
<td>863.4556</td>
<td>26.1653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>1200.0469</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 3**

There is no significant difference among the centroids of the three treatment groups with respect to posttest scores of self-esteem and anxiety when pretest scores on these variables are used as covariates.

Multi-variate analysis of covariance was used to study the inter-relations of anxiety and the four subscale scores of self-esteem in looking for possible group differences. Table 23 gives...
the adjusted posttest means of each of the five covariates for the three treatment groups.

**TABLE 23**

**MULTIVARIATE ANALYSIS OF COVARIANCE ADJUSTED MEANS**

<table>
<thead>
<tr>
<th>Treatment Condition</th>
<th>General SEI</th>
<th>Social Self-Peers SEI</th>
<th>Home-Parents SEI</th>
<th>School Academic SEI</th>
<th>Anxiety TASC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-Emotive</td>
<td>15.7918</td>
<td>4.3029</td>
<td>4.2841</td>
<td>4.9036</td>
<td>8.2046</td>
</tr>
<tr>
<td>Recreational-Education</td>
<td>15.2743</td>
<td>4.4281</td>
<td>4.5654</td>
<td>4.1633</td>
<td>13.5256</td>
</tr>
<tr>
<td>No Contact</td>
<td>15.4927</td>
<td>4.6391</td>
<td>4.8592</td>
<td>4.3196</td>
<td>13.9609</td>
</tr>
</tbody>
</table>

Multivariate analysis of covariance with five criterion variables and five covariates yields an $F = 3.3417$ with 10 and 195 degrees of freedom, and a probability of .0007. The null hypothesis is therefore rejected.

There is a significant difference among the centroids of the three treatment groups. To understand the nature of these differences, discriminant analysis was undertaken in constructing a linear combination of variables to maximally discriminate among the three groups. The first discriminant function was found to be significant with an approximate $X^2 = 19.9402$, with 10 degrees of freedom and $P = .0298$.

Table 24 presents the group means on this first discriminant function. For ease of understanding, all means are made positive by adding a constant 10 to each.
TABLE 24

GROUP MEANS: DISCRIMINANT FUNCTION

<table>
<thead>
<tr>
<th>Treatment Condition</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-emotive</td>
<td>6.108</td>
</tr>
<tr>
<td>Recreational education</td>
<td>4.831</td>
</tr>
<tr>
<td>No contact</td>
<td>4.636</td>
</tr>
</tbody>
</table>

The standard coefficients for discriminant function I are shown in table 25. It is evident that variables that contributed the most in discriminating among the three groups are anxiety scores and school-academic (SEI) scores.

TABLE 25

DISCRIMINANT ANALYSIS FUNCTION I

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard Discriminant Function Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Self</td>
<td>- 3.2777</td>
</tr>
<tr>
<td>Social Self</td>
<td>- 5.0098</td>
</tr>
<tr>
<td>Home Parents</td>
<td>- 6.4001</td>
</tr>
<tr>
<td>School-Academic</td>
<td>+ 9.6523</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-10.2464</td>
</tr>
</tbody>
</table>

It is common practice to consider as making a meaningful contribution those variables with discriminant function coefficients which are at least half of the highest (absolute) coefficient. The rational-emotive groups are differentiated from the other two groups in that anxiety scores are lower, school-academic scores...
higher, and home-parent scores lower.

Summary

Three hypotheses were tested in this study. A summary of results is presented here. A discussion of results follows in chapter V. The first and second hypotheses dealt with the effects of rational-emotive group therapy on learning-disabled children. The first hypothesis looked at self-esteem scores as measured by the Coopersmith Self Esteem Inventory. Univariate analysis of covariance of self-esteem scores of children eight through thirteen showed that there was no significant difference in self-esteem scores among the three treatment groups. When analysis was undertaken by age-level grouping, a significant difference was indicated for twelve- and thirteen-year-olds. Comparison of means by the Newman-Kuhls method indicated significantly higher means for rational-emotive treatment group than for no-contact groups. The second hypothesis dealt with anxiety scores as measured by the Test Anxiety Scale for Children. A significant F-ratio in favor of the rational-emotive treatment group was indicated. When analysis was undertaken by age-level grouping, a significant difference was indicated for the twelve- and thirteen-year-olds where the mean anxiety score for the rational-emotive treatment group was considerably lower. Probabilities of F-ratios for the rational-emotive treatment groups at all other age groupings are noted as close to significant. Though statistically non-significant, the anxiety mean for the other age-level groupings of the rational-
emotive group was consistently, considerably lower than for the other groups.

The third hypothesis dealt with the differences among the treatment groups taking into account the intercorrelations of self-esteem and anxiety scores. Significant differences were again identified in favor of the rational-emotive treatment group. By discriminant analysis anxiety scores were found to maximally discriminate the groups with school-academic subtest scores of self-esteem ranked second. Results of testing of hypothesis 3 are noted as consistent with those indicated in testing hypothesis 2.
CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS
FOR FURTHER RESEARCH

This chapter presents a summary and the conclusions of the study and the implications for further research. The summary briefly describes the purpose of the study, the subjects, the procedure and methodology, and the findings. A discussion of the results of self-esteem and test-anxiety measures is followed by the conclusions with regards to the effects of rational-emotive group therapy on learning-disabled children. The chapter is concluded with some implications for further research.

Summary

Purpose of the Study

The purpose of this study was to investigate the effectiveness of rational-emotive group therapy conducted with learning-disabled children. Earlier studies (Brody, 1974; Knaus & Bokor, 1975) demonstrated the effectiveness of rational-emotive education in building self-esteem and reducing anxiety of fifth- and sixth-grade children in regular classrooms. This study was aimed at building upon and expanding previous studies by using more subjects and extending the age levels employed. The subjects were selected from a learning-disabled student population instead of a regular
classroom student population. Rather than regular classroom instruction, group-therapy sessions were conducted after school hours. The question was: Would rational-emotive group therapy reduce anxiety and build self-esteem in children identified as learning disabled?

Subjects

The subjects of this study were learning-disabled children ages eight to thirteen receiving learning-disability support service in the South Bend Community School Corporation in the fall of 1979. A total of 110 children identified as learning disabled by state of Indiana certified psychologists participated in the study. Parental permission was required for inclusion in the study. The total population of learning-disabled children within the school corporation at that time was 128 children.

Treatment

Three experimental treatment conditions were employed: (1) rational-emotive therapy, (2) recreational-educational programming, and (3) no-contact.

Self-help and problem-solving skills were emphasized in the rational-emotive treatment condition. The art of identifying rational and irrational beliefs and challenging irrational self-talk was stressed. A predetermined format for each session was used, employing strategies described in previous studies (Brody, 1974; Knaus, 1974) and other approaches acquired in the process of study and training preparation. Rational-emotive therapy groups met once a week for sixty-minute sessions over a ten week period.
The major goal of the recreational-education program was to develop in each child a positive self-concept through success-oriented activities. Perceptual-motor, expressive and receptive language, conceptual, and visual and auditory skills were emphasized in special activity groups. The children in this treatment condition were engaged in such activities as arts and crafts, tabletop games, gym activities, sports, auditory center, and hiking. Recreational-education program groups met once a week for nine sessions over the same ten-week period.

The no-contact group did not meet.

**Procedure and Methodology**

Children were assigned to treatment conditions in the following manner. All children whose parents indicated ability to transport them to outside-of-school sessions were assigned to the rational-emotive treatment provided they were not also planning to enroll in the recreational-education program. Children enrolled in the recreational-education program were assigned to that treatment. All other children were assigned to the no-contact treatment.

All children participating in the study were pretested and posttested with the Coopersmith Self Esteem Inventory and Test Anxiety Scale for Children. Test items were read to the children during test administration by South Bend Community School Corporation guidance counselors.

Three main statistical methods were employed to analyze the data collected. Univariate analysis of covariance was used to adjust for the effect of non-random assignment of subjects to groups.
Pre- and posttest scores on measures of self-esteem and anxiety were examined. Multivariate analysis of covariance was utilized to study the inter-relations of anxiety and facets of self-esteem. In the event of probabilities of F-ratio reaching significant levels, discriminant analysis was employed to identify the variable(s) which maximally discriminated children in each of the three treatment conditions. An alpha level of .05 was used to test all hypotheses.

**Summary of the Findings**

Three major hypotheses were tested. A summary of the findings, hypothesis by hypothesis, follows:

The first hypothesis was: There is no significant difference among the means of the three treatment groups with respect to posttest scores of self-esteem as measured by the SEI when pretest scores are used as covariates. The probability of an F-ratio reaching significant levels was not obtained. Hypothesis 1 was retained.

Hypothesis 1 was further subdivided into four sub-hypotheses, one for each age-level grouping. Probabilities of significant F-ratios were not obtained for eight- and nine-year-old children, ten-year-old children, or eleven-year-old children. The null hypotheses were retained for these age-level groupings. For twelve- and thirteen-year-old children, the null hypothesis was rejected. There was a significant difference in self-esteem means of twelve- and thirteen-year-old children in each of the three treatment groups. Comparison of means by the Newman-Kuhls method indicated significantly higher self-esteem scores for both the rational-emotive and no-contact treatments. Means for these two groups were
not significantly different from each other yet significantly higher than the mean for the recreational-education groups.

The second hypothesis was: There is no significant difference among the means of the three treatment groups with respect to posttest scores of anxiety as measured by the TASC when pretest scores are used as covariates. The probability of an F-ratio reaching significant levels was obtained. Hypothesis 2 was rejected. Comparison of group means by the Newman-Kuhls method indicated significantly lower anxiety scores for the rational-emotive treatment groups.

Hypothesis 2 was further subdivided into four sub-hypotheses, one for each age-level grouping. While probabilities of F-ratios were consistently in the direction of significance in favor of the rational-emotive groups for all ages, only means of the twelve- and thirteen-year-old groups reached significance. Comparison of group means by the Newman-Kuhls method indicated significantly lower anxiety scores for the rational-emotive groups.

The third hypothesis was: There is no significant difference among the centroids of the three treatment groups with respect to posttest scores of self-esteem and anxiety when pretest scores on these variables are used as covariates. The probability of an F-ratio reaching significant levels was obtained. Hypothesis 3 was rejected. A significant difference in favor of the rational-emotive treatment groups was indicated. Discriminant analysis revealed that lower anxiety scores for the rational-emotive treatment groups maximally discriminated among the three treatment groups. Higher scores on the School-academic subscale of the SEI for the
rational-emotive treatment groups ranked second in discriminating among the three treatment groups. Lower scores on the Home-parents subscale of the SEI for the rational-emotive treatment groups ranked third in discriminating among the three treatment groups. Results of testing of hypothesis 3 are noted as consistent with testing of hypothesis 2.

Discussion of the Findings

It is apparent from the data analysis that there is qualified support for the effectiveness of rational-emotive group therapy conducted with learning-disabled children. The results indicate that learning-disabled children exposed to rational-emotive group therapy do exhibit less anxiety than learning-disabled children not exposed. This is the first study to investigate empirically the effect of rational-emotive techniques conducted with learning-disabled children. It supports the findings of Knaus and Bokor (1975) and Brody (1974) which demonstrated that rational-emotive education approaches bring about less anxiety in regular classroom children.

The results of this study do not indicate the effectiveness of rational-emotive techniques in building self-esteem in learning-disabled children as a whole. Twelve- and thirteen-year-old learning-disabled children who received rational-emotive group therapy did display higher posttest self-esteem scores. However, this result is confounded by the phenomenon that twelve- and thirteen-year-old children who received no treatment at all also exhibited significantly higher posttest scores. No plausible explanation for this result has been developed.
While the earlier study of Brody (1974) also did not find significant differences in self-esteem, the study of Knaus and Bokor (1975) did find rational-emotive techniques effective in enhancing positive self-esteem. A possible explanation of this result may be that self-esteem is less amenable to change over relatively short periods of time. Both the Brody (1974) study and this investigation were conducted over a three-month period. The Knaus and Bokor (1975) study was conducted over an eight-month period. Too, children in the recreational-education program, a program which was specifically designed to foster positive self-concept development, did not exhibit significant gains on the self-esteem measure. Another possible explanation is that techniques used in this study were more powerful in influencing anxiety than self-esteem. This is questionable, however, as techniques used in this study stressed both self-esteem and anxiety constructs.

Twelve- and thirteen-year-old learning-disabled children exposed to rational-emotive group therapy did exhibit less anxiety and more positive self-esteem. It may be that rational-emotive techniques are more effective with increasing age of children. Actual observation does partially support this supposition. Children in the eight- and nine-year-old age-level grouping required additional explanation of and practice with the A-B-C model. Children in all other rational-emotive groups demonstrated awareness and control of self-verbalization in the A-B-C model more readily. Each age-level grouping displayed facility with challenging techniques with practice.

Investigation of the interrelations of all variables
studied revealed that lower anxiety scores for the rational-emotive therapy groups maximally discriminated the three treatment groups. School-academic measures of self-esteem ranked second in maximally discriminating the three treatment groups and were noted as higher for the rational-emotive treatment groups than for the other two treatment groups. This suggests that rational-emotive techniques show promise in building self-esteem in disabled children with respect to self-esteem measures of school-academic measures of self-esteem. It indicates a renewed self-esteem for the children that techniques have full potential in the home. The techniques have full potential in practice.

It is of note that learning-disabled children obtained and reported observation is consistent with findings of studies (Larsen, Parker, & Jorjorian, 1973; Griffiths, 1975) designed to investigate differences in self-concept between learning disabled children and normally achieving children. Also, mean anxiety scores for learning-disabled children participating in this study are indicative of elevated anxiety states. No studies of anxiety in learning-disabled children were found. Sarason (1960) describes several...
studied revealed that lower anxiety scores for the rational-emotive therapy groups maximally discriminated the three treatment groups. School-academic measures of self-esteem ranked second in maximally discriminating the three treatment groups and were noted as higher for the rational-emotive treatment groups than for the other two treatment groups. This suggests that rational-emotive techniques show promise in building self-esteem of learning-disabled children with respect to school and academic performance. Home-parent measures of self-esteem ranked third in differentiating the rational-emotive groups from the other two treatment groups. However, lower self-esteem measures on this factor were observed. It is possible that techniques for problem solving and self-understanding within the home environment were not emphasized enough. Children may not have fully developed their abilities to generalize rational-emotive practices to varying situations.

It was not the intention of this study to compare learning-disabled children with normally achieving children. However, it is of note that mean scores on the self-esteem measure for learning-disabled children participating in this study are much below norms obtained and reported by Coopersmith (1975). This observation is consistent with findings of studies (Larsen, Parker, & Jorjorian, 1973; Griffiths, 1975) designed to investigate differences in self-concept between learning disabled children and normally achieving children. Also, mean anxiety scores for learning-disabled children participating in this study are indicative of elevated anxiety states. No studies of anxiety in learning-disabled children were found. Sarason (1960) describes several
studies reporting a negative relationship between anxiety and achievement in the school situation.

**Conclusions**

From the findings of this study concerning the effects of rational-emotive group therapy upon self-esteem and anxiety of learning-disabled children, the following conclusions were drawn:

1. Elementary-school-age learning-disabled children as a whole exhibit no significant differences in measures of self-esteem when exposed to nine hours of rational-emotive group therapy.

2. Twelve- and thirteen-year-old learning-disabled children exhibit significantly higher scores on measures of self-esteem when exposed to nine hours of rational-emotive group therapy. Twelve- and thirteen-year-old learning-disabled children receiving no therapy or contact at all also exhibit significantly higher scores on measures of self-esteem. Further investigation of this variable is required to resolve such confounding results.

3. Elementary-school-age learning-disabled children exhibit significantly lower anxiety scores when exposed to nine hours of rational-emotive group therapy. When age-level groupings are examined separately, twelve- and thirteen-year-olds in rational-emotive treatment groups exhibit a significant reduction on anxiety measures. All other age groupings of rational-emotive treatment display reduced anxiety scores in the direction of the determined level of significance.

Implications for Further Research

This study was an attempt to investigate the effects of rational-emotive group therapy upon anxiety and self-esteem of learning-disabled children. The findings provide insight in the use of rational-emotive group therapy with elementary-school-age learning-disabled children in the South Bend Community School Corporation, South Bend, Indiana. A significant reduction in measures of anxiety was found in favor of the rational-emotive therapy groups when compared to the recreational-education program groups and the no-contact groups.

The findings concerning anxiety suggest that rational-emotive group-therapy techniques have the potential for influencing learning-disabled children to confront emotional reactions to failure or difficulty with school work. Lower scores on anxiety measures were obtained for rational-emotive therapy groups. Facility in challenging irrational thoughts and, in turn, producing less destructive emotional reactions may break up the cycle of failure to learn and the emotional reaction to failure described earlier by Lerner (1976). Gains in academic achievement might be observed with use of rational-emotive techniques. Further research might consider: To what extent, if any, is academic achievement enhanced by rational-emotive group therapy? What are some other possible variables which might be influenced by practice of rational-emotive techniques?

As studies (Rosenburg, 1953; Lippsett, 1958; Suinn & Hill, 1964) generally indicate highly significant negative correlations between anxiety and self-esteem, significant differences on measures
of self-esteem were expected. Significantly higher scores were obtained only for twelve- and thirteen-year-olds. However, such gains were noted for both the rational-emotive therapy groups and no-contact groups. Further research on the self-esteem variable is definitely in order to resolve such confusing results. Studies might address: What are the possibilities of enhancing self-esteem? Is self-esteem less amenable to change over relatively short periods of time? Assuming that rational-emotive group therapy will bring about less negative self-evaluation, approximately how many sessions are required to realize such change?

It is evident that the findings of this study raise a number of questions related to the use of rational-emotive group therapy with learning-disabled children. The following recommendations for further studies are offered:

1. A larger sample of learning-disabled children might be used to determine whether similar findings with reference to measures of self-esteem and anxiety will result.

2. A similar study might be undertaken with full randomization to determine whether similar findings will result.

3. Different measures of self-esteem and anxiety might be employed in a similar study.

4. Other variables such as achievement, frustration tolerance, adaptive behavior, and social adjustment might be investigated to determine the extent to which these variables are influenced by rational-emotive group therapy.

5. Follow-up studies might be designed to ascertain to what extent rational-emotive techniques are retained over time.
6. Several therapists might be utilized in order to assess results of rational-emotive techniques independent of therapist individuality.

7. Rational-emotive group therapy might be conducted regularly over an entire school year. It would be interesting to investigate whether increasing the time period of treatment or the intensity of treatment would modify posttest results.

8. Teachers and parents of learning-disabled children might be trained in rational-emotive theory principles along with rational-emotive therapy for the children themselves in order to ascertain the effects of consistent approaches to problem-solving skills. Measures of social adjustment and achievement might be utilized.

This study investigated the effects of rational-emotive group therapy conducted with learning-disabled children. The above recommendations for further research, while not exhaustive, may serve as a guide in future studies.

Implications for Practice

Results of this study support the findings of previous studies of rational-emotive techniques. Rational-emotive therapy is an effective approach in reducing anxiety in children and, specifically from this study, learning-disabled children. The following suggestions for practitioners are offered.

1. As P. L. 94-142 mandates not only special education service but also such related services as are required to assist a handicapped child to benefit from special education, school
psychologists, counselors, and social workers might consider using rational-emotive techniques when providing counseling services to learning-disabled children.

2. Regular classroom teachers might conduct weekly or bi-weekly rational-emotive affective education (Knaus, 1974) sessions with the entire class including the mainstreamed learning-disabled children.

3. Parents of learning-disabled children might be provided with instruction in rational-emotive theory and practice to assist them in understanding and coping with the needs of their children.

4. Teachers of learning-disabled children might be instructed in rational-emotive theory and approaches. They might be able to assist learning-disabled children in coping with emotional reactions to learning difficulties.

5. Instruction in rational-emotive therapy techniques might be offered as part of course work in school psychology preparatory programs.

This study contributes further empirical research concerning the use of rational-emotive therapy techniques with children. It offers data concerning the practice of rational-emotive therapy with a specific population of children—learning-disabled children.

Attention to remediation of learning disabilities alone without attention to accompanying emotional responses does not completely meet the needs of the learning-disabled child. Just as applying paint to a car without first sanding away the rust spots produces less than satisfactory results, so it is that treating only the specifically diagnosed learning disability without
addressing the related emotional reactions of the child yields less than optimum effects. Rational-emotive therapy, with its emphasis on thoughts and beliefs and the resulting feelings and behaviors generated from such thoughts, offers a constructive, positive approach to dealing with emotional reactions of the learning-disabled child.
APPENDICES
APPENDIX A

SELF-ESTEEM INVENTORY
Coopersmith
Self-Esteem Inventory
Form A

by

Stanley Coopersmith
University of California at Davis
1975
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APPENDIX C

FORMAT FOR RATIONAL-EMOTIVE GROUP THERAPY SESSION
FORMAT FOR THE RATIONAL-EMOTIVE
GROUP THERAPY SESSIONS

High interest paper-and-pencil activity materials (dot-to-dot, mazes, picture absurdities, etc.) were provided before each session began. This was done to encourage early arrival so that all group members would be present at the beginning of each session and to provide enjoyable and constructive activity for those who did arrive early.

Refreshments (juice, sometimes with popcorn or peanuts) were served midway through each session. The children played a game of their choice (ring-on-a-string, Simon says, etc.) for a few minutes at that time. This was done to provide a change in activity and to provide enjoyment which would, hopefully, encourage children to attend each session.

At the beginning of the first session, the children were told that they had at least one thing in common with each other—they were all receiving learning-disability support service. They were told that they would be meeting each week for the next few months to understand themselves better and strengthen their problem-solving skills. They were told to feel free to speak anytime they had a question or comment with only one rule. They should wait to speak until someone else was finished speaking.
Session 1
Activity 1 Introduction

Purpose: To help group members become acquainted with each other.

1. Ask the children to introduce themselves by name and school attended and also to describe their hobbies, pets, favorite foods, and any other information about themselves that they would like to share with the group.

2. Tell the group that they will play a game to help them learn group members' names. Introduce the N.A.S.A. communication game, played as follows: "Let's all pretend that we have been selected for the next space flight to the moon. We have been informed that we may take only one of our favorite things with us. We will be provided with food and clothing and we can take one thing for our enjoyment. We will go around the group and find out what each member will take." The game is played in the following manner: The first person states his/her name and what he/she will take (Mary and her monkey). The next person states the previous person's name and selection and then adds his name and selection (Mary and her monkey, Tim and his skateboard). The next person states the previous persons' names and selections and adds his (Mary, monkey; Tim, skateboard; Sue, needlepoint), etc.

Activity 2 Feelings (Knaus, 1974, p. 17)

Purpose: To help children define and identify their common feelings; to demonstrate that people express their feelings in different ways; and that feelings are generated by thoughts and beliefs.
1. Show the group some magazine pictures of people who are obviously expressing certain feelings. Ask the children what feelings they think the people in the pictures are expressing. (Distinguish between physical and psychological feelings.)

2. Ask the children to think of feelings they consider as pleasant or nice. Ask them to briefly tell about a situation in which these feelings were experienced. Elicit several examples. Do the same for feelings considered unpleasant.

3. Ask the children if they can think of a meaning for the word "feeling." Does a feeling just come automatically or is it a response or result of anything? Establish the idea of a relationship between happenings and feelings.

Break

Activity 3 The Expression Guessing Game (Knaus, 1974, p. 19)

Purpose: To demonstrate that different people can experience the same feeling but express it differently.

1. Ask the children if it is always easy to tell what someone else is feeling. Does everybody laugh the same way? Elicit other examples and emphasize that different people show their feelings in different ways.

2. Ask the children, "Do things that make ____ and ____ (group members' names) happy make you happy? Do you think everybody feels the same way about things?

3. Introduce the expression guessing game. Select two or three children and take them aside. Tell them a feeling and ask them to think about ways to express the feeling without using
Mr. Head has in his head. After they come up with the answer "thoughts," have each child pick a thought and then describe a situation in which a person might have that thought. The child should then be asked to describe how a person might feel or act if a person believed that thought. Emphasize the relationship between thoughts and feelings.

Break

Activity 2 Where Feelings Come From (Knaus, 1974, p. 20)

Purpose: To help the children discover for themselves how certain thoughts lead to certain feelings and behaviors.

1. Describe the following situation to the children: Suppose your mother bought you a new coat and told you to be careful not to get it dirty. As you are walking down the street, a car swerves near the curb and mud is splashed all over your coat. How would you feel? Suppose you saw that the driver was your mother's friend and that she had swerved to avoid hitting a child. She stopped and offered you a ride home and said that she would explain what happened to your mother. How would you feel now? Discuss.

2. Describe this situation: Suppose you are carrying a cardboard model of a toy you made for a class project through the park. You see a dime near one of the park benches so you put the model down and another child sits on it. How would you feel? Now suppose you found out that the other child was blind and he couldn't see your cardboard model. How would you feel in this situation? Discuss.

3. Ask the children, "Why did your reaction or feeling
change with the additional information? Is the coat still dirty regardless of the driver's motive? Isn't the cardboard model broken even if the boy who sat on it was blind?"

4. Ask, "Why doesn't everybody feel the same way about the situations? Where do feelings come from?" Emphasize that feelings come from thoughts.

5. Review key points: People have different feelings about things, different moods and experiences, and they express their feelings differently.

Session 3
Activity 1  ABC's of inner communication

Purpose: To acquaint the children with their own inner communications (self-talk) in thinking, feeling, and behaving; to further demonstrate that feelings come from thoughts.

1. Introduce the ABC framework for describing reactions to various situations. Tell the children that they are going to learn a new kind of ABC's. These ABC's help us understand our behavior. "A" stands for an event, something happening. "B" stands for thoughts or beliefs about that event. "C" stands for feelings and behavior in reaction to "A" and "B". Describe the following example: At point "A," the event, a student is asked to give a report to the class. At point "B," beliefs, the student thinks, "I might make a mistake. Everybody will laugh at me and see how dumb I am." At point "C," feelings and behavior, the student reacts with fear and anxiety and asks to be excused from giving the report. Elicit some alternate thoughts at point "B" and resulting behaviors at point "C" for the example.
2. Give the children practice with the ABC framework using examples of events from the group. Determine "Bs" and "Cs." To reinforce facility with the framework, elicit examples of feelings and reactions and have the group members think of events and thoughts which might correspond.

Break

Activity 2 Rational and Irrational Beliefs (Knaus, 1974, p. 24)

Purpose: To help the children identify rational and irrational beliefs.

1. Ask the children to think of some beliefs that would result in self-downing (putting yourself down, thinking poorly of yourself) and anxiety (nervous, not calm) and have them explain why.

2. Explain that an unreasonable or absurd idea (nonsense, silly) is called an irrational belief. Give as an example: "Nobody in the world will ever be my friend." Explain that a rational belief is a sensible, logical thought that seems to fit reality. For example: "Humans are capable of making mistakes" or "Making mistakes does not make us worthless human beings."

3. Have the children examine Mr. Head statements and determine if they are rational (sensible) or irrational (nonsense). Offer practice in challenging irrational thoughts.

Session 4

Activity 1 Challenging Irrational Beliefs (Knaus, 1974, p. 25)

Purpose: To provide practice in identifying irrational and rational beliefs and disputing irrational beliefs.

1. Review rational and irrational definitions. Give
examples. Have volunteers try to challenge the irrational belief that one is a fool for making a mistake. Try to show that no one is perfect and that all people make mistakes. Emphasize that many people accept irrational beliefs about themselves without stopping to question themselves: "Is it really true that I would be a total fool if I made a mistake in front of a group?" Point out that self-questioning is an important part of getting rid of irrational beliefs.

2. Examine why the idea "I wouldn't like to make a mistake" is rational and the feeling of displeasure at making the mistake reasonable. Help bring out the idea that things can't always go as we would wish them in the world, and when they don't, it is normal to feel badly. Have the children discuss why they would feel badly if a best friend moved away.

Break

Activity 2 Using Challenging Techniques (Knaus, 1974, p. 26)

Purpose: To give the children practice in questioning irrational ideas through the presentation of hypothetical situations. Through the challenging, children gain practice in reducing neurotic behavior.

1. Tell the children that the brief story they are about to hear concerns a boy's fears. Ask them to think about helping him overcome his fear as it is told. "A boy named Sam enjoys boating, especially on lakes. He believes that the world is flat, that there are monsters at the edge where the world ends. He's afraid of the ocean because he thinks he will fall off the earth.
if he goes too far out into the ocean."

2. Encourage the group to help Sam question his thinking.

3. Have the children work out Sam's feelings within the ABC framework. Ask: What are his rational beliefs? What are his irrational beliefs? What feelings do his irrational beliefs cause? As a result, what is his behavior like?

4. Ask the group members for examples of some beliefs they (or their friends) have that they think are irrational. Have the children discuss how they would feel if they supported such beliefs. Have the children practice challenging these irrational beliefs.

5. Have volunteers describe a fear they (or kids their age) experience. Elicit the beliefs that produce that fear. Identify rational and irrational beliefs. Emphasize that doing something (positive action) and risk taking are ways to challenge irrational beliefs.

Session 5
Activity 1 Simple and Complex (Knaus, 1974, p. 28)

Purpose: To show that people are complex rather than simple, i.e., of the thousands of traits and characteristics a person is capable of expressing, people share some similar basic traits but differ in others (No two people can be alike in all their talents and inner qualities); also, to highlight individual differences and show that each person is capable of feeling and acting in many different ways, so that children can then question the tendency to define themselves as worthless based on a few traits or actions.

1. Ask for volunteers to try to define the words
"complicated" or complex as in the example sentence: "This machine is complex." Using the same technique, try to elicit the definition of simple. Then explain that simple things have few features and are not very involved, whereas complex and complicated things have many parts that make up intricate and involved systems.

2. Draw some basic geometric shapes on the board without explaining why. Then show the group a series of pictures clipped from magazines (buildings, farms, machines, groups of people). Ask the group which pictures are simple and which are complex and have them give their reasons.

3. Once the difference has been clearly established, point out a geometric shape in one of the complex pictures (circle of church window in church picture). Ask the children if it would be correct to call that picture a simple circle.

4. Ask if the children think that people are simple or complex. Emphasize both physical and non-physical qualities. Ask the children to identify some of the different traits people have.

5. Culminating question: If it is inaccurate to call a complex or complicated picture a circle, why is it inaccurate to call a complicated person a fool? Elicit and emphasize that humans feel and do many different things. One feeling or trait does not change all of the other qualities.

Break

Activity 2 Self-Concept Pin-Wheel (Knaus, 1975, p. 29)

Purpose: To show that every person is more than one thing and to help children challenge feelings of inferiority.

1. Distribute pin-wheel drawings. Have the children
write their names in the center circle. Ask them to fill in the outer circles with things about themselves (friendly most of the time, sometimes has a bad temper, likes swimming, helps Mom take care of baby sister, needs practice in reading, likes to play soccer, etc.) Give help with spelling.

2. Ask the children to look at one of their qualities in the self-concept circle. Ask the children: "Are you just that thing? If someone calls you a name or draws attention to a quality which you don't especially like about yourself, are you only that one quality? Does someone's opinion of you make you just that one thing?

3. Have some volunteers write or dictate name-calling statements (You are trash . . . stinky . . . stupid."). Place individual statements in a bag.

4. Have the children take turns picking a name-calling paper and challenging the statement. Self-questions like "If someone calls me a name, does it make me one or does it mean that the rest of the things about me don't count?" should be encouraged. The use of words "sometimes," "rarely," "occasionally," and "most of the time" to describe some of the children's individual qualities should be emphasized. Some key questions in challenging name calling are: (a) How can I be just a fool or a dumbbell if I am all of these other things? (b) Does one person's opinion of me mean that I am just what they think of me? (c) Don't the other things on the pin-wheel count?

5. Draw attention to the negative qualities, such as "sometimes dishonest" or "sometimes unfair" and emphasize that
acceptance of a "sometimes" trait doesn't necessarily lead to more dishonesty or unfairness. For example, admitting that one is dishonest sometimes rather than lying about whether one is dishonest is a sign of truthfulness. By being aware of some of our unpleasant qualities, we are able to work on them and change them.

Session 6
Activity 1 How People Learn (Knaus, 1974, p. 35)

Purpose: To help the children explore some of the ways humans learn and the functioning of human language in communicating, learning, and self-questioning.

1. Have volunteers describe the way they would "paper train" a puppy. Emphasize the following major points: (a) letting the dog know what is wanted—"going" on the paper rather than the rug; (b) rewarding the animal for good behavior and punishing him mildly for bad behavior; (c) being patient. Ask if the children think the puppy knows automatically that going on the rug is annoying to adults before the training has begun.

2. Explain that training is only one form of teaching and learning. Ask those children who have cats or dogs if the animal knew how to walk when it was born. Did it have to be taught to bark or meow? How long did it take for the animal to be fully grown? Ask the group if they think humans or animals take longer to develop. Emphasize that animals take a relatively short time to be fully grown and developed; humans, on the other hand, take a very long time to develop physically, mentally, and emotionally. Make sure that the children understand that humans have more
potential for learning and developing physical, mental, and emotional skills. Ask if a newborn baby can stack blocks. Why not? What are some of the skills a baby has to learn? As his mind and body develop, how does he learn to walk, stack blocks, avoid hot stoves, etc.? Emphasize how we learn by trial-and-error, making mistakes, practicing, and imitation.

3. Ask the children if they think that a little baby reaching for his rattle or trying to put his toe in his mouth is thinking with words: "If I could only get that rattle. . . ." or "I wonder if that toe has a taste?" Explain that newborns and infants don't think using a language because they don't know a language. Ask how a young baby's learning is similar to or different from their own. (Both learn by trial-and-error experimentation, mistake-making, imitation, practice, etc. Only older humans or children of a certain age can use language to work things out in their heads--talk to themselves--or talk to other people.)

4. If any of the children have younger siblings about three years old, ask them if they have ever heard the child talking out loud to himself while playing. Give as an example that children of that age often say aloud exactly what they are doing. While building a structure out of different size blocks, you may hear them say, "I put this here, and the big one on top. Aw, it fell down." Emphasize that they are practicing using language while they are improving a skill. Ask: "If the child were to ask you how to make something (garage, airplane) out of the blocks, how would he be using language?" (To learn, to communicate).

5. Ask the group to think of some ways they learn in
school through the use of language. (Elicit: "The teacher tells them things, they read books which contain words, they discuss, they write, they think, they look at films with spoken words.") Emphasize that once language has been mastered, people learn through the use of language by listening to what others say and by talking to themselves or thinking.

6. Ask for a definition of frustration and examples of frustrating situations. (Examples—doing a puzzle and finding that some of the pieces are missing; not being able to figure out the meaning of a word when there is no dictionary or no person available to consult; not getting what you want; a kind of tension; an "I can't stand it" feeling.) Remind the group of the example of the newborn reaching for its rattle or its toe. Is the baby blaming anyone or saying to himself: "It's my fault, or his fault" and getting angry? Or is he just frustrated? Do you think anger and frustration are the same? Emphasize that anger comes from blaming or talking to oneself in sentences about how terrible things are and whose fault it is.

7. Explore ways of dealing with frustration: (a) accepting frustration as an "all right" feeling to have? (b) trying to be patient and calm since learning and finding solutions takes time; (c) realizing that problems can't always be solved the way you want and when you want; (d) trying not to add sentences about "how terrible the situation is" so that you won't blame and get angry.

Break
Activity 2 Facts and Opinions (Knaus, 1974, p. 36)
Purpose: To establish the difference between facts and opinions.

1. Have the children give some statements about school. Establish the difference between fact and opinion. (Facts: The school is located at "x"; it is open ten months a year; there are "x" number of classes and about "x" number of students and teachers; it is an elementary school, etc. Opinions: I like or dislike the school, a certain class, the rules, etc.) A fact is a statement which is verifiable and observable. An opinion is someone's idea about something. It is neither true or false.

2. For further practice, elicit facts and opinions concerning group members' favorite television program or hobby.

3. Ask the children if facts can be rational or irrational. Ask why or why not. Can opinions be rational or irrational? Why or why not? Discuss.

Session 7
Activity 1 Making Mistakes and Learning (Knaus, 1974, p. 37)

Purpose: To review how people learn and that mistakes are usually a part of the learning process.

1. Remind the children about the previous week's discussion on how people learn. Review ways of learning--experience, trial-and-error, communicating and thinking with language, etc. Ask the children if they think that adults continue to learn in some of the same ways as animals and children.

2. Once it is established that learning is a lifelong, ongoing process, give the following examples of mistakes people make
while learning: (a) Your mother takes ballet lessons. She sprained her ankle because she had not had enough exercise and practice to try to stand on her toes. She made a mistake while learning. What was the cause of her mistake? (She lacked practice or skill, overestimated her talent, or made an error in judgment, etc.) (b) Your older brother decides to surprise your mother on her birthday by cooking dinner. He goofs up the recipe and the meal is not a very tasty one. He made a mistake. What are some possible reasons for his error? (He was in a rush, he read the recipe wrong, he didn't follow directions correctly, etc.) (c) Your twenty-year-old sister and her friends from the office have a discussion group at your house every week on women's liberation. They do this because they are trying to work out a way to get equal rights with men on the job. Your father forms the opinion that the girls are talking about female superiority when they are in fact discussing equality. He gets angry with your sister and tells her to have the discussion somewhere else. What mistakes did your father make? (He got himself angry; he did not understand the facts; etc.)

3. Ask the group if they think that these three mistake-makers are bad people because they made mistakes? Did the mistakes change their good traits and characteristics? When you make mistakes at school, home, or play, do the mistakes change your good qualities or do the mistakes make you a bad person? Why or why not?

Break

Activity 2 Why People Make Mistakes (Knaus, 1975, p. 45)

Purpose: To review and emphasize the fact that people
are mistake-makers, and that mistakes are usually part of the learning process; that because the world is a complex place, people react to the same things differently.

1. Present the following examples to the group: (a) In learning how to walk, the baby reaches for stable objects to maintain his balance. He reaches for a wobbly table and as he falls, the table collapses on top of him, giving him a serious cut on his head. (b) While trying to walk, the baby grabs onto an expensive standing lamp, and the lamp falls and breaks. (c) Mr. Jones is driving up Main Street and doesn't see the stop sign. He goes through the street and is seen by a policeman. He gets a ticket. (d) Mr. Smith is driving up the same street, and he goes through a red light, and his car crashes into a car making a turn. Both drivers are seriously injured. (e) John gets a failing mark on his weekly spelling test. (f) Jane fails the college entrance exam. (g) A young boy takes money from his mother's wallet, gets caught, and is punished for a week. (h) A teenager steals the same amount from a stranger, is caught, and is taken to juvenile court.

2. Do all these incidents have something in common? What is it? (All involve mistakes.) In what ways are they different? (Causes, consequences, varying degrees of importance.)

3. Have volunteers compare related examples (a) and (b), (c) and (d), etc. After examples have been discussed, emphasize the fact that some mistakes have worse consequences than others, the greatest being serious injury or death.
4. Ask what the causes of mistakes in the examples were? (Lack of skill, trial-and-error learning, carelessness, poor judgment, not studying, not understanding information, tired, ill, etc.)

5. Have volunteers share with the group mistakes they have made or observed. Discuss the mistake, the cause, the result, and then thoughts about the mistake maker.

6. Have the children consider some of their examples using the ABC method and then challenge irrational thoughts and beliefs. Emphasize that all humans are mistake makers, but that we need not just resign ourselves to things as they are. Ask each child to write down or dictate some areas of their lives they would like to improve (school activities, personal qualities). Suggest that they might make efforts to improve (themselves) using their subsequent mistakes as information in the improvement process.

7. Encourage the children to challenge and question their thinking about mistake making throughout the next week.

Session 8
Activity 1 Instant Replay

Purpose: To introduce the children to the problem-solving technique of "instant replay."

1. Read Instant Replay (Bedford, 1974) to the group. Discuss.

2. Ask for a volunteer to describe a "rough spot" that the group can use for instant replay. Have the child describe how he or she felt (and the intensity of the feeling) about the
"rough spot." Have him or her describe, in detail (instant replay) the setting, preliminaries, what happened, and what was the end result. Ask the child to describe his or her thoughts. Then have the group think of other options or alternate plans for action concerning the "rough spot." Determine consequences of each alternate plan and rate each option.

Break

3. Use instant replay to work through the following "rough spot" example: A math assignment was given to the class. Several examples and the first few problems were completed by the teacher and class members on the blackboard. Adam did not catch on to how to work the problems. While his classmates completed the assignment, Adam pretended to finish his. He did not hand in his assignment, and thus received a "0."

4. Encourage the children to practice instant replay for "rough spots" they encounter during the next week.

Session 9

Activity 1 Learning Disabilities

Purpose: To help the children understand that not all people have the same skills; to help them challenge irrational beliefs they may have about themselves or which others may exhibit towards them.

1. Ask the children what it means to be learning disabled. What is a learning disability? Ask them to describe learning-disabled children.

2. Keep track of all comments and then have the group determine which statements represent rational and which represent
irrational thoughts and beliefs. Have the group challenge irrational
statements.

3. Have the children place the irrational statements in
the ABC framework to identify feelings and reactions which might
result from such irrational beliefs.

4. Add points D and E to the ABC framework. Explain that
at point D, one questions or challenges the beliefs and thoughts
at point B. At point E, one answers his or her questions and
challenges at point D logically, sensibly, and rationally. Practice
the ABCDE framework using some of the statements previously obtained
from the children about learning disabilities.

Break

Activity 2 Instant Replay and ABCDE

Purpose: To offer the children practice in applying the
ABC method of examining thinking and in putting to use the instant
replay method in problem solving.

1. Have the children use the following activating events
for point A in practice of the ABCDE process: Getting teased,
making a mistake, taking a test, not being able to find something,
"other people don't want to do what I want to do."

2. Ask for volunteers to describe a "rough spot" they (or
one of their friends) have encountered. Have the group use instant
replay to practice problem-solving techniques.
PLEASE NOTE:

Some of the following appendix pages contain light and indistinct print. Filmed as received the best copy available.

UNIVERSITY MICROFILMS INTERNATIONAL.
APPENDIX D

REGISTRATION MATERIALS
"I like being ME."

Building self-esteem of L.D. kids
Please enroll my son/daughter ____________________________ in the study of the program "I like being ME!" designed by Donna Meyer.

Child's Age: _______ Parent Signature: _______________________

School: ______________ Street Address: _______________________

Grade Level: ________ City and Zip Code: _______________________

Phone: __________________

"I like being ME!"

A program to build self-esteem of learning disabled children

1. Group activities, games, and discussion strategies emphasizing positive self-esteem and self understanding

2. October 17 - December 20
   1 hr. sessions twice a week (Mon.--Wed. or Tues.--Thurs.)
   Beginning at 3:45 or 4:20 p.m.

3. Centrally located schools in the South Bend area

All your child in the first trial of this program, please fill out the form and return it by October 3 to your child's LD teacher or mail to:

Mr. Psychological Services Department, South Bend Community School
1230 South Main Street, South Bend, Indiana, 46601. There will be no

If transportation is needed, parents will be expected to

No more than eight students per group will be formed. Parents will be

specific dates, times, and locations for program sessions. The

will be evaluated at its close to determine effects.

For further information call 234-3141 (ext. 211), or 272-7358 if you have questions

about this program.

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"I like being me!"

A program to build self esteem of learning disabled children

WHAT: Group activities, games, and discussion strategies emphasizing positive self esteem and self understanding.

WHEN: October 17 - December 20
½ hr. sessions twice a week (Mon.--Wed. or Tues.--Thurs.)
Beginning at 3:45 or 4:20 p.m.

WHERE: Centrally located schools in the South Bend area

To enroll your child in the first trial of this program, please fill out the attached form and return it by October 5 to your child's LD teacher or mail to:
Donna Heyer, Psychological Services Department, South Bend Community School Corporation, 635 South Main Street, South Bend, Indiana, 46601. There will be no charge for this program. If transportation is needed, parents will be expected to provide it.

Groups of no more than eight students per group will be formed. Parents will be notified of specific dates, times, and locations for program sessions. The program will be evaluated at its close to determine effects.

Contact Donna Heyer at 234-8141 (ext. 211), or 272-7388 if you have questions concerning this program.

Building self esteem of L.D. Kids
Fun and Learn
Center

The Fun and Learn Center is a recreational-educational program for children with learning disabilities or for children having learning difficulties in their regular classroom. It was established in 1976 by the Children’s Dispensary, a private, non-profit, volunteer organization. In order to better meet the needs of the children, the center is divided into two programs, the regular program for 7 to 10 year olds and the junior program for 11 to 14 year olds.

Goals:

The major goal of the Fun and Learn Center is for each child to develop a positive self-concept through success oriented activities. In addition, perceptual motor, expressive and receptive language, conceptual, visual and auditory skills are enhanced by dividing children into special activity groups.

Staff:

Salaried staff consist of three professionals and trained volunteers. The staff are in the field of learning disabilities or some other related field. St. Mary’s College, University of Notre Dame and Indiana University at South Bend provide volunteers. Approximately, the staff, volunteer-participant ratio is five to one.

Fun and Learn Center—Junior Program:

This program is designed for children ranging in age from 11 to 14 years of age. Activities for these children are more adolescent in nature. Examples of programming are conservation, ecology, journalism, field trips, community service projects, theatrics, sports, camping and first aid. This program is flexible for it frequently allows the children to select and plan activities.

Fun and Learn Center—Regular Program:

Children in this program are from 7 to 10 years of age. Games and activities are specifically designed for this age group. Arts and crafts, auditory center, table top games, field trips, hikes, new games, gym activities, sports and an overnight campout are some of the many occurring activities.

The Fun and Learn Center meets each Saturday at St. Mary’s College from October through May. Fees are $50.00 per semester and there are three semesters per year. However, no child is denied the right to participate in the program because of an inability to pay and partial fee payment is acceptable. Any donations from organizations or individuals would be appreciated.

For further information contact:

Children’s Dispensary, Inc.
Marycrest Building
2015 Western Avenue - Suite 307
South Bend, Indiana 46629

219-234-1169
Welcome to the "I like being ME!" program. There has been one change. Instead of meeting twice a week for a half hour, we will meet once a week for one hour.

You have been assigned to the ____________________________ group which will meet at ____________________________ School (____________________________) from__________________ to ________________. Your group will meet on the following dates______________________________

__________________________________________________________

If you have any questions or problems concerning this assignment, please call me at 234-8141, Ext. 211 or 272-7388.

Sincerely,

Donna Meyer
Psychological Services Department
October 11, 1979

Dear Parent of a Learning Disabled Child,

In studying the needs of learning disabled children and attempting to develop appropriate programs, I would like to give two inventories to all L.D. children in the South Bend Community School Corporation. One of the inventories is a checklist which purports to measure self esteem, and the other attempts to measure anxiety. Both are group administered, paper and pencil checklists that will take approximately 20 - 30 minutes to administer. Inventories will be administered during the school day at your child's school this fall and again next year.

Results will be used solely for research and will not become a part of your child's permanent record. These individual results will not be shared with your child's teacher or school officials. Results will be used to aid in analyzing the needs of L.D. children and the effectiveness of present programming.

Please sign below to offer your permission for your child's participation in this study. Return immediately to your child's teacher.

Direct any questions to Donna Meyer, Psychological Services Department, South Bend Community School Corporation, 234-6141, Ext. 211 or 272-7388. Your cooperation is appreciated.

Sincerely,

Donna Meyer

I give my permission for my child to complete the Self Esteem Inventory and Anxiety Scale for the research study of L.D. children done by Donna Meyer.

______________________________  ________________________________
Child's name                     Parent's signature

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To: Dr. Zebrowski and Principals  
Date: October 15, 1979  
From: Mrs. Donna Meyer  
Subject: Psychological Services

As part of my doctoral studies, I have been doing research on emotional and social development of learning disabled children. Recent research seems to indicate that L.D. children who receive L.D. support services and counseling are able to adjust better and progress further academically than L.D. children who receive only L.D. support service or only counseling therapy. I am attempting to test this hypothesis with L.D. children in South Bend schools.

I have developed a group program for L.D. children which I have titled "I like being ME!" Major program goals are to build self esteem and reduce anxiety. Small group activities and strategies have been devised to emphasize self understanding and positive self esteem.

Program information has been given to all L.D. parents. All parents who have applied for this program will be served. Groups have been set up according to ages of the children. Groups will meet once a week for one hour (3:30 - 4:30) from October 17 through December 20.

I would like to use the following buildings to deliver this group program:

- Mondays - Monroe (9 years old)
- Tuesdays - Lincoln (11 - 12 years old)
- Wednesdays - Swanson (10 years old)
- Thursdays - Darden (7 - 8 years old)

Tentative agreement for building use from building principals has been sought, pending official permission from the Elementary Education office.

Parent permission has also been sought so that L.D. children in this system may be administered a self esteem inventory and an anxiety scale questionnaire now and again next January. Children's scores in the "I like being ME!" program, in the "Fun and Learn" program at St. Mary's, and those of students receiving only L.D. support services will be compared in an attempt to determine program effectiveness. (Scores will not become a part of the child's permanent record, nor will they be shared with the child's teacher or school officials). Group results will be shared with parents and school officials.

Testing with the Self Esteem Inventory and Anxiety Scale (takes approximately 20 - 30 minutes, group administered) will begin the latter part of the week of October 15. Principals will be contacted individually to make necessary arrangements. (Kay, Lincoln, Darden, Coquillard, Muner, Monroe, Swanson, Madison).

Your cooperation is greatly appreciated.
### TABLE 26
SEI RAW SCORES: RATIONAL-EMOTIVE THERAPY GROUP

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BIBLIOGRAPHY
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VITA

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DATE OF BIRTH: February 4, 1947

EDUCATION:
- B.S. Indiana University, 1969
- M.A. Andrews University, 1972
- Ed.D. Andrews University, 1981

POSIIONS HELD:
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- School Counselor (K-8) 1972-1978
- School Psychometrist 1979-