THE EFFECTS OF SOCIAL SKILL INSTRUCTION AND SELF-MONITORING ON ANGER-CONTROL BEHAVIORS OF MIDDLE SCHOOL STUDENTS WITH SEVERE BEHAVIOR HANDICAPS

A Thesis
Presented in Partial Fulfillment of Requirements for the Degree Master of Arts in the Graduate School of the Ohio State University by Melinda K. Ross, B.A.

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Master's Examination Committee:
Dr. Gwendolyn Cartledge
Dr. Ralph Gardener, III

Approved by
Advisor
College of Education
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Special thanks to my wonderful family and friends for always believing in me. I couldn't have done it without you.
VITA

March 5, 1963.............................................. Born - Kankakee, Illinois

1986............................................................. B.A., Mount Vernon Nazarene
College, Mount Vernon, Ohio

1992- Present.............................................. Physical Education Teacher
Columbus Public Schools
Columbus, Ohio

FIELDS OF STUDY

Major Field: Education

Department of Educational Services and Research

Education of Handicapped.................(SBH) Grades K-12
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CHAPTER I

INTRODUCTION

During physical education class a group of students is playing a game of flag football. Steve is on the offense and is carrying the ball, while Travis is on the defense. On this particular play, Travis trips over one of his own teammates and accidentally tackles Steve. Steve feels as though Travis tackled him on purpose and loses his temper. A fight ensues. The teacher has to intervene to break up the fight.

The above situation and outcome, although not specific to students with behavior disorders, is typical of what one might witness while observing them during competitive game activities. Social skills training has been presented as an effective strategy for helping these students deal with some of the stressors and situations in their interpersonal environments (Sprafkin, Gershaw, & Goldstein, 1993). Good skills are associated with success (Hollin & Trower, 1986). The responsibility of all teachers of students with behavior disorders is to teach them appropriate social behaviors to be successful in academic as well as other environments.
Purpose of the Study

The purpose of this study was to examine the effects of social skill instruction and self-monitoring on the anger-control behaviors of middle school children with severe behavior handicaps. Primarily, the study addressed the effects of social skill instruction and self-monitoring on a) appropriate reactions-to-anger and b) inappropriate reactions-to-anger. Of secondary interest was the students' opinions regarding the benefits and enjoyment of social skill instruction.

Research Questions

1. Will social skill instruction and self-monitoring increase the number of appropriate reactions-to-anger behaviors during competitive game activities in the gymnasium?

2. Will social skill instruction and self-monitoring decrease the number of inappropriate reactions-to-anger behaviors during competitive game activities in the gymnasium?

3. What are student opinions on the benefits and enjoyment of social skill instruction?

Review of Literature

This review of literature describes significant studies that are relevant to this study. This review includes the following topics: a) definition and social
characteristics of students with severe behavior handicaps, b) social skill instruction, and c) generalization and maintenance of social skills.

Definition and Social Characteristics of Students with Severe Behavior Handicaps

Social Characteristics. Children and adolescents with severe behavior handicaps typically exhibit inappropriate types of behavior, a general mood of unhappiness, and difficulty relating with teachers and peers. According to Vaughn (1987), students with behavior disorders have severe difficulties adapting to society and interacting successfully with others. They commonly display unacceptable social behaviors such as fighting, disruptiveness, profanity, destructiveness and defiance of authority. Their aggressive behavior often makes them unpopular and tends to elicit aggressive and punitive responses from other children as well as adults. Their behavior costs them many opportunities for gratifying social interaction and self-fulfillment (Kauffman, 1993). Many of these children are isolated from their peers and the community in general because of their unacceptable social behavior. In addition, their behavior is so inappropriate, disruptive, and sometimes destructive that it may interfere with education and may require special services (Kelly & Vergason, 1985).

Terminology. Professionals involved with youth with behavior disorders use a variety of terms to refer to this population (Moore, 1994). Although terms
such as "behaviorally disordered", "emotionally disturbed", and "emotionally maladjusted" litter legislative, educational and research literature, "seriously emotionally disturbed" is the label currently used in federal legislation. Even so, terms vary from state to state and profession to profession. For the most part, recognized terms are a combination of one term from column A and one from column B in Table 1. The terminology used in Ohio and therefore, throughout this study, will be severe behavior handicapped (SBH).

**Problems of Definition.** The majority of behavior disorders are defined by sociocultural expectations (Kauffman, 1993). Because of this fact, many questions and problems arise when attempting to define what is meant by "behavior disorders" or "emotionally handicapped". The definition of these disorders is a difficult and complex matter.

One reason it is so difficult to arrive at a reliable definition is that an emotional or behavioral disorder is not a thing that exists outside a social context, but a label assigned according to cultural rules (Burbach, 1981). That is, people are deviant only if society defines them as such, i.e. if they deviate from the norm or what people expect (Morgan & Reinhart, 1991). Some types of behavior are so severe that virtually every subculture of society would consider such acts abnormal, while other types of behavior only violate the standards of particular cultures or social institutions, not society as a whole. Certainly, social and cultural expectations need to be considered in defining behavior disorders.
Table 1

Combinations of Terms (Kauffman, 1993)

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotionally</td>
<td>Disturbed</td>
</tr>
<tr>
<td>Behaviorally</td>
<td>Disordered</td>
</tr>
<tr>
<td>Socially</td>
<td>Maladjusted</td>
</tr>
<tr>
<td>Personally</td>
<td>Handicapped</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
</tr>
<tr>
<td></td>
<td>Impaired</td>
</tr>
</tbody>
</table>
The difficulties in measuring emotions and behavior pose another road block to defining behavior disorders. Most other disabling conditions have tests of direct measurement which provide boundaries used to outline their condition. However, at present, there are no reliable objective measures of emotional and/or behavioral disabilities (Haring, 1987). Emotion is nonrational, nonlinear, and so far has been pretty elusive to being pinned down by precise prose (Bower, 1982).

Another problem standing in the way of building a solid definition of deviant behavior is the definition of the converse, normal behavior. To paint a clear picture of what constitutes deviant behavior we must first focus on what we consider to be normal behavior. Variations in emotions and behavior are considered to be "normal" and it is "normal" for children to do almost anything occasionally and under certain conditions (Hallahan & Kauffman, 1986). The line between normal and deviant behavior is not etched in stone, it changes constantly as one moves through the different stages of life, or from one environment to another. Acts such as temper tantrums and spitting food may be considered normal for children, but as one progresses towards adulthood such acts are increasingly abnormal. The problem of definition, then, involves comparison against a nebulous and constantly changing standard - for most behaviors, there are no quantitative norms to measure behavior against (Kauffman, 1993).
Also contributing to the difficulty of defining behavior disorders is that it shares many common characteristics with other disabling conditions. A recurrent finding in the literature is that certain populations with disabilities overlap with other disabled populations. Many students with educable mental retardation or learning disabilities also have behavior disorders, and the converse is also true (Smith, Wood, & Grimes, 1988). This makes it extremely difficult at times to discern exactly which disabling condition is evident. There is also the possibility that a child may have a combination of disabling conditions. Defining emotional or behavioral disorders in a way that excludes other disabling conditions, therefore, is unrealistic (Kauffman, 1993).

An additional problem associated with the issue of definition is one of labeling, that is, attaching a specific classification to a person or behavior. Assigning any label is dangerous in that the label is likely to stigmatize and can significantly alter the youngster's opportunities for education, employment, and socialization (Burbach, 1981). Such stigmatism may lead to discrimination by others as well as feelings of inferiority for the child. The real threat for youngsters is that such a label may continue to follow them years later and define them by a classification that may no longer fit.

Finally, the definitions of behavior disorders should meet the needs of the professionals who use them. Criteria for the definition are based upon the requirements, needs and goals of the given specialty. The concern of policy makers is the needs and wants of the public which they serve. Social and
behavioral scientists are interested in a way to describe groups of individuals for research. Educators give the greatest attention to academic achievement. Perhaps formulating a single definition that is useful to all the social agents who are responsible for youngsters' conduct is impossible (Kauffman, 1993).

Although definitions in the area of behavior disorders or emotional disturbances are extremely difficult, it is still necessary to formulate an appropriate one. Where such definitions limit or prescribe who may or may not receive services, the definitional problem becomes significant (Bower, 1982). The problem of definition becomes significant to children in need of the services of various social and educational agencies; to families interested in the social, emotional, and educational well-being of their child; and to schools developing courses of study and intervention techniques for the children that they serve. The problem is especially serious when funds and services to the child are reduced or eliminated. Finding a workable definition, while difficult, is crucial because inappropriate definitions will contribute to inadequate legislation, unclear and unfocused policies, improper teacher training, and ineffective interventions (Kauffman, 1993).

The Current Definition. The number of definitions of emotional and behavioral disorders are as abundant as the terminology used to label these disorders. Most definitions have been offered by researchers, educators and legislators looking to serve their own purposes, but none fully addresses all of the problems and issues previously discussed.
The current definition was derived from Eli Bower's original 1957 definition. He based his definition on results of a study of children designated as "emotionally disturbed". As part of his research, Bower had teachers describe the behavior patterns of all the children in their classroom. The major differences between the designated children with emotional disturbances and their classmates were spelled out in the definition (Bower, 1982). The current Federal definition is Bower's original definition with some modifications.

The current definition according to the U.S. Government and Public Law 94-142 (now the Individuals with Disabilities Education Act, IDEA) states:

"Seriously emotionally disturbed" is defined as follows:

(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:
   (A) An inability to learn which cannot be explained by intellectual, sensory, or health factors;
   (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
   (C) Inappropriate types of behavior or feelings under normal circumstances;
   (D) A general, pervasive mood of unhappiness or depression; or
   (E) A tendency to develop physical symptoms or fears associated with personal or school problems.
(ii) The term includes children who are schizophrenic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed. (45 C.F.R. 121a.5(b)(8)(1978))

Perspectives on the Current Definition. Today most professionals recognize that a given definition is never adequate for all purposes (Kauffman, 1993). As noted earlier, criteria for the definition is based upon the requirements, needs and goals of the given specialty. For educational purposes
it seems evident that a definition describing the behavior problems of the students would be the most beneficial.

In its attempt to create an inclusive definition of behavior disorders, the current federal regulation actually eliminates some of the very children who need services the most. Some children can be excluded because they are not academically retarded; others because they are judged to be socially maladjusted but not emotionally disturbed (Cline, 1990). Arguments in the legal arena continue over the current definition and its exact implications.

The definition of emotional or behavioral disorder remains partly subjective, even though several relevant characteristics of a student's behavior can be described clearly (Smith et al., 1988). The definition cannot be completely objective any more than describing love or hate can be completely objective. Emotions are subjective and therefore left up to the discretion of the observer. The ultimate criterion for the definition is the judgment of adults in authority roles, teachers and mental health professionals (Smith et al., 1988).

**Summary.** Children and adolescents with severe behavior handicaps typically exhibit inappropriate types of behavior, a general mood of unhappiness, and difficulty relating with teachers and peers. The definition of these disorders is difficult and extremely complex. An exact definition is complicated by sociocultural expectations, the difficulties in measuring emotions and behavior, the range of normal and deviant behavior, the commonality with other disabling conditions, the issues in labeling, and the differing criteria of various agencies.
The current definition was derived from Eli Bower's original 1957 definition. Although various definitions exist, no universal definition has been found.

Although an exact universal definition has been difficult to pinpoint, there is a general consensus that children with severe behavior handicaps have difficulty building and maintaining positive relationships with others. As noted by Vaughn (1987), students with behavior disorders have severe difficulties adapting to society and interacting successfully with others. As with social skills and academic achievement, there is a kind of reciprocal relationship between social skills and peer relationships. Children with better interpersonal skills have more opportunities to engage in the activities with peers that, in turn, enhance the learning of social behaviors (Cartledge & Milburn, 1995). With the current focus on inclusion, it is imperative that all educators, special and regular, begin to intervene and teach these students social skills that may ameliorate maladaptive behaviors that are frustrating for teachers and debilitating for students (Moore, 1994).

Social Skill Instruction

Defining social skills. Social skills may be conceptualized as part of a broader construct known as social competence (Gresham, 1983). Competence is a general term which refers to the social judgments about the quality of an individual's performance in a given situation. Specific social skills are defined by Foster and Ritchey (1979) as "the responses which, within a given situation,
prove effective, or in other words, maximize the probability of producing, maintaining, or enhancing positive effects for the interactor" (p. 626). The main characteristic of persons with behavior disorders is deficits in social skill performance.

Hartup & Sancilio (1986) suggest that participation in social interactions with peers contributes directly to the acquisition of advanced social skills. Because adolescents with behavior disorders typically have difficulty relating to peers, their opportunities for acquisition of higher level social skills are limited. The remediation of skill deficits through direct social skill instruction is the responsibility of teachers and the entire educational community.

**Assessing Social Skills.** The assessment of children's social skills is a necessary component of the instructional process. Moore (1994) notes that an important aspect of social skill instruction is determining the degree to which the skill is present in a learner's repertoire. Assessment measures include adult ratings, peer evaluations, self-report measures and direct observation. Assessment of the social skills of a child with a disability should involve a combination of these measures by more than one informant.

Adults, such as parents and teachers, are the major sources of information about children's social behavior (Cartledge & Milburn, 1995). Data is gathered via a variety of scales, inventories and observation techniques such as the: Revised Child Behavior Checklist (CBCL) (Achenbach, 1983); the Matson Evaluation of Social Skills for Youth (MESSY) (Matson, Rotatori, &
Helsel, 1983); and the Social Behavior Assessment (Stephens, 1992). These checklists and rating scales are commonly used by parents, teachers, and other professionals to specify skill areas in need of intervention.

Peer evaluations include nominations, peer ratings, paired comparisons, roster-ratings and peer assessment. These measures generally ask children to rate characteristics such as popularity, acceptance and rejection. The consensus of the peer group is likely to reflect consistencies in performance and stable characteristics (Kazdin, 1987). This information is relevant given the difficulties that children with behavior disorders evidence in each of these areas.

Self-report measures, in the form of scales, checklists and self-monitoring techniques, require the child to assess his own behavior. Self-report is not usually the primary source of information, but it can yield important details. Children can report on behaviors not overtly apparent to their teachers and parents. When combined with other evaluation instruments, self-report measures can be extremely useful (Cartledge & Milburn, 1995).

Naturalistic observations possess distinct advantages over other skill assessment methods because of their sensitivity, nonreactivity, objectivity, and specificity regarding antecedents and consequences of social interaction (Gresham, 1981). Direct observation can provide valuable information such as: the frequency and duration of occurrences, the settings in which a behavior occurs, as well as what other inappropriate responses are displayed. In collecting naturalistic observations, it is important to collect observations across
a variety of settings and across a variety of situations within a specific setting (Gresham, 1983). Observation provides unique and pertinent information by sampling behavior directly.

Assessment prior to teaching social skills helps determine which social behaviors are missing from the child's repertoire and need to be taught, and which behaviors need only to be increased through altering motivational conditions (Cartledge & Milburn, 1995). Assessment measures include adult ratings, sociometric measures, and self-report measures. None of these measures should be used as the sole assessment procedure, but rather a multi-method approach by more than one informant is important.

Teaching social skills. Social learning theory provides the framework for the procedures most commonly employed in social skills training (Cartledge & Milburn, 1995). The premise for this theory is that social behaviors are learned and can therefore be taught. A variety of teaching procedures have been developed to promote appropriate social behavior. Social modeling involves introducing a subject to a model of appropriate social behavior that enables him to learn via direct observation. Social skills training includes the use of instruction, coaching, modeling, behavioral rehearsal and reinforcement to foster social behavior. This training is generally conducted in small groups to allow for adequate practice of the target behaviors (Epstein & Cullinan, 1987). The research literature provides examples of this model's positive effects on the development of alternatives to aggression (Knapczyk, 1988).
Social skill instruction is shown to be effective with elementary and middle school-aged children with emotional and behavioral disturbances (Amish, Gesten, Smith, Clark & Stark, 1988); adolescents who are physically aggressive (Knapczyk, 1992); and high school students with severe behavior handicaps (Moore, 1994).

Amish et al., (1988) assessed the effects of social problem-solving (SPS) with 50 elementary and middle school-aged students with severe emotional disturbances. The intervention consisted of classroom-based lessons which taught a systematic approach to solving interpersonal problems. The following problem-solving steps were taught: (a) say how you feel and what the problem is; (b) decide on your goal; (c) stop and think before you act; (d) think of as many solutions as you can; (e) think ahead to what will probably happen next; and (f) when you have a really good solution, try it! Lessons were taught using a variety of instructional techniques such as: posters and other visual aids, class discussion, competitive games, role-plays, videotape modeling and feedback. Three social problem-solving measures were used to assess change: (a) an interview assessment - students were presented with problem situations and asked to generate solutions; (b) a role-play assessment - students were asked to role-play possible solutions to problem situations; and (c) a simulated problem situation - students' natural problem-solving behaviors were measured when confronted with a simulated situation. The results indicated that trained students gained significantly on both the interview and role-play measures, but not
significantly on the simulated problem situation, relative to the control children. In addition, results demonstrated that students with severe emotional disturbances were able to learn problem-solving skills.

Knapczyk (1992) studied the effects of developing alternative responses on the aggressive behavior of three high school students with behavior disorders. Each student's behavior was assessed prior to initiating the study to determine the circumstances that seemed to provoke aggressive acts. Two categories of antecedent events were defined: provoking - interactions which would usually produce an aggressive response; and nonprovoking - interactions that usually did not produce an aggressive response. Responses were categorized as either aggressive behavior - a threatening or obscene response; or alternative behavior - a response appropriate for the setting. The study was conducted in three settings: a special education classroom, gym class, and a multipurpose area. Small group training sessions used videotapes to model, rehearse, and provide feedback of appropriate alternatives to aggressive behavior. Results showed that aggressive acts were replaced with alternative behavior. Additionally, decreases in the number of provoking events and increases in the number of nonprovoking events occurred. According to the researcher, the findings "seem to show that rehearsal of alternative responses was a useful adjunct to modeling because it gave the subjects opportunities to demonstrate an understanding of the relationship between antecedent events
and their actions and to generate their own alternatives. In addition, rehearsal allowed the teachers to give feedback regarding the alternatives" (p. 262).

Moore (1994) examined the effects of social skill instruction on the appropriate play behaviors (reactions-to-anger, reactions-to-winning, reactions-to-losing) of three secondary students with severe behavior handicaps. The intervention consisted of an adapted form of the social skill training model developed by Goldstein (1988). Appropriate play behaviors were taught using a 5-step approach involving: rationale, modeling, role-play, personal experience and homework assignments. Detailed lesson plans were used to teach the target skills each day. Responses of the targeted behavior were recorded each session on a data recording form. Responses were designated as either appropriate or inappropriate. The study was conducted in two settings: the special education classroom and the gymnasium. Results indicated an increase in appropriate play behaviors across settings for all subjects and a decrease in inappropriate play behaviors across settings for all subjects. In addition, social skill instruction proved to have positive effects on the development of appropriate play behaviors while self-monitoring proved effective in the generalization and maintenance of those behaviors.

Summary. Students with severe emotional disturbances are able to learn appropriate social skills through the use of social learning techniques. However, in spite of the effectiveness of these procedures for promoting skills acquisition, few studies have demonstrated maintenance and generalization of
the skills trained (Gresham, 1981). Harris (1984) notes that, teaching social
skills to students is not a particularly difficult task, but teaching students to use
the social skills they have learned in appropriate situations is a real challenge.
Therefore, programming for generalization and maintenance of social skills is an
important component of research.

Generalization and Maintenance of Social Skills

The main interest of any training or treatment program (and where most
training and treatment programs fail) is not the participants' performance in the
training site but, instead, how well they perform in their real lives (Sprafkin et al.,
1993). Social behaviors need to be generalized to different settings and people
and need to be maintained over time. Research has identified a number of
procedures which enhance the probability that behaviors will generalize and be
maintained including: training in more than one setting and with more than one
trainer, structuring the training setting to approximate the real-life environment,
and developing self-management skills. These procedures need to be planned
and implemented into the treatment program. According to Moore (1994) one
technique that may prove effective for promoting generalization and
maintenance of social skills is self-monitoring.

Self-monitoring. Self-monitoring suggests that the student concurrently
assess and record the occurrence of a target behavior (Ninness, Fuerst,
Rutherford, & Glenn, 1991). Researchers report self-monitoring procedures to

Warrenfeltz et al. (1981), studied the effects of a combination role-play and self-monitoring technique with four adolescents with emotional disturbances. The study was conducted in two settings: the intervention site - the classroom, and the generalization site - the vocational training room. It was conducted within EMPLOY, a vocational training program for youth with disturbances. Intervention was designed to teach students to: identify instructions given by a work supervisor, state appropriate responses to instructions, and identify appropriate responses in a teacher demonstration. This intervention procedure resulted in rapid acquisition of appropriate responses, however little change occurred in the generalized setting. A subsequent intervention, in which students were subjected to role-play training and taught to use a self-monitoring procedure, produced generalized increases in the targeted social skill. The results indicated that generalized changes in the prosocial behavior of adolescents with emotional disturbances can occur from the training setting.

Ninness et al. (1991) assessed the effects of self-management training and reinforcement on the transfer of improved conduct with three adolescents with seriously emotional disturbances. The study was conducted in two settings: the special education classroom and the hallway between classes. The goals of the treatment program were for students to acquire appropriate social behavior
and be able to transfer this improved conduct in the absence of supervision.

Instruction consisted of social skills training, self-management training and reinforcement. Treatment procedures included instruction, modeling, and role playing of social skills, as well as self-assessment, self-recording, and self-reinforcement for correct approximations of these skills. The results of this study indicated improvements in classroom behavior when the teacher was absent; however transfer did not occur in the hallway between classes until self-management procedures were introduced in that setting. This study suggests that a social skills training model including modeling and behavioral rehearsal, coupled with a self-management procedure, may be an effective treatment for increasing prosocial behavior across conditions.

Kiburz et al. (1984) investigated the separate effects of structured learning (using modeling, role-playing, and performance feedback) and self-monitoring procedures on promoting maintenance and generalization of social skills across settings with an adolescent with severe behavior disorders. Social skills instruction took place in the special education classroom. Generalization probes took place in three settings: the hallway, the student lounge, and a vocational setting. Skills to be trained were identified by subjective evaluation prior to instruction. Training consisted of four major components: (a) modeling, (b) role-playing, (c) performance feedback, and (d) transfer of training. According to the researchers, "the structured learning process (modeling, role-playing, and performance feedback) resulted in a rapid acquisition of new social
skills" (p. 51). Generalization of performance occurred for all settings and was highest when self-monitoring was paired with reinforcement. The results of this study indicate that a structured learning intervention, combined with a self-monitoring technique, may be an effective treatment for increasing prosocial behavior across settings.

Generalization and maintenance of social skills are not automatically occurring processes. Once social skills have been selected, assessed, and successfully taught, the remaining task is to make sure the child can exhibit the skills when and where it is desirable to use them (Cartledge & Milburn, 1995). Programming for generalization and maintenance is an essential part of a social skills training program and needs to be addressed.

Summary

Children and adolescents with severe behavior handicaps typically exhibit inappropriate social behavior and have difficulty establishing productive social relationships. Since behavior is learned, this social incompetence and lack of skills in social interactions must be remediated through direct social skill instruction. Social skills training has been proven to have a positive effect on the development of prosocial behaviors. Generalization and maintenance of skills needs to be programmed as part of the training process. Self-monitoring may prove effective for promoting generalization and maintenance of social skills. The purpose of this study was to assess the effects of direct social skill
instruction on anger-control behaviors and the effects of self-monitoring on generalization and maintenance.
CHAPTER II

METHOD

The second chapter contains information relating to the methods of this study. The following components are discussed: participants, setting, experimenter, definition and measurement of both dependent variables, observers and their training, reliability of data, experimental design, materials, procedures, and measures of social validity.

Participants

The participants were three male students with severe behavior handicaps (SBH) attending middle school in a large metropolitan school district and placed in a self-contained classroom for students with SBH. The students were seventh graders ranging in age from 12 to 13 years for a mean age of 13 years 1 month. Their placement in the classroom for SBH students was based on the severity of behavioral difficulties in the general education classroom.

Teachers are required to assess student behavior at the beginning of the school year and at the time of the IEP periodic review, which occurs at the conclusion of the school year. The instrument used for this assessment is the
Behavior Evaluation Scale (BES). The BES contains five categories in which students are assessed and is based on the components of SBH definition. An overall score is then determined and is referred to as the behavior quotient. The normal score of general education students should be 100. Students placed in the SBH program are likely to score below 75. The behavior quotient of the students selected for this study ranged from 58 to 80 for a mean score of 71.

The students selected showed deficits in the area of anger-control and tended toward both physical and verbal aggression. Academic and background behavioral information was taken from school files while current behavioral information was gathered through direct observation.

Each of the students had an Individualized Education Program (IEP) goal of controlling his reactions to anger. The SBH classroom teacher, her instructional assistant and the boys' physical education teacher were interviewed regarding their observations of such things as verbal and physical aggression, leaving classrooms or other designated areas without permission, excessive profanity, and failure to complete assigned tasks. The students selected for participation in the study were those observed as having the most difficulty controlling anger.

The first student was a 12-year-old African-American male in the seventh grade. He was from a low socioeconomic background and lived with a foster parent. His school behavior was described as violent, aggressive and disruptive. He performed at a 4th grade level in math and a 3rd grade level in
reading according to the Wrat-2R. He received instruction in a self-contained classroom, but transitioned for lunch, physical education, art, industrial arts, home economics and computer.

The second student was a 12-year-old African-American male in the seventh grade. He was from a low socioeconomic background and lived with his grandmother. His school behavior was described as destructive, confrontational and disruptive. He performed at a 4th grade level in math and a 3rd grade level in reading according to the Wrat-2R. He received instruction in a self-contained classroom, but transitioned for lunch, physical education, art, industrial arts, home economics and computer.

The third student was a 13-year-old Caucasian male in the seventh grade. He was from a low socioeconomic background and lived with his mother. His school behavior was described as impulsive, aggressive, oppositional and disruptive. He performed at a 6th grade level in math and a 7th grade level in reading according to the Wrat-2R. He received instruction in a self-contained classroom, but transitioned for lunch, physical education, art, industrial arts, home economics and computer. (See Table 2 for student profiles).

Observations took place for 30 minutes a day on Mondays, Wednesdays and Fridays during each student's scheduled physical education period. All three students had physical education at different times during the day.

Permission was obtained from each student's parent or guardian prior to initiating the study. (See Appendix D).
Table 2

Profile of Students 1, 2, 3, and 4

<table>
<thead>
<tr>
<th>Student</th>
<th>Race</th>
<th>Sex</th>
<th>Age</th>
<th>Grade</th>
<th>Socio-Economic Status</th>
<th>Math Grade Level</th>
<th>Reading Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Black</td>
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<td>12</td>
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<td>13</td>
<td>7</td>
<td>Low</td>
<td>6</td>
<td>7</td>
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</table>
Setting

This study was conducted in an urban public middle school located within a large metropolitan area in the Midwestern United States. Instruction in social skills took place in the gym equipped with bleachers, one chalkboard, one desk, six basketball rims, a dividing curtain, a volleyball net and various other sports equipment (see Appendix A for a diagram of the gym). Three members of the class for SBH participated individually in this instruction. The students were observed during their regular 30-minute physical education class, which takes place in the gym.

Experimenter

The experimenter was a third-year teacher of physical education pursuing a Master of Arts degree in Special Education. She received her Bachelor of Arts degree in Physical Education and Health from Mount Vernon Nazarene College in 1986. She had prior experience with students with SBH working as an intern in a residential treatment facility for one year. The experimenter served as the social skill instructor during the course of this study.

Definition and Measurement of Dependent Variables

Two dependent variables were measured in this study. The dependent variables were: 1) frequency of appropriate reactions-to-anger behaviors, and 2) frequency of inappropriate reactions-to-anger behaviors.
Appropriate reactions-to-anger behaviors. Appropriate reactions-to-anger behaviors were defined as the occurrence of any of the following behaviors during physical education class: ignoring the situation by not responding to the person who is making him angry, trying to resolve the situation through a discussion of the problem, walking away from the adverse situation, and/or seeking help from a peer or an authority figure.

Measurement consisted of counting the number of times a student made any of these appropriate reactions-to-anger responses during a 30-minute class session. A data recording form was used to record responses of the targeted behaviors for each subject during each class session.

Inappropriate reactions-to-anger behaviors. Inappropriate reactions-to-anger behaviors were defined as the occurrence of any of the following behaviors during physical education class: displaying physical aggression by hitting, pushing, kicking, spitting at or tripping another person or by throwing equipment at another person; engaging in verbal aggression such as name-calling, taunting, or teasing; attempting to destroy property; and/or using profanity.

Measurement consisted of counting the number of times a student made any of these inappropriate reactions-to-anger responses during a 30-minute class session. A data recording form was used to record responses of the targeted behaviors for each subject during each class session.
Observers

The experimenter served as the primary observer. The experimenter sat at a desk in the corner of the gymnasium and recorded data using a data recording form (see Appendix B). The SBH instructional assistant and the boys' physical education teacher were trained to serve as secondary observers to establish interobserver agreement. The SBH instructional assistant used the same recording form as the experimenter.

The boys' physical education teacher recorded data of the target student's behavior while conducting instruction by using paper clips as counters. He had 30 large paper clips signifying appropriate reactions-to-anger in his upper left shirt pocket and 30 small paper clips signifying inappropriate reactions-to-anger in his left pants pocket. When the student responded appropriately, the teacher took a large paper clip out of his upper left shirt pocket and transferred it to his right pants pocket. When the student responded inappropriately, the teacher took a small paper clip out of his left pants pocket and transferred it to his right pants pocket. At the end of the period, the teacher counted the number of large and small paper clips in his right pants pocket and transferred those numbers onto a data recording form (making sure that he still had a total of 60 paper clips).

Observer Training. The secondary observers were trained in data collection prior to initiating the study. They were trained in the gymnasium setting during free play activities. During the first two training sessions open
discussion took place on identifying the target behaviors. During the third and fourth training sessions the secondary observers practiced identifying the target behaviors by independently recording each occurrence on the daily recording form. The final training session, which consisted of independent recording, was held to verify an acceptable level of agreement (85%) between observers.

**Interobserver Agreement**

The secondary observers recorded data independently on one randomly selected day per week. Interobserver agreement, or the percent of agreement, was calculated by dividing the number of agreements by the number of agreements plus the number of disagreements and multiplying that number by 100. The minimum acceptable level of agreement was 85%.

**Experimental Design**

A multiple baseline across subjects design was used to apply the same anger-control behaviors of several different subjects. This design allowed the experimenter to analyze the effects of social skills training and self-monitoring on anger-control behaviors without withdrawing treatment and reversing improvements in behavior. This feature of the multiple baseline design made it the most appropriate method for analyzing independent variables that cannot, by their nature, be withdrawn and for investigating target behaviors that are likely to be irreversible (Cooper, Heron, Heward, 1987). A second treatment condition
involving self-monitoring was implemented following social skill instruction to facilitate maintenance of the target skill.

**Materials**

**Daily lesson plans.** Detailed lesson plans were used to teach the target skills each day. The organization of the lesson plans was based on a structured learning social skills training model (Sprafkin, Gershaw, Goldstein 1993; Goldstein 1988). Lesson plans were modified according to Moore 1994. (See Appendix C).

**Play activities.** The play activities to be observed included: basketball, floor hockey, flag football, softball, kickball, fitness or other planned activities.

**Data recording form.** A data recording form was used to record responses of the targeted behaviors for each subject for each session.

**Self-monitoring form.** Self-monitoring forms were utilized during and following social skill instruction. Students recorded the frequency of their appropriate and inappropriate behaviors after each gym session. (See Appendix F).

**Consent form.** The parent or guardian of each participant was sent a letter requesting permission for their child's participation in the study.

**Social validity questionnaire.** A survey was administered to the students at the conclusion of the study to assess their attitudes and opinions about the social skill instruction and self-monitoring. (See Appendix E).
Procedures

General Instruction Procedures

Social skill instruction took place Monday through Friday from 8:00 - 8:30 a.m. Each student was instructed on an individual basis for a period of 10 days. Observations took place for 30 minutes a day on Mondays, Wednesdays and Fridays during each student's scheduled physical education period. All three students had physical education at different times during the day.

Baseline

The students were observed for occurrences of appropriate and inappropriate anger-control behaviors in the gymnasium. The experimenter collected data on each subject's target behaviors for 8 days prior to social skill instruction. The student selected for social skill instruction first was designated Student 1. The other students continued to be monitored under baseline conditions. After 10 days of social skill instruction was completed for Student 1, social skill instruction began with Student 2 and so on, until all three students had received social skill instruction. Data for the baseline condition were recorded on Mondays, Wednesdays and Fridays during each student's 30-minute physical education class. Students participated in one or more of the following play activities in the gymnasium: basketball, floor hockey, flag football, softball, kickball, fitness or other planned activities.
Social Skill Instruction and Self-Monitoring

The social skill to be taught during this condition was appropriate reactions-to-anger. Social skill instruction took place for 10 days for each student. Social skill instruction occurred during 30 days of this study. Each student received social skill instruction individually. Observations took place for 30 minutes a day on Mondays, Wednesdays and Fridays during each student's scheduled physical education period. Following the physical education session each student used a self-monitoring form to record occurrences of the target behaviors. All three students had physical education at different times during the day.

The appropriate reactions-to-anger skill was taught using a skillstreaming approach as outlined by Sprafkin, et al. (1993). The four major components of Structured Learning are: 1) modeling, 2) role playing, 3) performance feedback, and 4) transfer of training. The first component provided the student with a model (the teacher) demonstrating the skill to be learned. The second component required the student to practice the skill that had been demonstrated. The third component involved the teacher providing the student with feedback on how well he did during the role playing. The fourth and final component required the student to practice the same skill in different situations and with different people.

Component 1 - Modeling. This component of instruction involved social modeling. The teacher used a role play situation to model appropriate ways to
handle situations which cause a person to become angry. Two positive (appropriate) reactions were role played with a discussion following each to ensure that the student understood the skill. One negative (inappropriate) reaction was also role played in order to show the distinct differences between the appropriate and inappropriate ways to handle the situation. As an example, the teacher assumed the role of student A, and the student assumed the role of student B. The situation: student B makes fun of the way student A is dressed.

Positive reaction 1: Student A ignores student B's comments and walks away.

Positive reaction 2: Student A turns away from student B and counts to ten under his breath. Negative reaction 1: Student A threatens to hit Student B if he doesn't shut up.

Component 2 - Role Playing. The second component of instruction involved the student practicing the skill that had been demonstrated. The student was given a script to follow in which he was in a situation that made him angry. He then role played an appropriate way to handle the situation. The student only role played positive reactions-to-anger. As an example, the student assumed the role of Jamaar, and the teacher assumed the role of Theo. The situation: Jamaar and Theo are playing basketball in the gym. Theo notices that Jamaars' tennis shoes are not the "in" brand and begins to make fun of him.

Theo: What's the problem, Jamaar? Can't your mom afford to buy you Nike's?
Jamaar: No, that's not it. My good shoes got muddy this morning and I had to wear these old ones.

Theo: Yea, I bet you are just too poor.

Jamaar: Theo, I don't like the way you try to put me down. (Jamaar walks away.)

A discussion followed to ensure that the student understood the skill. Once it was clear that the student understood the skill, the student was allowed to create his own script. The student was encouraged to use personal experiences to script and role play the skill.

Component 3 - Performance Feedback. The third component of instruction involved the teacher providing feedback on the student's role playing performance. Feedback most often took the form of social reinforcement (i.e., praise, encouragement) and was contingent on successful performance of the target behavior. The teacher verbally reinforced appropriate behaviors while explaining to the student the adverse effect of his inappropriate actions or behaviors. As an example, the student role played a scripted situation and effectively performed the target skill. The teacher responded by encouraging the student that he did a good job and should keep up the good work. The student then scripted his own role play but, his performance of the target skill was inappropriate and could get him put in PEAK (in-school suspension). The teacher responded by discussing why the student's performance was inappropriate and how his inappropriate behavior was harmful to himself (he
could get put in PEAK). The teacher then provided alternatives which the student could choose in this situation to respond appropriately.

Component 4 - Transfer of Training. The final component of instruction involved the student practicing the same skill in different situations and with different people. As an example, the student practiced the skill of ignoring. The student was put in three or four different situations in which ignoring would be an acceptable reaction, for example a fellow student called him a name or challenged him to a fight. The student responded to the different situations by using the target skill of ignoring. A discussion followed to ensure the student understood that the target skill could be used in a variety of situations. The student was then put in the same situation with different people (another teacher, another student, the SBH instructional assistant) and responded to each by ignoring them. A discussion followed to ensure the student understood that the target skill could be used in the same situation with different people.

Self-Monitoring Condition

Following the completion of baseline, during and after social skill instruction each student used a self-monitoring form to promote generalization and maintenance of appropriate anger-control behaviors. The experimenter continued the daily recording of target behaviors for each of the target students. Verbal reinforcement was given to a student whose self-monitoring form closely matched the recording form of the experimenter. The student tallied each
behavior he exhibited following the observation session. A discussion about the student's behavior followed each session.

**Social Validity**

At the conclusion of the study the students independently completed a social validity questionnaire. The questionnaire asked the students if they enjoyed the social skill instruction and self-monitoring, if they felt that it was beneficial in helping them control their anger, and if they thought it was a fun way to learn.
CHAPTER III

RESULTS

This chapter presents the results of the effects of social skill instruction and self-monitoring on anger-control behaviors of middle school-aged children with severe behavior handicaps. The results include: (a) interobserver agreement measures, (b) each subject's mean scores for the dependent variables, (c) group scores for the dependent variables, and (d) social validity responses.

Interobserver Agreement

Interobserver agreement data were collected on 11 (33%) of the sessions across all phases of the study. Interobserver agreement was calculated by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100. The overall mean agreement was 91%, with a range of 86%-100%. Table 3 shows the results of interobserver agreement for each observation session.
### Table 3

**Interobserver Reliability Scores**

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<tr>
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Mean and Range of Dependent Variables

**Student 1.** During baseline, the mean number of appropriate anger-control behaviors for Student 1 was .88, with a range of 0 to 2. The mean number of inappropriate anger-control behaviors was 23.5, with a range of 20 to 27 during the 30-minute session. During social skill instruction, the mean number of appropriate anger-control behaviors was 7.7, with a range of 6 to 9, while the mean number of inappropriate anger-control behaviors was 15.9, with an range of 13 to 18 per 30-minute session. After instruction and during self-monitoring only, Student 1's mean number of appropriate anger-control behaviors was 13.1, with a range of 10 to 16. The mean number of inappropriate anger-control behaviors during this condition was 11.5, with a range of 9 to 13 per 30-minute session. (See Figure 1 and Table 4 for behavior results for Student 1).

**Student 2.** During baseline, the mean number of appropriate anger-control behaviors for Student 2 was 2.6, with a range of 0 to 5. The mean number of inappropriate anger-control behaviors was 19.2, with a range of 17 to 24 during the 30-minute session. During social skill instruction, the mean number of appropriate anger-control behaviors was 10, with a range of 7 to 12, while the mean number of inappropriate anger-control behaviors was 15.3, with an range of 14 to 16 per 30-minute session. After instruction and during self-monitoring only, Student 2's mean number of appropriate anger-control behaviors was 13.5, with a range of 11 to 17. The mean number of
Figure 1. Number of Appropriate and Inappropriate Anger-Control Behaviors per 30-Minute Session in the Gymnasium
inappropriate anger-control behaviors during this condition was 12.1, with a range of 9 to 15 per 30-minute session. (See Figure 1 and Table 4 for behavior results for Student 2).

**Student 3.** During baseline, the mean number of appropriate anger-control behaviors for Student 3 was 3.8, with a range of 2 to 6. The mean number of inappropriate anger-control behaviors was 14.3, with a range of 12 to 18 during the 30-minute session. During social skill instruction, the mean number of appropriate anger-control behaviors was 10, with a range of 7 to 13, while the mean number of inappropriate anger-control behaviors was 7.3, with an range of 5 to 10 per 30-minute session. After instruction and during self-monitoring only, Student 3's mean number of appropriate anger-control behaviors was 13.5, with a range of 13 to 14. The mean number of inappropriate anger-control behaviors during this condition was 4.5, with a range of 3 to 6 per 30-minute session. (See Figure 1 and Table 4 for behavior results for Student 3).

**Group.** During baseline, the mean number of appropriate anger-control behaviors for the group of three students was 2.4, with a range of 0 to 6. The mean number of inappropriate anger-control behaviors was 19, with a range of 12 to 27 during the 30-minute session. During social skill instruction, the mean number of appropriate anger-control behaviors was 9.2, with a range of 6 to 13, while the mean number of inappropriate anger-control behaviors was 12.8, with a range of 5 to 18 per 30-minute session. After instruction and during self-
Table 4

Mean and Mean Increase/Decrease of Appropriate and Inappropriate Anger-Control Behaviors in the Gymnasium per 30-Minute Session for Students 1, 2, and 3.

<table>
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<th>Student</th>
<th>Baseline Average</th>
<th>Instruction Average</th>
<th>Mean Increase Or Decrease from Baseline</th>
<th>Self-Monitoring</th>
<th>Mean Increase Or Decrease from Baseline</th>
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<tr>
<td>1</td>
<td>.9</td>
<td>23.5</td>
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<td>+6.8</td>
</tr>
<tr>
<td>2</td>
<td>2.6</td>
<td>19.2</td>
<td>10.0</td>
<td>15.3</td>
<td>+7.4</td>
</tr>
<tr>
<td>3</td>
<td>3.8</td>
<td>14.3</td>
<td>10.0</td>
<td>7.3</td>
<td>+6.2</td>
</tr>
</tbody>
</table>

+ INCREASE
- DECREASE
monitoring only, the mean number of appropriate anger-control behaviors was 13.4, with a range of 10 to 17. The mean number of inappropriate anger-control behaviors during this condition was 9.4, with a range of 3 to 15 per 30-minute session.

**Visual Analysis of Data**

**Student 1.** During baseline, eight data points were collected for Student 1. During this condition, the data path for appropriate anger-control behaviors showed a gradually increasing trend with a low variable level of responding, while inappropriate anger-control behaviors showed a gradually decreasing trend with a high variable level of responding. During instruction, seven data points were collected for Student 1. During this condition, the data path for appropriate anger-control behaviors showed a rapidly increasing trend with a stable mid-level of responding, while inappropriate anger-control behaviors showed a rapidly decreasing trend with a stable mid-level of responding. During self-monitoring, sixteen data points were collected for Student 1. During this condition, the data path for appropriate anger-control behaviors showed a gradually increasing trend with a variable mid-level of responding, while inappropriate anger-control behaviors showed a gradually decreasing trend with a variable mid-level of responding. The data paths finally cross during this condition (a number of times actually), with the appropriate anger-control behaviors consistently outnumbering the inappropriate ones during the final five
sessions of self-monitoring. From our visual analysis of the data for Student 1, we can conclude that a meaningful change in behavior did take place and was maintained over time.

**Student 2.** During baseline, fourteen data points were collected for Student 2. During this condition, the data path for appropriate anger-control behaviors showed a gradually increasing trend with a low variable level of responding, while inappropriate anger-control behaviors showed a gradually decreasing trend with a high variable level of responding. During instruction, seven data points were collected for Student 2. During this condition, the data path for appropriate anger-control behaviors showed a rapidly increasing trend with a stable mid-level of responding, while inappropriate anger-control behaviors showed a zero trend with a stable mid-level of responding. During self-monitoring, eight data points were collected for Student 2. During this condition, the data path for appropriate anger-control behaviors showed a gradually increasing trend with a variable mid-level of responding, while inappropriate anger-control behaviors showed a gradually decreasing trend with a variable mid-level of responding, although some data is missing for this condition. The data paths cross twice during this condition, with the appropriate anger-control behaviors consistently outnumbering the inappropriate ones during the final four sessions of self-monitoring. From our visual analysis of the data for Student 2, we can conclude that a meaningful change in behavior did take place and was maintained over time.
**Student 3.** During baseline, nineteen data points were collected for Student 3. During this condition, the data path for appropriate anger-control behaviors showed a gradually increasing trend with a low variable level of responding, while inappropriate anger-control behaviors showed a gradually decreasing trend with a high variable level of responding. During instruction, seven data points were collected for Student 3. During this condition, the data path for appropriate anger-control behaviors showed a rapidly increasing trend with a stable mid-level of responding, while inappropriate anger-control behaviors showed a rapidly decreasing trend with a stable mid-level of responding. During self-monitoring, two data points were collected for Student 3. During this condition, the data paths for appropriate and inappropriate anger-control behaviors showed no meaningful trend due to a lack of data. The data paths cross early in the instruction condition, with appropriate anger-control behaviors showing a stable rapid increase and the inappropriate anger-control behaviors showing a stable rapid decrease during the remainder of the condition. Appropriate anger-control behaviors continue to outnumber inappropriate ones during self-monitoring although the number of data during this condition is insufficient. From our visual analysis of the data for Student 3, we can conclude that a meaningful change in behavior did take place. Maintenance, however, could not be determined.

**Group.** During baseline, a variable level of responding was noted for all three students. Each student showed a gradual increase in appropriate anger-
control behaviors and a gradual decrease in inappropriate anger-control behaviors during this condition. This may be due in part to the presence of an observer in the instructional setting. The most stable and rapid changes in behavior occurred during the instruction condition. With the exception of inappropriate anger-control behaviors for Student 2, all three students showed stable and rapid increases in appropriate anger-control behaviors and stable and rapid decreases in inappropriate anger-control behaviors during this condition. We can conclude then that the combination of social skill instruction and self-monitoring produced significant and immediate change in both appropriate and inappropriate anger-control behaviors across students. During self-monitoring, a variable level of responding was again apparent. Because insufficient data was available for Student 3, we can only compare the results for students 1 and 2. Both showed gradual increases in appropriate anger-control behaviors and gradual decreases in inappropriate anger-control behaviors during this condition. We must conclude then that self-monitoring alone can produce maintenance of the acquired skills.

Social Validity Results

At the conclusion of the study, the students were given a student opinion questionnaire to relate their feelings about the social skill instruction and self-monitoring. Each student completed the questionnaire independently. Students were encouraged to make additional comments following each question. All
three of the target students completed the form and each of the students reported that they liked the instruction overall. Student 1 did not make any additional comments. Student 2 commented that he hopes that learning to control his anger will help him achieve his goal of attending college and playing basketball. Student 3 commented that he really enjoyed the role playing. All students reported that self-monitoring was helpful although Student 2 did not enjoy the task itself. Specific results of each question are listed in Table 5.
Table 5

Social Validity Results

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<thead>
<tr>
<th>Questions:</th>
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<th>No</th>
</tr>
</thead>
<tbody>
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<td>1. Did you like role playing the different behaviors?</td>
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<td>0</td>
</tr>
<tr>
<td>2. Do you feel the instruction was helpful?</td>
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<td>1</td>
</tr>
<tr>
<td>3. Are you dealing with your anger better?</td>
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</tr>
<tr>
<td>4. Do you feel your sportsmanship has improved?</td>
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</tr>
<tr>
<td>5. Did you like monitoring your behavior?</td>
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<td>1</td>
</tr>
<tr>
<td>6. Do you feel that monitoring your behavior was helpful?</td>
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<td>0</td>
</tr>
<tr>
<td>7. Would you like to do more activities about getting along with others?</td>
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CHAPTER IV
DISCUSSION

Students with severe behavior handicaps typically exhibit inappropriate types of behavior, a general mood of unhappiness, and difficulty relating with teachers and peers. These deficiencies interfere with school success and eventual adult competence. The ability to resolve successfully and appropriately conflicts or problems that arise in real-life interpersonal situations is one component of normal behavior lacking in students with behavior disorders (Chazan, Laing, Jones, Harper & Bolton, 1983). These deficiencies isolate students from their peers and from involvement in normal social situations. Students with severe behavior handicaps need to receive social skills training on a regular basis in order to acquire the necessary skills that contribute to overall social and academic competence.

The purpose of this study was to examine the effects of social skill instruction and self-monitoring on the anger-control behaviors of middle school students with severe behavior handicaps. This study demonstrated that social skill instruction had a positive effect on: (a) increasing the number of appropriate anger-control behaviors, and (b) decreasing the number of
inappropriate anger-control behaviors. An additional outcome of this study was that these behaviors persisted through self-monitoring.

This chapter presents a discussion of the research questions, the limitations of the study, recommendations for future research, and a final summary of the study.

**Research Questions**

The initial research question in this study addressed what effect social skill instruction and self-monitoring would have on appropriate reactions-to-anger behaviors during competitive game activities in the gymnasium. All three students showed increases over baseline in appropriate anger-control behaviors, during both the instruction and self-monitoring conditions of this study. All three students showed the greatest increases during instruction, but continued to increase gradually during self-monitoring.

The second research question in this study addressed what effect social skill instruction and self-monitoring would have on inappropriate reactions-to-anger behaviors during competitive game activities in the gymnasium. All three students showed decreases over baseline in inappropriate anger-control behaviors during both the instruction and self-monitoring conditions of this study. All three students showed the greatest decreases during instruction, but continued to decrease gradually during self-monitoring.
The third research question in this study addressed student opinions on the benefits and enjoyment of social skill instruction. All three students reported that they liked the instruction overall and really enjoyed the role playing. Two of the students thought the instruction was helpful, although all three believed that they were controlling their anger better. All three students felt that the self-monitoring was beneficial even though one really did not enjoy the task itself.

During baseline, Student 1 had the highest incidence of inappropriate and the lowest incidence of appropriate reactions-to-anger of the three students involved in this study. Student 1 showed a dramatic improvement in both behaviors during the instruction condition and continued to improve, although vacillating at times during self-monitoring. One reason for this wavering during the self-monitoring condition could have been the fact that Student 1 often forgot to fill out a self-monitoring form. Therefore, the absence of self-monitoring may have weakened the maintenance effective of this intervention.

Student 2 improved his anger-control behaviors under all conditions. His appropriate reactions-to-anger increased and his inappropriate reactions-to-anger decreased in both the instruction and self-monitoring conditions of this study. One reason for this might have been the fact that Student 2 seemed motivated by teacher approval. Once instruction was implemented, Student 2 constantly sought teacher attention and approval during the class session. Positive reinforcement during the class session may have acted as a stimulus which increased the overall effectiveness of this intervention.
During baseline, Student 3 had the lowest incidence of inappropriate and the highest incidence of appropriate reactions-to-anger of the three students involved in this study. His improvement climbed steadily throughout all the conditions. One reason for this might have been the fact that Student 3 was very competitive and the most self-motivated of the three participants. The self-monitoring forms may have acted as a strong reinforcer for increasing appropriate and decreasing inappropriate reactions-to-anger for this student as he strived to "better" his score every day.

Group results indicated that social skill instruction and self-monitoring had a positive effect on a) increasing the number of appropriate anger-control behaviors and b) decreasing the number of inappropriate anger-control behaviors. An additional finding in this study was that these behaviors were maintained through self-monitoring. All three students showed increases over baseline in appropriate anger-control behaviors during both the instruction and self-monitoring conditions of this study.

The results of this study indicate that students who exhibit inappropriate anger-control behaviors and are deficient in the skills necessary to interact in normal social situations can acquire these skills through training procedures which include modeling, role playing, performance feedback, and transfer of training. Another important result of this study is the maintenance effect of these acquired skills through self-monitoring. The results of this study support the findings of past research, e.g. Moore (1994). Moore (1994) found that social
skill instruction had a positive effect on both the appropriate and inappropriate anger-control behaviors of the students. In addition, her study showed that the target behaviors were not only maintained but continued to improve during self-monitoring.

Students with severe behavior handicaps lack the skills necessary to perform in normal social situations resulting in negative responses from teachers/authority figures, poor academic performance, and poor peer relationships. According to Sprafkin et al. (1993), performance of aggressive behaviors often results from a social skill deficit. This would suggest that students who exhibit aggressive behaviors must acquire social skills to perform successfully in normal social situations.

The implications of these findings are that if some level of social competence can be attained, behavior problems may decrease, academic performance may increase, and relationships may build with peers and teachers. As behavior problems decrease, opportunities for academic instruction may increase which will improve chances for learning and achievement (Moore, 1994). The development of normal social behavior may increase a student's acceptance into general education classes, once again increasing opportunities for success in, and possibly, out of the classroom. Students who develop skills necessary for positive relationships with peers and authority figures may show a higher level of achievement both personally and academically.
Limitations

One of the major limitations of this study was the data collection procedures in the gymnasium. Because this study took place during each student's own scheduled physical education period and no tape recording device was available, observers had several obstacles with which to contend. An additional class of students added an element of difficulty to recording every incidence of the target behaviors. Also, the noise level in the gymnasium at times made it challenging to record verbal interactions. Therefore, it is possible that some occurrences of the target behaviors were missed by the observers.

A second limitation of this study was the subjectivity of data collection. While the dependent variables were defined for the observers and observers were trained in data collection and the definition of the dependent variables, the observer's view of the actual student's response may have influenced the recorded data. As noted in Moore (1994), the dependent variables were behaviors that could not be strictly defined through objective measures. Several weeks of practice data collection may have helped to increase the reliability of this study.

A third limitation of this study was the effort towards generalizing training effects. Homework assignments, that is practicing the skill outside the instructional setting are viewed by various authorities (e.g., Cartledge & Milburn, 1995; Goldstein, 1988) as necessary for skill acquisition, maintenance and generalization to other settings. Because the students' academic pursuits took
place away from this treatment setting and the students' classroom teacher
reported a low percentage of completed homework assignments in her
classroom, no homework assignments were given. Therefore, the likelihood that
the students received any reinforcement for these skills outside the treatment
setting is remote.

Future Research

It seems clear that more research is necessary in the area of social skills
training for students with severe behavior handicaps. Similar studies might
address a broader range of skill acquisition. The treatment effect of social skill
instruction and self-monitoring needs to be assessed over a wider range of
behaviors to determine its overall effectiveness in promoting social competency.

Much more information is needed on the generalization of social skills
outside the instructional environment. Within the context of the school
environment, does the student exhibit the targeted behaviors in the classroom?
the cafeteria? the hallway? etc. It would be beneficial to study the generalization
of targeted social skills to a wide range of environments.

Another topic that would benefit from further research is the effect of the
social skills curriculum on the acceptance of the student with emotional and
behavior disorders by nondisabled peers. For a special education student to be
accepted into the general education classroom setting it must first be determined
which skills are necessary to participate in that environment.
Since social skill instruction and self-monitoring were implemented at the same time, their separate effects cannot be determined. Procedures that isolate these treatment variables would provide further evidence of their individual treatment effects.

Summary

The purpose of this study was to examine the combined effects of social skill instruction and self-monitoring on the anger-control behaviors of middle school students with severe behavior handicaps. Primarily, the study addressed what effect social skill instruction and self-monitoring would have on a) appropriate reactions-to-anger and b) inappropriate reactions-to-anger. Of secondary interest was the students' opinions regarding the benefits and enjoyment of social skill instruction. The participants were three male students with severe behavior handicaps (SBH) attending an urban public middle school in a large metropolitan school district and placed in a self-contained SBH classroom. The experimenter was a third-year teacher of physical education pursuing a Master of Arts degree in Special Education. The study took place over an eleven week period. Data were collected during each students' scheduled 30-minute physical education class. A multiple baseline across subjects design was used to apply the same anger-control behaviors of several different subjects. The study consisted of baseline, instruction and self-monitoring conditions. This study demonstrated that social skill instruction and
self-monitoring had a positive effect on a) increasing the number of appropriate anger-control behaviors and b) decreasing the number of inappropriate anger-control behaviors. An additional result of this study was that these behaviors were maintained through self-monitoring.
References


Moore, R. J. (1994). *The effects of social skill instruction and self-monitoring on anger-control, reactions-to-losing, and reactions-to winning behaviors of ninth grade students with severe behavior handicaps*. Columbus, Ohio: Ohio State University.


APPENDIX A

Diagram of the Gymnasium
APPENDIX B

Data Recording Form
<table>
<thead>
<tr>
<th>Date:</th>
<th>Student 1</th>
<th>Student 2</th>
<th>Student 3</th>
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<tr>
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<tr>
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<td>Observer:</td>
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APPENDIX C

Examples of Lesson Plans
SKILL: ANGER CONTROL

Part 1: Anger Control When Someone Teases You

OBJECTIVE: Students will control their anger by responding to teasing or name-calling by ignoring, changing the subject, or using some other nonaggressive means.

RATIONALE: Lance is walking down the hall when a student from another class begins to make remarks about the clothes Lance is wearing. The student insults Lance while the other students are around. Lance feels embarrassed and becomes very angry.

Component 1: Modeling

A. The instructor will assume the role of a student. A student will take the role of another student. The students have a misunderstanding and student A (student) becomes verbally abusive towards student B (instructor). Student B tries to ignore student A by walking away from him. While walking away student B counts to ten under her breath.

Ask students what student B did to control her anger.

Another example will be given. While on the basketball court one player says to another, "You shoot the ball like my grandmother!". The taunted player, who has been made very angry, simply walks away and ignores the comment.

B. The instructor asks for feedback on the modeling skits. All responses will be acknowledged. The following questions will be asked:
   a) What did the instructor do to control her anger?
   b) Do you feel she showed good anger control when she was taunted?
   c) What else could the basketball player have appropriately done instead of ignoring the comment?
   d) Who showed more control, the person who walked away, or the person who made the rude comments?

C. The instructor will make a list of key words the student use. Discussion will be directed to encourage words such as: patience, self-control, discipline, strength, etc.
The instructor will list specific steps of anger control on the board:

a) taking deep breaths
b) counting to ten
c) making calming self-statements
d) nonverbal assertive behaviors
e) walking away

Verbally praise those students who respond appropriately.

**Component 2: Role Playing**

**A. Students will be given scripts to read silently. Each student will be given an opportunity to role-play at least one part.**

**Role-Play #1**

**SITUATION:** Two students are waiting in line for their lunch. Billy does not have enough money to buy his lunch and feels embarrassed. Joe, who is in line behind him, is in a hurry to get his lunch.

**JOE:** What's the problem, Billy? Can't your mom afford to feed you?
**BILLY:** No, that's not it. I forgot my money this morning because I was in a hurry to catch the bus.
**JOE:** Yea, I bet you are just too poor.
**BILLY:** Joe, I don't like the way you try to put me down. (Billy walks away.)

**Role-Play #2**

**SITUATION:** The same as above.

**JOE:** What's the problem, Billy? Can't your mom afford to feed you?
**BILLY:** You shouldn't talk, Joe. Your family can't afford to buy you decent clothes.
**JOE:** (becoming angry) Your family has less money than mine. And if you don't stop talking mess I'm going to bust you up!
**BILLY:** (very angry) Come on Joe, let's just see what you are really made of!

**Role-Play #3**

**SITUATION:** Todd tries real hard to do well in school but has difficulty
getting good grades. He has a learning disability that keeps him from achieving at the same pace as the rest of the class. Hence, he often asks questions.

TODD: Mr. Wilson, could you please repeat what you said?
JEFF: Come on you big dummy! What's your problem? You are always behind.
TODD: (counts to ten to himself) I'm sorry, Mr. Wilson, but I still need your last comment repeated.

B. Following each reading the students will critique the actions of the person who is being taunted. The scripts will show both positive and negative examples of anger control.

Following the role-plays the following questions will be asked:
a) Who showed they had control over their anger? How?
b) What could the person who showed no control have done differently?
c) Why is it important to show good anger-control when someone makes you angry?

C. Ask students to share situations in which they have been taunted. Have students share how they handled the situation, what they would do differently, and how it made them feel. Allow each student to share his experience if he wishes.

Component 3: Performance Feedback
A. All appropriate responses and participation will be praised.

Component 4: Transfer of Training
A. The student will be given scripts involving the same skill in a variety of situations. The student will be given an opportunity to role-play the skill in these various situations and with various people (another teacher, another student, the SBH aide).

Role-Play #1

SITUATION: Two students are waiting in line for their lunch. Billy does not have enough money to buy his lunch and feels embarrassed. Joe, who is in line behind him, is in a hurry to get his lunch.
JOE: What's the problem, Billy? Can't your mom afford to feed you?
BILLY: No, that's not it. I forgot my money this morning because I was in a hurry to catch the bus.
JOE: Yea, I bet you are just too poor.
BILLY: Joe, I don't like the way you try to put me down. (Billy walks away.)

Role-Play #2

SITUATION: The same as above.

JOE: What's the problem, Billy? Can't your mom afford to feed you?
BILLY: You shouldn't talk, Joe. Your family can't afford to buy you decent clothes.
JOE: (becoming angry) Your family has less money than mine. And if you don't stop talking mess I'm going to bust you up!
BILLY: (very angry) Come on Joe, let's just see what you are really made of!

Role-Play #3

SITUATION: Todd tries real hard to do well in school but has difficulty getting good grades. He has a learning disability that keeps him from achieving at the same pace as the rest of the class. Hence, he often asks questions.

TODD: Mr. Wilson, could you please repeat what you said?
JEFF: Come on you big dummy! What's your problem? You are always behind.
TODD: (counts to ten to himself) I'm sorry, Mr. Wilson, but I still need your last comment repeated.

B. Following the role-play the student will critique his actions.

The student will assess his performance by answering the following questions:
a) What did you do to control your anger?
b) Do you feel you showed good anger control when you were being taunted?
c) What else could you have appropriately done instead of ignoring the comment?
d) How did it make you feel to be able to control your anger?
C. The instructor will list the appropriate steps the student took to control his anger on the board. The student will then list other appropriate ways he could have used to control his anger.
APPENDIX D

Consent Form
January 10, 1995

Dear (Parent),

This is a follow-up letter to the telephone conversation we had last evening. Beginning in mid-March, I will be introducing a social skill curriculum to your son's class. I am requesting permission for your son's participation in a study that will seek to determine the effectiveness of the social skill instruction on anger control. This study will help fulfill a graduate requirement through the Ohio State University.

Complete discretion regarding your son's identity will be maintained throughout the study and thereafter. Also, any time during the study you may request that your son be withdrawn from the study and it will be done. If you would like your son to participate in this study please complete the following form and send it to school with him. If you have further questions regarding the nature of the study or the involvement your son will have in this study, please contact me at Southmoor Middle School at 365-5550.

Sincerely,

Mindy Ross
I hereby consent for my child, __________________________, to participate in a study through the Ohio State University. I give permission for biographical data to be used in the study provided that his name is withheld. I understand that I may withdraw my son from the study at anytime and for any reason. I also understand that discretion will be used regarding my son's identity throughout the course of study and thereafter.

Signed __________________________

Date ____________________________
APPENDIX E

Social Validity Questionnaire
Name ____________________

Please answer the following questions.

1. Did you like role-playing the different behaviors?
2. Do you feel the instruction was helpful?
3. Are you dealing with your anger better?
4. Do you feel your sportsmanship has improved?
5. Did you like monitoring your behavior?
6. Do you feel that monitoring your behavior was helpful?
7. Would you like to do more activities about getting along with others?

Write any additional comments you have about social skills program, the role-playing, or self-monitoring.
APPENDIX F

Self-Monitoring Form
# SELF-MONITORING FORM

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<table>
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<tr>
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