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Cognitive-behavioral approaches to anger management for children and adolescents

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COGNITIVE-BEHAVIORAL APPROACHES TO ANGER MANAGEMENT FOR CHILDREN AND ADOLESCENTS

A Master's Paper

Submitted

in Partial Fulfillment

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Masters of Arts in Education

Amy Zirkelbach

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CHAPTER 1: INTRODUCTION

The Importance of Studying Anger among Children and Adolescents

Children and adolescents with anger problems present a clear risk to not only themselves, but to others around them, affecting nearly every aspect of their lives. While each individual is different in his or her response to anger, many exhibit similar characteristics. For this reason, it is important to understand the implications of uncontrolled anger on a child or adolescent's relationships, education, possible involvement with the law, and physical and mental well-being.

Anger strains relationships and impairs interpersonal functioning. The child or adolescent who experiences uncontrollable anger slowly destroys those relationships around him or her. Parents and siblings often feel isolated from the child, and after a long line of shattered friendships, the angry child may experience rejection from peers and a lowered self-esteem (Feindler, 1990). In a qualitative analysis of student, teacher, and parent interviews, Fryxell and Smith (2000) found negative self-descriptions or self-derogatory comments to be much more common among a group of high-anger students when compared to a low-anger group.

In the classroom, chronic anger can significantly interfere with the student's ability to learn and may result in academic failure. Wilde (2001) suggests that in nearly every classroom in America, children with anger problems can be found. This "epidemic of anger" is forcing teachers to spend less time teaching and more time correcting misbehavior (Wilde). The anger experienced by these children, which often manifests itself through disruptive and aggressive behaviors, also has a negative impact on

classmates and peers when attention is diverted away from educational tasks, which results in less on-task behavior and wasted class time (Lochman, Lampron, Gemmer, Harris, 1987). In fact, anger-related problems are among the most common reasons for referral to school counselors (Furlong & Smith, 1994).

The anger which fuels aggressive and violent acts committed by individuals at school often extends to the community (Larson, 1992). The behaviors can lead to dangerous and sometimes criminal behavior, often resulting in a long history of involvement with the law. The 1997 National Longitudinal Survey of Youth reported that 10 percent of youth between the ages of 12 and 16 have carried a handgun at one time or another. Twenty-Eight percent of these youth have purposely destroyed property and 18 percent have committed assault (Snyder & Sickmund, 1999).

As the seriousness of these acts intensify, the cost to society, as well as individuals, families, and victims also increases. In his 1998 study, Mark Cohen estimated the external marginal costs imposed on society by the average career criminal, heavy drug abuser, and high school dropout. Though speculative in nature, Cohen estimates that leaving high school for a life of crime and drugs costs society $1.7 to $2.3 million per drop-out (Snyder & Sickmund, 1999).

Youths who experience anger-related problems are also at a greater risk for developing both physical and mental health problems. Chronically angry children put themselves at risk for developing a number of health problems. For children and adolescents who display acting-out or aggressive behaviors, anger is often the common

underlying characteristic in clinical syndromes and personality patterns present in this population (Deffenbacher, 1993 as cited in Akande, 1997).

Differentiating Between Anger and Aggression

Anger is a normal emotion, expressed by all people, but children and adolescents are not always capable of expressing such a strong feeling in healthy, productive ways. When this is the case, unhealthy expressions of anger usually take one of two forms. Either the anger is suppressed and internalized, or the anger manifests itself through overt behaviors, oftentimes resulting in aggressive and sometimes violent acts. While both warrant attention given their ability to impair one's functioning, it is the type of anger that results in overt behavioral responses that will be the focus of this paper.

The relationship between anger and aggression is not always clear. The matter is further complicated when researchers and authors use the terms interchangeably, as is often the case. But to fully understand anger and to properly treat the negative consequences associated with this emotion, it is important to look at these two terms and distinguish them from one another.

Nelson and Finch (2000) describe anger as "the internal experience of a private, subjective event (i.e. emotion) that has cognitive...and physiological components" (pg. 132). Aggression, on the other hand, is viewed as only one of the potential overt, behavioral expressions of the subjective experience of anger, resulting in either bodily or mental harm to others (Nelson & Finch, 2000; Loeber & Hay, 1997). Adding yet another

dimension, Nelson and Finch describe violence as a more serious and harmful form of aggression.

For the majority of people, anger is expressed in a manner that does not lead to aggression (Averill, 1983; Goldstein, Glick, & Gibbs, 1998). Only approximately 10% of the time, suggest Goldstein et al., do these angry feelings lead to aggression in the form of verbal or physical attempts to hurt the person with whom we are angry (Goldstein, et al., 1998). But for chronically aggressive youth who are unable to express these feelings in a constructive manner, the response is more often an attempt to lash out with intent to harm, "sometimes with words, commonly with fists, and increasingly with weapons" (Goldstein et al., 1998, pg. 69). While it is this type of anger that is most disturbing and often most destructive, an individual's anger may not always target another person, like the angry teenager who slams a locker in a fit of rage. In other words, anger will be defined here as an emotion that leads to aggression, an action which is intended to inflict harm on a person or object.

One of the many shortcomings of traditional approaches to managing aggression, argues Feindler (1990), is the failure to treat the high anger arousal that accompanies impulsive and explosive behaviors. Although anger arousal does not accompany all acts of violence and aggression, most theorists would agree that anger often acts as precursor to aggressive behavior, driving and motivating such acts (Feindler; Averill, 1983).

The Importance of Early Intervention

Problems controlling anger and aggression are not limited to children and adolescents. Longitudinal research has identified anger to be a relatively stable trait over time. Angry and aggressive children often grow up to become angry and aggressive adults who are risk for developing a number of health risks, including: coronary heart disease (Siegel, 1992), cancer, depression (Furlong & Smith, 1992), and substance abuse (Lochman, 1992). Often, angry or aggressive adults are also plagued by difficulties at home or in the workplace as a result of poor interpersonal skills.

One key to reducing the long-term negative consequences associated with poor anger management is early intervention. Most of the research in this field has explored the effects of anger management programs with adolescent and preadolescent populations, resulting in an abundance of curriculums targeting this age group. However, the effectiveness of anger management programs with younger populations has received little attention in the literature.

Unfortunately, when anger problems are neglected at younger ages, difficulties associated with improper anger control often go untreated until the seriousness of one's actions warrants immediate attention. Studying a wide range of disabilities (including autism, Down syndrome, cerebral palsy, and low birth weight and premature infants), researchers have repeatedly demonstrated the short-term and long-term benefits of implementing interventions at younger ages than originally thought possible. But while great strides have been made in identifying high risk children and developing early

interventions aimed at addressing a wide range of needs, researchers have failed to include anger management programs as a necessary component in these interventions.

Such early intervention practices are particularly important for those students demonstrating antisocial behaviors. Characterized by a pattern of aggression, hostility, and violation of social norms, these individuals are "highly resistant" to intervention (Gresham, 2002). To maximize effectiveness, intervention must take place relatively early in the child's educational career (Walker, Colvin, & Ramsey, 1995). After the age of eight, suggests Kazdin (1987) antisocial behavior patterns should be viewed as a chronic condition that can only be controlled and managed, but not "cured" (Gresham, 2002).

It is important to understand the challenges of adapting cognitive-behavioral anger management programs to younger populations. Once these challenges are understood, researchers can begin implementing these changes and examining the effectiveness of these programs for this age group. This will provide the proper framework for curriculum developers to begin adapting existing programs or developing new curriculums tailored to younger, elementary aged students.

Theoretical Underpinnings

Until the 1970s, three major psychological approaches dominated individual and group interventions targeting aggressive youth: psychodynamic, humanistic, and behavior modification (Goldstein & Glick, 1987; Glick & Goldstein, 1987). Goldstein and Glick describe all three approaches as sharing the similar assumption that somewhere within the

person were the healthy, nonaggressive goal behaviors that could be released through intervention or counseling. Treatment or therapy, however, would differ depending on the theoretical approach of the therapist. Utilizing a psychodynamic approach, the therapist sought to uncover and work through the "unconscious material" blocking the client's awareness. By creating a warm, empathetic environment, humanistic change agents attempted to maximize the client's potential for change, thus enabling him or her to unlock the goal behaviors. The behavior modifier encouraged the expression of goal behaviors by shaping and rewarding those behaviors with appropriate contingent reinforcement.

The counter-revolution inspired by cognitive theorists re-introduced "internal" variables into the study of behavior (Kendall, Panichelli-Mindel, & Gerow, 1995). For decades when behaviorism reined supreme, the only legitimate domain for studying psychological processes involved observable behavior. Anger was only understood in terms of overt aggressive behavior, which was nothing more than a learning response to external reinforcement (Finch, Nelson, & Moss, 1993). As a result, punitive measures were often used in the past as way of controlling unhealthy expressions of anger. But these methods have proven ineffective and fail to address underlying issues involving anger. Sabatino (1997) states, "Externally opposed controls designed to overpower anger exacerbate conflict, producing negative interpersonal skills and social disagreement" (pg. 167).

The cognitive revolution set the stage for the introduction of cognitive-behavioral theory as the cognitive activities of the child were introduced into the

behavioral equation (Kendall, Panichelli-Mindel, & Gerow, 1995). Psychological problems were now seen as resulting from both behavioral and cognitive antecedents (Kendall et al., 1995). Addressing the dysfunction occurring in both realms became the goal of therapy. This approach lays a more complete framework for understanding anger problems as both the internal and external variables are addressed. With intervention taking place on both the cognitive and behavioral level, the therapist is able to assess and treat the full scope of the person's anger.

While the goal of this paper is to explore the role of cognitive-behavioral interventions in treating childhood and adolescent anger problems, it is also important to recognize that this particular approach is only one of many that can be used to treat anger. Children and adolescents experience anger for a number of reasons, and for many, their anger is justified. For those youngsters whose anger is a result of deep underlying hurt, individual counseling or psychotherapy may be more appropriate for working through those underlying issues.

Purpose

The purpose of this paper is to explore an approach to anger management which draws from a cognitive-behavioral model. An explanation of the four key characteristics of cognitive-behavioral approaches to anger management will be given. The key characteristics include arousal management, cognitive restructuring, skill acquisition, and practice and transfer.

A description of the key characteristics is followed by a description of four different intervention programs which have received considerable attention in the literature based on their empirical support and promising findings for the future. Relevant research exploring the effectiveness of these programs as well as suggestions for future research will also be discussed. The paper concludes with an explanation of the school psychologist's role in identifying children who are at risk for anger problems and suggestions for implementing cognitive-behavioral anger management programs.

CHAPTER 2: REVIEW OF THE LITURATURE

Key Characteristics of Cognitive-Behavioral Approaches to Anger Management

Arousal Management

The first step toward successful anger management involves helping children and adolescents to recognize the internal signals happening in the body, indicating to them that they are becoming angry. It is important for child or adolescent to understand that there are certain physiological events that immediately precede anger (Wild, 2001). Many adolescents, and particularly children, are not aware when these "body cues" are happening, but they need to learn to recognize them before they get angry (Wilde). Early detection of the internal warning signs indicates to the child that they are becoming angry and that steps need to be taken to resolve these feelings.

The body's response to anger is often associated with high levels of autonomic nervous system arousal, resulting in increased heart rate, blood pressure, and respiration (Akande, 1997). In addition to tension in the skeletal musculature, anger arousal is also marked by reactivity in the cardiovascular and endocrine systems (Novaco, 1985). Such changes within the body often result in a flushed face, increased adrenaline flow, dilated pupils, clenched hands and jaw, and hotness, coldness, or numbness in different parts of the body.

Once the child or adolescent is able to recognize the physiological changes that occur within the body, he or she must be taught strategies for relieving stress and reducing anger. Grief (1999) describes relaxation techniques as protective mechanisms which may help the child or adolescent notice tension in their mind and body and chose

to intervene to reduce stress. He also suggests creating an environment of "silence, solitude, and stillness" to have a beneficial relaxation experience. Equipping the child or adolescent with the tools to relax in the presence of an anger-provoking situation is a necessary step toward successful anger management. Oftentimes they are able to walk away from the provoking situation or deal with the mounting feelings before their anger spins out of control after learning relaxation techniques.

As an anger control component of their Aggression Replacement Training (ART), Goldstein and Glick (1987) present three techniques that may be used to reduce the physical signs of anger: deep breathing, backward counting, and pleasant imagery. One or all of these techniques may be used with the child or adolescent to "increase their self-control and personal power" when they notice themselves getting angry (Goldstein & Glick, 1987).

1. *Deep Breathing*

   Taking slow, deep breaths can reduce tension by relieving the physical symptoms of tension. Learning to gain control over one's breathing can help the child make more controlled responses in pressure situations.

2. *Backward Counting*

   Backward counting serves to momentarily distract the child from the high-pressure situation. While counting backward from 20 to one at a slow, even pace, he or she can use this time to think about how to respond most effectively. When appropriate, the child or adolescent is encouraged to turn away from the provoking person or situation while counting.

3. *Pleasant Imagery*

Imagining a peaceful scene during the anger-arousing situation can have a calming effect. Because it is often difficult for the child or adolescent to think about anything other than the person or situation that is bothering them when they are mad, it is important that they decide what they are thinking about before they get angry (Wilde, 2001). To be most effective, the child or adolescent should also be encouraged to think of a scene that *they* find relaxing.

Another procedure which is often used to manage anger arousal is systematic desensitization. This is a form of respondent conditioning in which anger-provoking situations are paired with deep muscle relaxation, an inhibitory response (Akande, 1997). Based on a hierarchy of anger producing scenes developed by the child or adolescent, he or she is gradually exposed to stronger anger-provoking situations while deeply relaxed. Eventually, a new bond develops between the relaxation response and the anger stimuli until the child or adolescent no longer experiences the same angry feelings when confronted with the provoking situation (Akande, 1997; Feindler, 1990).

Cognitive Restructuring

Cognitive restructuring is often considered to be the fundamental principle guiding cognitive-behavioral therapies. When used with anger control, cognitive restructuring involves modifying the thoughts, ideas, and beliefs that contribute to unhealthy expression of anger. As individuals learn to change their thinking, they will gain greater control over their physical responses (Akande, 1997; Meichenbaum, 1977).

Said another way, "cognitive restructuring embodies the behavioral principles of reinforcement and conditioning, but does so with the patient's thinking...rather than behavior" (Akande, 1997, p. 88; Mahoney & Kazdin, 1979).

Understanding the cognitive side of anger can be somewhat complex. Research in this area has resulted in a variety of methodologies aimed at understanding and correcting cognitive distortions associated with anger. Components of those approaches are described in the following paragraphs.

Cognitive Appraisals and Expectations

Davis and Boster (1993) draw a link between anger and cognitive appraisals and expectations which predispose a person to act a certain way. They describe appraisals as the characteristic manners in which a person perceives his or her environment and expectations, which are based upon prior experiences, as the person's prediction of the outcome of an anticipated behavior. Angry individuals tend to appraise neutral situations in a more hostile manner and expect interpersonal conflict, resulting in a greater tendency toward angry and aggressive behaviors (Davis & Boster, 1993; Feindler, 1990).

Self-Instruction Training

Self-instruction training is designed to facilitate adaptive appraisals and appropriate expectations of the provoking situations. When used with anger control, children and adolescents are taught to generate self-statements that take into account future consequences of their negative behaviors (Feindler, 1990). "If I (reaction) now, I

will (future reaction) later." Self-instruction training also involves teaching children and adolescents to use reminders to help guide their behavior. Reminders such as, "Cool it. Take it easy. Tell the teacher. I won't let him push my buttons" are all statements the individual can say to him or herself to remain calm in pressure situations. With practice, the child or adolescent will eventually learn to generate self-statements on their own and will be able to stop the mounting feelings before an angry outburst occurs.

Attribution Retraining

Similar to self-instruction training, attribution retraining focuses on the individual's initial perceptions and interpretations about the provoking events. When a person attributes another's provocation to intentionality or hostility, they often justify an anger expression or even aggressive retaliation (Feindler, 1990). Feindler (1990) suggests that individuals be encouraged to make alternative interpretations of the event and recognize other nonpersonal reasons that may be involved. Rather than interpret a peer's bump in the hallway as a deliberate attempt to harm the person, an individual is taught to recognize that that contact may have merely been accidental. She also suggests that attempts should be made to examine underlying irrational belief systems at this time. Much like rational-emotive therapy, developed by Albert Ellis, the individual is taught to replace irrational beliefs with "reasonable conclusions" about events.

Thinking Errors

Correcting thinking errors has also received considerable attention as an approach to cognitive restructuring. Lumsden (1994) defines a thinking error as a "mental mistake in reasoning that causes a person to draw an erroneous conclusion" (p. 6). In many instances, describes Lumsden, thinking errors represent an attempt to avoid taking responsibility for one's actions.

In their work with antisocial youth, Gibbs, Potter, Goldstein, and Brendtro (1997) have identified four specific categories of thinking errors that lead to angry thoughts and behaviors. They suggest that therapists should focus on equipping their clients with the skills for recognizing, naming, and correcting the cognitive distortions typically involved in anger and violence. "The realization that such lies and violence are linked, and that catching lies and thinking the truth are crucial to avoid acting violently" (Gibbs et al., 1997, p. 122). Self-Centered is the primary or most fundamental thinking error, supported by three secondary categories: Assuming the Worst, Blaming Others, and Minimizing/Mislabeling.

Self-centered thinking errors can be described as failing to see things from another person's perspective, coupled with a strong sense of entitlement. The three secondary thinking errors arise out of a need to rationalize the desire to continue engaging in negative behaviors, despite potential bad or guilty feelings. The first of these secondary cognitive distortions, Blaming Others, involves misattributing blame for one's harmful actions to outside sources, including the innocent victim. Closely related to Blaming Others is Assuming the Worst and includes the tendency among aggressive

youth to exaggerate a situation or see hostility where none exists and the act accordingly. These dangerous thoughts allow the individual to rid themselves of guilt and responsibility and attribute their actions to self-defense.

And lastly, Minimizing/Mislabeling rationalizations allow the individual to see their behavior as causing no real harm or as being acceptable or even admirable. They may also use belittling or dehumanizing labels when referring to others. Correcting these self-serving thinking errors is often a first step toward teaching angry youth to think, both adequately and accurately, before acting.

Skill Acquisition

As children and adolescents begin managing their anger, they must be taught a set of skills that can be used to replace unhealthy expressions of anger with those that are necessary for effective and satisfying personal and interpersonal functioning. These skills can be either cognitive or behavioral in nature and are taught directly and systematically. During this phase, the child or adolescent is presented with the notion that what they do in any situation (behavior) is basically a function of how they feel and think about a situation and what they say to themselves (cognitions). Once again, "aggression is not triggered merely by environmental events but rather by the way in which these events are perceived and processed" (Nelson & Finch, 2000, pg. 151).

Cognitive Approaches

Stress Inoculation training, an approach developed by Donald Meichenbaum in 1975 and later applied to the study of anger by Raymond Novaco, can be used to teach clients how to discriminate circumstances for which anger is justified from those which it is not justified as part of a skill acquisition phase of training (Stern & Fodor, 1989). The effective way to accomplish this is by remaining task-oriented in anger arousing situations. Becoming task-oriented, describes Novaco, requires that one defines the situation as "a problem that calls for solution rather than a threat that calls for attack" (Novaco, 1975, p. 51). By focusing on the issue involved, attention is directed away from the physiological changes and negative thoughts that are beginning to occur within the individual, lessening the likelihood of an angry response.

In their review of the Stress Inoculation approach within a problem-solving framework, Finch, Nelson, and Moss (1993) have identified a series of interpersonal cognitive problem-solving skills that can be used to cope with anger in a variety of social situations. The skills mentioned include: sensitivity to identifying problems, ability to spontaneously link cause and effect (causal thinking), capacity to think through possible consequences of actions (consequential thinking), ability to generate solutions (alternative thinking), ability to conceptualize step-by-step means for attaining specific goals (means-ends thinking), and ability to view situations from the standpoint of other involved children (perspective taking) (Finch, Moss, & Nelson, 1993; Spivack, Platt, & Shure, 1976; Spivack & Shure, 1974). The authors point out that it is important to recognize that children develop these skills at different ages. Teaching children to use

cognitive skills in anger arousing situations may depend on whether the child is cognitively ready to learn such skills.

Marion's (1994, 1997) research has focused on understanding anger in young children. She presents parents and teachers with strategies that can be used to guide children's expression of angry feelings in direct, nonaggressive ways. One way to do this is by helping children develop sturdier coping skills. An important component of coping involves helping children to perceive themselves as being in control. This is often accomplished by teaching children to think purposely about their anger and encouraging them to recognize events that triggered that anger (1994). It is important to remember that anger triggers will differ for each child. For some children, their anger trigger may be a person, such as an irritating classmate or sibling, and for others their anger trigger may be a place, like as a hostile home environment, or an activity, such as reading.

Marion also encourages teachers to give their students direct instruction in emotional talk. Children need to understand that their strong feeling has a name and they should be encouraged to use the word anger to label their feeling (1994). Children should also be taught that anger is a complex emotion with many levels and that different words can be used to describe each levels of anger. As children improve their anger vocabulary, they will learn that anger can range from minor irritation to full-blown rage.

Behavioral Approaches

In her work with adolescent anger control, Feinder (1990) addresses the behavioral component of anger and aggression through social skills training and self-

management techniques. Although the social behaviors that have typically been the focus of interventions have not been empirically derived, earlier research has suggested a number of nonverbal and verbal skills that should be targeted for improvement if found deficient (Fiendler). The nonverbal skills include such behaviors as appropriate response latency, eye contact, facial expression and gestures, while verbal skills such as appropriate voice loudness and verbal response have received attention (Frederiksen, Jenkins, Foy, & Eisler, 1976; Kolko, Dorsett, & Milan, 1981). Feindler also describes advanced social skills included in other comprehensive aggression reduction programs which rely on more sophisticated social discrimination and assertiveness, including: asserting individual rights, expressing emotion appropriately, making requests of others, saying no effectively, resisting peer pressure, maintaining friendships, and coping with manipulation by others.

The focus of self-management skills training, another behavioral technique for controlling anger, is on teaching the child or adolescent to evaluate the social appropriateness of his or her own overt behaviors and determine whether such angry and aggressive responses provoke others. Those behaviors which are found to provoke others are targeted for change. Self-management skills are taught and reinforced as the adolescent selects the social behavior in need of changing, identifies the strategies need to modify the behavior, and implements self-reinforcement procedures (Feindler, 1990). The result is newly learned repertoire of skills which can be used to appropriately control anger.

Practice and Transfer

Once the child or adolescent has learned the necessary skills to successfully manage his or her anger, these skills must be practiced in a controlled setting and then transferred to the natural environment. Strategies for practicing these techniques in individual and group setting will be discussed, as well as issues relating to generalization and ways to maintain behavior change over time.

When working one-on-one with a child and adolescent, imagery techniques can be a helpful tool. Using this strategy, the child or adolescent is encouraged to generate a hierarchy of anger-arousing situations that the he or she is likely to encounter in real life. The individual first visualizes him or herself using the appropriate coping skill in the mildest anger-arousing situation and then progresses to more provoking situations (Finch, Moss, & Nelson, 1993).

Role play exercises can also be an effective strategy for the children and adolescents, in both individual and group settings. Using this approach, the individual is encouraged to practice the anger management technique modeled by the trainer in situations he or she has encountered in the past or is likely to encounter in the future (Goldstein & Glick, 1987). The contents of these role play exercises are drawn from the hierarchies of provocation developed by the child or adolescent, similar to those used in imagery exercises. Even in group settings, hierarchies should be established for each individual and presented systematically from mildest to strongest along the anger spectrum (Finch, Moss, & Nelson, 1993). Group settings can provide an opportunity for

social reinforcement and allow the child or adolescent to further develop their coping skills by teaching and helping others (Finch, Moss, & Nelson, 1993).

In their use of the Anger Control Training technique as an affective component of Aggression Replacement Training, Goldstein and Glick (1987) make several recommendations regarding the use of role playing exercises. They suggest that prior to the exercise, individuals who are participating in the role play should be reminded of their parts: the main actor must use the anger control technique (or techniques) and the co-actor should try to stay in his or her described role as the other person in the conflict. The authors also instruct the observing group members to pay attention to whether the main actor is properly using the anger control technique. If at any time the actors "break role" or depart from the anger technique being practiced, the trainers are encouraged to stop the scene, give whatever directions are needed, and resume the role play. The role playing should continue until each group member has had the opportunity to be the main actor and practice using the technique.

Performance feedback should be an important next step following each role playing exercise. Goldstein and Glick (1987) recommend that both the trainers and the other group members should provide feedback to the main actor on how well he or she used the technique and the effectiveness of the technique in reducing anger. The trainer should provide appropriate reinforcement after the role play when the technique is used properly. They also suggest that the co-actor be asked to comment on his or her reactions to the technique and be thanked for their cooperation in the exercise. It is important for

the trainer to use this time to encourage group members to practice these techniques outside of the training sessions (Goldstein & Glick).

Another technique for practicing these skills involves the use of homework assignments. "It is the main mechanism to foster generalization of treatment effects into the real world by providing a structure in which the child practices anger management skills" (Nelson & Finch, 2000). A commonly used approach to homework involves the use of "barbs," first described by Kaufman and Wagner (1972). A "barb" is defined as a provocative statement that is applied in situations other than the training/therapy session. The rationale and procedure are explained to the child or adolescent, who is then warned that "I'm going to barb you" (i.e. "Don't look at me like that! You're grounded tomorrow!"). The person delivering the barb (parents, teachers, staff members, other significant individuals, etc...) records the child or adolescent's response, which is then reviewed and discussed in the following therapy session (Finch, Moss, & Nelson, 1993; Nelson & Finch, 2000). Finch, Moss, and Nelson suggested that this procedure be used on an intermittent basis by a variety of individuals to maximize generalization.

Promoting generalization should be an important consideration in any approach to anger management. Finch, Moss, and Nelson (1993) make a number of additional suggestions intending to aid generalization. They recommend carrying out these procedures in a variety of settings, including home, school, outdoors, and other nonclinical settings. It may also be helpful to vary the trainers and include teachers and parents into training sessions. And lastly, the authors also suggest that the child or adolescent learn to train others and to practice new skills under varying levels of stress.

In their review of the Anger Coping Program, Lochman, Dunn, and Klimes-Dougan (1993) found that the generalization of behavior change across settings and over time continues to be weaker than desired for the Anger Coping Program and other secondary prevention programs. To address the issue of generalization, Lochman et al. suggests augmenting these programs with universal interventions and teacher collaboration. Universal intervention should be geared toward providing primary prevention to nonrisk students, as well as secondary prevention to high-risk aggressive students within the classroom setting. When teachers and peers are exposed to the program in the full classroom, they are more likely to reinforce the use of appropriate social skills and anger management techniques throughout the day. Consultation with teachers will also aid in generalization by focusing on behavioral change strategies and social problem-solving.

Without any attempt to establish generalization, the effects of any program aimed at successful anger management will be short lived, resulting in minimal behavior change for an extended period of time. Given ample opportunity to practice coping strategies across settings and over time, children and adolescents will be more likely to maintain these newly learned skills and prevent further angry and aggressive acts.

Selected Cognitive-Behavioral Approaches to Anger Management

At this point it is important to examine the effectiveness of cognitive-behavioral approaches to anger management currently existing in the field. The four programs described in the following paragraphs were chosen after a thorough search of the

PsychInfo and Eric databases of available curriculums targeting childhood and adolescent anger problems using a cognitive-behavioral approach. Programs were chosen based on the substantial contribution each author and curriculum developer has made to this field. Each one of the authors has also been frequently cited in the work of their peers and has produced work backed by strong empirical support. While the list is certainly not exhaustive, all four programs suggest promising findings for the future. In reviewing this data, only those studies using experiment or quasi-experiment designs will be described to ensure a careful, scientifically-based understanding of these programs. Every effort was also made to ensure an exhaustive search of all available studies conducted by each of the four authors.

In Control: A Skill-Building Program for Teaching Young Adolescents to Manage Anger Millicent H. Kellner (2001)

In Control: A Skill-Building Program for Teaching Young Adolescents to Manage Anger is a curriculum-based approach consisting of ten 30-minute weekly sessions. Because of concerns over stigmatizing labels placed on students removed from the class and efforts at improving generalization, the curriculum is designed to be administered in the classroom (Kellner, Bry, & Colletti, 2002). However, the program can be adapted to the small group. The purpose of this curriculum is to teach students how to utilize cognitive-behavioral techniques to manage anger and develop prosocial behaviors within the context of the school setting (Kellner, Salvador, & Bry, 2001). One of the main objectives of the program is to teach students that anger is a powerful, but

normal emotion that cannot be taken away from them. The goal is to help students manage their angry feelings and express anger in a socially acceptable manner (Kellner et al., 2002).

Each of the ten sessions begins with a didactic phase, in which concepts are presented and discussed, building upon previously learned skills (Kellner, Bry, & Colletti, 2002). During this phase, students are educated about the physiology of anger and are introduced to techniques designed to control the body's response to anger, including: counting exercises, deep breathing, and muscle relaxation. Students are also taught to recognize their own anger "triggers" and identify the settings in which controlling anger may be difficult and the degrees of anger experienced in certain situations. Students are then presented with thinking and behavioral techniques which serve as useful tools in managing anger. As students learn and apply these techniques, they begin to develop skills for self-evaluation, which provides important feedback for improving anger management and strengthening feeling of self-competence. Each session ends with an experiential phase, in which role play is utilized to help students practice the skills presented in the session and facilitate skill acquisition (Kellner, Bry, & Colletti, 2001).

Throughout the program students make use of anger logs, which are used to record their angry feelings. According to Kellner & Bry (1999) students are instructed to record (a) each anger-provoking incident, (b) the setting associated with the incident, (c) how the incident was handled, (d) the degree of anger, and (e) how well anger was

managed These logs serve as a self-monitoring device as well as a teaching tool to reinforce skill development (Kellner, Bry, & Colletti, 2001).

In their 2001 study, Kellner, Salvador, and Bry examined the effects of the In Control program with a middle school population at a therapeutic day school for children with severe emotional and behavioral disorders. The 46 students participating in the study were assigned to a program or nonprogram group. The program group consisted of students in three of the five participating classrooms in the study. The remaining two classrooms made up the nonprogram group. Data were collected on the number of anger logs completed by each student in the experimental group, the average number of aggressive behaviors per month and per student as recorded in the school's incident reports, classroom observations, scores obtained on the aggression, attention, and social scales of the Achenbach Teacher Report Form, student scores on a knowledge quiz assessing a student's knowledge of and ability to apply concepts taught in the program, and monthly teacher and interdisciplinary team ratings. During the program, students in the program group exhibited significantly more prosocial behavior than the nonprogram control group toward their teachers during class time and toward peers in less structured times. At three-month follow-up, those students receiving the program completed significantly more anger logs and exhibited significantly fewer aggressive incidents. No significant differences were found among program and non-program participants on the Achenbach teacher report form, the knowledge quizzes, or the monthly teacher and interdisciplinary team reports. While the results of this study provide some support for the In Control program, these findings must be carefully interpreted given the number of

limitations present in this study, including: the small sample size, the use of intact classes, the lack of classroom observations carried out at pre-program and post-program phases, the potential effects of medication on performance which was not controlled for, and the lack of standardized instruments as evidenced by the knowledge quizzes and monthly teacher and interdisciplinary team reports.

Kellner, Bry, and Colletti (2002) also examine the effectiveness of the In Control program with an early adolescent population with serious emotional or behavioral problems at a therapeutic day school. Three of the five middle school classrooms, where teachers first volunteered to participate in the study, served as the treatment group and received the In Control program. The remaining two classrooms did not receive the program, but had anger logs made available to them and were encouraged by their teachers to fill them out. An informal comparison of those students receiving the anger management program to those who had only been exposed to the anger logs, found that participants filled out more logs, had fewer incidents of fighting with peers, and were more likely to talk things out with an on-duty counselor when angry during implementation of the program. Four months after the program was completed, program students continued to fill out more anger logs. This was especially true for those students who had received four monthly booster sessions, which focused on monitoring the use of anger logs, using role play to review and strengthen student use of the anger management skills and strategies, and identifying further anger-related issues and skill development needs. Behavioral changes associated with reduced peer aggression and talking to a

counselor were not maintained at follow-up. However, once again caution must be used in interpreting these finding given the informal nature of this study.

Anger Coping Program

John E. Lochman and colleagues (1984)

The Anger Coping program is cognitive-behavioral approach to anger management which seeks to correct the social-cognitive deficits and distortions in aggressive children (Lochman, 1992). The program is also based in part on Dodge's information processing model (Dodge, 1993). According to this model, aggressive children attend to a narrower range of social cues, particularly hostile cues, and tend to perceive hostile intent in ambiguous situations. They also generate fewer social problem solutions overall, with a higher proportion of those solutions being physically aggressive (Lochman, Lampron, Burch, & Curry, 1985). Although originally designed for elementary-aged aggressive boys in school settings, the Anger Coping Program has been adapted for use with girls, older or younger children, or clinic and residential settings (Lochman, Curry, Dane, & Ellis, 2001).

The 18-session curriculum is typically implemented in weekly small group sessions consisting of four to six children and lasting 45 minutes to an hour. Within these sessions children practice self-control techniques, establish the notion of perspective-taking, identify their own physiological cues signaling anger and the impact of self-statements, and are introduced to the problem-solving model. A significant amount of time is also devoted to the group project, in which group members create their own

videotape demonstrating use of the Anger Coping method. The final sessions are focused on application of the model to additional problems the children want to solve (Lochman, Curry, Dane, & Ellis, 2001).

In their 1984 study, Lochman, Burch, Curry, and Lampron compared the separate and combined effects of the Anger Coping program and a less intensive goal setting condition on a group of aggressive, elementary school boys using a 2 x 2 factorial design. The 76 boys were assigned to one of the four experimental cells on a rotating basis: anger coping (AC), goal setting (GS), anger coping plus goal setting (ACGS), and an untreated control cell (UC). The Anger Coping groups in the AC and ACGS cells met weekly for 12 sessions. In the eight-week, goal setting intervention, the participants established weekly goals, which were monitored by the classroom teacher. The boys received contingent reinforcement for appropriately attaining their goal. Four to six weeks after completion of the intervention, the children in both Anger Coping program groups (including AC and ACGS) displayed significantly more reductions in disruptive and aggressive classroom behaviors than the untreated control group. The addition of the goal-setting procedure tended to amplify the treatment effects observed in the classroom. Both Anger Coping groups also exhibited reduced aggression in their home, and displayed a nonsignificant tendency for improved perceptions of self-esteem.

As a follow-up to Lochman, Burch, Curry, and Lampron's (1984) study, which found that the inclusion of a goal setting procedure into the content of the intervention tended to produce stronger behavioral improvements and greater generalization, Lochman (1985) examined the effects of an 18 session program which incorporated a

goal setting component into the Anger Coping curriculum. The 18 session intervention, which targeted disruptive, off-task behavior, compared the results of the four experimental cells in the previous study using an expanded Nonequivalent Control Group Design. The results of this study revealed greater improvements in on-task and passive off-task classroom behavior for the eighteen session format, when compared to the twelve session version of the same Anger Coping plus goal setting condition. While the findings are supportive of the 18 session Anger Coping curriculum, the results must be interpreted with some caution given the use of a quasi-experimental design.

Using a sample of 32 aggressive boys at six public elementary schools, Lochman, Lampron, Gemmer, Harris, and Wycoff (1989) examined the effects of two versions of the Anger Coping program to an untreated control condition. The schools participating in the in the study were alternatively assigned to one of two experimental groups: an Anger Coping (AC) condition consisting of the 18 session intervention or an Anger Coping plus Teacher Consultation (ACTG) condition which included the addition of structured teacher consultation which focused on behavioral management and developing student problem-solving skills. At each school, the boys were assigned on an odd-even basis to either one of the two intervention conditions or the untreated control condition (UC).

Compared to the untreated control group, the two treatment conditions reported significant improvements in disruptive-aggressive off-task classroom behaviors, consistent with previous studies. In addition, the treated boys developed a more positive perception of their own social competence and tended to have reductions in their teachers' rating of their aggressiveness. However, no significant differences were found

between the two treatment conditions, indicating that teacher consultation did not enhance the effects of the Anger control treatment.

In a three year follow-up study, Lochman (1992) examined the longer term preventive effects of the Anger Coping program with a group of 145 elementary school boys referred by classroom teachers as highly aggressive and disruptive compared to untreated aggressive boys and nonaggressive boys. The Anger Coping (AC) condition was recruited from three annual cohorts of boys who had been identified by classroom teachers as aggressive and disruptive and had received the Anger Coping intervention. The untreated aggressive (UA) condition did not receive the intervention and included participants who had either been assigned to the untreated aggressive condition in the first cohort or had equivalent peer-rated levels of aggression in the first cohort year, but had not been previously assessed. The nonaggressive (UA) condition also did not receive the intervention and consisted of boys who were identified as aggressive by less than seven percent of their male peers in the first cohort and also had not been previously assessed.

Using individual unstructured interviews, treated aggressive boys reported significantly lower levels of substance abuse than the aggressive boys who did not receive the intervention. No significant differences were found between the rates of drug involvement reported by the treatment group and the nonaggressive, low-risk group. Treated boys also had higher levels of self-esteem and problem-solving skills when compared to the untreated aggressive boys. Although the Anger Control intervention failed to produce longer term affects on delinquency rates and classroom behavior at

follow-up, the inclusion of a booster intervention with a subset of boys the following school year did produce lower levels of follow-up passive off-task behavior. However, the findings related to the booster sessions must be considered preliminary given the small sample sizes.

Think First

James D. Larson and Judith A. McBride (1992)

The Think First program is a ten-session intervention which teaches children how to manage their anger through cognitive-behavioral principles and techniques. During these sessions children are taught a functional analysis of anger, learn to recognize anger cues, and are introduced to a set of anger-reduction techniques. They are also taught to recognize internal and external "triggers" to anger, and are trained in the self-instruction method of anger-aggression control, which is then expanded to general problem-solving skills training. The program also makes abundant use of modeling and role-play procedures, both live and recorded on video. "Hassle Logs" are introduced at the beginning of the program and are used throughout the intervention as a method of self-monitoring. Token exchange systems are also employed to encourage completion of the Hassle Logs as well as homework assignments and attendance (Larson, 1992).

Larson (1992) evaluated the effects of the Think First program with a group of at-risk, middle school students within a large, urban school system. Using a modified randomized groups design, participants were assigned to either a treatment group consisting of the Think First program or a discussion-only control group based upon their

pre-existing assignment to one of two intact classrooms. Results of the study revealed modest support for the program. While reductions in disruptive behaviors were found to be significant according to Incident Referral Forms, the results of the Teacher Report Form were inconsistent with the results obtained by the Incident Referral Forms, suggesting a worsening teacher appraisal of the participants' behavior. Data collected on the Children's Inventory of Anger and the Jesness Inventory also failed to produce significant differences between the experimental and control groups. As is the case with quasi-experimental designs, the results should be interpreted with some caution given the use of intact classrooms.

Anger Control Training

Arnold P. Goldstein and Barry Glick (1987)

An affective component of Goldstein and Glick's Aggression Replacement Training, Anger Control Training traces its roots back to the work of several key figures, starting with the work of Russian psychologist Luria who explored the manner in which children learn to regulate their external behavior by means of internal speech. Donald Meichenbaum and his research group sought to further research in this area by examining the relationship between impulsivity and poor verbal control of overt behavior, leading to the development of self-instruction training, which was later applied to the management of anger by Novaco. Building on his work, Eva Feindler and her research group have also contributed greatly to the development of Anger Control Training with the

introduction of triggers, cues, reminders, reducers, and self-evaluation to interventions aimed at anger control (Goldstein, Glick, & Gibbs, 1998)

The goal of the Anger Control Training program is to teach adolescents to understand what causes them to feel angry and act aggressively and train them to use a series of techniques for reducing anger and aggression (Goldstein & Glick, 1987). The end result will be a newly learned set of skills that enable adolescents to consider positive and constructive alternatives to angry and aggressive behavior.

The Anger Control Training curriculum is presented in ten weekly sessions of one hour each. Trainers in the program (usually two) are required to model proper use of the anger reduction techniques that are the core of the program, lead role-playing exercises designed to help trainees practice the newly learned skills, and provide performance feedback on the trainees' performance (Goldstein & Glick, 1992). The topics covered in the sessions are varied and include the following concepts: functional assessments of aggression, identifying cues and anger reducers, understanding triggers and how to use reminders, learning how to self-evaluate and think ahead, and understanding the Angry Behavior Cycle. A great deal of time is spent reviewing and practicing the new behaviors in the final sessions. Hassle Logs also play an important role in the Anger Control Training program. The logs are important in that they provide trainees with an accurate picture of the conflicts they encounter as well as providing insight into what makes them angry and how they handle these situations (Goldstein & Glick, 1992). The Hassle Logs also provide material for later role playing exercises. Trainees are also encouraged to fill

out Hassle Logs for situations that are handled well in addition to those in which they become angry and aggressive (Goldstein & Glick, 1992).

Two major evaluation projects were conducted to examine the efficacy of Aggression Replacement Training and are described by Goldstein and Glick (1987). The Annsville Youth Center project examined the effects of ART with a group of 60 incarcerated youths at a limited-security, residential facility for boys between the ages of 14 and 17. The boys were randomly assigned to one of three conditions. The treatment group received the Anger Control Training component of the intervention one day a week for 10 weeks and was compared to one of two control groups. The Brief Instruction Control Group, which was designed to control for the effects of trainee motivation, received none of the Aggression Replacement Training and participated only in usual facility activities. The no-treatment control group did not participate in ART or brief instruction procedures.

The MacCormick Youth Center project sought to both replicate the exact procedures and findings of the Annsville project and extend them to youth incarcerated for substantially more serious felonies. Participants in this study included 51 young people between the ages of 13 and 21 drawn from the MacCormick Secure Center, a New York State Division for Youth facility for male juvenile offenders.

To examine the effectiveness of the ART program, participants were presented with three categories of stimulus situations in which they were instructed to describe exactly what they would do in each of the situations. Each category of situations was increasingly removed from those used in the ART training and included Direct

Situations, Minimal Generalization Situations, and Extended Generalization Situations. Responses were judged on the participant's ability to correctly identify the correct Structured Learning Skill the situation was intended to measure. They are as follows: Expressing a Complaint, Responding to the Feelings of Others, Preparing for a Stressful Conversation, Responding to Anger, Keeping Out of Fights, Helping Others, Dealing with an Accusation, Dealing with Group Pressure, Expressing Affection, and Responding to Failure.

Participants were tested both prior to and after completion of the training for Direct Situations and were only tested after training for the Minimal and Extended Generalization Situations. Staff members also filled out Behavior Incident Reports and each participant was rated on a Sociomoral Reflections measure and by his counselor pre and posttest on a standardized measure of impulsivity, the Kendall-Wilcox Self-Control Scale. Changes on this particular scale were thought to be most reflected of gains derived from the Anger Control Training classes. However, the authors caution readers against interpreting the results of this measure independently from the other components of ART.

While both projects yielded similar results and maintained support of the ART program as a whole, slight differences were noted when examining the effects of the Anger Control Training component of the intervention. The Annsville project revealed significant acquisition and extended transfer of the "Responding to Anger" Structured Learning Skill, which introduced reminder statements as an anger reducer. Reminder statements are taught to participants through self-instruction training, modeling, role playing, and homework assignments. However, the results of the MacCormick project

found the skill to be significant for minimal and extended transfer, but interestingly not for acquisition (Goldstein & Glick, 1987).

A third study examined the effects of ART within community-based programming, which offered training to not only the youths, but to their parents and other family members as well (Goldstein, Glick, Irwin, McCartney, & Rubama, 1989). While the research revealed significantly less rearrest rates for youths receiving the ART program, significant decreases in self-reported anger levels in response to mild anger-provoking situations are thought to contribute to this finding. "Perhaps it provided a context in which negotiating instead of hitting in conflict situations was praised, not castigated, providing a context supportive of, encouraging of, and reinforcing of prosocial, not antisocial, ways of being and doing" (Goldstein &Glick, 1994, p. 20-21).

A fourth and final ART evaluation examined the effects of the program with gang members at two Brooklyn youth care agencies assigned to either an ART or no-ART control group. Participants were measured on their ability to use and apply skills in each of the seven categories: beginning social skills, advanced social skills, feelings-relevant skills, aggression-management skills, stress-management skills, and planning skills. While outcome findings were supportive for the program, no significant differences were found for anger control scores among those participants receiving the ART program when compared to the control group.

While all four studies of the effectiveness of ART, including the Anger Control Training component in three of the four studies, yield promising findings, we must again exercise caution in interpreting these finding. Goldstein and Glick (1994) report an

abundance of outside evaluation examining and supporting the use of ART. However, none of the studies reported by these authors make specific mention of the effectiveness of the anger management component.

CHAPTER 3: CONCLUSION

Summary

All four programs reviewed in the previous section are similar, although not identical, in their approach to childhood and adolescent anger problems. While differences exist primarily in the format of the curriculum, including the length and number of sessions in each intervention and the use of pull-out groups verses in-class administration, all four programs are alike in that they address the four major components of cognitive-behavioral interventions: arousal management, cognitive-restructuring, skill acquisition, and practice and transfer. Slight differences are also noted in the specific techniques used to teach these four components and the terms used to label these different skills. For example, "triggers," "anger cues," and "anger antecedents" are all terms used to describe the behavioral and cognitive changes which occur prior to acts of anger and aggression that the child or adolescent must learn to identify. Despite these and other small differences, all four programs are alike in their overall goal of teaching children and adolescents to manage and control their anger through a cognitive-behavioral approach.

While cognitive-behavioral interventions can provide a valuable tool for treating anger-related problems among children and adolescents, this approach is not without limitations. Curriculums which draw from a cognitive-behavioral orientation require a certain level of cognitive functioning in order to be effective. Cognitive restructuring techniques can be rather complex and may not be suitable for low-functioning children or adolescents. Cognitive-behavioral approaches also rely on a rather high degree of

motivation from the participant. Those who are unwilling to participate in certain aspects of the intervention are less likely or even unable to receive benefit from these programs. And lastly, as has already been discussed, cognitive-behavioral approaches may not be appropriate for more severely disturbed children or adolescents who may instead need more intensive individual help to treat deep, underlying issues related to their anger. These limitations will be particularly important to consider as efforts are made to adapt cognitive-behavioral anger management programs to younger populations.

The four selected cognitive-behavioral anger management programs reviewed in the previous section were examined in light of sound, experimental research. For the most part, the results are encouraging. However, equal in number are the non-experimental, poorly controlled studies that make up a large percentage of the research and likewise suggest promising findings. To accurately determine and maximize effectiveness of these programs, it is imperative that researchers conduct quality, scientific research that goes beyond inference and speculation. Furthermore, this research must also be carried out over time and with follow-up studies, as long-term treatment effects are still unclear at this point.

It is also important that research examining the effectiveness of cognitive-behavioral anger management programs address both behavioral and cognitive changes experienced by the child or adolescent as a result of intervention. In reviewing the four selected programs, it was noted that often a great deal of emphasis was placed on examining overt, behavioral changes that occurred, often ignoring the equally important cognitive changes that had taken place. This lack of research targeting cognitive

variables seriously threatens the accuracy of evaluative research of cognitive-behavioral anger management programs. It is imperative that future studies remedy this problem.

And lastly, for each of the four selected programs, the majority (and in some cases all) of the research has been conducted by the curriculum developer and his or her colleagues. There is also a definite need within this field for outside evaluations to examine the effectiveness of these programs to ensure that evaluative research is objective and free of any biases that may exist.

Adaptations for Younger Children

A population left untouched by anger management programs, particularly those utilizing a cognitive-behavioral approach, are younger children. While these studies demonstrate a great deal of work with older elementary and adolescent populations, effort should be made to extend these programs to lower elementary and even preschool children. Lochman, Fitzgerald, and Whidby (1999) provide a description of several modifications that can be used to adapt cognitive-behavioral anger management programs to younger children between the ages of five and seven, given the unique behavioral and social-cognitive characteristics of this age group.

Because younger children are active and less skilled in important group behaviors (i.e. turn taking, sitting in one's seat, and making relevant comments), leaders are encouraged to improve upon these skills within the group in order to establish the "teaching moments" for each group session. To be successful, leaders will need to label and reinforce appropriate group behavior. Verbal praise is particularly important when

reinforcing desired behaviors. Inappropriate behaviors should be ended quickly followed by redirection with appropriate verbal and/or physical assistance. Given the comorbidity of ODD and ADD/ADHD, group leaders may also want to discuss the level of physical activity they can reasonably tolerate in advance of meetings. Expectations for activity levels may need to be adjusted to meet the special needs of these children.

Lochman, Fitzgerald, and Whidby (1999) also describe a number of social-cognitive differences exhibited by young children that require leaders to use increased repetition, concrete demonstration of concepts, and hands-on activities. These differences include: egocentric perspective-taking skills, concrete attention to social detail, restricted generation of varied and competent solutions to social conflict, recency biases for social information, and impulsive problem-solving styles. They suggest using puppets, visual aids, drawing tasks, and short stories or books to promote participation and learning.

Adapting cognitive-behavioral anger management programs to young children is certainly not without its challenges. Probably one of greatest difficulties in adapting these programs to younger populations will be addressing the cognitive differences in preschool and early elementary children. Understanding these differences in terms of a Piagetian approach to cognitive development, children during the elementary years and adolescents tend to be in the concrete operational or even formal operational stage. The type of thinking that occurs in these two stages is quite different than the thinking exhibited by early childhood youngsters in the pre-operational stage, which is characterized by egocentric thought and void of operational and abstract thinking.

Younger children also present unique needs related to their level of moral development. Kohlberg identifies most children as being as being in the preconventional stage of morality, while teens and some older children have progressed to the conventional stage of morality. These differences are sure to influence the way a child or adolescent interprets acts of anger and aggression and others' response to these acts. In addition to the changes recommended by Lochman, Fitzgerald, and Whidby (1999), researches interested in adapting cognitive-behavioral anger management programs to younger children will need to pay special attention to the unique cognitive and moral needs of this age group.

The Role of the School Psychologist

Students exhibiting social and behavioral difficulties present a major concern to schools and consume both time and resources. From the 1990/1991 school year to the 1999/2000 school year, the number of students served as emotionally disturbed under IDEA increased over 20 percent (Office of Special Education Programs, 2001). Over nine thousand students in Iowa are now served under this category and the number nation-wide is nearing the half-million mark (OSEP).

As a source of referral to school psychologists, these students display disruptive and sometimes dangerous behaviors, which can lead to acts of school violence. For many, these behaviors are accompanied by poor interpersonal skills and academic difficulty and mask underlying anger problems. For this reason, it is important for school psychologists to have a good understanding of anger among children and adolescents.

They must be able to examine the nature of the student's anger and address faulty coping strategies for controlling anger that may exist.

It will also be important for school psychologists to play a vital role in the establishment of preventative, school-wide programs geared toward appropriate anger management and to help identify those high-risk students needing more intensive interventions. Prevention and early intervention efforts are especially important for those students identified as emotionally disturbed and often display anger-related problems as the numbers increase dramatically during the first few years of the child's schooling. During the 1999/2000 school year 9,009 six-year-olds were identified as emotionally disturbed, compared to 31,755 nine-year-olds and an alarming 44,846 twelve-year-olds (Office of Special Education Programs, 2001).

For all children, efforts must be taken to address these issues early in a student's education and to get him or her the help they need as soon as possible to prevent or reduce later difficulties involving anger. But to do this, school psychologists will need to be well-versed in a variety of empirically-supported programs found to be effective in treating anger. With a pool to chose from, the school psychologist can select and implement interventions tailored to individual student or school needs.

School psychologists will need to work closely with teachers, counselors, administrators, and other professionals to ensure that students receive appropriate anger management training. School psychologists can become change agents in their schools as they educate students and co-workers about anger and develop support groups and programs which focus on appropriate and effective anger management.

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