GROUP COUNSELING FOR ANGER CONTROL:
THE EFFECTS OF AN INTERVENTION PROGRAM WITH
MIDDLE SCHOOL STUDENTS

by
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ABSTRACT

This study was designed to examine the degree to which a small group counseling intervention resulted in attitudinal and behavioral change with adolescent boys identified by their school principals as having conduct problems. An eight-week cognitive-behavioral intervention was co-led by pairs of student services personnel made up of school psychologists, school social workers, and school counselors. The anger management program, called "Better Ways of Getting Mad," was designed from Morganett's *Skills for Living: Group Counseling Activities for Young Adolescents* (1990). Participants were 87 sixth- or seventh-grade boys at seven middle schools in Prince William County, Virginia, who were not in any special education program.

A pretest-posttest, experimental/control group design was used. Variables studied were the extent of the conduct problems measured by the number of discipline referrals and scores on the Conduct Problem Scale of the Conners' Teacher Rating Scale-39 (CTRS-39); the experience of anger measured by the State-Trait Anger Expression Inventory (STAXI); the expression of anger measured by STAXI; and the cognitive understanding of anger and anger expression measured by the Morganett inventory. Posttest differences between Experimental and Control groups were examined through analyses of covariance.
The extent of conduct problems was found to be less for the experimental group than for the control group. A lower number of discipline referrals was also noted. However, neither of these differences were statistically significant. Students who participated in the counseling intervention did not show less intensity in state and trait anger. While students in the experimental group showed an anger expression index score lower than that of the control group score, this was not statistically significant. A significantly higher score in cognitive understanding was found in the experimental group.
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CHAPTER 1

INTRODUCTION

Society is reeling from the escalation of violence. According to Harper (1990), every type of community across the country, urban, suburban or rural, has experienced street crime, even on school grounds. For example, the National Center for Education Statistics, in addressing the incidence of crime in the school, reported that 16 percent of students between the ages of 12 and 19 indicated seeing teachers attacked or threatened with attack, and 12 percent reported something stolen from desk/locker/other (Alsalam, Ogle, Rogers & Smith, 1992). In response, schools have begun new programs, standards for behavior have been clarified, and consistent discipline practices have been reinforced. Newly created elementary guidance programs have begun to address the emotional and behavioral roots of the problem of aggressive behaviors by working with younger students. Despite attempted interventions, more violence and aggressive behavior continue to spill into our schools from the larger society.

The National School Safety Center at Pepperdine University recommended some general security measures to lessen violence in the schools in response to the public cry for safer schools. In order for schools to better educate, the students must feel physically and emotionally secure in the school environment (Burke, 1991). To meet the
main mission of education, schools must acknowledge the problem and educate students to cope and function in a more volatile society. The solution of this wide social problem may exceed the mission of schools to solve alone. However, many authors and educators feel that schools can and should be able to make a difference.

There is little consensus on what schools should do to address the public concern for safer schools beyond ensuring safety at the building level. Steinberg (1991) says that, although a Senate Judiciary Committee named the United States as the most violent and self-destructive nation in the industrial world, we lack an understanding of the best role schools can take in a problem that has deeper social and familial roots. Steinberg continues that it is now understood that violence often erupts in the context of peer relationships. Students who witness or are victims of aggression typically know the assailant or may even participate in the instigation or maintenance of the conflict. The lack of skills to resolve conflicts with peers reinforces the tendency to act out angry impulses. These skills can be taught in schools and in specific programs which target affective education.

Societal factors that may spur violence, such as drug abuse, poverty, breakdown of the families, are found in rural, suburban, and urban areas as well. Algozzine, Ysseldyke, Kauffman and Landrum (1991) and White and deFrancis (1990) link increasing economic stress, substance abuse, and violence in the homes of many American children with the increased percentage of children who are coming to school with learning and behavioral problems.
Murray and Whittenberger (1983), who examined biological, familial, cognitive and social learning factors related to aggression in children, cited the Thomas Chess and Birch proposal that every newborn begins life with an inborn tendency to behave in certain ways, a temperament that is determined predominantly by biological factors such as genetic endowment and prenatal conditions. Characteristics of infants at risk for behavior disorders as children include high activity level, high intensity of response, and quality of mood. Society may interpret these factors as aggressive and persons in the environment may respond to them aggressively. Murray and Whittenberger concluded that a biologically innate temperament may work through interaction with the parental environment to increase the likelihood of an aggressive behavior disorder.

Secondly, children identified as aggressive by their peers at school tended to come from homes where parents were rejecting and used physical punishment. Besides modeling of aggressive behaviors at home, the aggressive child may have influenced the family to accelerate its rate and intensity of aggressive responses as part of an increasingly coercive system.

Cognitive factors such as poor verbal mediation of behaviors may have an influence on the development of aggressive ways of behaving (Camp & Ray, 1984). Frustration, the blocking of goal-directed activities, and the anticipation of frustration, a cognitive factor, may also influence a youngster's behavior.
Murray and Whittenberger (1983) summarized social learning factors as perpetuating and strengthening aggressive behaviors. These factors include social or tangible rewards as consequences of behavior and punishments which strengthen the responses. Conditions where punishment is unsuccessful occur when there is no positive alternative to the punished behavior, when the punishment is delayed or inconsistent, when the punishment itself provides a model of successful aggressive behavior, and when observing someone punished inequitably. Steinberg (1991) applied these principles in her examination of aggressive youth and gang violence.

In an enlightened application of these principles with regard to school discipline, Jordan (1993) described "creative detention," examples of disciplinary tactics of a pro-social nature, such as painting over graffiti, caring for plants or animals, fixing computers, or serving suspensions in school, rather than paddling as a punishment. Punishing aggressive behavior with aggressive behavior does not help students learn to solve problems in a nonviolent way.

Meyers and Craighead (1984) reported that aggression is the behavior problem most mentioned by teachers as disruptive of classroom functioning and the most frequently presenting problem in clinic referrals. Physical aggression, non-compliance, destructiveness, verbal combativeness, and negative relationships with peers and adults, the defining characteristics of a conduct disorder, are becoming more prevalent according to Camp and Ray (1984). How are schools
attempting to deal with more conduct problems and the escalation of aggressive behaviors?

In response to the escalation of violence, school counseling programs can be an important place to begin the process of behavioral change and social skills training programs. These programs can assume the form of large group classroom instruction or small group counseling model.

Many experts point to elementary school as the place where the beginnings of antisocial behavior are first noted. By integrating social skills training into the curriculum, a program in the Chicago Public Schools trained both teachers and students to divert aggressive behavior into socially acceptable behavior. Young students learned to evaluate situations and look for solutions that did not involve violence. However, learning to observe rules, to become independent and work well with others, and to set limits begins in the home. Lucker (1991) quoted VanArcher, one of the team of researchers testing the violence prevention project in the Chicago Public Schools, "We assume that kids learn certain social skills by virtue of being a family member and that they come to school with a certain set of values and a sense of right and wrong. The solution may be early intervention" (p. 26).

The solution may include early school programs to give youngsters experience in solving problems and in resolving conflicts without violence and without formal isolated professional counseling outside of school. Early intervention is important to help youngsters
learn that they have to find nonviolent ways of dealing with their angry feelings and frustration.

However, the earliest interventions and training occur within the family structure. School personnel need to develop an understanding of the roots and development of aggressive behavior problems before they can begin to address specific behaviors in either group lessons or small group counseling as part of the curriculum. While specific training programs occur in the school, attempts to understand factors which influence these target behaviors can result in a more relevant counseling intervention.

Research on the development of aggressive behavior and some defining characteristics offer guidance in the designs of specific content of a counseling intervention. Methods chosen must be developmentally appropriate and conducive to learning for the specific age level. For example, McHolland (1985) offered specific ways to deal with resistant adolescents within the context of the developmental issues of adolescence and within the social context in which resistance arises and is maintained.

Steinberg (1991) concluded that experts on conflict resolution say that, while the capacity for violence may be inborn, children learn to be aggressive. Some attribute the increase in violent or aggressive behavior to the breakdown of the family and family values. In abusive homes, children learn: when in trouble, hit.

Hawkins, Von Cleve and Catalano (1991) hypothesized that aggressive behavior could be reduced by promoting conditions thought to
be necessary for social bonding. Olweus (1978) found two important dimensions in the development of aggressive reaction patterns in boys. First, highly aggressive boys often had parents who had been hostile, rejecting, negative, or indifferent. Second, the parents had not usually placed consistent demands on the boy for reasonably controlled nonaggressive behavior. In addition, Olweus, Block and Yarrow (1986) added the factor, degree of parental conflict, to these dimensions as a predictor of later criminality.

Children arrive at school with a set of values and behavioral responses learned from home. So Lawrence (1985) explained that when students experience failure in school and alienation from school activities, they tend to act out with disruptive or violent behavior. The students do not fit in because they do not possess in their behavioral repertoire the skills for anger management.

To what degree can the school, as an arm of the larger society, reverse the trend towards aggression and violence? In order to begin to answer this question, some programs have been developed to train anger management skills. Many programs target older students, middle and high school adolescents, with behavioral disorders or emotional disturbance. Much research has been conducted with college students. Psychoeducational packages exist whereby, through classroom instruction, student receive affective education as part of the curriculum.

Goldstein and Glick (1987) believed that, among the many existing psychoeducational packages, the most helpful in addressing the
problem of interpersonal violence were those in which prosocial values were taught. He defined "interpersonal violence" as aggressive acts such as verbal threats, harassments, theft, and personal assault.

School guidance programs, and especially elementary guidance programs, have attempted to integrate social skills-building activities into the curriculum through classroom lessons. Counselors have tried to introduce specific units which deal with conflict resolution, assertiveness training, and anger management in an attempt to reduce incidences of aggressive behavior. At the middle school level there is the same thrust, but to a lesser degree.

While many individual counselors attempt to deal with their own unique situations, there remains little time for the assessment of the results of their counseling interventions, be it in classroom lessons, small group counseling sessions, or individual counseling. Does one particular counseling approach lead to students' progress in managing anger or developing a repertoire of social skills to handle provocation more constructively? To what degree do students and teachers perceive changes in emotional state or outward expression of angry feelings as inappropriate aggression?

There is a dearth of research into the effectiveness of specific school guidance approaches to the question of anger management. We know very little of the effectiveness of the specific small group counseling model as a vehicle for addressing the need for social skills training with the regular population who are not involved in special education programs.
While much of the research deals with the effects of counseling programs or special school curricula with emotionally disturbed or behaviorally disordered adolescents, the investigation of the effectiveness of techniques with more normal children are few. It is also becoming clear that the escalation of conduct problems is coming from the ranks of the regular education population.

With the escalation of the problem of aggressive behavior among all elements in the society, still only a small proportion of students who are labeled behaviorally handicapped or emotionally disturbed receive direct intervention. The answer is not to place children who have not achieved levels of social skill development in special education programs. Part of the solution may be to teach children to understand and manage their angry feelings, so that outward aggression in the schools can decline. The best module for delivery of the social skills may be small group counseling sessions where students can practice with their peers new ways of solving problems and resolving conflicts.

Gazda (1989), in his discussion of group counseling with the preadolescent (9-13 years old), endorsed ideas from Moreno's activity-oriented approach and Slavson's insight about activity-counseling groups for the preadolescent, "What little children gain through play and acting out, young children in their latency period and early adolescence achieve through manual activity, creative expression and free play, and interaction with one another " (p. 202).

Hypothetically, it is through interactions with each other in the counseling group that the social skills of anger management will be
learned, rehearsed and applied, under the careful direction of the trained counselor.

Kendall and Braswell (1985) endorsed the application of the cognitive behavioral procedures (described in Chapter 2) in the group settings for children. Through "perspective-taking" or role-playing children learn to understand the feelings of another person by pretending they are that other person. The group represents a microcosm of children not unlike the clusters in which the group members may experience conflict. Practice among other children adds to the ecological validity of role plays.

Omizo, Hershberger and Omizo (1988) in small groups and Fishman (1983) in regular classrooms did target upper elementary school children as recipients of anger management programs. But little research has been documented with preadolescent or early adolescent children to prepare them for adolescent stresses and turmoil by training in the understanding of their anger and in its management.

Statement of the Problem

Because of the increase in violence in society and the overflow of aggressive behavior into the schools, the need to develop programs to address the lack of social skills for anger management is growing. Research into small group counseling for anger management has suggested some positive effect in terms of reduced teacher ratings of disruptive behaviors and students' own self-reports of better anger management. The Morganett program of anger management has been
used with young adolescents but has not been adequately tested. If anger management can be taught in a three-step process, including the development of an awareness of behaviors, acquisition of new skills and application of new skills, at what stage will adolescents who receive the intervention fall?

This study was designed to examine to what degree, if any, a small group counseling intervention resulted in attitudinal and behavioral change in a group of adolescent boys identified by their principals as having conduct problems. Variables of interest included: The extent of symptoms of conduct problems measured by number of discipline referrals and B-Scale of the CTRS-39; the experience of anger measured by STAXI Trait and State Anger scales; the frequency of expression of anger measured by the STAXI AX/EX scale; and the cognitive understanding of anger measured by the Morganett self-report instrument.

**Research Questions and Hypotheses**

By exposing middle school students to an anger management program, will the extent of their symptoms of a conduct problem diminish, compared to a control group? Will they acquire less discipline referrals? How effective is this social skills training program in teaching alternatives to aggression to young adolescents? If students understand, label their angry feelings and explore alternative ways of reacting, will this cognitive understanding lead to less overt, socially disruptive expression? Will students who have participated in the group
counseling intervention have a decreased intensity in their present state of anger, compared to the control group? Will these students develop a lessening in their general disposition to harbor angry feelings compared to the relatively stable disposition of the control group toward anger? Can a cognitive-behavioral approach shown effective with behaviorally disordered students work with students in middle school regular education program?

The following hypotheses relate to the comparison between experimental and control groups on posttest scores, adjusted for corresponding pretest scores. In comparison to a control group, students undergoing an eight-week counseling intervention will have, on average:

1. a lower adjusted Conduct Problem score (adjusted for pretest score).
2. a lower number of discipline referrals.
3. a lower general disposition to harbor angry feelings (compared to the relative stable disposition of the control group towards anger).
4. less intensity in their present state of anger.
5. lower anger expression scores (shown by lower verbal or physical anger expression, lower anger turned inward, and higher frequency of controlled anger).
6. a better cognitive understanding of their angry feelings and expression of anger.
Definition of Terms

Anger is defined by Stearns (1972) as a combination of uneasiness, discomfort, tenseness, resentment and frustration. Anger can be replaced by emotional reactions such as anxiety, depression, hostility and aggression. Novaco (1975) says that, most simply, anger can be viewed as a strong emotional provocation that has identifiable autonomic, central nervous system, as well as cognitive determinants. Anger may or may not lead to aggressive behavior depending on the nature of the provocation, situational constraints, and preferred coping style.

For the purpose of this study, the focus will be on the behavioral expression of anger and the situation, physical and cognitive clues that precede angry responses.

The experience of anger, as measured in this research by the STAXI, is seen as having two major components—state and trait anger.

State anger was defined by Spielberger, Jacobs, Russell and Crane (1983) as an emotional state or condition that consists of subjective feelings of irritation, annoyance, fury and rage with the concomitant activation of the autonomic nervous system.

Trait anger was operationally defined in terms of individual differences in the frequency that state anger expressed over time.

Aggression will be defined as "behavior that results in personal injury and in the destruction of property. The injury may be
psychological in the form of devaluation or degradation, as well as physical" (Bandura, 1973).

Teachers will describe aggressive behaviors with the conduct problem scale of the Conners' Teacher Rating Scale–39 (CTRS). The CTRS contains 13 statements, which include: quarrelsome, mood changes quickly and drastically, acts "smart," destructive, steals, lies, temper outbursts, explosive and unpredictable behavior, no sense of fair play, teases other children or interferes, impudent, stubborn, and uncooperative.

Group Counseling: Group counseling is defined as the development of an interpersonal network characterized by trust, acceptance, respect, warmth, communication and understanding through which a counselor and clients come into contact in order to help each other confront unsatisfactory or problem areas in the clients' lives and discover, understand and implement ways of resolving these problems and/or dissatisfactions (Trotzer, 1981).

Cognitive-behavior modification as a therapeutic treatment addresses itself to changing how a client thinks. The cognitive-behavioral belief is that cognitions as events, processes and structure, direct and guide behavior (Gazda, 1989). Meichenbaum and Jaremko (1983) defined cognitive processes as the way an individual selectively picks what he or she wants to think about as well as the meaning he or she will attribute to it.

Cognitive-behavior group methods include elements of didactic teaching, Socratic discussion, problem-solving, cognitive restructuring,
behavioral and imagined rehearsal, self-monitoring, self-instruction, imaginable practice and possible relaxation training (Gazda, 1989).

**Role playing** is defined as a situation in which an individual is asked to take a role (behave in certain ways) not normally his own, or if his own, in a place not normal for the enactment of the role (Goldstein, Sprafkin, Gershaw & Klein, 1980).

**Modeling** is defined as learning by imitation. It has been examined in a great deal of research under many names, including copying, observational learning, identification, and vicarious learning (Goldstein et al., 1980).

**Reinforcement** has been defined as any event that serves to increase the likelihood that a given behavior will occur, e.g. material reinforcement such as food, social reinforcement such as praise or approval from others, and self-reinforcement which is a person’s positive evaluation of his own behavior (Goldstein et al., 1980).

**Organization of the Study**

Chapter 1 consists of the introduction, problem statement, research questions, significance of the study, and definition of terms. Chapter 2 includes a review and summary of the literature, which are divided into the following sections: review of theoretical issues, developmental issues in aggression, review of treatments and interventions, and tie to present intervention and assessment. Chapter 3 addresses the methods utilized in the study which include: statement of research question, population and sample, design, counselors and
adult raters, intervention, instruments, dependent variables and their measures, procedure hypotheses, and analyses. Chapter 4 will present the results of statistical analysis used to test the research questions. The final chapter, Chapter 5, concludes with a summary of the study, conclusion drawn from the findings, a discussion of the results, and recommendations for further research.
CHAPTER 2
REVIEW OF THE LITERATURE

In this chapter, the review of the literature will begin with a discussion of the theoretical issues surrounding the concept of anger. These are necessary considerations in the choice of a relevant and effective small group counseling intervention. I will then review developmental issues which make early intervention at the middle school an important place to begin the process of anger management. Then I will review research on strategies for dealing with anger management, focusing on subjects, duration of the counseling interventions, and results of research. The main group counseling approaches for anger-related issues will be traced, and their evolution to my present choice, a cognitive-behavioral approach, will be explained. Small group interventions with children will be highlighted.

Review of Theoretical Issues

Experts agree that learning to manage anger is a difficult life task. But what is anger? Anger is a multi-dimensional concept that simply does not lend well to intellectual or scientific descriptions, according to Sharkin's (1988) review of the research. This is because anger is experienced physiologically, affectively, and cognitively. Its
expression may involve a motoric and/or verbal component or no overt expression at all.

Alschuler and Alschuler (1984) traced the development of the concept of anger. Beginning with the physiological basis, they reported that the manifestations of anger originate in the hypothalamus which in turn releases nor-adrenaline, causing the dilation of pupils, increased consumption of oxygen, and elevated blood pressure. The heart rate may accelerate, increasing cardiac output, sweating head, dryness in the mouth, increased available blood sugar for muscles, thus promoting muscle strength. Sensitivity to pain decreases while alertness increases. These internal physiological responses have been called a "fight or flight" reaction.

In an extensive examination of the psychology, physiology and pathology of anger, Stearns (1972) defined anger as a "combination of uneasiness, discomfort, tenseness, resentment and frustration," an emotional reaction to certain kinds of stressors, known as provocations. Many provocations for anger arousal include external, physical stimuli, proprioceptive stimuli (receptors located in subcutaneous tissues that respond to stimuli produced within the body), or recall of stimuli. The provoking stimulus for anger is hypothesized to be blocked, goal-oriented behavior. Stearns emphasized that anger differs from aggression, which is defined as an overt behavioral destructive response, and hostility is the residual of negative feelings which persist after anger has subsided.
From the developmental view of Alschuler and Alschuler (1984) emerged the proposal that from the time children engage in goal-directed behavior, frustration can hurt their chances to succeed and this, in turn, leads to anger. Because most children are taught in the socialization process to suppress immediate aggressive behavior, the resulting frustration hurts their chance to succeed and thus leads to aggression. Inevitably, anger must be expressed internally, externally, or displaced. In students, displaced anger can be the root of tardiness, absenteeism, lost materials, or even vandalism. It can result in unprovoked outbursts directed at family members or peers. It can result in behavior problems at school.

If suppressed responses to anger are turned in on oneself, it can result in emotional signs, such as depressed self-concept, self-criticism, or physical consequences like skin rash, ulcers and muscle tension.

Alschuler and Alschuler (1984) altered the definition of anger to that of a temporary internal state that is in response to being hurt. Taking a developmental view of anger, they explained that the behaviors of children take on different forms and assume different meanings, as children progress through adolescence. What can be a developmentally appropriate expression of anger at a young age can be maladaptive at a later age.
Review of Developmental Issues in Aggression

Matthews and Brooks-Gunn (1984) examined the development of aggressive behavior in early childhood through middle childhood. They stated that very early aggression in children below the age of four is often associated with sociability or popularity. Aggression then peaks at age 4 to 5 and gradually declines. This occurs because, at school age, the aggressive behavior loses its playful quality or positive societal potential. Most children then learn to control their aggressive impulses in school.

As already stated, physical aggression, non-compliance, destructiveness, verbal combativeness, and negative relations with peers and adults, defining characteristics of conduct disorder, emerge in studies of normal and treatment populations across the ages of childhood from preschool through adolescence. Camp and Ray (1984) also stated that aggression, non-compliance, and poor social relationships identified in 6- to 10-year-old children tend to persist into adolescence where they are accompanied by school failure and delinquency.

Cohen and Schlesser (1984) reviewed cognitive development and clinical interventions beginning with Piaget, who explained that aggressive behaviors generally decline in the school age child. Because an increase in cognitive ability makes it easier for the child to take the perspective of the other, he or she becomes more empathic and understands how another may feel if aggressed upon. Hawkins, Von
Cleve and Catalano (1991) found that even 5- to 6-year-olds are capable of understanding how to arrive at solutions where both sides win. Hartup (1974) also suggested that the expression of aggression presupposes cognitive antecedents that mediate anger and its behavioral expression.

Besides cognitive influences, there are also cultural influences in the developmental expression of anger. Aggression is one social behavior where sex differences are generally reported. During infancy, aggression measured by grabbing toys and hitting does not seem to be sex-typed.

Mussen, Conger and Kagen's (1969) summary of sex differences in aggressive behavior concluded that, in the American culture, boys receive more encouragement and less punishment for aggressive behavior than girls do. These differences become more marked during the preschool years as 2-year-old boys and girls hit, cry and scream with equal frequency. During the preschool years boys express more aggression than girls in play and fantasy. Mussen et al. cited Maccoby's study that counted physical attacks, fighting, negativistic behavior, quarreling, lying, tackling, verbal aggression, destructiveness, and temper tantrums as more common among boys than among girls.

Maccoby and Jacklin (1980), in a meta-analysis of observational studies of peer-directed aggression, stated that males are the more aggressive sex and that this sex difference is evident as early as the
preschool years and continues through subsequent phases of development, although it may change in form and in the circumstances which trigger it.

Matthews and Brooks-Gunn (1985) continued that parents are likely to encourage or at least tolerate aggressiveness in their sons more than in their daughters. Teachers may allow boys more latitude as well. In a fourth grade, Cairns and Cairns (1984) asked teachers and principals to nominate students whom they thought to be particularly aggressive and troublesome to peers. Surprisingly, almost as many girls were nominated at this level as boys. By seventh grade, boys were twice as likely to be nominated as being high-risk.

Olweus (1978) found that bullies were rated by teachers as higher on dimensions such as "starts fights," "verbal protests" and "teases." Olweus pointed out in his classic study that there were two important dimensions in the development of aggressive reactions. First, highly aggressive boys often had hostile, rejecting, negative and indifferent parents. Secondly, consistent demands had not usually been placed on their son for reasonably controlled nonaggressive behavior. Lastly, Olweus, Block and Yarrow (1986) added a degree of parental conflict to these two dimensions as a predictor of later criminality. In a recent review of childhood conduct problems in a family context, Frick (1993) named three specific dimensions that seemed to be most consistently linked to conduct problems: parental
psychological adjustment, parental marital adjustment, and parental socialization practices.

In emphasizing the impact of early aggressive traits, Hoover and Hazler (1991) stated that a longitudinal study of 8-year-olds indicated that a child who was nominated as aggressive by peers at an early age was significantly more likely to have a criminal record as an adult. Lawrence (1985) explained that students who experience failure in schools and alienate themselves from school activities tend to act out with disruptive or violent behavior.

Steinberg (1991) suggested that attitudes and beliefs contribute to development of aggressive responses. Aggressive youth tend to attribute hostility to others, search for few facts in trying to understand the provoking situation, and have difficulty visualizing situations, especially nonviolent ones. Juvenile offenders seem to have the least sense of the harmful consequences of their behavior and also tend to ignore the suffering of the victim.

Behavioral theorists answer the question of anger and anger control from the perspective of the frustration-aggression hypothesis, which suggested that aggression may be one by-product of environmental frustration and is defined as "interference with goal-directed behavior." Another contribution to the learning theory model of aggression came from Bandura's (1973) view of aggressive behavior as being simply one form of social behavior and exposure to an aggressive model or models is likely to elicit the imitation of aggression. In
Bandura, Ross and Ross' (1961) work with preschool children, the experimental group which had been exposed to aggressive real-life or fantasy (television or movies) models were more likely to imitate the aggressive responses of the model. On the other hand, none of the control group who had not been exposed to the aggressive model displayed such behavior.

Up to this point in the examination of developmental issues in aggression, it has been shown that the capacity for violence may be inborn, but children learn to be aggressive. Children learn by watching and emanating models in the home, community and school. They practice ways of handling frustration and anger which have been encouraged or inconsistently discouraged. Many youngsters lack the skills for resolving conflicts as well as the cognitive understanding of provoking situations. Marion (1991) described a coercive pattern of interaction in family systems which teaches children how to imitate aggression and how to be the victim of aggression.

**Review of Treatments and Interventions**

What have therapists and counselors done to help treat anger-related problems? The treatment of anger-related problems varies according to the therapists' beliefs about anger and the roots of the aggressive behavior. However, interventions for maladaptive anger tend to target one or more of its components, according to Sharkin's
review of the empirical studies of the effectiveness of treatments for helping clients deal with everyday anger-related problems.

To help clients recognize, understand and manage their anger, treatment measures can be examined under a few specific models which reflect the focus of each counseling approach. Current research almost exclusively examines the cognitive-behavioral model which deals with the relationship between internal cognitive events and overt behavior.

Meichenbaum and Jaremko (1983) provided the major rationale underlying cognitive training. Influenced by the Soviet neuropsychologist Luria on the controlling effects of language and thought on behavior, Meichenbaum and Jaremko suggested that the inappropriate, maladaptive performance and behavior of the problem child were based in part on the child's use of poorly organized subvocalized cognitions, i.e., speech, thoughts and images. In cognitive training, the child is taught appropriate task-relevant cognitions which interrupt and inhibit maladaptive stimulus-response associations, according to his view. For example, in the "self-instruction" format, a child uses internal cognitions to direct task performance.

Changing a person's self-statements is also a major tenet of the rational-emotive therapy of Ellis (1973) which proports that it is not events that cause distress, but rather a person's interpretation and internal sentences about the event. Bandura (1973) and Piel (1991) both
suggested that the absence of verbal skills to cope with stress often leads to aggression.

To see how well a child's own labeling of his own anger was associated with others' perceptions of his behavior, Caplan (1980) developed the Children's Anger Scale (CAS). Her instrument was designed to measure the cognitive labeling of anger in 9- to 12-year-olds. Caplan then was able to report that a relationship existed between the cognitive labeling of anger in children and overt aggression in children. Abikoff's (1979) historical review of cognitive training studies with children said that in these early studies, cognitive training appeared most successful in altering the impulsive response style in visual perceptual task, on Kagen's Matching Familiar Figures Test (MFFT).

For the purposes of my research, I will review cognitive-behavioral interventions with children and young adults, including the stress inoculation model, psychological/social skills training, and cognitive-problem solving skills training. I will emphasize group counseling interventions, and conclude by offering reasons why I chose the Morganett (1990) curriculum for an anger management intervention.

**Stress Inoculation**

The early stress inoculation approach of Novaco (1975) is a cognitive behavioral approach to maladaptive anger. Novaco's
subjects were college students who engaged in individual therapy over 11 visits. Novaco emphasized the functional effects of anger. As an emotional response to provocation, the experience of anger and its concomitant cognitions, like thoughts about the provocateur and/or thwarting situations, can serve to instigate aggressive actions. The learned association between anger and aggression may lead to elicit aggressive behavior. Techniques like self-instruction aimed to change behavior by modifying what clients say to themselves.

In Novaco's (1975) stress inoculation, anger control consists of three phases: cognitive preparation, skills acquisition, and application training. Cognitive preparation involved learning about events that trigger one's pattern of anger. By keeping an "anger diary" the person can monitor the frequency and intensity of anger responses. Cognitive and behavioral coping skills are learned in the second stage. Alternative strategies are suggested and modeled by the counselor and then rehearsed by the person counseled. Students or clients are taught how to use relaxation techniques to cope more effectively with provocation. Lastly, in the third phase, counselees imagine situations of conflict and role-play their monitored reactions. Sharkin (1988) pointed out that the underlying assumption of the stress inoculation approach was that anger is related to (and perhaps the result of) cognitive processes. Novaco's research found a significant improvement in his subjects' ability to regulate and manage anger.
Novaco's (1982) research with thirty-two boys ages 10-12 showed relaxation training as a viable technique for decreasing impulsivity, a big factor in behavior problems, and attention to task. Using the Matching Familiar Figures Test (MFFT) as a dependent variable, Omizo (1980) demonstrated that students in the training group were able to perform better on a visual perceptual task when taught to concentrate and modulate their own physical reactions through biofeedback.

Omizo, Hershberger and Omizo (1988) extended the stress inoculation approach to work with normal fifth grade students. They investigated the theory behind teaching children to cope with anger. They said that children are usually punished for exhibiting aggressive or destructive behavior which leads them to conclude that adults find such behavior unacceptable. For example, they said that punishing a child for throwing things while angry does not allow the anger to disappear, resulting in an angry child who does not throw things and increasing the chance that the anger will surface in other ways at other times. Furthermore, when individuals are unable to cope with their angry feelings, they may resort to violence, crime, substance abuse, suicide, and self-destructive behaviors.

Omizo et al. (1988) continued that it is better if schools attempt to prevent the occurrence of disruptive behavior by teaching children how to handle angry feelings. They noted that most intervention strategies focused on assisting adults and few attempted to assist children.
To achieve this end, Omizo et al. presented a three-phase 10-week counseling intervention strategy developed to help children in coping with anger, employing the cognitive-behavioral techniques of modeling, role-play and reinforcement. In Phase One, the aim was to teach children to develop an understanding of anger and to differentiate between its positive and negative aspects, since having angry feelings is a part of normal life. In Phase Two, the counselors focused on raising awareness on the child's part of the special incidences that precipitated angry feelings of each child in the past. Behaviors and consequences were identified and discussed by the group. Other topics included: exploring alternatives to inappropriate responses, distinguishing between constructive and destructive responses, and learning to make choices. Lastly, in Phase Three, activities were used to practice the techniques and elicit feedback from group members.

Omizo et al.'s (1988) results supported the use of group counseling intervention strategies for teaching children to behave less aggressively. Besides decreased incidences of aggressive behaviors on a teacher behavior rating scale, the students in the study were sent to the principal's office less often for discipline. In addition, Blistine and Frieden (1984) showed the effectiveness of a stress inoculation treatment in a case study with a chronically-aggressive young woman.
Developmental Stress Inoculation

In addition, Alschuler and Alschuler's (1984) developmental counseling approach built upon the stress inoculation model. She introduced stress-inoculations into the curriculum and entered the classroom with her total program. Alschuler's subjects were 11-year-old students who participated in a 10-week social skills training program within the regular classroom in a large group situation.

Alschuler and Alschuler identified the three following developmental causes of anger. First, because people get angry to restore physical well-being, the initial response to anger is increased autonomic activity, i.e., the accompanying tension and surge of energy if one has been hurt. To restore homeostasis, she taught the students one strategy called "let go" to release their tension and excess energy through vigorous activities, e.g., individual or team sports participation, or deliberate, harmless outbursts like banging a table in private, stomping the floor, or screaming into or hitting a pillow.

In taking exception to this technique, the Tavris (1983) study indicated that sometimes the aggressive expression of anger makes people more riled up rather than less. To counter this idea, Alschuler and Alschuler (1984) said that the beneficial effects of vigorous activities depend upon the intent to reduce physical tension.

The factor of intent was examined by Olthof, Ferguson and Luiten (1989), who investigated the interaction of personal responsibility along the dimensions of availability, intentionality, and
motive acceptability with anger and responses in children from 5 to 15 years old. Olthof et al.'s results showed that the intentionality dimension affected the children's judgments of naughtiness and anger in stories when harm was caused avoidably and when harm was caused unavoidably. Even with unavoidable harm, the intentionality aspect of the behavior led children to give more severe judgments than when the story character caused harm unintentionally and unavoidably. Results with children suggested that the presence of bad motives outweighed the perpetrator's lack of intent in causing the harm.

The second technique used in Alschuler's and Alschuler's (1984) extension of stress inoculation was the inclusion of the use of assertive speech, e.g. "I-messages" (Dinkmeyer and McKay, 1982). Because a goal has become blocked, action must be taken. Such statements include a description of the person's feelings, a non-judgmental identification of the unacceptable behavior, and the specific effect on the person. She also names a second assertive verbal message called "dealing fairly," which involves negotiating differences and reaching compromises.

Thirdly, because anger was considered a response to interrupted psychological well-being, the well-being may be restored by adjusting one's thoughts and feelings, stopping self-criticism, and understanding the offender in a more positive way. Novaco's (1975) technique of "inner dialogue," the silent conversation of thoughts that
redefine the offensive stimulus in more positive terms, was adopted. Variations of positive inner dialogue included imagined conversations within imagined alternative situations, roles, interactions, and outcomes.

Basically, Alschuler and Alschuler (1984) taught regular education students strategies to recognize warning signs, including characteristics of situations which led to anger in the past (both internal and external signs); taught students to develop constructive responses like "loosening up" or "speaking assertively," and strove to influence school policies that reduce destructive responses by providing alternatives, e.g., a "time-out" sign could be placed on the desk by a student when he/she feels the need to calm down. The researchers reported a reduction in reported incidences of student anger and aggression after the 10-week social skills training program.

Deffenbacher Research Cluster

Another cluster of studies involving the cognitive-behavioral approach involved the research of Deffenbacher. His cognitive-behavioral interventions focused primarily on the training of specific coping skills (e.g., applied relaxation and cognitive restructuring for anger reduction) (Hazaleus & Deffenbacher, 1986; Deffenbacher, McNamara, Stark & Sabadell, 1990; Deffenbacher, 1988; Deffenbacher, Story, Brandon, Hogg & Hazaleus, 1988; Deffenbacher, Story, Stark, Hogg & Brandon, 1987).
At the onset, Deffenbacher, Story, Stark, Hogg and Brandon (1987) acknowledged Novaco's work as the first well-controlled study of anger reduction which showed the effectiveness of the stress inoculation. They then combined cognitive and relaxation interventions to form a new program.

Subsequent studies supported the combination of cognitive and relaxation skills training as well as cognitive interventions alone (Hazaleus & Deffenbacher, 1986; Moon, 1981). Deffenbacher questioned earlier studies as to whether or not cognitive and cognitive-relaxation conditions were similar.

Deffenbacher, Story, Brandon, Hogg and Hazaleus (1988) found that with college students, both the cognitive and the cognitive-relaxation interventions showed significant reductions of reported general anger, anger across diverse provocations, anger in personally most angering situations, anger-related physiological reactivity, unconstructive coping tendencies in analogue provocations and in trait anxiety. They used an 8-week one-hour group counseling format to compare interventions. In the end, cognitive subjects reported less tendency to suppress anger than controls, and appeared to be dealing constructively with their anger using new alternatives. Spielberger's Strait-Trait Anger Scale (STAS) (1970) was used as the dependent variable in many of the Deffenbacher studies. The STAS was the precursor of the present State-Trait Anger Expression Inventory (STAXI).
Finally, Deffenbacher, McNamara, Stark and Sabadell (1990) compared cognitive-behavioral counseling with process-oriented group counseling for general anger reduction with the college-age population over 8 weekly one-hour group sessions.

According to the existential-humanistic theory of process groups (Yalom, 1985), anger results primarily from poor self-concept and low self-esteem. Self-understanding, catharsis, interpersonal learning, and interpersonal communications are at the core of process groups. Findings of the Deffenbacher et al. (1990) study replicated short-term results (Deffenbacher, 1988; Deffenbacher, Story, Stark, Hogg & Brandon, 1987; Novaco, 1975) and long-term results (Deffenbacher, Story, Brandon, Hogg & Hazaleus, 1988) for the effectiveness of cognitive-relaxation coping skills conditions. Results also gave support for the anger-focused process group counseling format where none had existed before. To the list of cognitive-behavioral interventions, Sharkin (1988) included the technique of systematic desensitization (whereby muscle relaxation was theorized to serve as an incompatible response to anger arousals) as another effective behavioral intervention.

**Psychological/Social Skills Training**

Psychological skills training as an intervention began to emerge in the 1980's, according to Glick and Goldstein's (1987) review. In psychological skills training, the client was viewed as lacking, deficient or weak in the skills necessary for effective interpersonal
functioning. Psychotherapy was viewed as pro-active training between a trainee and trainer of psychological skills. Glick and Goldstein (1987) credited Bandura's (1973) work, together with the widespread deinstitutionalization in the community mental health movement, as the underlying reasons for the shift to training skills for daily living from long-term, in-depth psychotherapy. Bandura (1973) provided insight that an absence of verbal skills in coping with stress and insufficient cognitive mediation may lead to anger and aggression. Problem-solving deficits and impulsivity were implicated by Shure and Spivak (1980) as reasons for aggression.

Camp and Ray (1984) explained that social skills training was based on the assumption that behavior problems were an outgrowth of specific social interaction skills deficiencies. For example, aggressive children experience much peer rejection and may exhibit deficits in gathering alternative solutions to interpersonal problem situations. Camp and Ray's (1985) "Think Aloud" program was a self-instructional procedure incorporating cognitive modeling and interpersonal problem-solving components aimed at functional control of overt aggressive behavior through the training of verbal mediational processes. The technique of cognitive modeling in the "Think Aloud" program added a cognitive component to training in appropriate coping behaviors through symbolic modeling. The cognitive model, usually an adult or a peer, demonstrates discrete overt coping behaviors enhanced by verbalization of a strategy or rationale.
Goodwin and Mahoney (1975) illustrated the application of cognitive modeling in reducing aggressive behaviors in a small case study.

Camp and Ray's (1985) interpersonal problem-solving approach evolved from the extensive work of Shure and Spivak (1982), whose data suggested that aggressive impulsive children exhibit deficits in generating alternative solutions to interpersonal situations. With a two-month classroom training program, students were better able to generate alternative thinking, and with concomitant changes in classroom ratings of behavioral adjustment. Their subjects were normal preschool and kindergarten populations. Their intervention, called Interpersonal Cognitive Problem-solving Skills (ICPS), consisted of daily 20-minute games and dialogues through which teachers and children interact in small groups over a period of about three months. Pre- and post-intervention measures were tests designed to elicit from the child as many alternative solutions as possible to typical age-relevant problems, another test designed to elicit from the child as many consequences as possible to an interpersonal act, and a test which identified youngsters who demonstrated a spontaneous tendency to conceptualize cause-and-effect when presented with a stated outcome. The results of the study indicated that, within a wide IQ range, preschool and kindergarten children who benefited from ICPS training became better able to cope with typical everyday problems than those who did not.
Feindler and Fremouw (1985) suggested that many aggressive boys were deficient in the use of language skills to control behavior. Young boys tended to respond impulsively instead of responding after reflection. When they were trained to increase their self-verbalizations, their pro-social behaviors increased and the aggressiveness decreased.

Bender's (1976) earlier work showed that, with 374 first grade subjects, self-verbalization techniques, trained over four sessions, showed no significant impact in reducing errors on a perceptual test which required concentration. Camp and Ray (1984) expanded the cognitive behavior interventions to approximately 40 sessions over two months and used a no-treatment control group of aggressive and normal children. Children who had made good progress in this program showed significant improvement in classroom behavior, while children who responded poorly to the refresher program deteriorated or showed no change. Camp and Ray emphasized that significant changes in complex problem behavior should not be expected to appear in a durable or generalizable fashion overnight.

A major project involving explicit skill training for aggressive youngsters was undertaken by Glick and Goldstein (1987) who proposed Aggression Replacement Training (ART) as a multimodal and psychoeducational intervention. They explained the three components of ART. First, structured learning training (SLT), a fifty-skill curriculum of pro-social behaviors, was systematically taught to
small groups of chronically aggressive adolescents. Techniques of modeling, role-playing, performance feedback, provision of praise, re-instruction, related feedback on how well the youth's playing of the skill matched the expert model's portrayal of it, and transfer learning were incorporated into the system.

Secondly, Glick and Goldstein (1987) adopted the Anger Control Training (ACT) developed by Feindler, Marriott and Iwata (1984). They partially based the newer model on the earlier anger control and stress inoculation research of Novaco (1975) and Meichenbaum (1977). Glick and Goldstein's main goal in this section of ART was to teach skills.

Techniques included the use of a log of anger-arousing experiences; herein the youngsters could learn to identify external and internal self-statements that provoke anger responses. The youngsters (boys 14-17 years old in a residential court facility) were also taught to identify individual physical events, such as tightened muscles, flushed face, clenched fists, that let them know that the emotion that they were experiencing was anger. Next, through a series of techniques like self-reminders, they were taught to lower the level of their anger. Finally, the boys were taught to use self-evaluation to examine their behaviors by identifying triggers, using cues or reminders, and then rewarding themselves for effective performance. The third component of ART, a unique moral education component, was added by Glick and Goldstein to supplement the
youngsters' repertoire with skills for acting pro-socially and for successfully inhibiting antisocial or their more aggressive behavior.

Research on the ART program was conducted with incarcerated youths. Acting-out behavior was rated weekly by child care staff in terms of number and intensity of behavioral incidents, pre- and post-treatment. After the 10-week social skills training program, the results indicated that both the number and severity of the behavioral incidents decreased significantly.

Moon's (1981) social skills training program included assertive ways of behaving when angry and focused on teaching general problem-solving skills. He hypothesized that the passive, covert emphasis on anger reduction may foster withdrawal from anger-provoking stimuli by discouraging interaction with the social environment. Moon's research compared three treatment approaches to anger control: first, Novaco's stress inoculation as a cognitive-behavioral group; secondly, a group controlled for the effect of group cohesiveness and attention; and, thirdly, the assertive, social skills training group. All three treatments were rated as successful in reducing anger. The social skills program was rated as most enjoyable by the college students subjects. Only the social skills and problem-solving groups were successful in increasing assertive behaviors.
Cognitive–Problem-Solving Skills Training

Another skills training intervention with aggressive children and adapted for the school setting was the Anger Management program of Lochman, Lapron, Gemmer, Harris and Wycoff (1989). They undertook a study to compare the effects of two anger-coping interventions with groups of aggressive 11-year-old boys. Both anger-coping conditions used cognitive-behavioral and social problem-solving training procedures, and one group included an extra teacher consultation component designed to enhance the teacher's behavior management skills. Lochman et al.'s (1989) results indicated that, in comparison to untreated aggressive boys, treated boys displayed significant improvements in their disruptive-aggressive, off-task classroom behavior and in their level of perceived social competence. Teachers rated them lower on aggressiveness on the behavior rating scales employed (Breyer's Behavior Observation Schedule for Pupils and Teachers, Missouri Children's Behavior Checklist, and the Perceived Competence Scale for Children) after an 18-week intervention than before the treatment. Lochman, Dunn and Klimes-Dougan (1993) advocated universal interventions and teacher consultation to augment secondary prevention programs, such as their 18-week Anger Coping Program, a cognitive behavioral approach with second and third grade students.

Lastly, Etscheidt (1991) focused her research with social-cognitive skills training on the role of training program incentives in
affective behavior change. She stated that often reinforcement procedures were included in the training approach, but their relative contribution was not evaluated. The results of her investigation indicated that students in the two groups receiving the cognitive-behavioral program (Lochman’s Anger Management) were rated at post-treatment as having significantly more self-control than students in the control group. There was no significant difference between the first group, who received the cognitive-behavioral program only, and the second group, who received the cognitive-behavioral program plus a positive consequence for displaying strategies presented in the program. In this study, the limited effectiveness of the incentive may be explained because the incentive was not one chosen by the students.

Forman’s (1980) cognitive training program with elementary school students who were nominated for their aggressive behavior showed that both cognitive restructuring and a response cost program (loss of reward) were effective in decreasing disruptive behavior in the classroom. The study did not evaluate the differential effects of internal and externally-based behavior control program with children.

Kazdin (1987) reviewed cognitive–problem-solving skills training, recalling the works of Shure and Spivak (1982) and Kendall and Braswell (1985). He indicated that the majority of these studies focused on training of cognitive processes and laboratory task performance, rather than deviant child behavior. Other studies reviewed by Kazdin of aggressive children and adolescents have shown
that cognitive-based treatments can lead to changes in behavior at home, at school, and in the community, and gains last up to one year later (Kazdin, Esveldt-Dawson & Loar, 1987; Lochman, Lapron, Gemmer, Harris & Wycoff, 1989).

Problem-solving skills training (PSST), as defined by Kazdin (1987), focused on the child's cognitive processes (perceptions, self-statements, attributions and problem-solving skills) that are presumed to underlie maladaptive behavior. Cognitive processes have been accorded a major role in aggressive behavior. Because of the way events are perceived and processed, the child's appraisal of a situation, anticipated reactions of others, and self-statements in response to particular events may skew their reactions either away to towards acceptable behavior. Kazdin, Bass, Siegel and Thomas (1989) examined the effectiveness of cognitively-based treatment with antisocial youth referred for treatment and assessed the impact of treatment on measures of functioning at home and school.

Kazdin et al. (1989) evaluated alternative treatments for children (n=112, ages 7-13) in a diagnostic triage center. Antisocial behaviors included fighting, unmanageability at home or school, stealing, running away, truancy. Cognitive-behavioral problem-solving skills training (PSST) and client-centered relationship therapy were compared. A child behavior checklist was completed by teachers and parents before and after intervention. Treatments were administered individually (50 minutes) for 12 weeks. The central finding was that
problem-solving skills training could effect change in pro-social and antisocial behavior of clinically-referred children.

Tie to Present Intervention and Assessment

Kendall and Braswell (1985) believed that many of the cognitive-behavioral procedures can be effectively applied in a group counseling setting. The cognitive-behavioral training builds, nurtures and utilizes the group process. In the group context, spontaneous emotionality can be triggered by the peer interactions, which makes the group a microcosm of real life. The second focus of group training, generating alternative solutions to problems, was good practice in practical brainstorming, perspective-taking, in the context of role-playing. In this way children learn to understand the feelings of another by pretending or imagining they are that person. Basically, the counseling group represents a microcosm of children not unlike clusters in which group members have difficulty. Kendall and Braswell claimed that practice among other children added ecological validity to the role plays.

Morganett's (1990) unit called Better Ways of Getting Mad: Anger Management Skills evolved as the cognitive-behavioral intervention of choice for the present study. Morganett's lessons were built upon a body of research evidence that suggested that inappropriate anger responses can be replaced with more appropriate behavior (Abikoff, 1979; Bender, 1976; Camp & Ray, 1984; Kendall &
Braswell, 1984). Some of the research-supported techniques used by
Morganett to help youth manage anger responses come from self-
instruction (Meichenbaum & Jaremko, 1983; Camp & Ray, 1985),
interpersonal problem-solving training (Shure & Spivak, 1981), self-
control training (Lochman, Lapron, Gemmer, Harris & Wycoff, 1989;
Lochman, Nelson & Sims, 1981), the structured learning approach to
teaching pro-social skills (Goldstein, Sprafkin, Gershaw & Klein,
1980), stress inoculation (Novaco, 1975; Omizo, Hershberger & Omizo,
1988; Alschuler & Alschuler, 1984), and rational-emotive therapy
(Ellis, 1977). Morganett's program employs the three-step process of
cognitive-behavioral intervention to help youngsters learn and practice
anger management skills: (1) becoming aware of behaviors that are
hurtful to self and/or others; (2) learning skills or techniques to replace
hurtful behaviors; and (3) practicing until the new, more adaptive
behaviors become usable in real-life situations. Specific techniques
include use of anger logs or anger situations forms as homework;
anger-control role-plays; use of worksheets to examine events,
thoughts and feelings; positive reinforcement for group participation
and willingness to share; and training of "self-talk."

Morganett indicated that no specific research had been
completed using her anger management unit (R.S. Morganett,
personal communication, May 3, 1991). However, she reported many
positive comments from counselors who have utilized her units (R.S.
Morganett, personal communication, February 16, 1993).
Instruments to assess the effectiveness of the intervention were chosen based on research precedents. The STAXI has been widely used in research projects as a dependent variable after anger management interventions. The Conners' Teacher Behavior Rating Scales (1990) have been used extensively in studies with children who show behavioral and conduct problems. The third instrument is a short 10-item test devised by Morganett (1990) to be used as a pre-test and post-test to gauge the effectiveness of her intervention. This self-report scale contains items which ask about the students' thoughts, feelings and expression regarding anger and anger management. An inspection of the rate of discipline referrals was included to offer a measure of the effectiveness of the students' application of learned skills in an educational setting.

Summary

In summary, in this chapter I have traced the development of the theory of anger, examined the development of aggressive responses, and reviewed research on treatment models. The major cognitive-behavioral approaches began with those emerging from the stress inoculation model to include the studies of Omizo et al, (1988); Alschuler and Alschuler (1984); Olthof et al, (1989); and Deffenbacher et al., (1990). Secondly, some research surrounding social skills training, a more behavioral-biased perspective, were analyzed. These were the psychological/social skills training studies of Glick and
Goldstein (1987); Moon (1981); and Lochman et al. (1989). The Etscheidt (1991) research investigated the role of reinforcement in training programs for anger. Cognitive–problem-solving was discussed by examining the work of Kazdin (1987) and Kazdin et al. (1989), who followed in the footsteps of Camp and Ray (1984) and Shure and Spivak (1982). An outline of major studies has been included in Appendix A.

Finally, the ties to the present research were presented through examination of the underlying theory and techniques used in the Morganett (1990) curriculum for small group counseling for anger management for young adolescents.
CHAPTER 3

METHOD

In order to answer the major question, "To what degree, if any, does a group counseling intervention result in attitudinal and behavioral change in a sample of middle school boys?", I examined several main variables before and after an intervention based on the Morganett program intended to teach anger management skills. The main constructs of interest were the extent of behaviors classified broadly as conduct problems, the experience and expression of anger, and the cognitive understanding of both aspects of anger.

Population and Sample

A sample of 140 sixth- and seventh-grade middle school boys were nominated by principals from 10 of 11 middle schools in Prince William County, Virginia, a large suburban county outside of Washington, D.C. The students were selected by their principals as having a history of conduct problems and discipline referrals for problems related to anger management. Special education students identified as emotionally disturbed or learning disabled were not included in the sample. The participants in the study, whose behavior problems have not been significant enough to warrant special education intervention, were drawn only from the regular education program.
Description of the Sample

The proposed sample of 140 students from 10 middle schools was not attained for the following reasons. One school, represented by 14 subjects, was not able to successfully begin the intervention program because the administrator determined that the counseling groups must occur after school hours. Hence, only two students reported to the counselor on one occasion. After interviewing the students, the counselor disbanded the groups and reassembled as a single group later in the school year, too late to be included in the study.

Another reason for the diminished number of subjects was that counselors encountered difficulties with the return of parental permission slips despite numerous interventions, so that some groups began with six subjects rather than the proposed seven.

During the course of the intervention, nine students moved from the school boundaries, one was furloughed in anticipated placement in a more restrictive school, and one student chose to leave the group.

Data from other subjects was lost due to faulty data collection and tracking, even though these students did receive the counseling intervention. Specifically, one counselor did not administer posttests for the control group. At another school, the counselor did not administer pretests (CTRS-39, STAXI, and Morganett) for any of the control group subjects. Therefore, instead of the participation of 10 middle schools in the group counseling intervention, seven schools were included in the final analysis. The total number of subjects fell to 87, divided into 14 groups, seven experimental (n=45) and seven control (n=42) groups.
Descriptive information was collected for the sample on age, race, socioeconomic class (lower SES defined as recipients of free or reduced lunch), and initial number of discipline referrals for the present school year. The demographic information of the resulting sample was compared to their specific school profile and the county profile to see how well the students represented other middle school students (see Table 1).

The racial/ethnic composition of the sample compared favorably to the middle school population and the total student population of Prince William County Schools. The percentages of the sample with respect to racial/ethnic group ranged from an under-representation of the white group of four percentage points to an over-representation of the African-American group of five percentage points, with differences of less than one percentage point noted for the Hispanic and Other groups.

Specifically, 69% of the sample was white compared to 73.3% of the middle school population and 73% of the total school population. The sample contained 3.4% Hispanic students compared to 4.8% Hispanic students in the middle school population and 5% in the total school population. African-American students composed 23% of the sample compared to 18% of the total middle school population and 18% of the total school population. The sample represented 3.8% Other groups (American Indian/Asian/Pacific Islander), consistent with their 3.8% representation in the middle school population.

When individual schools' percentages were compared to the county middle school percentages of racial/ethnic composition, some schools, such as School 4 and School 5, indicated a higher percentage of
Table 1
Prince William County School and Sample Profile of Student Demographics for School Year 1992-93

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<th>County Profile</th>
<th>Middle School Profile</th>
<th>Sch. 1</th>
<th>Sch. 2</th>
<th>Sch. 3</th>
<th>Sch. 4</th>
<th>Sch. 5</th>
<th>Sch. 6</th>
<th>Sch. 7</th>
<th>Sample Profile</th>
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<tbody>
<tr>
<td>RACIAL/ETHNIC</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>White</td>
<td>73.0</td>
<td>73.3</td>
<td>68.4</td>
<td>57.2</td>
<td>70.3</td>
<td>81.9</td>
<td>87.1</td>
<td>61.8</td>
<td>78.9</td>
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<td>4.1</td>
<td>5.7</td>
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<td>.9</td>
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<td>18.0</td>
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<td>24.8</td>
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<td>3.9</td>
<td>3.3</td>
<td>2.3</td>
<td>3.7</td>
<td>2.4</td>
<td>5.5</td>
<td>5.3</td>
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<td>LUNCH</td>
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<tr>
<td>Reduced/Free</td>
<td>16.0</td>
<td>18.0</td>
<td>11.6</td>
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<td>4.2</td>
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<td>ENROLLMENT</td>
<td>44,540</td>
<td>9,869</td>
<td>918</td>
<td>911</td>
<td>667</td>
<td>1165</td>
<td>882</td>
<td>751</td>
<td>1169</td>
<td>87</td>
</tr>
</tbody>
</table>
white students (81.9 and 87.1) compared to the total middle school percent (73.3). Other schools, such as School 6, either showed double the number of Hispanic students or very few Hispanic students as at School 5. Percentages of African-American students were higher in five of the seven schools than the county's middle school percentage. This figure ranged from the highest African-American percentage (33.8) demonstrated at School 2 to a low percentage (9.6) at School 5. Finally, the minority percentage (Hispanic, African-American, Other) was highest at School 6 with 38.2%.

When free/reduced lunch percentages were compared, the sample percent of 13.8 was lower than the total middle school population percent of 18.0. Schools ranged from a high free/reduced lunch percentage of 35.8% at School 6 to the low of 4.2% at School 4. School 3 (23.5) also showed a larger portion of its students who participate in the free and reduced lunch program, a measure of socioeconomic status.

Finally, another dimension of the school and sample profile depicted in Table 1 and which may contribute to the unique characteristic of the schools was school size. The middle schools in the sample ranged from 687 to 1165 students.

**Design**

The experimental design was a pretest-posttest control group design (see Figure 1). The experimental group was exposed to a group counseling intervention based on the Morganett anger management unit while the control group did not receive the treatment.
**Figure 1** Diagram of the independent and dependent variables for the pretest-posttest control group design.

*CTRS-39 Conners' Teachers Rating Scale / STAXI State Trait Anger Expression Inventory / Self report - Morganett
At each middle school, 14 students were randomly assigned to either experimental or control groups. Some of the original subjects were lost for various reasons, so that the final total was 87. For the purposes of group counseling, 45 students fell into seven groups. The remaining 42 students served as the control group. The experimental counseling groups were then assigned to pairs of school social workers, school psychologists, or school counselors trained by me in the intervention program. Counselor pairs, treatment and control subjects are diagrammed in Figure 2.

The control group received the group counseling intervention after the experiment was finished because ethical considerations dictate that the intervention should also be available to these students who also had parental approval.

Counselors and Adult Raters

Seven pairs of counselors conducted eight weekly counseling sessions with small groups of sixth and seventh grade students. These pairs consisted of school psychologists, school social workers, or school counselors in any combination. The group co-leaders, experienced professionals who were certified in their respective fields, were composed of ten school social workers, seven school psychologists, two school counselors, and one substance-abuse counselor. They conducted the counseling intervention at the middle school to which they were assigned.
<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Totals</th>
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<tbody>
<tr>
<td>TREATMENT</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SCHOOL</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Totals</td>
</tr>
<tr>
<td>Counselor Pairs</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>7</td>
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<tr>
<td>Number of Subjects</td>
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<td>7</td>
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<tr>
<td>CONTROL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHOOL</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Totals</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>42</td>
</tr>
</tbody>
</table>

*Figure 2 Diagram of Counselor Pairs and Groups*
The group co-leaders were trained in the use of Morganett's anger management unit and general cognitive behavioral techniques. The training consisted of five hours of instruction dealing with a review and definition of cognitive behavioral therapy and techniques, the historical review of cognitive behavior therapy with children, an overview of anger management group counseling research, and a specific review of goals, techniques and activities contained in eight Morganett lessons. The counselors were also appraised of the present research questions, design, instruments and procedures.

In addition to the co-leaders, middle school classroom teachers participated in the evaluation phase of the program. They were trained in the use of a teachers' rating scale which targets individual classroom behaviors, group participation, and attitude toward authority. The teachers were not informed of placement of their students in experimental or control groups. The design called for three teachers to rate each student; two teachers of academic subjects and one teacher from related arts area. Out of 522 behavior rating scales requested (87 students x 3 teachers x 2 occasions), a total of 452 were returned (see Table 2). While some teachers completed an initial rating scale, their second rating was not returned due to their own failure to comply. Also, a change in students' class schedules in a few cases made some initial ratings unfollowed by the second rating by the same teacher.
Table 2  Rate of CTRS Return by School.

<table>
<thead>
<tr>
<th>School</th>
<th>CTRS-39 Returned/Requested</th>
<th>Pre and Post % Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
<td>42/42</td>
<td>100</td>
</tr>
<tr>
<td>School 2</td>
<td>31/33</td>
<td>94</td>
</tr>
<tr>
<td>School 3</td>
<td>28/39</td>
<td>72</td>
</tr>
<tr>
<td>School 4</td>
<td>30/36</td>
<td>83</td>
</tr>
<tr>
<td>School 5</td>
<td>36/39</td>
<td>92</td>
</tr>
<tr>
<td>School 6</td>
<td>27/30</td>
<td>90</td>
</tr>
<tr>
<td>School 7</td>
<td>32/42</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>452/522</td>
<td>87</td>
</tr>
</tbody>
</table>
Intervention

The counseling program consisted of eight weekly, 40-minute sessions called "Better Ways of Getting Mad: Anger Management Skills." This program is based on a unit from Morganett's (1990) *Skills for Living: Group Counseling Activities for Young Adolescents*.

The group objectives for the counseling sessions were: 1) to explore the origins of anger and illustrate that anger as an emotional response is neither good nor bad; 2) to help students become aware of the situational, physical and cognitive clues that precede angry responses and identify their own typical patterns of responses in anger-provoking situations; 3) to distinguish between appropriate and inappropriate anger responses; 4) to present the use of coping statements and cognitive restructuring as positive means of reducing angry feelings; and 5) to encourage students to take personal responsibility for their own thoughts, feelings and behavior.

Morganett's (1990) program is based on the premise that most anger management skills can be taught in a three-step process. First, an awareness of behaviors is developed. Then new skills are acquired to replace hurtful behaviors. Thirdly, practice with the new, more adaptive behaviors will lead to application.

Although no specific research has been conducted with the Morganett (1990) eight-week anger management unit (personal telephone communication, Morganett, 5/91; personal communication, Morganett, 2/93), her program is based upon research employing cognitive-behavioral techniques. Exercises and techniques are similar

The specific goals and techniques included in the eight counseling sessions were these: The goal of session 1 was to explore the origins of anger and the premise that anger is an emotion that is neither good nor bad. The anger situation form was introduced so that the students would be able to become aware of situations that were personally most anger-provoking. The goal of session 2 was to promote awareness of the situational, cognitive and physical clues that precede angry responses and to help the students identify their own typical pattern. Specific anger control techniques were discussed. In session 3 the goal was to help students distinguish between inappropriate and appropriate responses to anger. The anger log was introduced. In session 4 the goal was to introduce the use of coping statements or self-talk and practice this technique through role play situations. In session 5 the goal was to encourage students to substitute more moderate thoughts to control their angry feelings through the rational emotive principles called the ABC's of anger. In session 6 the goal was to further illustrate how changing thoughts about a situation can change feelings as well. In session 7 the goal was to practice statements of personal responsibility with regard to thoughts, feelings and behaviors. Finally, in session 8 the goal of the counseling session was to review past lessons and establish closure.
Appendix B contains more specific information about the content of the counseling sessions.

Sessions were limited to eight. Attendance was monitored. A contract was presented at the time of the first session to elicit commitment and cooperation.

**Instruments and Measures**

Three instruments were used to measure subjects with respect to conduct, feelings and expression of anger as well as their cognitive understanding of their feelings and behavior.

**Conners’ Teacher Rating Scales (CTRS-39)**

The Conners’ Teacher Rating Scales (CTRS-39, Conners, 1989) is a 39-item rating instrument completed by the child’s teachers. Each CTRS-39 item is rated with one of four responses (0 = not at all, 1 = just a little, 2 = pretty much, 3 = very much). The CTRS was designed to characterize the behaviors of children and compare them to levels of appropriate normative groups. The CTRS-39 has usefulness in general screening applications for childhood problem disorders in schools.

Conners (1989) stated that the CTRS assessed important constructs which have strong explanatory and predictive utility in the characterization of childhood problem behaviors. It contains seven indices: A. Hyperactivity; B. Conduct Problem; C. Emotional-Indulgent; D. Anxious-Passive; E. Asocial; F. Daydreaming-Attention; and I. Hyperactivity Index. Conners claimed that initial ratings may serve as
baseline indicators of behavior problems prior to counseling and progress may be evaluated by comparing these scores to those derived from later ratings. Raw scores are transformed to standardized T scores, with a mean of 50 and a standard deviation of 10. The individual transformed scores tell how well the child compares to children not specifically identified as having a diagnosable behavior problem. High scale scores are indicative of the presence of a problem, while low scale scores indicate the absence of a problem. Notation of the sex of the subject is also important so that appropriate norms are used. Normative data are reported on a sample of 9583 Canadian children aged 4-12 years. Norms are presented separately by groups formed by age and gender. For example, on the Male Profile form there are four age groupings for years 3-5, 6-8, 9-11 and 12-14. My sample fell both in the 9-11 and 12-14-year brackets.

While the entire CTRS-39 was used to describe the sample, one subscale, the Conduct Problem Index, was specifically utilized in the experiment. The Conduct Problem Index consists of 13 statements. Seven items refer to classroom behaviors such as "quarrelsome," "destructive" or "temper outbursts." Two items refer to group participation, i.e., "no sense of fair play" and "teases other children or interferes with their activities." Lastly, four items deal with attitude toward authority, such as "defiant," "stubborn" and "uncooperative."

The temporal stability of the Conners' Teacher Rating Scale has been demonstrated in a number of studies. For the CTRS-39 Conners (1969) reported fairly high one month test-retest reliability, ranging from
.72 to .91. Over a longer time period, reliability remained at a moderate level: .53 for Conduct Problem Index, according to Glow, Glow and Rump (1982).

In terms of inter-rater reliability, ratings of emotionally disturbed children by teachers and independent observers correlated .39 for the CTRS-39 Conduct Problem Scale and .52 for the total deviance (Kazdin, Esveldt-Dawson & Loar, 1983). Using a slightly altered version of the CTRS-39, Glow, Glow and Rump (1979) reported high inter-teacher correlations on troublesome behavior with a correlation of .66 for Conduct Problems. To help counter this relative weakness, more than one, preferably two or three, teachers rated each child and an average score was taken to give more stability among responses of raters.

High internal consistency reliability for the various scales have been reported by Edelbrock, Greenbaum and Conover (1985) with an average reliability of .94. Trites, Blouin and Laprade (1982) report alpha reliability coefficient of .93 for the Conduct Problem factor.

The validity of the CTRS-39 as a screening measure for hyperactivity, inattentiveness and defiance has been supported by research (Schacher, Sandberg & Gutter, 1986) which has shown a high degree of association between observed and rated behaviors. Minde (1980) reported correlations between the Conduct Problem factor of the CTRS-39 and observations of disruptive behavior (r=.73). Kazdin et al. (1983) reported correlations between independent observations of disruptive behavior and teachers’ and other raters’ responses on the Conduct Disorder scale of .48 and .51 respectively.
In the present research, correlations among teachers' ratings on the CTRS Scales A to I were computed (see Appendix B). For the sample relationships between ratings, the two teachers of academic subjects (Teacher X and Teacher Y) were generally higher than relationships of ratings of teachers of non-academic subjects (music, arts and physical education). The difference was most pronounced on Scales A (Hyperactivity), Scale D (Anxious/Passive) and Scale F (Daydreaming/Attention). This probably reflects the nature of the behavioral expectations in the more action-oriented, less sedentary non-academic subjects where physical outlets are appropriately offered and encouraged. On the other hand, it was noted that on Scale B (Conduct Problem), all three teachers reported consistent ratings of behavior (.53, .47, .46). Scales C (Emotional/Indulgent) and Scale E (Asocial) also were more consistently rated across teachers.

State-Trait Anger Expression Inventory

The State-Trait Anger Expression Inventory (STAXI) consists of a series of 44 statements on which people rate themselves, their feelings and their reactions to anger-provoking situations. In Part 1 subjects describe their present state. In Part 2 subjects describe their general state or trait. In Part 3 the subject rates again on a scale of 1 to 4 how they express their feelings of anger. Students rate themselves on 44 items of the STAXI, along three dimensions, "How I feel right now" (STATE), "How I generally feel" (TRAIT) and "When Angry or Furious.." (EXPRESSION). A four-point scale from "Almost Never" to
"Almost Always" is used. Raw scores are then converted to T scores, with a mean of 50 and standard deviation of 10. The sex of the respondent is also required to determine appropriate norms.

Spielberger, Jacobs, Russell and Crane (1983) developed the STAXI to provide a concise measure of the experience and expression of anger. The experience of anger, as measured by the STAXI is seen as having two major components--state and trait anger. The State anger was defined as an emotional state or condition that consists of subjective feelings of irritation, annoyance, fury and rage with concomitant activation of the autonomic nervous system. Trait anger was operationally defined in terms of individual differences in the frequency that state anger is expressed over time. Persons with high Trait anger would be more likely to perceive a wider range of situations as anger-provoking.

When Spielberger et al. (1983) developed the scale to assess anger expression, he formulated working definitions of anger-in and anger-out. Anger-in was defined on the basis of how often an individual experiences but does not express angry feelings. Anger-out was defined on the basis of how often an individual engages in aggressive behavior when motivated by angry feelings. Items on the scale were written with contents ranging from strong inhibition or suppression of angry feelings (anger-in) to the extreme expression of anger towards other persons or objects in the environment (anger-out).
The component parts of the STAXI are:

1. **State Anger** (S-Anger): A 10-item scale which measures the intensity of angry feelings at a particular time.

2. **Trait Anger** (T-Anger): A 10-item scale which measures individual differences in the disposition to experience anger.

3. **Anger Expression** (AX/EX): A total score based on the responses to the 24 items of the AX/IN, AX/OUT and AX/CON scales which provides a general index of the frequency that anger is expressed, regardless of the direction of expression. The formula is: $AX/EX=AX/IN + AX/OUT - AX/CON + 16$. Spielberger included the constant 16 in the formula to eliminate negative numbers. Scores on the AX/EX scale range from 0-72.

   a. **Anger-in** (AX/in): An 8-item anger expression scale which measures the frequency with which angry feelings are held in or suppressed.

   b. **Anger-out** (AX/out): An 8-item anger expression scale which measures how often an individual expresses anger toward other people or objects in the environment.

   c. **Anger Control** (AX-CON): An 8-item scale which measures the frequency with which an individual attempts to control the expression of anger.

The STAXI has been used with a junior high population, and with subjects who possess a fifth-grade reading ability. The instrument has not been normed for use with a younger sample.
Generally, the STAXI scales have been used in behavioral medicine and health psychology, and as a measure of treatment progress with angry individuals. Harburg, Blakelock and Roeper (1979) and Gentry, Chesney, Gary, Hall and Harburg (1982) have reported that individuals who tend to suppress anger have higher systolic and diastolic blood pressure. Dembroski, McDougall, Williams and Haney (1985) found that high ratings for hostility and "anger-in" were positively associated with angiographically documented severity of coronary atherosclerosis. Conners (1989) cited the Johnson study with high school students which reported a relationship between anger expression and blood pressure.

Evidence of the validity of the anger expression scales was seen in the correlation of STAXI scales with other anger and personality measures, such as Harburg et al.'s (1979) Teacher and Movie vignettes describing anger-provoking situations.

**Self-Report Instrument by Morganett**

This instrument consists of 10 statements to be answered on a scale of 1 to 5 from Never to Always. These 10 questions deal directly with topics and feelings covered in the group counseling program. For example, the first statement reads: "I know what makes me mad." The fourth reads: "I just can't control my anger." Eight statements appeared to deal with cognitive understanding of anger, two statements appeared to address behavioral expression of the angry feelings.
Dependent Variables and Their Measures

Six dependent variables derived from the three main instruments which fall into four major categories were examined. These were the extent of symptoms of a conduct problem (measured by CTRS and discipline-referral number), the experience of anger (measured by TRAIT and STATE) anger, the expression of anger (AX/EX), and the cognitive understanding of anger (see Table 3).

Procedure

Ten principals nominated 14 sixth- or seventh-grade students with demonstrated conduct problems. An additional pool of nominees was formed, in case permissions were not returned or were denied. Students were contacted and their cooperation requested. Parental permission was secured on a form which explains the purpose of the intervention. Demographic information was collected, as well as the number of discipline referrals to date. The sixth- and seventh-grade students were randomly assigned to experimental and control groups at their respective middle school. The total experimental group was composed of seven counseling groups of 6 or 7 students each. The counseling groups were assigned to trained school counselors and student service personnel who work in the building. Teachers were not apprised which of their students would be receiving an anger management intervention at the beginning of the study.
Table 3
Dependent Variables and Their Measures

<table>
<thead>
<tr>
<th>Constructs of Interest</th>
<th>Variables</th>
<th>Hypothesized Difference in Adjusted Posttest Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extent of symptoms of conduct problem</td>
<td>1. CTRS-39 (Conduct Problem Index)</td>
<td>E&lt;C</td>
</tr>
<tr>
<td></td>
<td>2. # discipline referrals</td>
<td>E&lt;C</td>
</tr>
<tr>
<td>2. Experience of anger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Trait anger</td>
<td>3. STAXI t-anger</td>
<td>E&lt;C</td>
</tr>
<tr>
<td>b. State anger</td>
<td>4. STAXI s-anger</td>
<td>E&lt;C</td>
</tr>
<tr>
<td>3. Expression of anger a</td>
<td>5. AX/EX</td>
<td></td>
</tr>
<tr>
<td>a. Anger withheld</td>
<td>STAXI - AX/IN</td>
<td></td>
</tr>
<tr>
<td>b. Anger expressed</td>
<td>STAXI - AX/OUT</td>
<td>E&lt;C</td>
</tr>
<tr>
<td>c. Anger controlled</td>
<td>STAXI - AX/CON</td>
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<tr>
<td>4. Cognitive understanding of anger and anger</td>
<td>6. Morganett score</td>
<td>E&gt;C</td>
</tr>
<tr>
<td>expression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\* A total score will be used to measure frequency of anger expression, regardless of direction (STAXI AX/EX = AX/IN + AX/OUT - AX/CON + 16)
At this point, pretesting occurred:

1. Three teachers were asked to rate each student's behavior with CTRS-39 and an average score taken. Only the Conduct Problem scale composed of three subsets of behavior (classroom behavior, group participation, and attitude towards authority) was a variable of interest in the study. The other Conners scales were used to describe the sample.

2. Students rated their own understanding of anger and anger management skills on the Morganett instrument.

3. Students rated themselves on the STAXI items.

Pre-testing occurred with both groups.

The counseling intervention took place in an eight-week period in small counseling groups of 7 students. Students in the experimental group met in the counselor's assigned room during the regular school day. The weekly group time was decided by each school. Sessions lasted 40 minutes one day a week. Provision was made for one make-up session, in case of weather or unforeseen emergency. Each counseling group was observed once by the researcher.

After the intervention, posttesting was completed, replicating the administration of the three instruments with teachers and all subjects. The number of discipline referrals was again calculated for experimental and control groups to be compared with initial tallies of referrals before the intervention.
Hypotheses

The following hypotheses related to the comparison between experimental and control groups on posttest scores, adjusted for corresponding pretest scores (see Table 3 for specific measures used).

1. Students undergoing an eight-week counseling intervention will have a lower adjusted Conduct Problem score (adjusted for pretest score) than will a control group.

2. Students undergoing an eight-week counseling intervention will have a lower number of discipline referrals compared to the number of discipline referrals for the control group.

3. Students undergoing an eight-week counseling intervention will have a lower general disposition to harbor angry feelings compared to the relative stable disposition of the control group towards anger.

4. Students in the experimental group will have less intensity in their present state of anger than the control group.

5. Students in the experimental group will express their anger less frequently than students in the control group. This will be shown in lower verbal or physical anger expression, lower anger turned inward, and higher frequency of controlled anger.

6. Students in the experimental group will show a better cognitive understanding of their angry feelings and expression of anger than students in the control group.
Analyses

Description of the Sample

For a general description of the sample by teachers, means and standard deviations of all the CTRS-39 scales were used. Summary statistics were used to describe the sample, both pre and post, on all the relevant variables.

Because the students were randomly assigned to groups, there should be no significant difference between initial mean scores of experimental and control groups.

Factor Analysis

On the Morganett self-report inventory, means were calculated for each of the 10 questions which dealt with cognitive understanding of anger and possible expression for both sets of scores derived from experimental and control groups.

Because this is an untested inventory with no existing factor analysis data or validating data, total scores may represent multiple constructs. If the hypothesized factor "cognitive understanding" is correlated with STAXI measures, some usefulness of the Morganett instrument may be derived. If not, adjusted means of the items of experimental groups can be evaluated to see if any change in attitude is reported.

Factor analysis of Morganett instrument was conducted to determine if one or two constructs are being measured. Eight of the ten statements use the phrases like "I know," "I believe," "I think," seemed
to connote cognitive understanding. However, two statements, "I just can't control my anger" and "When I am angry I express my feelings to the person I am angry with" appeared to deal more with behavioral expression vs. cognition. By utilizing factor analysis, I attempted to show if and how well the test items cluster together based on the two hypothesized constructs, cognitive understanding, or behavioral expression.

Correlations
All pretest measures for experimental and control groups were analyzed to see how well they correlate with one another.

Analyses of Covariance
Analyses of covariance was used to adjust the final mean scores (posttest means), on the basis of the covariate (pretest) means and then compare the adjusted means to see if there was any difference between experimental and control groups. To allow testing for differences across counselor pairs in different schools, as well as for the interaction between treatment and school, two-way ANCOVAs were run. Dependent measures and corresponding covariates used were (a) an index of extent of symptoms of conduct problems, (b) number of discipline referrals, (c) level of experience of anger trait, (d) level of the experience of state anger (e) level of expression of anger, and (f) level of cognitive understanding. Three scores which composed the level of anger experience (c) were also analyzed separately.
Observations by Researcher

The experimental counseling groups were observed by the researcher. Group dynamics, behavior management, adherence to the Morganett curriculum, and general emotional tone were observed and rated (see Appendix H).

Questionnaires

An informal questionnaire was devised to elicit information from the counselors, which would help in future planning of anger management groups (see Appendix I). First, counselors addressed questions concerning the initial phases of the group counseling process, including the collection of parental permissions, formation of groups, and time factors. In the second section, counselors contributed information regarding group dynamics of their specific anger management groups. They were asked to describe the techniques which were most effective with students who were disruptive or reluctant. They judged the incidences of attentional problems among their group members and its defined impact. In turn, the counselors were asked to describe what type of behavior management system they employed. With future planning in mind, the counselors were asked specific questions regarding the impact of behavioral and/or emotional problems on group dynamics. Ideas were elicited from the counselors for ways to encourage teacher support and other useful ways to make the groups more effective. Finally, the counselors were asked for their thoughts.
Significance of the Study

The importance of this study lay in beginning to answer the question of how to address the escalation of aggressive behaviors within the context of the school. If a social skills training program can impact on future behaviors of these children, it would be a worthy adjunct to the regular academic curriculum as presented through the guidance curriculum and at a younger level. The middle school has been called the "last best chance" to impact on children's behavior. Education itself would be enhanced because a more cooperative clientele would be able to focus more energy on constructive learning. Better disciplined students would be more apt to glean more from the lessons presented. Nuttall and Kalesnik (1987) stated clearly, "When student involvement in social and curricular activities is increased, violent behavior decreases and commitment to educational processes is strengthened. The key is to reintegrate and recommit students in ways that will improve self-concept and self-esteem" (p. 374). If successful, the skills training for anger management should be able to increase the potential for better social relationships.

Through this research, I hoped to provide one piece of the puzzle of how to stop the violent trend and nonconstructive expression of anger. I hoped that the study would provide generalizability to other early
adolescent populations, an age group who have not as yet become enmeshed in confounding issues of later adolescence.

Limitations of the Study

The first limitation is in the area of generalizability. The identification process may reflect bias on the part of the principal in selection of students. Some principals may choose students with more serious behavioral problems than others.

Another limitation of the study is the exclusion of female subjects, so that generalizability of findings to all middle school students cannot be made.

Another weaker point in the study is the specific lack of research evaluating both the eight-session Morganett unit and the ten-item Morganett self-report instrument.

Finally, another limitation concerns the length of the program. Even though cognitive-behavioral counseling interventions are short-term in nature, eight weeks may not be long enough at this age level to effect a detectable change in attitude and/or behavior. With children, a more integrative approach involving more teachers, more direct administrative support and reinforcement may lead to more effective behavioral and attitudinal change. An extension of "Better Ways of Getting Mad," which deals with verbal communication and assertiveness training, may be an efficacious addendum to the program.
CHAPTER 4

RESULTS

To answer the major research question regarding the degree to which a group counseling intervention resulted in attitudinal and behavioral change in a sample of middle school boys, analyses of covariance were conducted.

First, comparisons were made to describe the sample in terms of the basic demographic information. Teachers' descriptions of behaviors of the sample were made using the CTRS means, standard deviations, T-scores, and percentiles.

Four major constructs of interest, i.e., extent of conduct problem, experience of anger, expression of anger, and cognitive understanding of anger were addressed.

The hypotheses were tested by means of a series of analyses of covariance. Using a pretest-posttest control group design, I utilized analyses of covariance to determine whether a statistically significant difference was evident between adjusted posttest mean responses of subjects who received the counseling intervention and those who did not.

In addition to the Intervention variable (A), other sources of variability were examined, such as the counselor team variable or school (B), and the interaction between intervention and counselor (AXB).
Demographic Profile of Sample

The average age of the 87 students in the sample was 12.5 years. Half of the control group were 12 years old, while 51% of the experimental group was 13 (see Table 4). There were 33 sixth-grade students (38%) and 54 seventh-grade students (62%) (see Table 4). Over two-thirds (69%) of the students were Caucasian.

The racial composition of the sample compared favorably to the racial composition of the population of Prince William County (see Table 1). At individual schools, the racial composition of groups was fairly representative of the school population, except for one instance where the counseling groups were 100% Caucasian and the school’s 27% minority was not represented. African-American students were over-represented in groups by about 10% in five schools and under-represented by 22% in one school (see Appendix B).

Twelve students of the 87 or 13.8% received free or reduced lunch. This compared to 10.1% of the population of Prince William County Schools who receive free/reduced lunch. Participation in this Federal program was used as a measure of socioeconomic status or family income. Because of concerns about confidentiality, cafeteria managers were only able to furnish the number of participants in the free lunch program rather than specifically name the students. This 13.8% average participation figure was not truly representative of the overall make-up of the sample who received free or reduced lunch. Specifically, five of the seven middle schools reported one or no group members receiving free or reduced lunch (7% or less). On the other
Table 4 Demographic Profile of Sample

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>EXP (n=45)</th>
<th>CON (n=42)</th>
<th>Sample (n=87)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>17 (38%)</td>
<td>21 (50%)</td>
<td>38 (44%)</td>
</tr>
<tr>
<td>13</td>
<td>23 (51%)</td>
<td>10 (24%)</td>
<td>33 (38%)</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Average</td>
<td>12.6</td>
<td>12.4</td>
<td>12.5</td>
</tr>
<tr>
<td>Median</td>
<td>13</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>17 (51%)</td>
<td>16 (48%)</td>
<td>33 (38%)</td>
</tr>
<tr>
<td>7</td>
<td>28 (62%)</td>
<td>26 (62%)</td>
<td>54 (62%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>31 (69%)</td>
<td>29 (69%)</td>
<td>60 (69%)</td>
</tr>
<tr>
<td>African-American</td>
<td>11 (55%)</td>
<td>9 (45%)</td>
<td>20 (23%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
hand, one middle school (School 5) with 11.7% of its population receiving free lunch, reported 6 of 13 subjects, or 46% of the sample, as recipients of the lunch program.

Descriptions of Problem Behaviors

On the CTRS-39, means and standard deviations were computed for experimental and control groups. As was expected because the students were randomly assigned to groups, the initial means were equivalent for both experimental and control groups before the intervention began. Table 5 portrays the pretest means and standard deviations for experimental, control groups, and total sample. On Scale A, experimental and control groups were equivalent with raw scores of 26 and 27.4. On Scale B, 1.3 points separated the equivalent experimental and control raw scores, the second largest range of difference. A t-test indicated that B scale pre-test means for experimental and control groups were equivalent. On all other scales, there was less than one point difference between experimental and control groups. In addition, standard deviations varied minimally, with the greatest difference in variability between experimental and control lying among scores on the Hyperactivity Scale A (2.5) and Conduct Problem Scale B (2.2). Typically, in research with hyperactivity, students show very inconsistent patterns of activity levels, a finding reflected in the highest standard deviations on Scale A and in the most variable ratings by teachers (sample sd=10).
Table 5

CTRS-39 Pretest Means for Experimental and Control Groups

<table>
<thead>
<tr>
<th>CTRS-39 SCALES</th>
<th>EXP (n=45)</th>
<th>CON (n=42)</th>
<th>SAMPLE (n=87)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x.</td>
<td>sd</td>
<td>x.</td>
</tr>
<tr>
<td>Scale A Hyperactivity</td>
<td>26.0</td>
<td>11.1</td>
<td>27.4</td>
</tr>
<tr>
<td>Scale B Conduct Problem</td>
<td>15.9</td>
<td>9.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Scale C Emotional Indulgent Indulgent</td>
<td>8.8</td>
<td>4.8</td>
<td>9.3</td>
</tr>
<tr>
<td>Scale D Anxious/Passive</td>
<td>4.0</td>
<td>2.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Scale E Asocial</td>
<td>3.9</td>
<td>3.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Scale F Daydreaming/Attention</td>
<td>4.3</td>
<td>2.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Scale I Hyperactivity Index</td>
<td>16.0</td>
<td>6.6</td>
<td>16.2</td>
</tr>
</tbody>
</table>
Although for experimental purposes only, B Scale of the CTRS-39 was used; the other six scales offered descriptive information (see Table 6). According to Conners' descriptive categories under which a score of 65 or above is considered "Problem Range," the sample demonstrated one scale in this classification, Scale I. This indicates that a sample of students with general behavior problems was indeed nominated.

The Scale A (Hyperactivity) T-scores reflected much above-average ratings, especially for the younger half of the sample, on a set of problem behaviors, such as constant fidgeting, making odd noises, being easily frustrated, having poor coordination, being restless or excitable, having short attention span, daydreaming, disturbing other children, being quarrelsome, acting "smart," being easily led, teasing other children, being impudent, making excessive demands for the teacher's attention, and being uncooperative. Children in the problem range on Scale A have a number of behaviors which interfere with the efficient and orderly operation of the classroom (Conners, 1989).

On the B Scale (Conduct Problem), the sample average of 61, more than one standard deviation above the mean, was just below the threshold indicating "Problem Range" behaviors. Scale B includes problem behaviors related to a general category of conduct problems. These students tend to be quarrelsome, have quick mood changes, act "smart," be destructive, have temper tantrums, have explosive or unpredictable behavior, have no sense of fair play, tease other children, are defiant or impudent, and act stubborn and uncooperative.
Table 6  CTRS-39 Pretest T Scores by Age and Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>n=7 Age 11 T-score</th>
<th>n=38 Age 12 T-score</th>
<th>n=33 Age 13 T-score</th>
<th>n=9 Age 14 T-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale A</td>
<td>71</td>
<td>61</td>
<td>59</td>
<td>55</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale B</td>
<td>75</td>
<td>60</td>
<td>60</td>
<td>56</td>
</tr>
<tr>
<td>Conduct Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale C</td>
<td>72</td>
<td>60</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>Emotional-Indulgent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale D</td>
<td>51</td>
<td>49</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Anxious Passive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale E</td>
<td>58</td>
<td>56</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Asocial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale F</td>
<td>59</td>
<td>58</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>Daydream-Attent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale I</td>
<td>68</td>
<td>78</td>
<td>74</td>
<td>69</td>
</tr>
<tr>
<td>Hyperactivity Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aT values based on a distribution with x=50 and sd-10. Problem range if T≥65; Typical=50<T<65; Low-T≤50
The 11-year-olds in the sample displayed more behaviors characterized as conduct problems, while the 14-year-olds were close to average.

The high T-scores above 68 on Scale I offered a general dimension of significant problems. Students like these in the present sample who score high on the problem range tended to score high on the other scales. They were rated high on items such as fidgeting, easily frustrated, requires that his or her demands be met immediately, is restless or overactive, is excitable or impulsive, is inattentive or easily distracted, fails to finish things, has a short attention span, disturbs other children, has quick mood changes, and may have temper outbursts. The sample was rated "Average" or "Typical" on the remaining three Scales.

On Scale C, the sample was rated more than one standard deviation above the mean on behaviors which include: demands must be met immediately, over-sensitivity or sadness, quick or drastic mood changes, temper outbursts, unpredictable behavior, and stubbornness. Once again, the small number of sixth graders (11-year-olds) showed behaviors in the problem range, while the small number of eighth graders (14-year-olds) showed more typical behaviors. On Scale E, the sample was rated less than one standard deviation above average on a set of behaviors which include problems like isolate themselves, lacking a sense of fair play, and having difficulties interacting with other children. On Scale F (Daydream - Attention), the sample was again rated above average by one standard deviation or less. The Scale F behaviors involved failure to finish things, short attention span, daydreaming, and isolation of themselves. Finally, on Scale D, the
Sample was described as close to average on the set of behaviors related to anxiety and passivity. Compared to the other Scales of the CTRS, this group was rated lowest on behaviors such as shyness or fearfulness.

Pre- and Post Comparisons

Number of Discipline Referrals

The number of discipline referrals were calculated for experimental and control groups (see Table 7). Before the intervention, discipline referrals were the same for experimental and control groups, but the experimental group was more varied in the number of referrals. After the intervention, the same pattern was noted, but the average went from less than 6 to 8. Discipline referrals are also described by race, grade, age and school (see Table 8). Of greatest note are the large discrepancies between schools. Two schools initially averaged less than four referrals, and one school had over nine.

Conduct Problems

The CTRS Conduct Problem ratings were compared for experimental and control groups before and after the intervention (see Table 9). A t-test of means revealed no significant discrepancy between initial means for experimental and control groups. There was no significant difference between experimental group means before (15.9) and after (15.4) the intervention. On the other hand, with the control
Table 7  Discipline Referrals for Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x. (sd)</td>
<td>x. (sd)</td>
</tr>
<tr>
<td>EXP</td>
<td>5.8  6.1</td>
<td>8.4   8.0</td>
</tr>
<tr>
<td>CON</td>
<td>5.8  4.5</td>
<td>8.0   5.7</td>
</tr>
</tbody>
</table>
Table 8  Pre-test and Standard Deviations of Discipline Referral by Race, Grade, Age and School

<table>
<thead>
<tr>
<th>Discipline referrals</th>
<th>x</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Caucasian</td>
<td>5.8</td>
<td>6.0</td>
</tr>
<tr>
<td>2. African-American</td>
<td>5.9</td>
<td>3.8</td>
</tr>
<tr>
<td>3. Hispanic</td>
<td>8.0</td>
<td>4.4</td>
</tr>
<tr>
<td>4. Other</td>
<td>2.8</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>6.0</td>
<td>6.4</td>
</tr>
<tr>
<td>8</td>
<td>5.5</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>6.3</td>
<td>4.3</td>
</tr>
<tr>
<td>12</td>
<td>4.8</td>
<td>3.1</td>
</tr>
<tr>
<td>13</td>
<td>6.2</td>
<td>6.8</td>
</tr>
<tr>
<td>14</td>
<td>8.1</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3.7</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>6.1</td>
<td>4.0</td>
</tr>
<tr>
<td>3</td>
<td>5.5</td>
<td>6.6</td>
</tr>
<tr>
<td>4</td>
<td>9.2</td>
<td>9.6</td>
</tr>
<tr>
<td>5</td>
<td>6.8</td>
<td>3.7</td>
</tr>
<tr>
<td>6</td>
<td>6.7</td>
<td>3.8</td>
</tr>
<tr>
<td>7</td>
<td>3.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>
Table 9  Conduct Problem Ratings for Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention</th>
<th></th>
<th>Post-intervention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x.</td>
<td>(sd)</td>
<td>x.</td>
<td>(sd)</td>
</tr>
<tr>
<td>EXP</td>
<td>15.9</td>
<td>9.1</td>
<td>15.4</td>
<td>8.3</td>
</tr>
<tr>
<td>CON</td>
<td>16.7</td>
<td>7.2</td>
<td>14.9</td>
<td>6.1</td>
</tr>
</tbody>
</table>
group, teacher ratings of problem conduct behavior appeared to be lower after the intervention. However, this difference was not considered statistically significant, according to t-testing.

**Experience of Anger**

On the STAXI, means and standard deviations are reported in Table 10. The experimental group showed higher ratings of the experience and expression of anger at the beginning. After the intervention, the experimental and control groups showed less differences, implying that the group exposed to counseling reported less intense anger experience and more modulated anger responses. The standard deviations for the AX/EX scale ranged from 10.5 to 8.5 and seemed to fit the picture of a sample with impulsive or uncontrolled responses. Controlled anger was generally the least used of the modes of anger expression (AX/EX) for both groups and erratically used as the higher standard deviations would suggest.

In addition, T-scores and percentiles are depicted in Table 11. For the experimental group, the State-anger scores for the experimental group were lower after the counseling intervention, while the control group's State-anger scores were higher. It is possible that after the eight-week intervention, the comfort level increased and thus the subjective experience of "present" anger (STATE) was much less for students who had responded to the counseling program. The experimental group also reported less residual (TRAIT) anger than
Table 10  STAXI Pretest and Posttest  
Means for Experimental and Control Groups

<table>
<thead>
<tr>
<th>STAXI</th>
<th>PRETEST</th>
<th></th>
<th></th>
<th>POSTTEST</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXP</td>
<td>CON</td>
<td>EXP</td>
<td>CON</td>
<td></td>
</tr>
<tr>
<td>S - Anger</td>
<td>Score (sd)</td>
<td>Score (sd)</td>
<td>Score (sd)</td>
<td>Score (sd)</td>
<td></td>
</tr>
<tr>
<td>17.8</td>
<td>7.6</td>
<td>14.3</td>
<td>6.7</td>
<td>15.4</td>
<td>7.6</td>
</tr>
<tr>
<td>15.4</td>
<td>7.6</td>
<td>16.0</td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-Anger</td>
<td>28.2</td>
<td>7.1</td>
<td>25.9</td>
<td>6.8</td>
<td>26.4</td>
</tr>
<tr>
<td>26.4</td>
<td>8.4</td>
<td>25.6</td>
<td>6.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AX/EX</td>
<td>38.3</td>
<td>10.5</td>
<td>36.8</td>
<td>9.9</td>
<td>34.7</td>
</tr>
<tr>
<td>34.7</td>
<td>8.5</td>
<td>35.4</td>
<td>10.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AX/IN</td>
<td>14.5</td>
<td>7.2</td>
<td>15.0</td>
<td>7.1</td>
<td>18.0</td>
</tr>
<tr>
<td>18.0</td>
<td>4.8</td>
<td>17.6</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AX/OUT</td>
<td>20.2</td>
<td>5.3</td>
<td>22.1</td>
<td>4.9</td>
<td>19.1</td>
</tr>
<tr>
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<td>5.4</td>
<td>19.9</td>
<td>5.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AX/CON</td>
<td>14.2</td>
<td>8.2</td>
<td>16.1</td>
<td>7.3</td>
<td>15.2</td>
</tr>
<tr>
<td>15.2</td>
<td>8.4</td>
<td>15.5</td>
<td>7.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11  STAXI Pretest and Posttest T-Scores and Percentiles

<table>
<thead>
<tr>
<th>STAXI</th>
<th>PRETEST</th>
<th>CON</th>
<th>POSTTEST</th>
<th>CON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXP</td>
<td></td>
<td>EXP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X, %ile</td>
<td>X, %ile</td>
<td>X, %ile</td>
<td>X, %ile</td>
</tr>
<tr>
<td>S - Anger</td>
<td>58 80</td>
<td>54 68</td>
<td>55 72</td>
<td>56 75</td>
</tr>
<tr>
<td>T-Anger</td>
<td>58 81</td>
<td>54 65</td>
<td>55 70</td>
<td>55 70</td>
</tr>
<tr>
<td>AX/EX</td>
<td>59 82</td>
<td>58 78</td>
<td>57 75</td>
<td>57 75</td>
</tr>
<tr>
<td>AX/IN</td>
<td>50 50</td>
<td>50 50</td>
<td>51 57</td>
<td>50 50</td>
</tr>
<tr>
<td>AX/OUT</td>
<td>63 91</td>
<td>63 91</td>
<td>58 78</td>
<td>59 83</td>
</tr>
<tr>
<td>AX/CON</td>
<td>40 15</td>
<td>44 30</td>
<td>41 19</td>
<td>44 30</td>
</tr>
</tbody>
</table>
the control group after counseling. While the experimental group showed higher initial ratings of the experience of anger, they showed relatively lower posttest ratings, i.e., 8 and 9 percentile points lower for the experimental group, compared to 7 and 5 percentile points higher for the control group. For both the experimental and control groups, the Anger expression (AX/EX) score was lower after the intervention, but the experimental group began with a higher degree of anger expression.

Random assignment apparently did not result in truly equal groups. The experimental group on average had subjectively higher experience of anger (AX/EX) than the control group. Specifically, the experimental group scored at the 82 percentile, compared to the 78 percentile for the control group before the intervention. There was even greater discrepancy between initial State and Trait anger scores of experimental and control groups.

Cognitive Understanding of Anger

On the Morganett self-report inventory, means were calculated for each of the 10 questions which dealt with cognitive understanding of anger and possible expression for both sets of scores derived from experimental and control groups (see Table 12).

With regard to posttest results, the Morganett scores for the experimental group were higher than pretest scores for nine of ten items. Control subject did not show the same increase in scores, as their posttest performance generally remained stable except for one item. This meant that the students who participated in the group counseling
Table 12  Morganett Pretest and Posttest means and sd for Experimental and Control Groups

<table>
<thead>
<tr>
<th>MORGANETT ITEMS</th>
<th>Pretest EXP x (sd)</th>
<th>CON x (sd)</th>
<th>Posttest EXP x (sd)</th>
<th>CON x (sd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know what makes me mad.</td>
<td>3.7 1.0</td>
<td>4.0 .81</td>
<td>3.9 1.2</td>
<td>4.0 1.1</td>
</tr>
<tr>
<td>2. I understand my angry feelings.</td>
<td>2.9 1.1</td>
<td>3.3 1.3</td>
<td>3.6 1.1</td>
<td>3.2 .9</td>
</tr>
<tr>
<td>3. I believe my anger is cause...</td>
<td>3.4 1.4</td>
<td>3.2 1.4</td>
<td>3.7 1.0</td>
<td>3.0 1.4</td>
</tr>
<tr>
<td>4. I just can't control my anger.*</td>
<td>2.5 1.4</td>
<td>3.0 1.5</td>
<td>2.9 1.2</td>
<td>3.0 1.3</td>
</tr>
<tr>
<td>5. I think anger is a bad thing.*</td>
<td>3.0 1.5</td>
<td>2.6 1.2</td>
<td>2.8 1.5</td>
<td>3.2 1.2</td>
</tr>
<tr>
<td>6. When angry, I express my feelings...</td>
<td>3.1 1.5</td>
<td>3.2 1.5</td>
<td>3.9 2.3</td>
<td>3.1 1.4</td>
</tr>
<tr>
<td>7. Other people cause my anger.*</td>
<td>2.3 1.1</td>
<td>2.2 1.1</td>
<td>2.5 1.3</td>
<td>2.3 .8</td>
</tr>
<tr>
<td>8. I wish I could express anger better.</td>
<td>3.0 1.5</td>
<td>3.3 1.5</td>
<td>3.5 1.3</td>
<td>3.1 1.2</td>
</tr>
<tr>
<td>9. I am responsible for my own anger.</td>
<td>3.7 1.4</td>
<td>3.2 1.4</td>
<td>4.0 1.2</td>
<td>3.1 1.3</td>
</tr>
<tr>
<td>10. I know what kinds of situations anger me.</td>
<td>3.4 1.4</td>
<td>3.8 1.2</td>
<td>3.6 1.2</td>
<td>3.7 1.2</td>
</tr>
</tbody>
</table>

*items re-coded
intervention were indicating a better understanding of the emotion of anger, their own angry feelings, better knowledge of anger triggers, and reporting greater responsibility for their own feelings of anger.

At the time of the pretest, experimental (x.=3.1) and control groups (x.=3.18) obtained quite similar scores on average. The greatest difference between experimental and control scores was only .5. Pretest standard deviations for experimental and control groups were not higher than 1.5 for either group.

When seven of the ten items of the Morganett were inspected, it appeared that if higher scores emerged or subjects ratings moved from 1-never to 5-always, it would appear that they gained some insight from the program, e.g. they would report that they know better what makes them mad. However, a higher rating for three items like "I just can't control my anger" would not indicate success for the student in the area of anger management. For this reason, the three items were re-coded so that higher Morganett scores would imply better understanding.

Because the Morganett instrument is an untested inventory without existing factor analysis data or validating data, a factor analysis was conducted to determine if more than one construct was being measured.

Correlations of Morganett items are contained in Table 13. Most of the items did not correlate with each other. Only six correlations were higher than .30, with the strongest showing a moderate relationship of .49 between the first two items. Four factors with eigen values greater
Table 13 Correlations of Morganett Pretest Items

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>.19</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>-.11</td>
<td>.05</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>.12</td>
<td>.11</td>
<td>.05</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>.21</td>
<td>.09</td>
<td>.07</td>
<td>-.18</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>.12</td>
<td>.02</td>
<td>.04</td>
<td>.02</td>
<td>-.06</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>-.02</td>
<td>.16</td>
<td>.01</td>
<td>.15</td>
<td>.39</td>
<td>-.12</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>.18</td>
<td>.31</td>
<td>.19</td>
<td>.25</td>
<td>.13</td>
<td>-.02</td>
<td>-.10</td>
<td>.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>.38</td>
<td>.29</td>
<td>.12</td>
<td>-.08</td>
<td>.04</td>
<td>.07</td>
<td>.23</td>
<td>.09</td>
<td>.11</td>
<td></td>
</tr>
</tbody>
</table>
than one emerged, which explain 61% of the variability. Final factor loadings are contained in Table 14.

In the analysis depicted in Table 14, only one clearly logical factor emerged, factor 1, a cognitive understanding factor composed of items 1, 2 and 10. All three of these items deal with knowing or understanding some aspect of anger. Three other factors emerged, but the items within them did not appear to represent any definable construct. Because of limited support for more than one factor, the total Morganett score was used in subsequent analyses as a measure of general cognitive understanding of the material presented in the eight sessions.

**Relationships between Initial Measures**

All pretest measures for experimental and control groups were analyzed to see how well they correlate with one another. Table 15 contains the results.

There was a weak positive relationship between teachers' ratings of conduct problems (CTRS Scale B) and the actual number of discipline referrals that they bestow ($r = .38$).

The anger expression index (AX/EX) correlated much better with T-anger (.63) than with S-anger (.02), although both variables are hypothesized to depict the subjective experience of anger.

There was little or no relationship noted between student's present state of anger, trait anger, or anger expression and the number of discipline referrals they receive ($r = -.07$, $r = .03$, $r = .08$). This suggests
<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.82</td>
<td>.00</td>
<td>-.05</td>
<td>.07</td>
</tr>
<tr>
<td>2</td>
<td>.68</td>
<td>-.30</td>
<td>-.11</td>
<td>.08</td>
</tr>
<tr>
<td>3</td>
<td>.19</td>
<td>.24</td>
<td>-.02</td>
<td>.75</td>
</tr>
<tr>
<td>4</td>
<td>-.26</td>
<td>-.30</td>
<td>.20</td>
<td>.59</td>
</tr>
<tr>
<td>5</td>
<td>.10</td>
<td>-.70</td>
<td>-.01</td>
<td>-.03</td>
</tr>
<tr>
<td>6</td>
<td>.37</td>
<td>.32</td>
<td>-.57</td>
<td>-.05</td>
</tr>
<tr>
<td>7</td>
<td>.24</td>
<td>.17</td>
<td>.81</td>
<td>-.02</td>
</tr>
<tr>
<td>8</td>
<td>.05</td>
<td>-.79</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>9</td>
<td>.22</td>
<td>-.44</td>
<td>-.19</td>
<td>.59</td>
</tr>
<tr>
<td>10</td>
<td>.69</td>
<td>-.02</td>
<td>.33</td>
<td>.01</td>
</tr>
</tbody>
</table>
Table 15

Correlations of Experimental Pretest Measures

<table>
<thead>
<tr>
<th></th>
<th>T-Ang</th>
<th>S-Ang</th>
<th>AX/EX</th>
<th>MORG. TOTAL</th>
<th>Disc. Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Scale</td>
<td>.16</td>
<td>.22</td>
<td>-.08</td>
<td>-.04</td>
<td>.38</td>
</tr>
<tr>
<td>DISC. REF. #</td>
<td>.03</td>
<td>-.07</td>
<td>.08</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>T-ANG</td>
<td></td>
<td>.37</td>
<td>.63</td>
<td>.22</td>
<td></td>
</tr>
<tr>
<td>S-ANG</td>
<td></td>
<td></td>
<td>.02</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>AX/EX (Total)</td>
<td></td>
<td></td>
<td></td>
<td>.35</td>
<td></td>
</tr>
</tbody>
</table>
that teachers may not give out discipline referrals in response to their students' angry episodes, but may use flexible alternatives like offering the student a time out to cool down or sending them to speak to their guidance counselor. On the other hand, maybe discipline infractions are cooly committed by students without accompanying high emotions.

The relationship of Trait anger (how they usually feel) to Anger Expression was .63, indicating that the students usually act according to a set of attitudes. Trait anger and State anger showed a weak positive relationship (r = .37). Many students appeared comfortable and unprovoked as they were asked to complete the STAXI within the environment of the small group setting. Among the component scales of the AX/EX scale, the AX/IN scale and AX/OUT scales showed moderately high correlation (.63). Students who outwardly express their anger by arguing, losing their temper and using sarcasm also reported boiling inside, harboring grudges, and pouting. The Morganett score showed a weak positive relationship with AX/EX scale and number of discipline referrals. Very small or no relationships were noted between the Morganett score and Conduct Problem Scale (-.04), Trait anger (.22) and State anger (.05).

Comparisons of Experimental and Control Groups

Analyses of covariance were used to adjust the final mean scores (posttest means) on the basis of the covariate (pretest) means and then compare the adjusted means to see if there was any difference between experimental and control groups. To allow testing for differences across
counselor pairs in different schools, as well as for the interaction between treatment and school, two-way ANCOVAs were run.

General results which achieved statistical significance (p<=.05, p<=.01) were diagrammed in figure 3, according to treatment effect (A), counselor or school effect (B), or the interaction of treatment and counselor or school (AXB). First, there was a significant treatment effect for the Morganett score. The Morganett inventory, a curriculum-based assessment, was specifically designed to tap understanding of the Morganett curriculum or eight lessons. This proved to be the case in a positive sense. Students in the experimental group who received the counseling intervention clearly gained in their understanding of anger, anger cues, personal responsibility for their anger, and in techniques by which to manage their anger.

Secondly, with respect to discipline referral number, there was a significant effect for the counselor or school variable. School 2 accounted for a significant source of the variability, with more discipline referrals than five other schools (x.=10.68). A review of demographic information and qualitative data may explain this finding. This particular school began the intervention with the median, not outstanding, number of discipline referrals for the students (6.1), an initial level about average. However, the socioeconomic level of School 2 was well below the county and sample average, except for one other school with the lowest SES level of the sample. This school was median size (911 students). Except for one 11-year-old student, all students in the group were 12 or 13 years old. The attendance rate for participation was good (93%). Observation of the
### Significant Results by Variable

<table>
<thead>
<tr>
<th>Treatment</th>
<th>School or Counselors (B)</th>
<th>Interaction (AXB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morganett*</td>
<td>#Discipline</td>
<td>S-ANG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>T-ANG</td>
</tr>
<tr>
<td></td>
<td>AX/EX</td>
<td>AX/EX</td>
</tr>
</tbody>
</table>

Figure 3  Diagram of Significant Results at p=<.05 and *p=<.01
experimental group at this school revealed that this group was very loud and active and, when they were not actively engaged in the lesson, they roamed the portable classroom used for the session both inside and outside. They constantly tested the limits of the behavior management system. Although it may be surmised that at this school discipline referrals were more freely distributed, it could also be that these students reflect the impact of economic stress of their families and act out more in school in an atmosphere of tight enforcement of rules.

Moreover, upon inspection of total results, there was also a significant effect for the counselor/school variable for the AX/EX scale means (see figure 3). This meant that schools differed significantly in the amount of anger that students reportedly express. School 7 accounted for a significant source of variability, surpassing means of four schools. These students reported on average a greater tendency to act out their angry feelings, verbally and physically, as well as turn them inward and use less control techniques than other students in the sample. At School 7, the lowest number of discipline referrals are given out. It may be suggested that teachers and administrators are less apt to bestow discipline referrals because, by philosophy, administrators may expect discipline problems to remain in the classroom, rather than be handled by the front office. Classroom adaptations, together with considerable leeway, may be given to students. Demographic information depicted School 7 as the largest of the sample middle schools (enrollment 1169), with a lower percentage of families of low socioeconomic status than three other schools. All students were 12 and
13 years old (not the more active, younger set) and attendance at sessions was perfect. The teacher CTRS return rate of 76 per cent was second lowest, possibly indicating less involvement by the staff in implementation of alternative programs for anger management. The overcrowding at this school may contribute to the students' self-report of frequent anger expression. Students may be trying to act-out to gain attention and any recognition, even negative attention. They may become thwarted by the withdrawal by the staff in terms of formally correcting infractions or cooperating in new strategies. Therefore, low discipline referral numbers could be due to realistic time and space restraints and not related to angry behaviors. It was also interesting to note that students' reported anger expression (AX/EX) was lowest at School 6 where discipline referrals were second highest, surpassed only by School 2. This also supported the finding of the low relationship between discipline referrals and anger expression.

Third, with regard to important findings, there was a significant effect for the interaction of treatment and school/counselor (AXB) for the STAXI anger scales, State, Trait and Expression. This means that the specific combination of counselors and students (B) responded to the program (A) and this resulted in differences between groups with respect to the students' emotional experience of anger and its expression. Certain groups were more successful than others along this dimension, due to the interaction of counselor/school and particular subset of students. Basically, particular counselors utilizing the Morganett program were quite effective with particular students. It
appears that experience of anger (present and usual) can be influenced if certain students enter into a counseling relationship with the right counselors. The experience of weekly contacts of a positive nature with counselors seems to begin to change attitudes with certain students. It was also interesting to note that students' reported anger expression (AX/EX) was lowest at School 6 where discipline referral numbers were second highest, surpassed only by School 2. This supported the finding of the lack of relationship between discipline referrals and anger expression (r=-.08). From my observations, some counselors were more effective with the active students who are accustomed to testing the limits of rules. The counselors who quickly, thoughtfully and consistently implemented a management system reported better results themselves.

After the six experimental variables were analyzed according to sources of variability, the following results and conclusions were made. Specifically, Table 15 shows the six variables of interest, the source of variability, F ratios, and probabilities that significant differences emerged. Six analyses were conducted, as well as three analyses of the AX/EX scale. In the following section, the variables will be specifically examined according to their research hypotheses. The meaning of the results will be explained.
Table 16  Analyses of Covariance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Source</th>
<th>F</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B Scale</strong></td>
<td>X (x. pre B Scale)</td>
<td>70.5</td>
<td>.0000 *</td>
</tr>
<tr>
<td>Treatment</td>
<td>.63</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>.30</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>1.36</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td><strong>Dis #</strong></td>
<td>X (x. pre Dis #)</td>
<td>481.3</td>
<td>.0000 *</td>
</tr>
<tr>
<td>Treatment</td>
<td>.60</td>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>3.08</td>
<td>.01  *</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>.38</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td><strong>T-ANG</strong></td>
<td>X (x. pre T-ANG)</td>
<td>59.37</td>
<td>.0000 *</td>
</tr>
<tr>
<td>Treatment</td>
<td>.77</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>1.77</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>2.36</td>
<td>.04  *</td>
<td></td>
</tr>
<tr>
<td><strong>S-ANG</strong></td>
<td>X (x. pre S-ANG)</td>
<td>31.81</td>
<td>.0000 *</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.40</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>1.38</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>2.47</td>
<td>.03  *</td>
<td></td>
</tr>
<tr>
<td><strong>AX/EX</strong></td>
<td>X (x. pre AX/EX)</td>
<td>51.68</td>
<td>-.0000</td>
</tr>
<tr>
<td>Treatment</td>
<td>1.03</td>
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<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>3.10</td>
<td>.01  *</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>2.33</td>
<td>.04  *</td>
<td></td>
</tr>
<tr>
<td><strong>Morganett</strong></td>
<td>X (x.pre SUM)</td>
<td>96.74</td>
<td>.900</td>
</tr>
<tr>
<td>Treatment</td>
<td>6.82</td>
<td>.01  **</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td>1.91</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>AXB</td>
<td>.86</td>
<td>.53</td>
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</tr>
</tbody>
</table>

* P = .05
** P = .01
Table 17 Adjusted Means for Experimental and Control Groups

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>EXP</th>
<th>CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Scale</td>
<td>15.6</td>
<td>14.7</td>
</tr>
<tr>
<td>Disc #</td>
<td>8.5</td>
<td>8.1</td>
</tr>
<tr>
<td>T-ANG</td>
<td>25.3</td>
<td>26.4</td>
</tr>
<tr>
<td>S-ANG</td>
<td>14.7</td>
<td>17.1</td>
</tr>
<tr>
<td>AX/EX</td>
<td>33.5</td>
<td>35.2</td>
</tr>
<tr>
<td>Morganett Sum</td>
<td>28.4</td>
<td>25.0</td>
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</table>

<table>
<thead>
<tr>
<th>AX/EX SUBSCALES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AX/IN</td>
<td>18.8</td>
<td>17.6</td>
</tr>
<tr>
<td>AX/OUT</td>
<td>18.8</td>
<td>19.7</td>
</tr>
<tr>
<td>AX/CON</td>
<td>15.8</td>
<td>15.0</td>
</tr>
</tbody>
</table>
Extent of Symptoms of Conduct Problems.

Will the extent of conduct problems be less in a group of students exposed to a group counseling intervention compared to a control group after adjusting for covariate?

The B-scale adjusted posttest mean for the experimental group (15.6) was higher than the pretest B-scale mean (14.7) (see Table 17). This suggested that the experimental group may have ended with more behaviors that teachers rate as conduct problems. Even though the students may have changed their own understanding of anger, teachers did not observe significant changes in the classroom. It is possible that a students' reputations are so difficult to overcome, that minor positive behavioral changes are overlooked by teachers who expect appropriate behavior as a norm. Essentially, analysis of covariance found no significant findings for the effects of group counseling on the B-scale rating (p = .43) (see Table 16). The post-intervention adjusted discipline referral mean score for the experimental group (8.5) was lower than mean discipline referrals of the control group (8.1). Analysis of covariance found no significant difference between experimental and control group discipline referral means (p = .44). Analysis of covariance (see Table 16) produced significant results for the school or counselor pair variable (p = .01). Post hoc analysis with Fisher's LSD Comparison indicated that overall discipline referral numbers (10.7) were significantly higher at School 2 than at five other schools.
Experience of Anger.

Will students who undergo the counseling intervention have a lower general disposition to harbor angry feelings compared to the relative stable disposition of the control group towards anger? The Trait-anger (T-Anger) adjusted posttest means of the experimental group (25.3) were lower than than the T-Anger means of the control group (26.4) (see Table 17). However, analysis of covariance found no significant findings for the effects of group counseling on the Trait-Anger score (p = .38). Analysis of covariance (see Table 16) revealed significant results for the interaction of group counseling intervention by school (p = .04). The Morganett intervention, used by specific counselors with specific students, appeared to result in changes in the students' pervasive feelings of anger. Students may carry less intense feelings of anger as part of their normal repertoire of emotions after the intervention.

Will students in the experimental group have less intensity in their present state of anger than the control group? The State-anger (S-Anger) mean scores of the experimental group were lower than the mean S-Anger scores of the control group (see Table 17). However, analysis of covariance found these results not significant (p = .13) for explaining the effects of group counseling. While no significance was noted between schools, the interaction between schools and groups was a source of significant variance (p = .03). Once again, the specific combination of counselor and student appeared to result in less intense
present anger, probably due to an increase in comfort level with specific school personnel.

**Expression of Anger.**

Will the frequency of expression of anger be lower for those students who undergo an anger management counseling group compared to those who do not? The adjusted experimental group mean AX/EX score was lower than the control group mean AX/EX score (see Table 16). However, an analysis of covariance found no significant findings for the effect of group counseling on the AX/EX scale ($p = .31$). Further analysis showed a significant source of variability to be between schools ($p = .01$). Post hoc testing (Fisher's LSD) indicated that posttest mean (29.4) for School 6 was significantly lower than three schools and that mean (39.6) of School 7 was significantly higher than means of four schools at the .05 alpha level. Students at School 7 reported a much greater probability of acting out their anger, verbally or physically, while students at School 6 reported more self-control. The interaction of school by group (AXB) yielded another source of significant variability ($p = .04$) (see Table 16). Once again, the unique combination of specific students, counselor and intervention program worked together to make a difference in students' self-reported expression of anger.

Because the AX-EX score was composed of three separate scales, AX/IN, AX/OUT and AX/CON, three related sub-hypotheses were proposed to further explore different aspects of anger expression. Table 18 contains these results.
Expression of anger withheld.

Will students who participate in a group counseling intervention show a higher frequency of holding their anger inward, compared to those who do not receive the intervention? On the AX/IN scale, posttest means were greater for the experimental group compared to the control group (see Table 18). However, analysis of covariance found no significant findings for the effects of group counseling on the adjusted AX/IN mean score (p = .22). There was a significant source of variability between schools (p = .03). Post hoc analysis with Fischer's LSD Comparison indicated that the AX/IN mean score (22.5) from School 5 was significantly higher than four other schools. This meant that students at School 5 showed a greater tendency to keep anger in, pout, withdraw, harbor grudges, and hide angry feelings than students at other schools. Students in groups at School 5, a small middle school (882) had the highest percent of white students among the middle schools and one of the two lowest free/reduced lunch percentages. It is possible that in this community anger is typically more suppressed than actively expressed. Of particular interest, the students in the sample at School 5 had much higher percentage in lower family income than most students at their school. In this specific school environment, where discipline referrals are neither excessive nor minimal (x.=6.8), it seems that the lower SES students may be directing anger inward, rather than acting out.
Table 18 Components of AX/EX Scale

<table>
<thead>
<tr>
<th>Variables</th>
<th>Source</th>
<th>F</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>AX/IN</td>
<td>X (x. pre AX/IN)</td>
<td>17.55</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>1.52</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>Counselors</td>
<td>2.51</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>AXB</td>
<td>1.88</td>
<td>.10</td>
</tr>
<tr>
<td>AX/OUT</td>
<td>X (x. pre AX/IN)</td>
<td>25.27</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>.82</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Counselors</td>
<td>1.30</td>
<td>.27</td>
</tr>
<tr>
<td></td>
<td>AXB</td>
<td>1.88</td>
<td>.10</td>
</tr>
<tr>
<td>AX/CON</td>
<td>X (x. pre AX/CON)</td>
<td>54.04</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>.41</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>Counselors</td>
<td>.24</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>AXB</td>
<td>1.66</td>
<td>.14</td>
</tr>
</tbody>
</table>

*P = <.05
Anger expressed.
Will students who participate in a group counseling intervention show a lower adjusted mean score on a scale which measured scores of outward expression of anger compared to those who do not receive the intervention? AX/OUT adjusted means for the experimental groups were lower than AX/OUT means for the control group. However, an analysis of covariance found no significant findings for the effects of group counseling on the AX/OUT scale (p = .37). No significance was observed between schools (p = .27) nor in the interaction between school and counseling group (p = .06).

Anger controlled.
Will students who participate in a group counseling intervention report a greater chance of controlling their angry feelings than those students who did not receive the intervention? The adjusted posttest mean of the experimental group was slightly higher than the control mean. Analysis of covariance found no significant findings for the effect of group counseling (p = .52) on the AX/CON mean score. Students did not report their greater control of angry feelings after the intervention. Neither the school variable (p = .96), nor the interaction of school and group (p = .14) yielded a significant F ratio. This suggested that no school was outstanding in reports of controlling anger.
Cognitive Understanding of Anger and Anger Expression.

Will students in the experimental group show a better cognitive understanding of their angry feelings and expression of anger than students in the control group? This question was addressed through analysis of covariance for the means of Morganett total score (see Table 16). Inspection of adjusted posttest means indicated that the adjusted experimental group mean of 28.4 was higher than the control group mean of 25.0. Moreover, analysis of covariance found significant findings for the effects of group counseling on the Morganett score (p = .01). Overall, students who received the counseling intervention claimed a better understanding of anger, anger triggers, and greater responsibility for their angry feelings. There was not a significant source of variability when the school variable was analyzed (p = .09).

Since the final variable of interest cognitive understanding yielded the only statistically significant improvement directly linked to the group counseling intervention, I pursued an item analysis to see which of the Morganett statements showed most difference in the students' attitude towards anger and anger expression (see Appendix D). Two specific items: Item 3 "I believe that my anger is the cause of my problems" (p = .02); Item 9 "I am responsible for my own anger" (p = .006) indicated a significant difference which could be explained by the effects of group counseling. Adjusted posttest mean scores for three other statements, "When I am angry I express my feelings to the person I am angry with," "I understand my angry feelings," and "I wish I could express my anger better" almost achieved
statistical significance (p = .06; p = .07; p = .08). This suggested that subjects were moving in a direction which connoted greater understanding of their anger and anger expression.

Why did students overwhelmingly change their opinions on items 9 and 3 after the counseling intervention? The idea of responsibility for their own anger was attractive to students who may feel a need for power. The students' changed idea that they can be in control of their emotions may begin to answer an important need for personal power. It has been hypothesized that students engage in verbally or physically aggressive behavior in power struggles because of a need to personally control their lives and families. Researchers (Olweus et al., 1986) have depicted students with anger control problems as coming from chaotic or unsettled families. The perception of responsible control may mean power to youngsters who come from homes where discipline measures fluctuate from harsh to "laissez-faire." Parental discord and economic uncertainty may contribute even less stability. These students learn to test the limits of their environment because they have found through experience that rules change, life is uncertain, and security comes from constant vigilance. Schools which recognize the importance of blending fair, consistent discipline measures with pro-social skills training in a spirit of understanding and acceptance may show a decline in student anger expression.

To allow for testing differences across counselor pairs in different schools, as well as for the interaction between treatment and schools, further analysis showed some significant findings across schools, but no
significant findings for the interaction of school by intervention. Post hoc testing showed that four items (#4, #5, #8, #9) achieved statistical significance. Students at School 6, who earned the distinction of having the lowest (AX/EX) anger expression score, consistently indicated the least difficulty controlling anger on the Morganett item #4. Students at School 1 claimed that "anger was bad" more often than three schools, including two schools with the highest anger expression, suggesting that students who ascribe to this value may inhibit or contain their anger more often. On item #8, "I wish I could express my anger better," School 3 and School 5 both showed significantly higher scores, suggesting more energy spent by students controlling or suppressing anger as School 5 showed with the highest AX/IN score. Lastly, for the item #9 dealing with personal responsibility for anger, School 5 (x.=4.2) again proved to be more serious and introspective. On the other hand, School 2 (x.=2.76) with the largest number of discipline referrals was least apt to claim personal responsibility and more likely to project blame of anger to others.

Counseling Group Observations

The procedure included the observation of one session of each of the seven counseling groups by the researcher. A total of eight counseling group sessions were observed. I used five criteria to rate the groups on a four-point scale from excellent to poor. These included: adherence to the topic or Morganett less; sharing of the time;
enthusiasm of the group; goal-orientation of the group; and lastly, the efficiency of the behavior management system.

Most of the counseling groups adhered well to the Morganett lesson plan and thus were rated "Good." Two group leaders chose to thoroughly review the previous lesson because of a missed week due to a school closing or counselor illness. One counselor pair chose to shorten the group time with an early release due to misbehavior and, therefore, spent much less time on the structured lesson and practice. The aforementioned group was not included in the final sample because of inconsistent, faulty and lost data.

In the area of group participation, most group members had learned to share the time by the time of the observation at the fifth or sixth lesson, so ratings were generally good. All groups appeared to have one quiet or reluctant student. Various techniques were used to elicit his cooperation and participation.

Along the third dimension, enthusiasm, all observed groups displayed laughter and the beginnings of mutual support. For example, often the students were knowledgeable of another's absenteeism and were able to report. "Put-downs" and hurtful teasing were noticed, but other group members often intervened to remind the student that this behavior was contrary to the mutually-established rules of the group.

The fourth area noted in the observation was the general direction and goal orientation of the group. The attentional level of the group seemed directly related to how relevant the lesson was to real life situations. Anger management techniques seemed easier to apply in
role plays of personal situations, compared to prepared scenarios. Many group members seemed attracted to stories where "just retaliation" occurred. Details of fights fueled curiosity and counselors often needed to refocus the group towards constructive solutions to problems. Role play techniques appeared successful in maintaining interest and in providing the emotional link between behavior and consequences.

My general impression of the sample after observing the groups was that they were highly energetic youngsters with strong attentional needs. Issues of power and respect in the eyes of peers coupled with an impulsive style of responding often propelled them into situations that they later regretted.

Questionnaires

An informal 20-items questionnaire was collected from sixteen of the twenty original counselors and compiled for a sharing session, which terminated the counselor education aspect of this project. The questionnaire dealt with the group counseling effort from the initial phases to future implications (see Appendix I). Regarding the collection of parental permissions, counselors used personal follow-up contacts with students, phone calls to parents, and specific incentives for students to return slips (ice cream tickets, pizza passes). Specific aids like a return envelope placed with the guidance secretary and a chart for tracking collections were suggested to help in the organizational phase. For the creation of an appropriate mix of students in the group, counselors emphasized that groups should not include personal
enemies and contain a blend of students who express anger externally and suppress anger internally. Groups should include positive role models, and students at similar developmental levels. To ensure willing participation as well, interviews should be conducted carefully. Most counselors advised that groups should begin early in the school year, with October the most frequently-named month.

The next section questioned group dynamics and elicited suggestions for managing the behavior of disruptive or reluctant students in group. Counselors reported that while hyperactive students hindered progress of the group as a whole, not all groups reported the same degree of disruption. Many (30-50%) of the sample were described by counselors as showing characteristics of attention deficit disordered youngsters. In response to the question of how disruptive students were handled, counselors reported the use of techniques like ignoring the behavior, tying the behavior into the group topic, channeling the high activity by assigning a task or position of leadership to the student, offering time-out periods, changing activities to "hands-on" activities, using proximity and seating plans, and positively reinforcing appropriate behavior. Some suggestions that counselors offered to enrich the counseling experience for the reluctant student included giving verbal encouragement, asking students questions which were sure to be answered correctly, letting them progress at their own pace, and empowering them by offering choices. In an attempt to employ effective behavior management systems for the students, most counselors posted visible charts or check systems tied to group rules.
Counselors attempted to re-direct excess energy in the group members by allowing them to doodle or draw during discussions. By using personal experiences in active role plays, attention was enhanced.

The final section of the questionnaire drew counselors' thoughts about the future direction of anger management counseling groups in the middle school, with especial emphasis on how these groups can help address the larger problem of school violence. Counselors responded that social skills such as anger management should be taught early and in conjunction with teachers and parents. A majority of counselors pointed to peer mediation programs and training in negotiation skills as a logical extension of anger management training. To increase the effectiveness of counseling groups, counselors suggested increasing the duration to 12 weeks with added time to process real anger situations and give more practice, utilizing appropriate video tapes, including a parent participation component, and building in follow-up sessions. The project was hailed as a worthwhile experience for counselors who appreciated the support of accomplishing a project with other professionals, especially on a pertinent topic. Counselors reported that students gained insight into their problem behavior, yet were not at the stage of consistent application of their techniques. Mutual relationships which developed over the course of the intervention helped students experience positive adult interactions and gave counselors insight into the worlds of their students.
Summary

Chapter 4 began with a presentation of the demographic profile of the sample and description of problems behaviors. Pre- and post-intervention comparisons were discussed, including number of discipline referrals, conduct problems, and experience of anger and its expression. Correlations of the variables of interest were made. Analyses of covariance were conducted to answer the major research questions of whether or not the counseling intervention showed any impact on the dependent variables. The cognitive understanding measure (Morganett) was found to be significantly impacted by the counseling intervention. To allow testing for differences across schools, as well as for the interactions between treatment and school, two-way ANCOVAs were run. Significant findings emerged for the school/counselor variable for discipline number and expression of anger (AX/EX). A significant interaction effect was found for the experience of anger (S-ANG, T-ANG, AX/EX), implying that specific schools and counselors were effective in changing attitudes. Observations of the counseling groups added specific insight into the reasons why differences between groups emerged. Finally, the counselor training and support aspect of this project concluded with the completion and compilation of a questionnaire for practical and future implications.
CHAPTER 5
DISCUSSION

Summary

Because of the increase in violence in society and the overflow of aggressive behavior into the schools, the need to develop programs to address the lack of social skills for anger management is growing. Research into small group counseling for anger management has shown a positive effect in terms of reduced teacher ratings of disruptive behaviors and students' own self-reports of better anger management.

This study was designed to examine to what degree, if any, a small group counseling intervention resulted in attitudinal and behavioral change in a group of adolescent boys identified by their principals as having conduct problems. Variables of interest included: The extent of symptoms of conduct problems measured by number of discipline referrals and B-Scale of the CTRS-39; the experience of anger measured by STAXI Trait and State Anger scales; the frequency of expression of anger measured by the STAXI AX/EX scale; and the cognitive understanding of anger measured by the Morganett self-report instrument.

The experimental design was a pretest-posttest control group design. The sample included 87 sixth- or seventh-grade boys (median age, 13 years) from seven middle schools, randomly divided at each
school into experimental or control groups. The experimental group received an eight-week cognitive behavioral intervention co-led by pairs of Student Services personnel. Instruments were the Conners' Teacher Rating Scales - 39 (CTRS-39) completed by teachers, the State-Trait Anger Expression Inventory (STAXI), and the Morganett self-report instrument. Discipline referral numbers were also used.

Differences between experimental and control groups were examined using several two-way analyses of covariance, adjusting posttest mean scores by the pretest covariates. The sample group was described through CTRS-39 scales and found to be in "problem range" for General Index (Scale I) and higher than average on Conduct Problem (Scale B), and on the Hyperactivity (Scale A).

**Comparisons of Experimental and Control Groups**

There were four main questions and related hypotheses.

**Extent of symptoms of conduct problems.**

Will the extent of conduct problems be lower for the group of students exposed to a group counseling intervention, compared to a control group?

The extent of discipline problems, as measured by the adjusted (CTRS-39) B Scale and adjusted number of discipline referrals, were hypothesized to be lower for the experimental group than for the control group.
**Experience of anger.**

Will students who undergo the counseling intervention have a lower general disposition to harbor angry feelings compared to the relative stable disposition of the control group towards anger?

The experience of anger, as measured by the adjusted STAXI (T-Anger and S-Anger scales), was hypothesized to be lower for the experimental group compared to the control group.

**Expression of anger.**

Will the frequency of anger expression be lower for those students who undergo an anger management counseling group compared to those who do not?

The expression of anger, as measured by the adjusted STAXI total score on the AX/EX, was hypothesized to be lower for subjects who received the intervention compared to those who did not.

Related hypothesis for components of the AX/EX Scale, i.e., AX/IN, AX/OUT and AX/CON Scales, were:

a) The expression of anger withheld, as measured by the adjusted posttest mean AX/IN scores for the experimental group, will be lower compared to the control group mean.

b) The experience of anger expressed, as measured by the adjusted posttest mean AX/OUT scores for the experimental group, will be lower compared to the control group mean.
c) The experience of anger controlled, as measured by the adjusted posttest AX/CON means, will be higher for the experimental group compared to the control group.

*Cognitive understanding of anger and anger expression.*

Will students in the experimental group show a better cognitive understanding of their angry feelings and expression of anger than students who do not receive the counseling intervention?

The cognitive understanding of anger, as measured by the Morganett instrument, was hypothesized to be higher for the adjusted posttest score of the experimental group compared to the control group.

**Results**

The results of the analyses of the data related to the four main research questions with regard to the effects of the counseling intervention are summarized below:

1. There was not a significant difference in symptoms of conduct problems for students exposed to a group counseling intervention for anger management, either on teachers’ ratings of behavior or in number of discipline referrals.

2. Students who underwent the counseling intervention did not show a lower general disposition to harbor angry feelings or lower present state of anger compared to the relative stable disposition of the control group towards anger.
3. The frequency of anger expression was not significantly decreased for students who undergo an anger management counseling intervention compared to those who do not receive the intervention.

4. Students in the experimental group showed a better cognitive understanding of their angry feelings and expression of anger, compared to students who did not receive the intervention. The experimental group reported an increased responsibility for their own anger, with statistical significance.

While there was often a discrepancy between experimental and control group means, analyses of covariance did not attribute the mean differences to the counseling intervention. In addition to the intervention variable, other sources of variability were examined, including the counselor team or school variable. Often there was a significant source of variability in the relationship of counseling group by school (see Table 16).

There was a significant effect for the counselor/school variable for two scores: the discipline referral score and the AX/EX score. School 2 showed a higher number of discipline referrals than five other schools. This may be related to the unique characteristics of the group of eleven students (lower socioeconomic level) and/or their reactions to general tight discipline procedures at the particular school. Observation of one counseling revealed a very active group of boys who constantly tested the limits of the behavior management system.
Another notable finding was a significantly higher anger expression score for students in School 7 compared to four other schools. School 7 possessed the lowest number of discipline referrals, a low involvement in alternative strategies (low CTRS rate for teachers), and the highest number of total students. It may be surmised that discipline problems may be tolerated in the classroom, especially when the school exceeds capacity for students. Teachers may not have the space or time to deal with punishing consequences of misbehavior. This does not preclude angry students who escalate the expression of their feelings to gain attention, albeit positive or negative.

Another significant source of variability among schools was noted in the tendency of students to turn anger inward. School 5 reported a significantly higher posttest mean score than four others. Students at School 5 reported a greater tendency to hold anger in, pout, withdraw and harbor grudges compared to students at three other schools. School 5 was predominantly white, lowest percentage of low SES, a community where anger is typically suppressed.

The interactions of counseling intervention and specific schools (AXB) accounted for significant variability in the areas of trait anger, state anger, and anger expression. It appears that sometimes the unique interaction of counselors and students may have resulted in attitudinal change on the part of the student. Students' experience of anger (present and usual) may become less intense with the right counselor interaction.
Other results not directly related to the research questions involved some of the relationships of pretest variables. It was interesting to note the low relationship (.35) between discipline referrals and the teachers' ratings of conduct problems. This may mean that teachers tolerate much more misbehavior than actually results in discipline referrals to the front office. Also, the relationship of discipline referrals to students' level of anger was non-existent.

Conclusions

The effects of the group counseling intervention for anger management were primarily noted in the students' self-reports of better understanding of anger, its triggers, the impact of their angry feelings, management techniques, and especially their responsibility for their own anger. Therefore, one goal of the intervention was clearly recognized. However, teachers did not notice significant changes in behavior in the classroom after the counseling intervention. The discipline referrals for the students who received the counseling did not dramatically decrease. This may be due partially to the fact that teachers' perceptions are as difficult to change as reputations are especially hard to overcome.

If one keeps in mind that cognitive behavioral interventions follow a three-step process, beginning with an awareness or understanding of the problem behavior, then it becomes evident that the present intervention is beginning to show an impact. What is needed is more
skills acquisition through structured practice, so that the final step, transference to everyday situations, can be accomplished.

Further proof that the counseling intervention was beginning to work lay in the significant finding for the interaction between counselor/school variable and intervention for the experience of anger. This meant that the interaction of specific students, certain counselors and the intervention was related to a more modulated general sense of anger and present personal experience of anger for the students. The students may be beginning to emotionally bond, develop a level of personal comfort with caring adults and create rapport, so that their anger or alienation may not lie so close to the surface. Then they can learn to deal more objectively or rationally with confrontations.

The significant difference between schools which emerged for the discipline referral number suggested that schools vary greatly in their use of discipline referrals as a means of addressing students' anger management problems. One school with high enrollment whose students possessed the highest anger expression scores doled out the lowest number of discipline referrals, and teachers showed one of the lowest levels of cooperation in completion of behavior rating scales. The students' sense of belonging to a school community may not be as strong in the larger schools, and it may take more energy for them to gain any recognition, albeit positive or negative. This study also concluded that discipline number, poorly correlated with measures of anger, should not be used solely as a reading for potential aggressive behavior. Students reported significantly high personal expression of anger, whether
directed inward or outward, in schools without the high discipline referral number.

**Implications**

First, the Morganett program espoused a three-step process of cognitive behavioral intervention in anger management: 1) awareness of behaviors and the consequences, 2) acquisition of skills or techniques to replace inappropriate behaviors, and 3) practice so that the new behaviors become generalized to new situations. It was evident through the Morganett self-report measure that students who participated in the group counseling sessions were beginning to develop a greater understanding of anger and personal responsibility with respect to anger expression. Although the students' performance on the STAXI scales did not indicate deeper attitudinal change, there were indications that some of the counseling groups may have made progress in that direction. The eight weekly sessions may not have been long enough to effect deeper change. Because attitudinal and behavioral changes occur primarily in an atmosphere of trust and over time, some of the more conduct-disordered students may need more time to feel secure enough to take risks in the group situation. Moreover, many of the previous research samples were students with behavioral disorders who were in residential placements. Because of this, their environment was more tightly controlled and their total days were structured, interactions managed and behavior rewarded, than the present sample who spent a fraction of the week in a counseling
intervention. With respect to my sample, exposing these students to a series of 40-minute weekly sessions was not enough to change behavior significantly enough that teachers would overcome their original attitudes to notice improvements on behavior rating scales.

A more integrated effort on the part of school staff may be able to sustain more positive contacts with the students at risk for conduct problems. Offering a parent counseling component probably would increase opportunity for students to practice skills and reinforce some of the ideas presented in the anger management sessions.

Counselors noted that often students resorted to fighting to defend their honor, a behavior that was encouraged at home. Parent education regarding the necessity of maintaining a safe school environment and the importance of their support in encouraging more constructive solutions to interpersonal problems through verbal assertiveness or mediation probably should be included in any effort to change attitudes and hence influence behavior.

Results of the informal questionnaire indicated the counselors' satisfaction with the anger management group concept. They also reiterated the students' desire to continue the counseling sessions.

Other constructive comments which flowed from the counselor questionnaire and final training included ways to improve the organization of initial groups along the dimensions of time, collection of permission slips, and factors to create the proper mix of students for optimal growth. Ideas for behavior management of the students were shared. The future direction of anger management groups at the
middle school level was discussed, with many counselors endorsing the need for follow-up counseling with their groups. The project also offered an opportunity for counselors to support each other as part of a group effort to reduce violence in the school.

**Recommendations for Future Research**

Conduct problems may decline after a longer, more integrated anger management skills intervention. Opportunities for physical outlets of frustration, coupled with opportunities for successful prosocial growth, should be offered in conjunction with the basic social skills curriculum for anger management. Future research may focus on the effects of an integrated, community-based, family-involved program on the decline of discipline referrals or other measures of conduct problems.

Second, there appeared to be a strong relationship between Conners' Scale B (Conduct Problem) and Scale A and Scale I (Hyperactivity) for this sample of boys. It seems reasonable that the more impulsive, restless student would exhibit more temper outbursts, explosive and unpredictable behavior and tease others. Many specific interventions, such as McCarney (1989) proposed, have been utilized by teachers to provide the structure, behavioral strategies, and environmental modifications to reduce variables that may precipitate the problem behavior.

Therefore, another research direction may involve differentiating the responses of the conduct problem students vs. attention deficit
disordered student with respect to social skills training or anger management skills. How are these students the same in the ways they respond to intervention strategies?

Hinshaw's (1987) research has shown that the conduct problem children and attention disordered children are the most prevalent cases brought before mental health professions. While there may be overlap in symptoms, these children can differ in several respects, with attention deficit students more often displaying cognitive and achievement deficits, showing a lesser risk for behavior deviance. Hinshaw also said that the conduct disordered students were more popular with peers and had better volitional control over their behavior. Would it be possible that a cognitive behavioral approach such as Morganett would have a more lasting effect on a skill-deficient attention disordered student compared to the conduct disordered student, who seems to know the right responses in group and does not apply these skills?

Third, the question of generalizability of these results to the population of all middle school students must be examined. There were no girls included in the present research. However, I conducted an anger management counseling group with seventh-grade girls to gain some understanding of similarities and differences. The girls were referred to the group for counseling sessions because of discipline referrals, including fighting and verbal disrespect. The anger management issues and social skill deficits appeared the same. In the small sample of girls, their language was less direct than the boys and more subtle nonverbal communication and giggling was observed.
More research should be conducted to see if group counseling can be a viable alternative for managing anger and developing prosocial behaviors with adolescent girls as well as boys.

Fourth, a time extension of the present research with the same students may provide new data which may detect attitudinal and behavioral changes. A counseling unit which continues with assertiveness training and negotiation skills may be a natural progression.

Fifth, future research studies may consider the effect of inclusion of anger management training as a component in the training of peer mediators at the middle and high school. How effective can negotiation skills be to a student mediator who has no specific knowledge of techniques to diffuse volatile situations? Mediators may be able to help guide disputants in solving problems, if they better understand their own coping techniques.

Sixth, a final avenue of future research may be to examine the inclusion of anger management training or counseling within the context of a leadership training model. Counselors reported the natural emergence of leaders in the anger management groups. If these potential leaders could become more involved in driving, constructive, social issues, then a great deal of energy could be redirected. The adolescents’ sense of alienation may fade as a renewed sense of belonging and a clear direction for their future brightens.

In final summation, the present study was designed to examine to what degree, if any, a small group counseling intervention resulted in
attitudinal and behavioral change with a group of adolescent boys identified by their principals as having conduct problems. No statistically significant findings were noted for differences in discipline referral number, teachers' ratings of conduct problems, students' self-ratings for state anger, trait anger, and anger expression between experimental and control groups. However, in students who received the intervention, compared to those who did not, there was a significant difference noted in the counseled students' cognitive understanding of anger and anger expression. This most probably signified a change in self-awareness, which is the first step in changing ingrained attitudes and effecting more lasting behavioral change.
REFERENCES


Cairns, R.B., & Cairns, B.D. (1986). The developmental interactional view of social behavior: four issues of adolescent aggression. In D. Olweus, J. Block & M.R. Yarrow (Eds.), Development of antisocial and prosocial behavior: Research, theories and issues (pp. 325-334). Orlando, FL:


APPENDIX A

OUTLINE OF MAJOR STUDIES
## Anger management counseling studies

<table>
<thead>
<tr>
<th>STUDY</th>
<th>Ss</th>
<th>DESIGN</th>
<th>INTERVENTION</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etscheidt, S. (1991)</td>
<td>30 beh. disord. adolescents (12-18)</td>
<td>Group 1 Anger Control Program</td>
<td>3-week training 12 sessions</td>
<td>GR1+2 rated fewer aggressive behavior on Teacher rating scales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group 2 Anger control program + reinforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group 3 Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawkins, Von Cleve, and Catalano (1991)</td>
<td>435 Grades 1 &amp; 2</td>
<td>Pre-Post CBCL (Achenbach)</td>
<td>Teacher training Parent training Social skills training ICPS (Shure &amp; Spivak, 1982)</td>
<td>Boys in exp. group rated significantly less aggressive Exp. girls rated significantly less self-destructive</td>
</tr>
<tr>
<td>Deffenbacher, McNamara, Stark and Sabadell (1990)</td>
<td>48 college ss</td>
<td>2 counseling groups Process group Cogn. Beh. group Pre- Post-test STAS (15-mo. follow-up)</td>
<td>8 weekly 1-hour groups</td>
<td>Both forms effective</td>
</tr>
<tr>
<td>STUDY</td>
<td>Ss</td>
<td>DESIGN</td>
<td>INTERVENTION</td>
<td>RESULTS</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------------</td>
</tr>
</tbody>
</table>
| Lochman, Lapron, Gemmer, Harris  
and Wycoff (1989)           | 32 11-year-olds           | 3 groups  
Anger Coping  
Anger Coping + Teacher Consult  
Untreated control  
Pre-post behavior rating | 18-week small group counseling | Reduction in aggres.  
+ disruptive beh. at school  
No sig. diff. w/consult component |
| Olthof, Ferguson and Luiten (1989) | 16 (8m/8f)  
5-, 6-, 9-, 11-, 15-year-olds | 5 Groups rated stories on dimensions of avoidability, intention, motive |                            | Lower anger judgments w/less personal responsibility |
| Deffenbacher, Story, Brandon, Hogg, and Hazlaus (1988) | 45 college students | 3 Groups  
Cog-ther  
Cog-ther + relaxation control  
pre- post-test with STAS- TAI  
Ax-in AX-out | 8 weekly 1-hr. groups | Both forms effective |
| Omizo, Hershberger, and Omizo (1988) | 47 Ss  
4th, 5th, 6th graders | 2 Group  
EXP & Control | 10 weekly groups | Decreased aggr/ hostility behaviors on School Beh. Cklist |
| Glick & Goldstein (1987)    | 60 boys (14-17) Resident | Pre-test  
Post-test (Kendall-Wilcox Self-control)  
3 conditions: ART; Brief instruc. Control (no ART) | 10-week social skills training ART | Exp. grp.; acquired soc. learning skills Reduction in acting-out behavior |
<table>
<thead>
<tr>
<th>STUDY</th>
<th>Ss</th>
<th>DESIGN</th>
<th>INTERVENTION</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alschuler and Alschuler (1984)</td>
<td>5th grade class</td>
<td>Observe behavior PRE and POST</td>
<td>10-week social skills training in large group</td>
<td>Reduction in incidences of student anger and aggression</td>
</tr>
<tr>
<td>Feindler, Marriott &amp; Iwata (1984)</td>
<td>36 junior high delinquents</td>
<td>3 Groups Pre-Post Norwicki-Stricklen</td>
<td>10 bi-weekly 50-minute training</td>
<td>Support effic. for anger control for junior high</td>
</tr>
<tr>
<td>Omizo (1982)</td>
<td>32 boys (10-12 yrs.)</td>
<td>2 Group Exp. &amp; Control</td>
<td>12-week span Biofeedback-induced relaxation</td>
<td>↑ attention ↑ MFFT perf.</td>
</tr>
<tr>
<td>Shure &amp; Spivak (1981)</td>
<td>Preschool &amp; Kindergarten rated aggr. or impulsive</td>
<td>Pre- Post test on self-made tests; chose alternatives, give alternatives name conseq.</td>
<td>Interpersonal cog. Problem-solving (ICPS) Games &amp; dialogues in small groups. (3 months long)</td>
<td>Some improvement in classroom behavior</td>
</tr>
<tr>
<td>Forman (1980)</td>
<td>18 students (ages 8-11)</td>
<td>3 Groups response cost cogn. training control</td>
<td>6-week 2x weekly</td>
<td>Resp. cost. and cogn. cogn. training more effective</td>
</tr>
<tr>
<td>STUDY</td>
<td>Ss</td>
<td>DESIGN</td>
<td>INTERVENTION</td>
<td>RESULTS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Novaco (1975)| 34 college       | 4 Treatment Groups:         | Individual counseling               | Combined treatment
                | students       | - Self-instruct/relaxation   | (11 visits - 30-45 min.)                                               | Sig. impact in S's ability to regulate/manage anger in comp. to attend-control conditions - cognitive |
|             |                  | - Self-instruct alone       |                                     |                                                                         |
|             |                  | - Relax training            |                                     |                                                                         |
|             |                  | - Attention control         |                                     |                                                                         |
APPENDIX B

RACIAL COMPOSITION OF COUNSELING GROUPS
### Racial Composition of Groups Compared to School Racial Composition

<table>
<thead>
<tr>
<th>School</th>
<th>Group</th>
<th>School</th>
<th>% Difference</th>
</tr>
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<tbody>
<tr>
<td>School 1</td>
<td>1</td>
<td>68</td>
<td>+3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>23</td>
<td>+6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>−4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>−4</td>
</tr>
<tr>
<td>School 2</td>
<td>1</td>
<td>58</td>
<td>−3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>34</td>
<td>+11</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6</td>
<td>−6</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>−3</td>
</tr>
<tr>
<td>School 3</td>
<td>1</td>
<td>70</td>
<td>+30</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>24</td>
<td>−24</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>−3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>−2</td>
</tr>
<tr>
<td>School 4</td>
<td>1</td>
<td>82</td>
<td>−25</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
<td>+5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
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<td>4</td>
<td>+4</td>
</tr>
<tr>
<td>School 5</td>
<td>1</td>
<td>87</td>
<td>−25</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>10</td>
<td>+13</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>+7</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>+6</td>
</tr>
<tr>
<td>School 6</td>
<td>1</td>
<td>62</td>
<td>−12</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>25</td>
<td>+15</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>8</td>
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<tr>
<td></td>
<td>4</td>
<td>6</td>
<td>−6</td>
</tr>
<tr>
<td>School 7</td>
<td>1</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
<td>−5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>−4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>+9</td>
</tr>
</tbody>
</table>

**KEY:**
1 - Caucasian  
2 - African-American  
3 - Hispanic  
4 - Other
APPENDIX C

INTEROBSERVER RELIABILITY FOR CTRS-39 SCALES
Correlations Between Teacher Ratings CTRS-Scales A-I

<table>
<thead>
<tr>
<th>SCALES</th>
<th>AY</th>
<th>AZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>AX</td>
<td>.60</td>
<td>.31</td>
</tr>
<tr>
<td>AY</td>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>BZ</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>CY</td>
<td>.33</td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td>DX</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>DY</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>EY</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>EZ</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>FY</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>FY</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>IY</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>IZ</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>IY</td>
<td>.47</td>
<td></td>
</tr>
</tbody>
</table>

$X =$ Teacher 1  
$Y =$ Teacher 2  
$Z =$ Teacher 3
APPENDIX D

ANALYSIS OF COVARIANCE FOR MORGANETT ITEMS
Analysis of Covariance of Morganett Items

<table>
<thead>
<tr>
<th></th>
<th>Treatment F</th>
<th>prob.</th>
<th>School F</th>
<th>prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I know what makes me mad.</td>
<td>.18</td>
<td>.67</td>
<td>.52</td>
</tr>
<tr>
<td>2.</td>
<td>I understand my angry feelings</td>
<td>3.32</td>
<td>.07</td>
<td>.35</td>
</tr>
<tr>
<td>3.</td>
<td>I believe my anger is cause ...</td>
<td>5.74</td>
<td>.02*</td>
<td>.75</td>
</tr>
<tr>
<td>4.</td>
<td>I just can't control my anger.</td>
<td>.09</td>
<td>.76</td>
<td>3.63</td>
</tr>
<tr>
<td>5.</td>
<td>I think anger is a bad thing.</td>
<td>1.07</td>
<td>.30</td>
<td>3.14</td>
</tr>
<tr>
<td>6.</td>
<td>When angry, I express my feelings ...</td>
<td>3.55</td>
<td>.06</td>
<td>.52</td>
</tr>
<tr>
<td>7.</td>
<td>Other people cause my anger.</td>
<td>.58</td>
<td>.45</td>
<td>.22</td>
</tr>
<tr>
<td>8.</td>
<td>I wish I could express anger better.</td>
<td>3.13</td>
<td>.08</td>
<td>3.48</td>
</tr>
<tr>
<td>9.</td>
<td>I am responsible for my own anger.</td>
<td>6.95</td>
<td>.01*</td>
<td>3.00</td>
</tr>
<tr>
<td>10.</td>
<td>I know what kinds of situations anger me.</td>
<td>.25</td>
<td>.62</td>
<td>.46</td>
</tr>
</tbody>
</table>

No significant findings for Treatment x School (AXB)

*P. = <.05

Post hoc tests for items 4, 5, 8 and 9.

#4. School 6 (x=4.2) significantly higher than means of schools 2, 5, 7, 1.

#5. School 1 (x=3.92) significantly higher than means of schools 6, 5, 7.

#8. School 7 (x=4.0) significantly higher than means of two schools.

Also School 1 (x=2.4) significantly lower than means of four schools.

#9. School 2 (x=2.8) significantly lower than means of schools 3, 7, 5; and

5 is higher than 1, 2 and 6.
APPENDIX E
PARENT LETTERS
Dear Parent(s) of ________________________,

In order to develop and implement specific guidance strategies to help students deal with anger management and conflict resolution, Mrs. Doreen Dauer, School Psychologist at Beville Middle School and a doctoral student at Virginia Polytechnic Institute and State University, is conducting a study on "Group Counseling for Anger Control: The Effects of an Intervention Program with Middle School Students."

Mrs. Dauer has applied her knowledge and skills as a school psychologist in adapting a program of coping strategies which focus on short-term group counseling techniques of skills training.

During the evaluation process of this program, information will be collected to monitor the effects of the strategies on the students selected for the program. An opportunity for your child to discuss her responses to any of the instruments with a counselor will be available, if she chooses. Information on individual students will be computer coded in such a way that no student can be identified by any information. Analysis will be done on the group and will be reported in that manner. This information will be summarized in Mrs. Dauer's Doctoral Dissertation submitted to Virginia Polytechnic Institute and State University. Please be aware that specific information will be available only to Mrs. Dauer and to the parents who request information about their child. All identifying information will be destroyed when analysis is complete.

Your principal, ____________________________, fully supports this study at your school.

I am looking forward to working with your student. Please sign and return this form indicating that you understand the above information. If you have any questions, please call me at 791-7260 or your school's psychologist or school social worker at ________________________.

Sincerely,

Doreen Dauer, M.A., NCSP

Student Signature ____________________________ Date ____________

Parent Signature ____________________________ Date ____________
Dear ________________________,

Your permission is requested for your son, __________ ________, to participate in a group counseling activity at school. The group counseling will run for about 9 weeks to total eight 40 minute sessions. The group is entitled "Better Ways of Getting Mad: Anger Management Skills" and will include discussion of ideas, behaviors, feelings and attitudes. Some of the objectives to be covered in the group are as follows: to help students become aware of clues which precede angry feelings, to distinguish between appropriate and inappropriate anger responses, to encourage personal responsibility, and to present coping strategies in anger-provoking situations.

The group will be conducted by _______________. Some brief pretesting and posttesting will be used to see how effective the counseling intervention has been. This group is part of a county-wide study. Confidentiality will be maintained.

By signing this form I give my consent for my son to participate in the 9 week group counseling project.

Child’s Name: ________________________________
Parent/Guardian: ____________________________ Date: ______

Return this form to: Guidance Office
APPENDIX F

GROUP COUNSELING CONTRACT
GROUP COUNSELING

CONTRACT

I agree to participate in eight small group counseling sessions with __________ and _________________.

We will discuss topics having to do with anger management and ways to express anger appropriately.

________________________
Date
APPENDIX G

OUTLINE OF GROUP COUNSELING SESSIONS
Outline of Group Sessions

The specific goals and techniques included in the group counseling sessions are:

Session 1
Goals:

Explore origins of anger and that the emotion is neither good nor bad.

Anger Situations form introduced to be used for homework.

Session 2
Goals:

To promote awareness of situational cognitive and physical clues that may precede an angry response.

To help students identify own typical patterns of response.

Share anger situations form, given as homework.

Discuss triggers

Label cognitive, physical or situation that trigger angry response.

Brainstorm avoidance of angry response: 1) ignore; 2) consider consequences; 3) count to 10, deep breaths; 4) make calming self-statements.
Session 3
Appropriate or Inappropriate?
Goals:

To help student distinguish between inappropriate and appropriate responses to anger.
To provide students with an appropriate way of stating angry feelings
Introduce: Sample anger log and anger log
Review that how we express angry feelings can be appropriate or inappropriate.
"I messages" - generate statements to express anger without attacking the other verbally.
Discuss consequences of situations like accusing the teacher of being unfair.

Session 4
Coping statements for anger control - "self-talk"

Practice using coping statements
Specials - anger control role plays
    coping statements handout

Coping statement definition is discussed and modeled in two types of situations:
1) "Before" a situation which may provoke an angry response
2) "After" a situation has occurred.
Session 5

The ABC's of Anger

Goal: To encourage students to substitute more moderate thoughts to control their angry feelings.

Situations do not cause feelings but thoughts about situations cause feelings (RET principles).

No one forces us to be angry. Students hopefully will pay more attention to what they are thinking about situations, which in turn moderates behavior.

Session 6

Changing Angry Thinking

Goal: To further illustrate how changing thoughts about a situation can change feelings as well.

Angry thinking worksheet; e.g.

- What happened
- What I thought
- What I felt
- Changed thoughts
- Changed feelings

Homework: Angry thinking worksheets

Session 7

I'm in Charge of Me

Goal: to practice statements of personal responsibility.

Each person is responsible for his or her own thoughts, feelings and behaviors to encourage students to state openly that they accept personal responsibility for their anger.
Bowling ball exercise - symbolism of weight of personal responsibility.

**Session 8**

Saying Goodbye -

Goal:

*Review* of past lessons and closure activities.
APPENDIX H

OBSERVATION CRITERIA
OBSERVATION CRITERIA

4 - excellent
3 - good
2 - fair
1 - poor

1. Adherence to topic or Morganett curricula

2. Sharing the time - everyone has chance to participate

3. Enthusiasm of group as whole - laughter, attitude of mutual support

4. General tone of group - constructive v. aimless

5. Efficiency of behavior management system

Notes:
APPENDIX I
COUNSELOR QUESTIONNAIRE
Counselor Questionnaire

A. Initial Phase

1. Do you have any ideas how to ease the collection of permission slips?

2. Having put together anger management groups, can you see a way to create the proper mix of students from the beginning of group forming?

3. When should first group begin? October, January or February? (Circle)

B. Group Dynamics

4. Did one or two students in your group seem to greatly hinder progress of the lessons? ____ Was this person the same for all lessons or did the kids trade roles?

5. How many of your group members were diagnosed, or in your opinion, could bear the diagnosis of ADHD?

6. How did you handle the very disruptive student?

7. How did you handle the reluctant student?
8. Do you think girl members would be a positive addition to the group? ____ Why?

9. If you conducted two groups, please explain similarities or differences?

C. Behavior Management

10. What type of behavior management system worked best with your group? Did both groups need the same degree of control?

D. Future Planning

11. By the end of the school year, how many of your members were sent out of school for the final weeks or furloughed pending special ed placement?

12. Do you think ED students should be integrated in your groups?

13. How can teacher support be encouraged? e.g., rotating groups by period? e.g., periodic progress reports during team meetings as on-going consultation?

14. Do you think that running these groups helped you keep better tabs on the students and give you insight into the school’s biggest discipline recipients?
15. Do you have any ideas how group counseling projects of this nature can help address the larger problem of school violence and school violence prevention?

16. How early do you think anger management groups should begin?

17. Should these groups be included in the preparation of peer mediators?

18. Should these groups be required for students who are brought up for expulsion due to violent behavior?

19. Can you think of a way to make groups more effective? e.g., increase time duration to 10 weeks? or e.g., decrease numbers of student?

20. Can you think of another way to measure progress besides the teacher rating scale, student self-reports and discipline counts?

Additional comments:
Doreen M. Kruczek Dauer was born in Taunton, Massachusetts on November 13, 1948, and graduated from Bishop Cassidy High School. She graduated from Emmanuel College in Boston with a Bachelor of Arts degree in Psychology. She holds a Master of Arts Degree from George Mason University in Psychology and has received state and national certification as a school psychologist.

Mrs. Dauer has worked as a school psychologist in Prince William County for fifteen years. She resides in Northern Virginia with her husband and five children.

Doreen M. Dauer