THE EFFECT OF SOCIAL SKILL INSTRUCTION ON SPORT AND GAME RELATED BEHAVIORS OF CHILDREN AND ADOLESCENTS WITH EMOTIONAL OR BEHAVIORAL DISORDERS

DISSERTATION

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By

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Abstract

Children and youth with disabilities, especially those with mental, emotional, and learning disabilities often demonstrate deficits in social competence (Cartledge & Milburn, 1978; Gresham, Sungai, & Horner, 2001). Lack of appropriate social skills in physical education and sport by children with disabilities can lead to the lack of interaction and finally rejection by classmates without disabilities (Butler & Hodge 2004; Moore, Cartledge, & Heckman, 1995; Place & Hodge, 2001; Sherrill 2003). Further, lack of discipline and control have been cited as major obstacles for effective instruction in physical education (Lavay, French, & Henderson, 2006).

Many educators assume that students develop appropriate social skills as a by product of participation in physical education and sports (Buchanan, 2001; Hellison, 2003; Bloom & Smith, 1996). However, it has been demonstrated that appropriate social behaviors improve only when interventions are implemented in physical activity settings (Vidoni, 2005, Balderson & Sharpe, 2005; Moore et al., 1995). Social learning theory (Bandura, 1977) asserts that most behaviors are learned and thus, direct instruction can be employed to teach prosocial behaviors. Within the school environment, physical education is one setting which has been used to improve of social competence (Giebink & McKenzie, 1985; Hellison, 2003; Patrick, Ward, & Crouch, 1998; Siedentop & Tannehill, 2000). However, little has been done to enhance the social skills of children
with disabilities (especially those with emotional or behavioral disorders) in physical education and sport settings. The purpose of this study was to examine the effect of social skill instruction on the acquisition, maintenance, and generalization of peer related social behaviors of students with emotional or behavioral disorders (EBD) during competitive sports/games activities. The experiment specifically addressed the effect of social skill instruction on the number of appropriate and inappropriate sport/games behaviors during physical education class. Six students (4 males and 2 females) ages 10 through 17 and attending two alternative education school programs designed to serve children and youth with EBD participated in this study. A multiple baseline across participants design was used. A validated Appropriate Sport and Games Behaviors Curriculum (appropriate winning behaviors, appropriate losing behaviors, and appropriate behaviors during the game) was used for this study. Results of this study demonstrated that social skill instruction was an effective strategy to develop appropriate sport and game behaviors and decrease inappropriate ones for students with EBD in physical education. However, there was limited support for generalization. Social validity results demonstrated that parents and teachers support the curriculum as implemented to develop appropriate sport and game behaviors. Although further investigation is needed, the intervention was effective in improving appropriate behaviors and decreasing inappropriate ones.
To my parents Monsy Rivera and Juan Samalot, my wife Maria Monroig, my son Amaury Jr., my brother Yamil Samalot, my sister Glorimar Samalot and all the physical educators and children with disabilities in the island of Puerto Rico.

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A socially competent student is able to: (a) establish positive relationships, (b) share, (c) help others, (d) request help, (e) take responsibility for his or her actions, and (f) recognize the contributions of others (Elliot & Busse, 1991; Hellison, 2003; Spence, 2003). Research suggests that individuals with emotional or behavioral disabilities when compared to their peers without disabilities show disappointing outcomes like: (a) higher school dropouts rates (Kaufman, Alt, & Chapman, 2001); (b) lower rates of participation in postsecondary education (Wagner, Cameto, & Newman, 2003); (c) higher levels of unemployment (Bullis & Cheney, 1999; Carter & Wehby, 2003); (d) lower rates of community participation (Armstrong, Dedrick, & Greenbaum, 2003); and (e) higher rates of incarceration (U.S. Department of Health and Human Services, 1999).

The term emotional or behavioral disorders (EBD), refers to those individuals typically defined as emotional disturbed under the Individuals with Disabilities Education Improvement Act – IDEIA (2004). Kauffman (2005) points out that the term for this population has varied over the years and that no definition has been universally accepted. However, the national Mental Health and Special Education Coalition has proposed using the term "emotional or behavioral disorders". In addition, Kauffman (2005) points out that the term EBD is considered by professionals to be more educationally relevant.
than the term used in IDEIA. This is because the IDEIA definition often excludes students who need services.

Individuals with poor social competence such as those with EBD often: (a) have low self-esteem (Walker Todis, Holmes, & Horton, 1988), (b) have low achievement (Parker & Asher, 1987; Spence, 2003), (c) face peer rejection (Gresham, 1981, 1986), and (d) engage in delinquent lifestyles (Spence, 2003). Gresham (1986) has described four dimensions related to social skill deficits. First, individuals do not perform certain social skills, because they do not possess prerequisite skills necessary to perform them. Second, individuals possess specific social skills, but they are not demonstrated because they are not reinforced or motivated to perform them. Third, some individuals have self control skill deficits in which impulsive, disruptive, or aggressive social behaviors are not restrained. Finally, some individuals possess social skills in their repertoire, but do not perform these skills because of problems in antecedent and/or consequent control.

In addition to home, schools represent an important setting for the teaching of social skills (Vidoni, 2005). Schools can be characterized as learning communities that provide models for good citizenship, and a sense of fairness and caring (Siedentop & Tannehill, 2000). Teachers play an important role in the development of a student’s social skills (Muscott & Gifford, 1994). When teachers teach and reinforce social skills such as self-responsibility, respect for others, and the encouraging and helping of peers, they are helping students to improve their social competence (Vidoni, 2005).

Many educators assume that students develop social skills as a by product of participating in physical education and sports. Buchanan (2001), Hellison (2003), and
Bloom and Smith (1996) state that teachers and coaches cannot assume that students will improve levels of self responsibility and moral development by participating in physical education without careful planning and instruction.

Studies have demonstrated that appropriate social behaviors improve when interventions are implemented in physical activity settings. Balderson and Sharpe (2005) examined the effects of personal accountability and personal responsibility instruction on elementary-age, urban, at-risk physical education students on selected off task and positive social behaviors. Both personal accountability instruction and personal responsibility instruction were effective for changing managerial and off-task behaviors as well as increasing positive social behaviors. The personal responsibility instruction was particularly effective with more complex social behaviors as well as student conflict resolution.

Moore, Cartledge, and Heckman (1995) studied three ninth grade male students with emotional or behavioral disorders and taught them social modeling, behavior rehearsal, and behavior transfer for game related social skills. Specific behaviors consisted of appropriate: (a) peer reaction, (b) reactions to losing, and (c) reactions to winning. Results showed that students improved their game related social skills.

Social skill instruction is a proactive, positive intervention designed to replace negative behaviors with more desirable ones and to teach students more constructive socially rewarding ways to behave. Skill training, which is commonly used to teach social skills, typically involves the use of social modeling (teacher/researcher) shows learner how to perform the skill), behavioral rehearsal (provides the learner the
opportunity to practice the skill with corrective and reinforcing feedback), and behavior transfer (structures conditions for the learned behaviors to transfer to other times and conditions) (Moore et al., 1995). Gresham (1982) describes Social Skills Training techniques as being derived from Bandura’s (1977) Social Learning Theory (SLT). Social skill training is composed of: (a) manipulation of antecedents, (b) manipulation of consequences, and (c) modeling. One implication of Bandura’s theory is that modeling simply does not occur by exposure, it has to be explicitly presented and taught (Gresham, 1982).

Statement of the Problem

Social skills are defined by Sheridan (2000) as learned behaviors that are necessary for students to get along successfully with others including school and community settings. Furthermore, social skills are important in enabling a person to achieve social competence. Social competence is defined as a multilevel construct composed by three sub components: social adjustment, social performance, and social skill (Cavell, 1990). Social competence plays an important role in child and youth development, and academic success (Elliot & Busse, 1991; Kennedy, 1988). Unfortunately, children and youth with disabilities, especially those with mental, emotional, and learning disabilities often demonstrate deficits in social competence (Cartledge & Milburn, 1978; Gresham, Sungai, & Horner, 2001) which can have profound effects on their success for community integration (Huang & Cuvo, 1997). In addition, Lane, Carter, Pierson, and Giaeser (2006) state that less attention has been given
to school and community behaviors of secondary (middle and high school) students with emotional or behavioral disorders (EBD).

In physical education, lack of discipline and control have been cited as major obstacles for effective instruction (Lavay, French, & Henderson, 2006). The lack of appropriate social skills in physical education and sport by children with disabilities can lead to the lack of interaction and finally rejection by classmates without disabilities (Butler & Hodge 2004; Moore, et al., 1995; Place & Hodge, 2001; Sherrill 2003). Within the school environment, physical education is one setting which has been used to improve of social competence (Giebink & McKenzie, 1985; Hellison, 2003; Patrick, Ward, & Crouch, 1998; Siedentop & Tannehill, 2000). However, little has been done to enhance the social skills of children with disabilities (especially those with behavioral disabilities) in physical education and sport settings.

Purpose of the Study

The purpose of this study was to examine the effect of social skill instruction on the acquisition, maintenance, and generalization of peer related social behaviors of students with emotional or behavioral disorders (EBD) during competitive sports/games activities. The experiment specifically addressed the effect of social skill instruction on the number of appropriate and inappropriate sport/games behaviors during physical education class.
Research Questions

1. What effect will social skill instruction have on increasing the number of appropriate game related behaviors exhibited during sport activities/games in physical education class for students with emotional or behavioral disorders?

2. What effect will social skill instruction have on reducing the number of peer related inappropriate behaviors exhibited during sport activities/games in physical education class for students with emotional or behavioral disorders?

3. Will decreased inappropriate behaviors and increased appropriate behaviors be maintained following social skill instruction?

4. What effect will social skill instruction have on increasing the number of appropriate game related behaviors exhibited during recess (generalization) when participating in sport activities/games for students with emotional or behavioral disorders?

5. What effect will social skill instruction have on reducing the number of peer related inappropriate behaviors exhibited during recess (generalization) when participating in sport activities/games for students with emotional or behavioral disorders?

Significance of the Study

This study will extend the literature on social skill instruction for students with disabilities in physical education. It is based on a study completed by Moore et al. (1995) titled “The Effect of Social Skill Instruction and Self-Monitoring on Game-Related Behaviors of Adolescents with Emotional or Behavioral Disorders”. Even if numerous
studies show to varying degrees the effect of skill training procedures on an array of
behaviors including play, greetings, compliance, social interaction (Bulkely, & Craner,
1990; Zaragoza, Vaugh, & McIntosh, 1991), and social communication (Mathur &
Rutherford, 1994) there still is a need for additional empirical investigations,
documenting the efficacy of these procedures and their pervasive effects (Moore et al.,
1995). Ward and Barrett (2002) after conducting a review of behavioral research in
physical education found that even if the findings of previous studies where robust and
the designs rigorous, researchers have not addressed generality, maintenance, and social
validity as well as they should have. Ward and Barrett (2002) recommend that future
behavior analytic research in physical activity be modeled on a study by Yang and
Porretta (1999). That is, theoretical constructs, treatment integrity, maintenance, and
generalization be included in future studies. The current study will contribute to the
knowledge base related to social skill instruction effectiveness and the improvement of
appropriate social behaviors of students with disabilities during different types of
physical activity as well as include the recommendations of Ward and Barrett (2002).

Limitations

A limitation of this study is the lack of control of how students behaved outside of
the classroom, gymnasium, and recess settings. That is data were not collected on
behaviors in contexts (e.g. home) other than those described above. A second limitation
of this study was the there were three different teachers who implemented the instruction
to three different groups of participants. In order to enhance internal validity one teacher
should have taught all three groups.
Delimitations

There are several delimitations in this study:

1. There were approximately 24 to 30 sessions of 30 minutes social skill instructional sessions based on game/ sport/ physical education oriented unit.

2. This study was limited to one unit of sport - oriented social skill instruction.

3. This study assessed the effects of a social skill instruction on upper elementary and middle/high school students with emotional or behavioral disorders.

4. This investigation was limited to six students in three classes of two alternative education schools programs.

5. This study was limited to coding appropriate and inappropriate physical and verbal peers behaviors during games and sports in physical education class and recess.

Operationally Defined Terms

1. *Appropriate Game/Play Behavior.* Any physical, verbal or gestural positive behavior directed to an opponent or teammate during a game. Refer to participants not responding to peers trying to make them angry, attempting to resolve a situation through discussion, walking away from a conflict, and /or seeking help from an authority figure. They also refer to acknowledging a teammate’s or an opponent’s performance by giving “high fives”, hugs, pointing index finger up in signal of a victory, or verbally say “good swing, good game, I like the way you threw the ball, etc”, during a game or sport activity (Moore et al., 1995).
2. *Appropriate Behaviors to Losing*. Any physical, verbal or gestural positive behaviors directed to an opponent or teammate after the conclusion of a game which is lost. Refer to the participant offering a congratulatory comment such as “nice game” or “good contest”; offers a “thank you”; and/or displays a pleasant affect as demonstrated by the absence of frowns, scowling, or other unpleasant looks indicative of negative feelings. Participants may also offer high fives, or shake hands with teammates and opponents after losing a game (Moore et al., 1995).

3. *Appropriate Behaviors to Winning*. Any physical, verbal or gestural positive behaviors directed to an opponent or teammate after the conclusion of a game that is won. Refers to the student making statements to the opponent such as “nice game” or “nice try,” offers to shake hands with the opponent, gives high fives and/or thanks the loser after the game (Moore et al., 1995).

4. *Attention Deficit and Hyperactivity Disorders (ADHD)*. The essential feature of Attention-Deficit/Hyperactivity Disorder is a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable level of development (American Psychiatry Association, 2000).

5. *Emotional or Behavioral Disorders (EBD)*. Individuals who exhibit inappropriate behaviors or feelings under normal circumstances (Winnick, 2005, p. 536), are considered to have emotional or behavioral disorders. Also any students who are
diagnosed as having an emotional disturbance (U.S. Dept. of Education., 2004) and receive special education services.

6. **Direct Observation.** Direct observation is an important data collection approach when evaluating behavioral disorders. It requires a clear definition of the target behaviors and a daily recording of their occurrence (Moore, 1994).

7. **Inappropriate Game/Play Behaviors.** Any physical, verbal or gestural negative behaviors directed to an opponent or teammate during a game. Refer to the display of physical aggression such as hitting, pushing, kicking, spitting, or tripping another person, as well as verbal aggression such as name-calling, taunting, teasing, or using profanity. They also refer to attempting to or destroying property during a game or sport activity (Moore et al., 1995).

8. **Inappropriate Behaviors to Losing.** Any physical, verbal or gestural negative behaviors directed to an opponent or teammate after the conclusion of a game which is lost. Refer to participants who refusing to shake hands; verbally denigrating the opponent(s); and/or making nonverbal gestures such as scowling, giving the finger, or other nonverbal actions intended to put-down the opponent after loosing a game (Moore et al., 1995).

9. **Inappropriate Behaviors to Winning.** Any physical, verbal or gestural negative behaviors directed to an opponent or teammate after the conclusion of a game when the participant’s team wins. Refer to the participant making taunting comments to the loser such as “you are a looser” or “I always beat you”, refuses
to shake the opponent hands or make inappropriate physical gestures after winning a game (Moore et al., 1995).

10. ** Oppositional Defiant Disorders (ODD).** The essential feature of Oppositional Defiant Disorder is a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least six months and is characterized by the frequent occurrence of at least four of the following behaviors: (a) losing temper, (b) arguing with adults, (c) actively defying or refusing to comply with the requests or rules of adults, (d) deliberately doing things that will annoy other people, (e) blaming others for his or her own mistakes or misbehavior, (f) being touchy or easily annoyed by others, (g) being angry and resentful, or (h) being spiteful or vindictive. To qualify for Oppositional Defiant Disorder, the behaviors must occur more frequently than is typically observed in individuals of comparable age and developmental level and must lead to significant impairment in social, academic, or occupational functioning (APA, 2000).

11. **Social Competence.** Refers to the achievement of social goals in specific social situations, using adequate ways that produce positive outcomes (Ford, 1982).

12. **Social Skills.** Socially acceptable behaviors that enable the person to interact with others in ways that elicit positive responses and assist in avoiding negative responses for them (Cartledge & Milburn, 1995).
13. *Social Skill Instruction.* A proactive, positive intervention designed to replace negative behaviors with more desirable ones. It is designed to teach students more constructive socially rewarding ways to behave (Cartledge & Milburn, 1995).
CHAPTER 2

LITERATURE REVIEW

This chapter covers literature focusing on social skills instruction especially as related to social competence in physical activity settings. The chapter is organized into eight sections. The first section describes Bandura’s Social Learning Theory (Bandura, 1977). The Social Competence Model (Cavell, 1990), and its implications for social skills development and social adjustment is presented next. The third section describes characteristics of students with behavioral disabilities in the United States. The fourth section addresses the importance of social skills development in community settings. The fifth section presents the essential elements of and literature pertaining to social skills training. The sixth section covers literature associated with physical education, recreation/leisure, and sport for individuals without disabilities while the seventh section covers literature associated with physical education, recreation/leisure, and sport for individuals with disabilities. The chapter concludes with a summary.

Social Learning Theory

The theoretical framework for this study is Social Learning Theory (SLT) (Bandura, 1977). According to Ormord (1999) there are additional scholars who support the theory and have written about it. This theory suggests that individuals, especially
children, imitate or copy modeled behaviors from personally observing others, the environment, or the media (Ormond, 1999). Self-efficacy is the over arching concept in SLT (Ormrod, 1999). The goal of the social learning theory is to build self-efficacy or to build an individual's perception of capabilities for performance (Scott & Cervone, 2002). Bandura stated, "Perceived self efficacy not only reduces anticipatory fear and inhibitions but, through expectations of eventual success, it affects coping efforts once they are initiated" (Bandura, 1977, p. 80). The building of self-efficacy takes place through performance accomplishment, vicarious experiences, verbal persuasion, and emotional arousal. Do (2004, p.4) provides a good explanation of these terms:

*Performance accomplishments* are considered to be the strongest source of self-efficacy. Successful personal experiences raise a person's expectation of future success; repeated personal success leads to the development of strong self efficacy.

*Vicarious experiences* builds self-efficacy by seeing others perform threatening activities without adverse consequences can create expectations in observers they too will eventually succeed if they intensify and persist in their efforts.

*Verbal persuasion* is thought to be the weakest of the four possibilities in developing long lasting self-efficacy. Verbal persuasion consists of individuals being led, through persuasive suggestion, into believing they can cope successfully with what has overwhelmed them in the past.
Emotional arousal is pertinent to self-efficacy in perceived threatening situations. Due to the fact high arousal typically lowers performance success, individuals are more likely to expect success when they are not feeling highly aroused or not feeling the physical or emotion sensations connected with anxiety or fear.

SLT also focuses on learning that occurs within a social context (Bandura, 1977). It considers that people learn from one another which include such concepts as observational learning, imitation, and modeling. SLT explains behavior in terms of continuous interaction between cognitive, behavioral, and environmental influences. Akers (1998) further expanded SLT to include four key elements: (a) imitation, (b) definitions, (c) differential associations, and (d) differential reinforcement. Sellers, Chochran, and Branch (2005, p.381), provide a detailed explanation of these terms:

Imitation refers to the extent to which one emulates the behavior of role models. These role models are significant others whom one admires, whom one has a perceived personal relationship, and whom one has directly observed behaving.

Definitions, the second element of social learning theory, refers to the attitudes and values individuals hold regarding the morality of the law in general and the wrongfulness of specific deviant criminal behaviors.

Differential association is the third element of SLT. It refers to the influence of the definitions (attitudes) and behaviors of significant others on individuals’ Conduct. According to social learning theory, exposure to the definitions and behaviors of others with whom one interacts has a powerful effect on one’s own
definitions and behaviors. The impact of this exposure varies according to the frequency, duration, intensity, and priority of the different associations individuals have with others.

*Differential reinforcement* refers to the net balance of anticipated costs and rewards associated with a given behavior. According to social learning theory, an act that is expected to yield a greater balance of rewards than costs is more likely to be engaged.

A general principle of SLT is that people can learn by observing the behaviors of others. Behavioral outcomes are affected by reinforcement and punishment. This theory asserts that behaviors can be learned through modeling which is a key strategy used in social skills training. Bandura has affirmed that:

“Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action (Bandura, 1977, p.22).

According to Bandura (1977), modeling influences learning principally through an informative function. During exposure of modeled behavior, observers mainly acquire symbolic representations of the modeled activities which serve as guides for appropriate performances. Five processes underly observational social learning. These processes are
(a) attention, (b) retention (including cognitive organization and motor rehearsal), (c) motor reproduction (including physical capabilities, self-observation of reproduction, and accuracy of feedback), (d) motivation (including external and self reinforcement), and (e) observer characteristics (such as sensory capacities, arousal level, perceptual set, and past reinforcement). According to Bandura (1977, p.29):

“Modeling can be increased by reinforcing matching behavior....”, “Facility in observational learning is increased by acquiring and improving skills in selective observation, in memory encoding, in coordinating sensoriomotor and ideomotor systems, and by the ability to foresee probable consequences of matching another’s behavior”.

Bandura also asserts that reinforcement plays a role in observational learning, but it mainly as an antecedent rather than a consequential influence. He states that anticipation of reinforcement is one of several factors that can influence what is observed. Moreover, observation learning can be achieved more effectively by informing observers in advance about the benefits of adopting modeled behaviors than by waiting until they happen and then rewarding them for it. More importantly, these processes can be employed in social skill instruction.

Social Learning Theory is relevant to those who exhibit aggressive behaviors. Persons learn aggressive behavior through observing others, and the environment. This study included participants with emotional and behavioral disorders who typically exhibit
aggressive and otherwise poor behaviors. Reinforcement, a contemporary SLT principle (Ormrod, 1999) was a key element of the instructional model used in this study.

The educational intervention used in this study incorporate selected SLT principles. According to Ormrod (1999), SLT has numerous implications for classroom use. They are: (a) students often learn a great deal simply by observing others; (b) describing the consequences of behavior can effectively increase the appropriate behaviors and decrease inappropriate ones (he mentions that this can be done by discussing with learners about the rewards and consequences of various behaviors); (c) modeling provides an alternative to shaping for teaching new behaviors, which can provide a faster, more efficient means for teaching new behaviors; (d) appropriate behaviors must be modeled; (e) students must believe that they are capable of accomplishing school tasks, in other words it is important to develop a sense of self efficacy and; (f) teachers should help students set realistic expectations.

In summary, the basic principles of SLT were included within the sport behavior curriculum intervention used in this study. The intervention sought to assist participants with EBD acquire, maintain and generalize social competence within a school setting.

Social Competence Model

The Social Competence Model (SCM) was used in this study to explain the process that students go through to acquire social competence via social skill instruction. The main purpose of the curriculum and the SLT principle in this study was that students can be social competent in their communities (e.g., sport, recreation context).
Social Competence is a multileveled construct consisting of three sub levels: (a) social adjustment, (b) social performance, and (c) social skill (Cavell, 1990). Ford (1982) refers to “social competence” as the achievement of social goals in specific social situations, using adequate ways that produce positive outcomes. This model was created with the purpose of providing individuals with the skills needed to meet social challenges (Cavell, 1990). Effective functioning is the central concept of the social competence model. The socially competent person is one who: (a) establishes positive relationships, (b) shares, (c) helps others, (d) requests help, (e) takes responsibility for actions, and (f) recognizes the contributions of others (Elliot & Busse, 1991; Hellisom, 2003; Spence, 2003). Conversely, those with poor social competence often: (a) possess low self-esteem (Walker et al., 1988), (b) have low achievement (Parker & Asher, 1987; Spence, 2003), (c) face peer rejection (Gresham, 1981; 1986), and (d) engage in delinquent lifestyles (Spence, 2003).

Social adjustment, a component of SCMI, has been defined by Ford (1982) as the extent to which individuals achieve appropriate societal goals. Integrating social skill instruction in physical education, recreation and sport helps students enhance their opportunities to succeed. The aim is to be more socially competent in physical activity contexts, so individuals can better interact with peers and friendships are enhanced.

Social performance (functioning) another construct is defined as the degree to which an individual responds to relevant, primary social situations meeting socially valid criteria (Dodge, Murphy & Buchsbaum, 1984; Hops, 1983; McFall, 1982). It is defined by Cavell (1990), as (a) social attainment, (b) global judgments of social competence and
(c) social acceptance. Class planning and structure provide different levels of opportunity to develop the appropriate skills for social functioning. It is assumed that by implementing social skill instruction in physical education students with socially inappropriate sport behaviors will reduce or eliminate them, and then enhance their opportunity of being accepted by peers.

Finally, social skills the third component of the Social Competence Model, refers to specific abilities that enable individuals to perform a social task (e.g. decision making and response). Viewing social competence as a multilevel construct can be useful for those seeking to modify, predict or explain children social behaviors (Cavell, 1990).

The implementation of social skill instruction in a physical activity context focuses on behaviors that need improvement. Within any given context, individuals need to be able to recognize when an appropriate social skill is needed or expected to be performed. In addition individuals must be able to use those skills in specific situations.

This model is related to Bandura’s Social Learning Theory (1977) on the premise that social behaviors are influenced or reinforced by the environment and other people. Like mentioned in Social Learning Theory the environment and modeling of other people (e.g, teachers) play a vital role in the acquisition of new skills or behaviors in any given context (e.g., physical education class). Similarly to the three sublevels of the Social Competence Model, components of modeling from the Social Learning Theory are related. Social adjustment is related to the attention and retention process of modeling in which information (skills and behaviors) are obtained from the environment (e.g., people) and processed at various cognitive levels for learning to occur. In addition, social
performance is related to the motor reproduction of the skill. This action is performed based on the information obtained from the environment through modeling. Students are expected to perform a motor reproduction of the modeled skill. Social skill performance is the final outcome. It is based on students’ judgments of the information that was modeled and cognitively processed. Of course for this to occur, students need to be motivated to perform the learned skill.

Students with Emotional or Behavioral Disorders (EBD)

The term emotional or behavioral disorders (EBD) was used in this study rather than the term emotional disturbance (ED) as used in IDEIA (2004). In IDEIA, ED is a condition where persons exhibit one or more of the following behaviors over an extended period of time: (a) an inability to learn that can not be explained by intellectual, sensory, or health factors; (b) an inability to build (initiate) or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behaviors 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 (U. S. Department of Education, 2004). According to Kauffman (2005) the term EBD is considered more inclusive than the term ED because that term often excludes students who need educational services.

Social skill deficits are common among children with disabilities and most of the social skill research has centered on this population (Vaughn et al., 2003). As mentioned by Cartledge (in press) some disability groups (e.g., behavior disorders, autism, and
mental retardation) are defined and diagnosed by disorders of adaptive behavior. In addition, the research literature repeatedly documents the social perception and behavior problems of children with mild disabilities (i.e., learning disabilities, behavior disorders, attention deficit hyperactivity disorder, and mild mental retardation) (Kavale & Mostert, 2004; Frankel & Feinberg, 2002; Forness & Kavale, 1996; Nixon, 2001). Bower (1992) stated that such individuals may have few, if any, satisfactory friendships. In addition, they may have difficulty building positive peer relationships as a result of their inappropriate behaviors (Moore, 1994). Social perception (comprehending nonverbal cues, e.g. interpreting the facial expressions, voice tone, gestures, or feelings of others) will be of difficulty for this population (Most & Greenbank, 2000). They also will have difficulty with problem solving and when deliberating various options they are likely to select the least socially desired behavior. In addition, many children with mild disabilities have been found to have inadequate affect or smiling, conversation skills, and conflict resolution skills (overt behaviors). Nixon (2001) found that compared to typically developing age-mates, students with attention deficit hyperactivity disorder (ADHD) has higher rates of off-task and disruptive behaviors. About 50% of the children with ADHD evidenced aggressive conduct and had more negative interactions with other aggressive children. They displayed social communication problems and nearly 50% of them reported being rejected by their peers.

Research has revealed disappointing outcomes for individuals with EBD when compared to their peers without disabilities such as (a) higher school dropouts rates (Kaufman, Alt, & Chapman, 2001); (b) lower rates of participation in postsecondary...
education (Wagner, Cameto, & Newman, 2003); (c) higher levels of unemployment (Bullis & Cheney, 1999; Carter & Wehby, 2003); (d) lower rates of community participation (Armstrong, Dedrick, & Greenbaum, 2003); and (e) higher rates of incarceration (U.S. Department of Health and Human Services, 1999). Furthermore, Lane et al. (2006) stated that such post school outcomes serve as indicators that those students with EBD may have skill and performance deficit in academic, social and behavioral domains which negatively effect their transition from school to community. In addition Lane et al. (2006) stated that most of the research conducted with students with EBD concerning social and behavioral skill variables has focused predominately on younger children with less attention given to adolescents and that there is a big need to conduct research for adolescents with EBD. These studies reveal that elementary students with EBD exhibit higher levels of behavioral problems and lower social competence than their peers with out disabilities (Gresham & McMillan, 1997).

Moreover, Skiba, Poloni-Staundinger, Gallini, Simmons, and Feggins-Azziz (2006) state that there has been an over representation of students of color (e.g., African American, Hispanic students) in certain disability categories over the past 20 years. Over representation continues to be one of the most persistent and complex issues in the field of special education. Recent national data from the National Research Council (2002) indicates that African American students are overrepresented in the categories of mental retardation (MR), EBD, and multiple disabilities when compared to White American students and other ethnic groups. African American students were reported to be 2.9 times more likely than White American students to be labeled as MR and 1.9 times more
likely to be identified as EBD (Parrish, 2002). The Office of Special Education Program's IDEA 26th Annual Report to Congress (Office of Special Education Programs, 2005) identifies EBD as one of the largest disability categories for all racial/ethnic groups between the ages 6-21 with African Americans as the largest single group with 11.3%.

Importance of Social Skill Development in Community Integration for Students with Disabilities

The Individuals with Disabilities Education Improvement Act (IDEIA) (2004) mandates that transition services be provided to students with disabilities beginning at 16 years of age. The purpose of transition services is to help students prepare for adult life once they become community members. Positive transition outcomes include post-secondary education, employment, independent living, recreation and leisure activities, and community participation (Modell & Megginson, 2001). Physical education, recreation/leisure, and sport during the school years can help individuals with disabilities develop and lead a healthier life style as well as to help them develop and exhibit appropriate social skills (Hall, 2005). In addition, it helps them develop self determination especially as is pertains to leisure activities. Therefore, development of social skills is an important component of the transition process.

Research shows that some of the most common leisure activities for people with disabilities include watching television and listening to the radio (Hill, Rotegard, & Bruninskis, 1984). Because of this, people with disabilities lack physical activity and are more likely to experience disadvantages in health and well-being compared to the general
population. Research indicates that people with disabilities have higher levels of obesity because they are less likely to be active due to societal barriers to health promotion activities including access to community physical activity setting (Association of State and Territorial Health Officials, 2003). One recommendation of the association is to remove barriers and promote healthier lifestyles for individuals with disabilities. One way to do this is to promote community recreation/leisure physical activity.

Wagner et al. (2003) state that choice making of free/leisure time is extremely important for persons with disabilities because it provides them with the opportunity to develop independence and healthy lifestyles. Extracurricular activities, such as sport teams or special-interest clubs, can help them to explore and shape future choices and self-determination. Wells, Sanderuf, and Hogan (2003), examined the immediate post-high school years of adolescents with disabilities using data from two longitudinal studies (National Educational Longitudinal Study of 1998 and the National Longitudinal Transition Study of Special Education Students, 1987-1991). Results from these studies indicate that vocational education, work experience, tutoring, extracurricular group activities, and parental support positively contribute to school performance and post school outcomes (Blackorby & Wagner, 1996). By developing and positive social behaviors, individuals with disabilities can better access and participate in community recreation/leisure activities thereby enhancing their health as well as integrating into community life.
Social Skill Instruction

Social skills can be defined as “socially acceptable behaviors that enable the person to interact with others in ways that elicit positive responses and assist in avoiding negative responses for them” (Cartledge & Milburn, 1995). In Moore’s (1994) opinion, most people acquire social skills through observation, instruction and interaction from parents, peers and other people with influence upon their environmental context. Social skill instruction is a proactive, positive intervention, designed to replace negative behaviors with more desirable ones, and to teach students more constructive socially rewarding ways to behave (Cartledge, Gardner, & Ford, in press). An important aspect of social skill instruction is assessment. Assessment determines the degree to which particular skills are presented in the learners’ repertoire. Direct observation, is an important approach when evaluating disorders in behaviors, requires a clear definition of the target behaviors and a daily recording of their occurrence (Moore, 1994). In observation the researcher observes and records behavior or an event as it occurs.

The teaching of social skills may involve a variety of approaches. For example, Chen (2006) & Gresham (1982) described that social skills training techniques are derived from Bandura’s Social Learning Theory. Furthermore, Sheider (1988) believes that skills training based on social learning principles, is the instructional approach shown to be most effective. In addition, Moore (1994) has affirmed that skill instruction is based on social learning theory principles, and that it is the instructional approach shown to be the most effective in teaching social skills. According to that theory, “Social learning theory approaches provides the explanation of human behavior in terms of a continuous
reciprocal interaction between cognitive, behavioral, and environmental determinants” (Bandura, 1977, p.vii). Social learning theory assumes that most behaviors are learned and thus, direct instruction can be employed to teach prosocial behaviors (Ormrod, 1999). Social learning intervention includes the use of modeling, feedback, guided practice or coaching, reinforcement, extinction and non hostile humane punishment. Gresham (1982) also states that social skill training can be categorized in three areas of intervention: (a) manipulation of antecedents, (b) manipulation of consequences, (c) and modeling. Modeling is, indeed, the aspect of Bandura’s Social Learning Theory with the most theoretical implications for social skill instruction. Modeling effect, according to Gresham (1982) simply does not occur by exposure. He (1982, p.425) establishes what is necessary for modeling to happen, based on Bandura’s theory (1977):

“For modeling effect occur, the observer must attend to relevant modeling stimuli, retain the information or stimuli which were modeled, have the motor-reproduction processes necessary to execute the modeled behavior, and have some incentive or motivation for performing the observed behavior. Moreover, modeling effects are enhanced when modeling sequences are narrated, when coping rather than mastery models are used, and when attention is called to the model’s behavior”.

Social skills instruction in children has been a topic of increased interest over the last two decades (Vaugh et al., 2003). Cartledge and Milburn (1978) affirm that since schools are a major socializing institution, social skill instruction for children is needed. They explain that along with the academic goals and objectives, there is a “hidden
“curriculum” that deals with social behaviors, attitudes and values that need to be taken in consideration. Gresham (1997) contends that the literature in social skill instruction shows it can be effective in teaching appropriate social behaviors.

Social skills instruction has been a primary tool to teach students with disabilities. A U.S. Office of Special Education and Rehabilitation Services report (Office of Special Education and Rehabilitation Services, n.d.), indicates that social skill instruction is important and essential for children with disabilities since it provides interpersonal communication, self discipline, and problem solving skills which are necessary for integration into the community and important for independent living. Information on the report specifies that the ability of children to effectively interact with peers, teachers and families is crucial to their social development. Literature below provides evidence that social skills can be successfully acquired and exhibited by the implementation of social skill instruction.

Between 1975 and 1999 Vaughn et al. (2003) synthesized findings of 23 social skill intervention studies involving around 700 students from 3 to 5 years old exhibiting a variety of disabilities. The interventions in the studies were delivered either by teachers, researchers, therapists, parents, or peers without disabilities. The synthesis provides a description of the purpose, procedures, measures, and findings of each study as well as an analysis of effect size outcomes in relation to their critical features. Overall, findings indicate that social skills interventions can positively affect the social functioning of children with disabilities. More importantly, positive social outcomes are associated with a range of social skills interventions including modeling (peers and teachers demonstrate
specific desired behaviors to children with disabilities), play-related activities (specific play activities intended to help the development of cognition, language, and social functioning are used), rehearsal/practice (students practice target behaviors), and/or prompting (students are prompted to display target behaviors). Other effective intervention features include reinforcement of appropriate behaviors through systematic rewards, free-play generalization where children play with untrained peers during free play time, and direct instruction, which teaches specific behaviors.

In 1981, Gresham conducted a review of social skills training for children with disabilities related to behavioral techniques derived from social learning theory. The focus criteria of this review was on (a) the conceptualizations and definitions of social skills, (b) the assessment techniques which have been used to evaluate social skills, (c) the variety of techniques derived from social learning theory which had been used for social skill training, (d) the relative effectiveness of each technique, (e) the types of social skill trained, and (f) the generalization and maintenance of trained social skills. He reviewed studies of individuals with and without disabilities in four broad area strategies: (a) manipulation of antecedents, (b) manipulation of consequences, (c) modeling and coaching, and (d) cognitive–behavioral techniques. He concluded that all four area strategies were effective in teaching social skills to children both with and without disabilities. In addition, children with disabilities are more accepted by their peer without disabilities after the implementation of social skills instruction. In a follow-up review, Gresham (1985) concluded that modeling and coaching were effective in teaching social skills to children. The studies using cognitive-behavioral techniques were
evaluated again. The studies included modeling, coaching, combined treatments and social problem solving (Gresham, 1985). Seven criteria were used to critically evaluate these studies: (a) subject characteristics, (b) treatment specification, (c) outcome measures, (d) statistical analyses, (e) experimental design, (f) generalization, and (g) cost effectiveness. As a review of this reviews, Gresham states that there is need for more generalization and maintenance effects relative to social skill training.

McIntosh, Vaughn, and Zaragoza (1991) reviewed studies on children with learning disabilities 5 to 19 years old. These studies examined selected characteristics on the effectiveness of teaching social skills. Age, gender, grade, group size, duration of intervention and procedures, subject selection, and type of interventional model were examined to find patterns reflective of intervention success. They found positive effects for 64% of social skill instruction studies that used modeling, coaching, behavioral rehearsal, role playing, and feedback. Similar effects were found when Zaragoza, Vaught and McIntoch (1991) reviewed social skills instruction studies of children with behavioral disorders. Sample size, gender, age, subject selection criteria and group size, skill addressed, instructional procedures, duration of intervention and measures/ results were examined. Most studies reported significant results on one or more intervention outcome measures. Overall, the results of the reviewed studies reveal optimism about the effects of social interventions with children with behavior problems. In addition, children who participate in the social interventions, when compared with those who do not, often feel better about themselves, and their teacher and parents feel better about them.
The effects of social skill instruction and parental involvement on acts of aggression on five African American elementary school students in an urban school setting were investigated by Middleton and Cartledge (1985). Intervention consisted of teaching social skills through modeling, role playing, corrective feedback, and differential reinforcement of alternative and incompatible behaviors through the use of puppets. Social skill instruction took place in the library of the school. Observational data were collected in the classroom, and in physical education class and the school cafeteria to assess for generalization of the training to natural settings. Results indicated that the social skill instructional package decreased aggressive behaviors in four of the five students and that parental involvement helped in the maintenance of the learned behaviors. Some of these aggressive behaviors were bullying with others, arguing with others, getting angry easily and acting impulsively.

LeBlanc and Matson (1995) investigated the effects of a social skill training program with 32 developmentally delayed preschoolers. Participants were evaluated in an unstructured play session, matched for levels of appropriate and inappropriate social behaviors, and assigned to either treatment or control conditions. Positive social skills or appropriate social behaviors consisted of exhibiting any of the four behaviors targeted in social skill training like a greeting (verbal or physical gesture), any verbal request for a toy, initiation of play and showing a toy. Inappropriate social behaviors consisted of tantrums, aggression, grabbing toys and refusing to share. The treatment group received a six week protocol involving positive reinforcement, modeling, rehearsal, feedback, and time out. Control participants receive no instruction beyond regular classroom activities.
during the six weeks. Both groups were evaluated in a post test session and again in a
generalization setting. The generalization setting consisted of two peers with
developmental disabilities who did not participate during treatment. Results indicate that
the social skill training package was effective in increasing pro social behaviors such as
greetings, play initiations, and appropriate sharing. In addition, the pro social behaviors,
were successfully maintained and generalized. Efforts to reduce inappropriate behaviors
were less successful. Regarding the authors the results may have been due to a lack of
fading in the procedure used to consequate inappropriate behaviors.

Choi and Heckenlaible - Gotto (1998) examined the effectiveness of a regular
classroom based social skill training on students peer acceptance ratings of two first
grade classrooms from two different schools districts in the Midwest. Pre and post test
design was used to conduct this study. Pro social skill taught during the intervention were
accepting consequences, problem solving, avoiding trouble, and using self control. Data
were collected with a 5 point Likert-type peer rating scale. Pre and post data analysis
indicated significant gains in peer acceptance after social skill training was implemented
by classroom teacher and school psychologist.

In summary, research demonstrates the effectiveness of social skill instruction for
students with and with out disabilities. Modeling, role playing, corrective feedback,
behavior rehearsal and prompting of appropriate behaviors have been found among the
most effective instructional strategies used in educational classrooms Walker, Ramsey, &
Gresham, 2004; Cartledge & Loe, 2001).
General Physical Education, Recreation /Leisure and Sport

Physical education, recreation/leisure and sport settings offer unique venues where students can learn and exhibit appropriate social skills. Vidoni (2003) affirms the importance of teaching social skills in physical education and points out that the National Association for Sport and Physical Education Standards for Physical Education (NASPE Standards) specify the importance of teaching social skills. NASPE Standards (2004) specify that students in physical education must exhibit responsible personal and social behavior that respects self and others. It also values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction (NASPE, 2004). Hellison (2003) states that teaching social behaviors in physical education positively impacts student performance. In addition, he mentions that physical activity instructional settings hold the potential for the development of social skills due to the fact that these environments are emotional, interactive, and for some, attractive. Life in the gym provides unlimited opportunities for intervention and for the demonstration of personal and social qualities.

While physical education offers a unique educational environment where students can interact socially, the development of social skills does not happen automatically. According to Buchanan (2001), specific instructional strategies need to be used to develop social skills. Strategies like Teaching Personal and Social Responsibility (TPSR) (Hellison, 2003) and Fair Play Code of Conduct in Sport Education (Siedentop, Hastie, & van der Mars, 2004; Vidoni, 2005) had been used in physical education. In addition, other strategies like social skill instruction and cooperative learning had been used in
physical education to develop appropriate social skills behaviors (e.g., sportpersonship). Research on these strategies has demonstrated the benefits of using social behavior instruction.

*Teaching Personal Social Responsibility (TPSR)*

Teaching Personal Social Responsibility (TPSR) (Hellison, 2003) emphasizes self responsibility, focusing on issues of respect, participation, self direction, and caring. Students in physical education progress through various levels to become responsible and behaviors are then generalized beyond the physical education setting. The suggested developmental progression levels consist of: respect (level 1), participation (level 2), self direction (level 3), caring (level 4) and behavior outside the gym (level 5). The first 4 levels are expected to be transferred to community settings. Hellison provides specific strategies to incorporate the use of social responsibility. They consist of task modification, awareness talk, counseling time, lesson plans, group meetings, reflection time and take aways.

Balderson and Sharpe (2005) examined the effects of personal accountability and personal responsibility instructional strategies on urban elementary-age, at-risk students on selected off task and positive social behaviors during movement-oriented activities. Participants included fourth- and fifth-grade students from four elementary classes in an inner-city charter-school. The dependent variables consisted of teacher management, student leadership, passive and disruptive off-task behaviors, positive social behavior, and student conflict and conflict resolution behaviors. Outcomes indicated that both personal accountability and personal responsibility treatments were effective in the
primary treatment setting (physical education classroom) for positively changing all managerial, off-task, and positive social measures. The personal responsibility treatment was particularly effective with more complex social behaviors as well as student conflict resolution.

The effects of the Teaching Personal and Social Responsibility on target behaviors of fifth-grade class in a rural elementary school were examined by Compagnone (1995). Four target students were observed and videotaped who exhibited irresponsible and off task behaviors. Students were observed twice per week before and after intervention which consist of the Hellison’s Teaching Personal and Social Responsibility (TPSR) model. To obtain a clear understanding of participants’ changes in self responsibility interviews were conducted right before and after intervention. The context of the pre-program questions deal mainly with their concepts of being responsible. For example, they were asked what being responsible meant and if and how they were responsible in physical education class. Then a similar question was asked pertaining to physical education class after intervention. A posting of social responsibility behaviors levels was placed in the gym so they were able to identify at which level of social responsibility they were exhibiting. Results of the four students observed demonstrated improvement in their awareness do self-responsibility and off task behaviors. For example, before the TPSR program was initiated, three of the students were off task for more than a third of the time, and one boy was off task for more than half of the recorded period. After the program, all four boys were on task for approximately 75 percent of the time, this evidence that they were in some way positively
affected. In addition, students’ answers of post intervention interviews demonstrate an improvement of their understanding of what mean to be responsible. For example, they stated that not being responsible meant "losing self-control," "hollering at everyone," and "getting in their face." When asked how their names could move higher (more advance) on the chart (posted on the wall on levels of responsibility), responses such as, "Don't hang around people that are gonna get you in trouble," "Get away from them," "Start being responsible," and "[use] self-control," were not uncommon. In addition, the author provided comments from personal notes like, "Louis is doing an excellent job of not letting others influence his decisions - he was at level three today." In conclusion, the author provide recommendation to effectively implement this model and increase appropriate responsible behaviors of students in physical education like: a TPSR program should be implemented at the beginning of the school year, familiarize students with the different responsibility levels, encourage reflection in students, promote peer involvement and provide for class monitoring strategies.

Hastie and Buchanan (2000) conducted a research study in which they examined the effects of integrating the TPSR model and the Sport Education model (Siedentop, 1994) to determine if they improve the behavior of sixth graders who struggled with sport education fair play requirements which are participate fully and responsible, you’re your best effort, show respect to teammates and opponents, be a good sportperson, and be helpful not harmful. The intervention was implemented during a 26 lesson season of X ball (modified Australian football). Every day class intervention procedure included strategies for teaching personal and social responsibility recommended by Hellison,
which included awareness talks or daily meetings, the opportunity to put the goal-levels into practice, and time allocated to some form of reflection. In addition problem-solving tasks to be completed by the students within their particular teams were provided. Three techniques were used to collect the data, independent observations, daily debriefs and students interviews. Results show that students strengthen their foundations of sport education during the season which are fairness and appropriate competition maintaining a sane sport culture.

Fair Play Code of Conduct in Sport Education Model

Siedentop et al. (2004) proposed a sport education model that seeks to make the sport experience more authentic to students. Its goals are student centered. The goals are to be competent, literate and enthusiastic sport people. One of the main objectives of this model is to develop group collaboration and leadership skills. Some of the appropriate behaviors that this model espouses are: perseverance, teamwork, cooperation, leadership, self-control, building character and responsibility to teammates and opponents. They state that sport education creates a context where, through active teaching, these appropriate developmental behaviors become possible. The Fair Play Code on Conduct is used by the sport education model as the central focus for appropriate sport behavior development. The fair play goals consist of: participating fully and responsibly, giving your best effort, respecting the rights and feelings of teammates and opponents, being a good sportperson and being helpful not harmful. Instructional strategies to accomplish these goals, consist of codes of conduct, fair play contracts, fair play posters, fair play...
awareness talks and discussion dealing with inappropriate behaviors. Research on fair play in physical education, has demonstrated positive social behavior outcomes. For example, Vidoni (2005) examined the effects of fair play instruction on two 8th grade physical education classes with 21 and 13 students respectively during 18-day tag rugby unit based on Sport Education. Seven students (i.e., two girls and one boy from Class 1, and two girls and two boys from Class 2) were purposely selected according to four selection criteria. First, students who did not have signed informed consent were excluded from the investigation. Second, students with poor attendance were excluded from the investigation because data were collected on a daily basis, thus data could have been missed with high absenteeism. Third, both boys and girls were represented in the selection. Fourth, the teacher pointed out one boy and one girl who demonstrated occasional or few occurrences of effort or helpful behaviors during previous units. In order to facilitate data collection, students were placed in the same team. A multiple baseline design across two behaviors was used to demonstrate functional relationship between the independent variable (Fair Play instruction) and the dependent variables: (a) students' active participation, and (b) students' helpful, harmful, and missed opportunities to help someone during a tag rugby unit. The Fair Play Instruction consisted of: (a) students developing a chart with fair play cues to be accomplished during the lesson, (b) teacher’s prompts and praise during the lesson related to fair play behaviors, and (c) positive pinpointing of fair play behaviors used by students during the lesson closure in which the teacher ask students to point out situations of fair play that occurred to them during the lesson. Teacher praised students who performed fair play behaviors. Results
show an increase in students’ active participation, a decrease in waiting time, as well as a decrease in harmful behaviors.

Hastie and Sharpe (1999) studied the effects of a fair play intervention on twenty 7th and 8th grade boys from a rural school during a 20 lesson sport education unit of a modified football game called “Kangaroo ball”. Their purpose was to examine the changes in the positive social behaviors of at risk students in physical education. The specific behaviors included the extent of compliance with or resistance to students’ referee and captains’ decisions, the amount of positive and negative interpersonal interactions, as well as leadership statements. During fair play instruction students served as team captain in which they purposefully allocated administrative task. These roles consist of players, a referee, scorer-statistician, linesmen, and a sideline cameraman. Changes in students’ compliance, interpersonal behaviors, and leadership behavior were measured. The rules of the game were designed to artificially ensure opportunities for conflict. Data collection consisted of videotaped lessons to measure and analyze frequencies and percentages of positive social or conflict behaviors. In addition, students completed a questionnaire after each lesson about perceived character of their positive social behaviors. Results indicated that exposure to the curriculum increased students’ positive peer interactions as well as self monitoring of social interactions.

Another study by Gibbons, Ebbeck, and Weiss (1995) measured the effectiveness of participation in educational activities selected from a Fair Play for Kids curriculum (1990) on moral judgment, reasoning, intention, and pro social behaviors of 452 students (248 girls, 204 boys) in 18 fourth-, fifth-, and sixth-grade classrooms in two Canadian
provinces. Six intact classrooms at each grade level were randomly assigned to the following experimental groups: (a) control -- no fair play curriculum implemented \( (n = 140) \); (b) physical education (PE) only -- fair play curriculum implemented by physical education teachers only \( (n = 146) \); and (c) all classes -- fair play curriculum implemented in physical education and in other subjects, including health, language arts, social studies, and fine arts \( (n = 166) \). The experimental protocol extended for 7 months of the academic year, and measures were administered prior to and following the intervention phase of the study. The Fair Play curriculum intervention consist of teaching strategies selected by the researchers from the Fair Play for Kids (1990) resource manual for use with the experimental groups. The selection of teaching strategies was based on two factors: (a) representation of the five ideals of fair play and (b) different types of strategies consistent with structural-developmental theory designed to enhance moral growth (i.e., moral dilemmas, dialoguing, problem solving). Data were collected through an adaptation of Horrocks' (1980) Prosocial Play Behavior Inventory (HPPBI). The behavior inventory adapted for this study required the teacher to rate each student on 10 prosocial behaviors commonly associated with fair play in sports and games. The behaviors represented in the inventory included arguments with teammates, showing off, complaining, teasing others, sharing equipment, disobeying the rules of the game, "hogging" the ball, disputing officials' decisions, not taking turns, and ignoring teammates, suggestions for improving. Content of the questions and the response format were developed by two sport psychologists with expertise in the area of moral development (e.g., "Do you think it is OK to argue in PE class?"). Results indicated that the two treatment groups significantly
increased their posttest scores on all four measures when compared to the control group. Moreover, results of this study suggest that an understanding of moral issues in the physical domain may be effectively addressed in classes inside or outside the gymnasium. Specifically, activities highlighting fair play in physical education alone or in a combination of physical education and academic classrooms were just as effective in implementing significant changes in judgment, reason, intention, and behavior.

Other Strategies used in Physical Education to Develop Social Skills

Appropriate sport behaviors, and social development has been viewed as a key element in physical education programs (Horrocks, 1980; Siedentop, 1980). Bredemeier and Shields (1987), and Weiss and Bredemeier (1990), believe that good sport behaviors in the context of sport and related activities facilitates the development of social skills. Socialization can take place through sport participation because sport provides a learning environment that promotes competition, cooperation, role playing and discipline regarding rules, regulations and goals (Bloom & Smith, 1996). Research reveals positive outcomes of sportsmanship when appropriate social instruction is provided.

Giebink and McKenzie (1985) report two studies that examined the development of appropriate sport behaviors in physical education and in a recreation setting. Study 1 examined the effects of three strategies to foster the development of sports behaviors: (a) instructions and praise, (b) modeling, and (c) point system. Participants were four boys 12 years old during a softball unit. A reversal design ABCDA was used to assess the three strategies on students’ positive and negative social interactions. During intervention
the teacher explicitly explained the behaviors to the students during instruction and praise conditions. Throughout the modeling condition, instruction and praise continued, but the teacher stopped the game some instances to point out, and do role-play of sportsmanship behaviors. During the point system condition, previous strategies remained in place, but students were rewarded (extra points for treat) when sportsmanship behaviors were performed. The results showed that all four students increased their rates of performances of sportsmanship behaviors. In addition, students’ rates of negative social interactions decreased during intervention phases.

In the second study, Giebink and McKenzie (1985) used an ABAC reversal design to assess the effectiveness of the strategies and generalization effects from softball classes on students’ sport behaviors during basketball recreational practices. The same participants were used as in study one, but the instructor was different. The same dependent variables from study one were also used. The intervention involved (a) instructions and praise, and (b) point system. The point system strategy consisted of: (a) students earning points for sportsmanship behaviors performance, (b) points earned were equal of names on ballots, and (c) ballots placed in a lottery box and drawn during the last class to win prizes. Results showed that improved sportsmanship behaviors of the softball class did not transfer to basketball; however, students decreased negative behaviors during intervention phase compared to baseline. In both studies, the point system with reinforces was the most effective intervention.

Wandzilak, Carrol, and Ansorge (1988) conducted a study to determine the effectiveness of a values-related model in producing changes in the moral reasoning,
sportsmanship perceptions, and behaviors of male junior high school basketball players. Two teams of male junior high school basketball (1 experimental group \( n=10 \), 1 control group \( n=10 \)). Intervention consisted on a discussion about issues and dilemmas of basketball. First day of intervention, participants were asked to define appropriate sport behaviors and they were asked to cite examples of good and bad sportsmanship behaviors at the end of the practice. During first two weeks one decision making task or dilemma was discussed (e.g., selecting team captain, choosing starting line up). In addition, the coach attempted to take on an appropriate sport behavior role. Each practice concluded with feedback on the players’ behaviors. The control group maintained a normal practice schedule. Appropriate sport behaviors included providing verbal or nonverbal support, shaking hands, assisting people after falls, and praise. Inappropriate sport behaviors included arguing, retaliating, fighting, and demonstrating displeasure with coaches or other persons on the court. Data were collected through the administration of two tests, The Defining Issues Test (DIT) and the Action-Choice Test for Competitive Sports situation (ACT) during the first and last week of a 9 week basketball season. In addition, three participants from each team were systematically observed twice per week throughout the season. Appropriate and inappropriate sport behaviors took place in practice and once per week in game situation. Analysis of Covariance (ANCOVA) was used to determine the effects of the model on the responses from both tests. Results indicated no significance difference between the groups for either dependent variable. However, an improvement in moral reasoning and sportspersonlike behaviors among half of the group
(five players) who received the treatment were found when comparing mean scores of both tests and behavior patterns.

Dyksen and Cohen (1996) evaluated the social and emotional goals of Special Olympics International (SOI) to determine whether or not SOI facilitates social competence and self-esteem in persons with mental retardation. Findings were "triangulated" across three studies on the social competence, adaptation, and self-perceptions of 104 athletes. Results show that SOI athletes had higher social competence scores and more positive self-perceptions and self esteem than the comparison group. The length of time participating in Special Olympics was the most powerful predictor of social competence among the study groups. This study provides us with evidence that social events provided through Special Olympics can provide individuals with mental retardation with the opportunity to develop social competence.

Sharpe, Brown, and Crider (1995) investigated the effects of an elementary physical education curriculum in which development of positive social skills, (including leadership and conflict-resolution behaviors), was the primary focus. Children (8 years old) from physical education from two urban elementary schools where chosen as participants. They were chosen due to their similar background, characteristics, and poor social skills (evidence by the average number of daily discipline referrals). Two classes, randomly selected received social instruction in the gymnasium and the third served as a control group. Regular classes for each group were monitored for the generalization effects of social instruction in the gymnasium. The effects of the curriculum intervention were evaluated in a training setting and in the students' regular education classrooms. A
multiple baseline across classrooms design was used. The intervention consisted of daily social instruction based on documented effectiveness of class wide peer tutoring and teaching self responsibility. Specific intervention procedures consisted of: (a) five minutes of teacher talk defining the objectives of the class, and (b) verbal definitions by the teacher of (good winners, good losers, peer respect, enthusiasm, content effort, conflict resolution, and peer helping and organization). Frequencies and duration of target behaviors were measured through videotaping. Results showed (a) an immediate increase in student leadership and independent conflict-resolution behaviors, (b) an increase in percentage of class time devoted to activity participation, and (c) a decrease in the frequency of student off-task behavior as well as the percentage of class time that students devoted to organizational tasks. Generalization changes in behavior were observed in regular classroom settings. The total number of conflicts was somewhat lower than in the gymnasium setting suggesting a functional relationship between the social skill curriculum and students’ behavior changes in the regular classroom.

Polvi and Telama (2000) investigated the effects of cooperative teaching on the development of helping behavior of four groups of 11 year old girls. In two groups, cooperative teaching was used and the pupils performed physical fitness exercises in pairs. The aim was to learn together. In the first of two groups the girls were systematically assigned new partners every three weeks. In the second of the two groups the girls chose their partners themselves for every lesson. The third group worked individually while the control group was given no information or instructions. In all groups the content chosen consist of gymnastics, swimming, fitness training, track and
field, ball games and winter sports. Results showed that group one participants were more willing and motivated to help provide physical and psychological support, give instructions and correct errors than the other groups. On the other hand working with the same person all the time as did the participants of group two did not promote social development. The study suggests that it is possible to develop helping behavior if children are given the opportunity to practice it with several other children.

Physical Education, Recreation /Leisure and Sport for Students with Disabilities

Sherrill (2003) promotes the development of social skills in physical education settings for student with disabilities. According to her,

“Is it not time to reconsider social inclusion as a major goal of physical education and to teach professionals how to help children achieve these goals?” It is not time to reconsider the implementation of appropriate strategies to promote the development of social skills of students with disabilities? (Sherrill, 2003).

According to Snell (1998), the mission of education is to prepare students of all ability levels for adult life in their communities. Social skills are an important and indispensable aspect of community life. However, students with disabilities do not automatically learn and exhibit appropriate social skills. This is especially true for students who possess emotional and behavioral disorders. Therefore, social skill instruction is needed in physical education settings for student with disabilities so that social skills can be acquired and eventually generalized to recreation/leisure community settings. Demchak (1994) concluded that when individuals with disabilities engage in
appropriate recreation and leisure activities they increase their chances for success in the community and are more satisfied with their lives than their peers who do not (Harner & Heal, 1993). Block (2003) states that inclusive activities, if done correctly, can promote appropriate interaction cooperative play, taking turns, anger management, following directions, listening quietly, staying on task, and behaving appropriately with non disabled peers.

Place and Hodge (2001) studied the social interactions of three eight grade females students with physical disabilities and 19 classmates (11 females, 8 males) without disabilities in an inclusive physical education classroom during a 6 week softball unit. The three girls with physical disabilities were: (a) Ashley, an African American girl with spastic cerebral palsy (balance, movement and speech difficulties) who was ambulatory with the use of a walker; (b) Karen, an African American girl that also have spastic cerebral palsy who used a power wheelchair and have full use of her upper body; and c) Abby, an European American girl with spina bifida who used a manual wheelchair with full use of her upper body. Videotaping, non participant live observations and interview schedules were used for data collection. Also two videotape systems were used for analysis, Academic Learning Time for Physical Education (ALT-PE) of Sidentop, Tousignant, and Parker (1982) and the Analysis of Inclusion Practices in Physical Education for Students (AIPE-S) of Hodge et al.(2000). Findings indicate that students with and without disabilities infrequently interacted during inclusive physical education class. In addition, two themes emerged, segregated inclusion and social isolation. In
other words, students with disabilities generally interacted within themselves and were segregated from classmates without disabilities in an inclusive physical education class.

To address Sherrill’s first question related to considering social inclusion as a major goal, Samalot – Rivera and Porretta (in review) surveyed adapted physical educators in the state of Ohio regarding their perception of teaching social skills to children with disabilities. A questionnaire was developed (Perception of Adapted Physical Educators Teaching Social Skills – PAPETSS) and mailed to a population of 426 adapted physical education teachers in the state. The instrument consisted of three parts: (a) questions eliciting Likert-type responses to determine teachers’ perceptions about the application of social skills in physical education and the degree to which they feel prepared to teach social skills; (b) a checklist list to determine what social skills teachers taught or have taught as well as what social skills are important to teach, and; (c) demographic information such as professional preparation and teaching experience. Face and content validity were established using a four member panel of experts consisting of three university faculty (two in APE and one in special education) and one public school APE teacher. A correlation of 0.89 was obtained for test-retest reliability. Two hundred twenty five (53%) teachers (148 females and 77 males) responded. Results indicated that 93% (209) of the respondents believe it is important to teach social skills and 91.5 % (204) that they should be included in the PE curriculum. However, when asked if they included social skill objectives in their teaching, 71% (160) expressed that they do sometimes or not at all. A majority 60.3 % (135) expressed not feeling properly prepared to teach social skills. This study reveals that even if teachers believe it is important to
teach social skills to children with disabilities, the majority do not feel appropriately
to teach them. Furthermore, they stated (via open-ended questions) that: a) physical
education is an appropriate and natural setting to teach social skills which can
generalize to real life settings and leisure skills, and b) sportsmanship, interaction,
acceptance of social background differences (economically/cultural background) are
benefits of teaching social skills in physical education.

Kolb and Hanley-Maxwell (2003) ascertained views of what parents perceive as
critical social skills for their children with disabilities. By purposive sampling they
interviewed 11 parents of students with high incidence disabilities attending a middle
school in the Midwest. Field notes were taken. Findings indicated that while parents
agree that academic performance is important, they wanted their children to develop
social skills in two major areas: (a) interpersonal and intrapersonal skills, which include
skills such as communicating, listening, and discerning; and (b) moral development,
including, development in character, empathy, and perseverance/motivation.
Furthermore, developing positive relationships and friendships was identified by a
majority of parents.

Hodge, Yahiku, Murata, and Von Vange (2003) stated that promoting friendship
between students with and without disabilities will likely lead to more frequent
interactions. The authors provided strategies to promote the interaction of students with
and without disabilities in inclusive classes. These strategies were: (a) creating an
interactive environment, (b) promoting cooperative learning activities/curriculum models,
(c) using class wide peer tutoring, (d) promoting in school programs/clubs, and (e)

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making community connections. In addition to these strategies, they asked teachers
which strategies they typically used. The Sport Education Curriculum Model, awareness
talk, cooperative activities, buddy systems, extracurricular activities, icebreaker activities,
teaching /learning stations, methods to pairing, peer teaching/peer tutoring/ peer
assessment, and role playing were identified.

Literature shows the social benefits children with disabilities can acquire in
leisure/recreation, physical education and sports settings. Moore et al. (1995) state that
play and leisure activities provide an important arena for the development of social skills
for children with disabilities. They studied the effect of social skill instruction and self
monitoring on game related behaviors of three ninth grade boys with behavioral
disorders. Aaron, an African American 15 years old male described by school personnel
as impulsive, aggressive, and disruptive. Jason, a 14 year old African American male,
described by school personnel as excessively disruptive, confrontive, and aggressive.
Richard, a 14 years old White male described having disruptive, aggressive and
explosive behaviors. The study was conducted in self contained urban secondary
schools. The researchers taught the boys’ game related social skills consisting of
appropriate peer reactions, appropriate reactions to losing, and appropriate reactions to
winning. A skill training model involving social modeling, behavior rehearsal and
behavior transfer was used. A multiple baseline across behaviors to evaluate the effect of
the social skill instruction on appropriate and inappropriate peer reactions and on reaction
to loosing and reactions to winning behaviors was used. Data were collected during 30
minutes of informal classroom play sessions immediately following social skill
instruction. Generalization data were collected during a 20 minute game segment in an inclusive physical education class, which took place in the gym. The intervention had positive effects on the target skills in both treatment and generalization settings. For example in the classroom all three students demonstrated an increment in appropriate behaviors (reaction to loosing, appropriate peer reactions, and reactions to winning behaviors) and a decrease in inappropriate behaviors during social skill instruction. Moreover in the generalization phase (gym), student behaviors associated with each skill improved over baseline conditions. Excepts for inappropriate peer reactive behaviors, greater improvements were evident during the self-monitoring phase.

Summary

It is evident that individuals with disabilities, especially those with emotional or behavioral disorders need to develop social skills for better integration into their respective communities (Modell & Meaginsson, 2001). Social skills instruction has been demonstrated to be an effective strategy to improve appropriate social skills in educational and physical activity contexts (Moore et al. 1995, Vidoni, 2005) for both students with and without disabilities. Social skills training strategies such as modeling, role playing, and feedback that emanate from Bandura’s Social Learning Theory are effective in teaching social skills to individuals with disabilities (Gresham, 1982). Thus far Fair Play Code of Conduct in Sport Education (Siedentop, Hastie, & van der Mars, 2004; Vidoni, 2005) and Teaching Personal Social Responsibility (Hellison, 2003) have been used successfully to teach appropriate social behaviors in physical education.
However, future studies need to focus more on the generalization effects of these interventions (Ward & Barrett, 2002), especially with students who exhibit emotional or behavioral disorders.
CHAPTER 3

METHODS

This chapter describes the methods used for investigating the use of social skill instruction relative to appropriate and inappropriate behaviors of students with behavioral disabilities during competitive sports/games while in physical education and recess settings. The chapter includes: pilot study information, setting and participants, description of the independent variable, description of the dependent variables, interobserver reliability, treatment integrity and procedure reliability, experimental design and procedures (including baseline, training, maintenance and generalization), data collection, data analysis, and social validity.

Pilot Study

A pilot study was conducted to assess the feasibility and effectiveness of a social skill intervention based on appropriate behaviors during games and sport within physical education and recess settings. This pilot study took place at a central Ohio alternative education school (grades k-12) specially designed for students with behavioral disabilities and mental health issues. The school facilities included one half of a basketball court (with concrete surface) and an open field with two soccer goals and an area for
volleyball, including volleyball net. A curriculum based on appropriate sport behaviors was developed by the investigator and then tested during the pilot study. The curriculum was developed by reviewing the extant literature on basic principles of SLT and social skill instruction in addition to seeking the professional opinions of expert faculty. This curriculum was based on SLT principles (modeling, role playing/imitation, feedback) and used to teach social skills to the participants in addition to the use of reinforcement which is a contemporary SLT perspective (Ormrod, 1999). The curriculum was content validated and examined by two experts (faculty members), one special education faculty member with expertise on the teaching of social skills and another faculty member with expertise in adapted physical activity. The curriculum consisted of three instructional units: (a) appropriate behaviors when winning, (b) appropriate behaviors when losing and, (c) appropriate behaviors during the games. Four males (age range 14-15 years) participated in the pilot study. Based on teacher information, all four participants exhibited prior behavior problems and misconduct during both physical education and recess settings. All four participants where diagnosed with a disability (3 ADHD, and one bipolar/ADD) and had Individualized Educational Plans (IEPs). Their lack of appropriate social skills were one of the main reasons that prevented them from transitioning to a regular school setting. Only one participant was performing at grade level (9th grade) while the other three were not. The research design used for the pilot study was a multiple baseline across behaviors (wining, loosing and, during game behaviors).
The intervention took place in a classroom setting. Each social skill instructional session lasted approximately 15 to 20 minutes. Following instruction, students engaged in competitive sport activities (volleyball, basketball, fitness, and cup stacking challenges) in a physical education class for approximately 20 to 25 minutes. The social skill instruction and physical education classes were taught collaboratively by the classroom teacher assistant (who was always in charge of the physical education class) and the investigator. Data were videotaped and coded. Interobserver (IOA) agreement data were coded with other two observers (graduate students in adapted physical education) for 30% of the sessions. IOA’s percentages for each participant were: 91% - participant 1; 90% - participant 2; 89% - participant 3; and 88% - participant 4. The overall IOA average was 90%.

Overall, participants showed improved appropriate verbal and physical behaviors to winning, loosing, and during the games. For example, verbal behaviors consisted of phrases like, “good job, nice effort”, while physical behaviors consisted of high fives and shaking hands. In addition, all four participants decreased their inappropriate behaviors to winning and losing to some degree. For example inappropriate verbal behaviors consisted of phrases like, “you suck”, while physical behaviors consisted of pushing classmates or inappropriately throwing the equipment.

Results of the pilot study (Appendix A) demonstrated that contamination was present because the first two sets of behaviors (appropriate winning and loosing behaviors) affected the third set of behaviors (appropriate behaviors during game play). This was due to the similarity of behaviors taught during the three instructional units.
(appropriate behaviors to winning, loosing and during the game). Thus, changes in methodology took place based upon the results of the pilot study. The first change was that appropriate behaviors to winning, losing and during the game would be taught as one instructional unit, that is, appropriate sport/game behaviors. Second, a multiple baseline across participants design was used instead of a multiple baseline across behaviors. Because of contamination this design change was necessary. A multiple baseline across participants assesses the effect of the appropriate sport/game behaviors instructional unit across participants when implemented at different times.

Participants

The participants for this study were six students (4 males and 2 females) who attended two alternative education school programs designed to serve children and youth with emotional and mental disabilities (Table 3.1). Both females attended the same school program. For the purpose of this study these participants were labeled as having emotional or behavioral disorders (EBD). Both alternative educational school programs participating in this study used the term EBD as opposed to the IDEIA term, emotional disturbance (ED). The Parent Advocacy Coalition of Educational Rights (PACER, 2006) provides examples of students served under the EBD diagnosis (e.g., attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD). Individuals with ED as defined by IDEIA (2004) exhibit one or more of the following behaviors over an extended period of time: (a) an inability to learn that can not be explained by intellectual, sensory, or health factors; (b) an inability to build (initiate) or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behaviors
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 (U. S. Department of Education, 2004). However, the term EBD is considered by professionals to be more educationally relevant. That is, students who would otherwise be ineligible for special education services if labeled ED can be eligible for services when labeled as EBD.

Participant 1 was a 10 year old White American male at the fifth grade level. He was identified as having attention deficit-hyperactivity disorder (ADHD) and anger problems. Further, this participant was from a family of low socioeconomic status. His school behaviors were described as extremely impulsive and disruptive. In addition, he exhibited anger problems when things don't go the way he wanted them to. One characteristic that distinguished this participant from others was that he tended to run away when he felt frustration or anger. When frustrated or angered he walked or ran and then sat. Once he calmed down he returned to the activity.

Participant 2 was a 11 year old White American male at the sixth grade level. He was identified as having serious emotional disturbance and ADHD. Further, this participant was from a family of low socioeconomic status. His school behaviors were described as calm but on occasions impulsive and disruptive. He was the taller and appeared older than the other students. Since this participant was taller and stronger than his classmates he tended to win at games in physical education. He would typically push and get competitive when he lost a game or if the team was not performing well.
Participant 3 was a 16 year old White American male at the eleventh grade level. He was identified as having serious emotional disturbance and anger problems. While not formally diagnosed as such, his teacher believed he was schizophrenic because he exhibited constant delusional episodes at school which were often confused with bipolarity. While he was required to take medication, his mother refused to medicate him. Further, this participant was from a family of low socioeconomic status. One characteristic that distinguished this participant from others was that he tended to be alone and talked to himself. He was rejected by peers because of his strange conversations and habits.

Participant 4 was a 16 year old White American female at the tenth grade level. She was identified as having an oppositional defiant disorder (ODD). This participant was from a family of low socioeconomic status. Her school behaviors were described as extremely cooperative but at times defiant and disruptive. On occasion, she used offensive language. One characteristic that distinguished this participant from others was that she tended to be very cooperative during social skill instruction and physical education, but if she did not like an activity she could drastically change her behaviors.

Participant 5 was a 17 year old White American male at the eleventh grade level. He was identified as having attention deficit-hyperactivity disorder (ADHD) and was referred by the school personal for ODD due to his constant defiant behaviors and anger problems. Further, this participant was from a family of low socioeconomic status. In addition, he had family issues and on occasion had to live with different people. His school behaviors were described as extremely impulsive and disruptive to the extent that
he was disrespectful to the school personnel. He exhibited anger problems when things
did not go his way. One characteristic that distinguished this participant from others was
that he constantly cursed and enjoyed making others angry (e.g., teasing). He was feared
by all other students in the school and was rude to teachers and other classmates.
Furthermore, he cursed and exhibited inappropriate gestures.

Participant 6 was a 16 year old White/Native American female at the tenth grade
level. She was identified as having behavior problems and defiant behaviors. However,
this participant was not formally diagnosed as having EBD. She was referred to the
alternative school program by her local public school district because of her poor
pervasive behaviors. As such, she was in the process of been evaluated for EBD. This
participant was also from a family of low socioeconomic status. School behaviors were
described as cooperative at times but defiant at other times. She also used inappropriate
language. When things did not go her way she exhibited anger. One characteristic that
distinguished this participant from others is that she had regular visits from a probation
officer.

Because of the nature of this study participants were assigned to pairs.
Participants 1 and 2 from school one were then labeled pair 1. Pair 1 then participated
with seven other students in a group. The group then consisted of a total of nine students.
Participants 3 and 4 from school two were labeled as pair 2. Pair 2 then participated with
three other students in a group. The group then consisted of a total of five students.
Participants 5 and 6 again from school two were labeled as pair 3. Pair 3 participated with
three other students in a group. The group consisted then of a total of five students.
The criteria used for the selection of participants were that they where: (a) identified by teachers, (b) diagnosed with a behavioral disability, (c) previously demonstrated misconduct and, (d) lacked of social skills during physical education and recess settings. An additional criterion was that potential participants needed to regularly attend school.

Information related to all aspects of the study was provided to all students in their respective classrooms by the investigator. In addition, a packet consisting of a parental consent form and an informational cover letter that thoroughly described the study was sent home to parents. Another criteria for participation was to return signed parental consent forms. All students, (those as participants in the study as well as those who participated in the larger group) in each classroom return signed parental consent forms.

Participants who were assigned to pairs and served as the focus of the study were then selected by the classroom teacher and investigator considering the criteria mentioned above. The research protocol was approved by the Behavioral and Social Sciences Human Subject Review Committee of the Ohio State University (Appendix B).
<table>
<thead>
<tr>
<th>Participants</th>
<th>Age</th>
<th>Grade Level</th>
<th>Behavioral Attributes</th>
<th>IEP</th>
<th>Medication</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Male</td>
<td>10</td>
<td>5th grade</td>
<td>Attention Deficit and Hyperactivity Disorder and Anger problems</td>
<td>Yes</td>
<td>Yes</td>
<td>White American</td>
</tr>
<tr>
<td>#2 Male</td>
<td>11</td>
<td>6th grade</td>
<td>Serious Emotional Disturbance and Attention Deficit Hyperactivity Disorder</td>
<td>Yes</td>
<td>Yes</td>
<td>White American</td>
</tr>
<tr>
<td>#3 Male</td>
<td>16</td>
<td>10th grade</td>
<td>Serious Emotional Disturbance and Anger Problems</td>
<td>Yes</td>
<td>No</td>
<td>White American</td>
</tr>
<tr>
<td>#4 Female</td>
<td>16</td>
<td>10th grade</td>
<td>Oppositional Defiant Disorder (ODD)</td>
<td>Yes</td>
<td>No</td>
<td>White American</td>
</tr>
<tr>
<td>#5 Male</td>
<td>17</td>
<td>11th grade</td>
<td>Attention Deficit and Hyperactivity Disorder and Oppositional Defiant Disorder</td>
<td>Yes</td>
<td>No</td>
<td>White American</td>
</tr>
<tr>
<td>#6 Female</td>
<td>16</td>
<td>10th grade</td>
<td>Behavioral Problems and Defiant behavior (court involved)</td>
<td>No</td>
<td>No</td>
<td>White/ Native American</td>
</tr>
</tbody>
</table>

Table 3.1 Participants’ Demographic Information
Description of Independent Variable

*Social Skill Instruction Curriculum*

A modified form of the social skill instructional model as described by Moore, Cartledge and Heckman (1995), was used to teach the targeted social skills. The modified curriculum based on basic principles of SLT was described in the pilot study section of this chapter and also in appendix C. The curriculum consisted of 15 lesson plans focusing on appropriate behaviors during games and sports (e.g., when losing, when winning and during the game) (Appendix C). Positive prompts of appropriate behaviors were provided by the classroom instructor during physical education class sessions which consisted of games and sports such as basketball, volleyball, ultimate frisbee, speed stacking, kick ball, fitness challenges and games. These activities considered to create an interactive environment. Furthermore, they are functional and can be used as leisure/recreation activities in the community. There were seven steps (phases) to this instruction model. First, a rationale and definition of the skill to be learned was provided. Second, the classroom instructor modeled the skill. Third, students had guided practice of the target skill. Fourth, students were asked to role play the skill through guided practice. Fifth, questions and scenarios focusing on sports and games were provided to assess student understanding. Sixth, the classroom instructors provided students a verbal or written homework assignment. Seventh, students were asked to practice the acquired skill in the physical education class session.
Rationale (Step 1)

During the first stage of instruction students were provided with a rationale and definition of the skill to be acquired, (e.g., congratulating the winner when loosing). Positive examples of the skill to be performed were provided to the students by the classroom instructor (e.g., saying “good game” or “good defense” to the opponents after loosing a game), followed by a scenario to engage them in discussion about the positive consequences of performing the appropriate behavior (e.g., be a good sports person) and the negative outcomes (e.g., not being a good sports person) of performing the opposite behavior (e.g., “you cheated”, “you won because you were lucky”). In addition, questions were asked to encourage students to provide appropriate examples of the target behavior.

Modeling (Step 2)

In this step solutions to the previous target skills scenario (congratulating the winner when loosing) and student examples of appropriate target behavior (e.g., good game, I like the way you throw the ball) were demonstrated and explained by the classroom instructor to the students. For example, the classroom instructor presented a loosing situation, and used an appropriate expressions like (e.g., “congratulations”), and explained to students the positive and negative outcomes of either appropriate or inappropriate behaviors of the target skill. Questions were asked to engage students in a discussion to facilitate their understanding of the modeled skills (e.g., what are the benefits of congratulating the winner when you loose?, why it is important to congratulate the winner when you loose?).
Guided Practice of Target Skill (Step 3)

Students had the opportunity to imitate the model’s example of how to appropriately perform the target skill under the classroom instructor supervision. Classroom instructor provide corrective feedback if needed.

Role Play (Step 4)

Scenarios related to the target behavior were demonstrated by students in class. Students were assigned to a specific role and as a group demonstrated appropriate behavior to the hypothetical situations presented. The classroom instructor did make sure that selected participants of the study were involved in the role playing (Appendix D).

Student assessment for understanding (Step 5)

Questions focusing on sport and games were provided to students with the purpose of assessing their understanding of the skills taught (e.g., what did you learn about using appropriate behavior when loosing a game?). During this step the classroom instructor make sure to specifically ask selected participants to assess their understanding.

Homework Assignment (Step 6)

Students were provided with a homework assignment so they were directed to practice the skill at other times or in other settings.

Follow up / practice (Step 7)

Students were asked to practice the appropriate new target skill learned immediately following the physical education class session. Reminders to use the new target skill will be provided during this time (e.g., “remember to congratulate the other team”, “use your nice words about their game”).
Frequencies of target behaviors were measured by recording the number of times a student displays any of the descriptions stated for each behavior during physical education class and during recess. See Appendix E for the daily record form.

Interobserver agreement

Randomly videotaped sessions (30%) of the physical education class setting were conducted for each of the participants to establish interobserver (IOA) agreement. In addition, IOA was conducted during recess (generalization) as well. This resulted in 44% of sessions for participant 1, 40% for participant 2, 33% for participant 3, 29% for participant 4, 43% for participant 5 and 33% for participant 6. To the extent possible, a pre established percentage of the sessions for both physical education and recess were identified to establish IOA. However, all participants did not have the same percentage of sessions because of absenteeism.

IOA was calculated by dividing the lower number of behaviors by the higher number of behaviors recorded and multiplying the result by 100 (Cooper et al., 1987). To increase reliability in recording between observers, the data recording form was divided into three time segments (see Appendix E).

Observer Training

Videotapes from the baseline setting (physical education) were used to practice coding of the dependent variables for each of the three pairs of participants. First, a discussion and explanation of the definitions of the behaviors as well as how to correctly
use the coding sheet took place between the investigator and coders. Three coders were trained. One coder observed participants of pair 1; a second coder observed participants of pair 2 and a third coder observed participants of pair 3. All three coders were doctoral students in adapted physical activity. Second, the investigator and coders observed the training tapes at least two times or until both felt they had a clear understanding about the definitions of the dependent variables. Open discussion of target behaviors took place for clarification. During the third session, each coder record the target behaviors on the recording form and disagreements were discussed. Each session last proximally two hours. These procedures ended when at least an 82% agreement was obtained.

Treatment Integrity and Procedural Reliability

Treatment integrity refers to the extent to which the independent variable is applied or implemented as intended (Cooper, et al., 1987). To ensure that the independent variable was applied in an accurate and consistent manner, a procedural reliability checklist (Appendix F) was used in each intervention session.

Experimental Design

A multiple baseline across participants design was used to evaluate the effects of social skill instruction on appropriate and inappropriate behaviors during games and sports across acquisition, maintenance, and generalization. When assessing the effects of such an intervention, a multiple baseline design is recommended because theoretically social skills are irreversible (Cooper, et al., 1987).
Procedures

General instruction procedures:

Social skills instructional sessions took place three times per week for each participant pair. Each teacher used detailed lesson plans provided by the investigator which were developed from the instruction model (Appendix D). The instructional sessions were between 20 to 25 minutes in duration for each participant pair. Each instructional session start with providing students a rationale and definition of the skill to be learned. Second, the teacher modeled the skill to be learned followed by a chance for the students to perform guided practice of the modeled skill. Then, the teacher provided students with written examples (hand outs) of how they could perform the skill. Next, role playing and a question/answer period to determine whether or not participants understood the skill were presented. Finally, teachers provided students with assignment related to the skill and asked them to practice the skill in the physical education class. Immediately after instruction, participants participated in physical education.

The physical education class sessions were in the form of competitive sport activities and games. Prompts of appropriate peer reaction behaviors and appropriate winning and losing behaviors were provided to the students during the physical education class sessions during intervention phase. No prompting was provided for any specific skill during baseline or maintenance phases. For generalization purposes, all participants were observed during recess time in which they participated in sport activities and games with students from throughout the school. No prompting was provided for any specific skill during generalization.
Participants 1 and 2 (pair 1) had between 30 to 35 minutes for each physical education class session. The physical education class session started with a warm up (e.g. stretching exercises) followed by drills of the various skills of the sport to be played. Then, participants had a chance to actually compete on the game activities.

Participants 3 and 4 (pair 2) had between 20 to 30 minutes of physical education class sessions following the social skill instruction. While the physical education class did not begin with a warm up, it did start with an explanation of the sport or competitive game to be played. The participants had time to practice the sport or competitive game which was followed by actually playing it.

Participants 5 and 6 (pair 3) had between 20 to 30 minutes of physical education class sessions following the social skill instruction. The format of the class was similar to pair 2 in which they received an explanation of the sport, time to practice and time to play.

The first pair (participant 1 and 2, and the remaining seven students) received social skill instruction by a male State of Ohio certified classroom teacher assistant with six years of experience on that school who is certified to teach reading and physical education. This teacher assistant was also in charge of the physical education class session in collaboration with the investigator. The social skill instruction took place in the school social worker classroom. The classroom had a black board and two big tables with chairs around it. In addition the classroom had two books cabinets with table games. The teacher assistant who did the social skill instruction for this group followed the procedures of the instruction in a very detailed manner. This teacher assistant literally
took ownership of the social skill instruction. He came every day to the social skill instruction session well prepared, in addition he modified the lesson plan scenarios including students names on it and including some issues that already were happening with them that were related to the social skill to be taught. He provided hand outs of the role plays and every student (target and non target) had a chance to participate. The teacher divided the group in two so every child had the chance to participate in the role plays. He taught half of the group first and the other half later. Both target students (pair 1, participants 1 and 2) were always together. In other words this teacher assistant went beyond what was expected of him. Further, this teacher assistant provided these students with written assignments that needed to be turn in the next day.

After the social skill instruction, the teacher assistant for pair 1 (participants 1 and 2) organized the students into a circle when they performed warm up exercises. After this, he explained once again that he was expecting to see the learned skill described in the classroom. Next, physical education class activities took place. All physical education and activities took place either in a outdoors half concrete basketball court, in a open soccer field or under a shed (in rainy days) adjacent to the school. When the physical education class was over, the teacher grouped all students in a circle formation and asked them if they had a chance to use the new learned social skill during the sport/game played. Lastly, participants walked back to the building.

The second pair (participants 3 and 4, and the remaining three students) received the social skill instruction from the school lead teacher who was certified by the State of Ohio in special education. This was this teacher’s first year as a special education lead
teacher in that school. However, she had 8 years of previous teaching experience. The social skill instruction for pair 2 (participants 3 and 4) took place in a small audiovisual room. In that room they had chairs, a couch and a couple of tables, in addition to a TV and DVD. Teacher for pair 2 did start the social skill instruction with an explanation of the skill to be taught. She followed the lesson plans and depending on students’ behaviors during the instruction, she made the necessary adjustments. However, she did try to follow it step by step. During the role plays, this teacher had to lead the students to actually participate because some students were not cooperative. However, they did eventually participate in the role plays. After the social skill instruction, participants engaged in the physical education class. A female teacher assistant also certified by the State of Ohio led each physical education class session. She was a veteran teacher for more than 20 years of experience and for the last 5 to 6 years she was working as a teacher assistant (physical education and art). She taught physical education in collaboration with the investigator. The physical education class took place in a couple of places depend on weather conditions and availability of staff. For rainy days they stayed in a physical education fitness room which had medicine balls, dumbbells, and other fitness equipment. Some other days they participated outside in the yard or on a basketball court near by the school (walking distance).

The third pair (participants 5 and 6, and the remaining three students) received social skill instruction from another male State of Ohio certified teacher assistant certified to teach art and physical education. The physical education class for the third group was led by the same teacher assistant who provided services to the second group in
collaboration with the investigator.

The socials skill instruction for the third group took place in a conference room that had individual working stations and a couple of computers. Like the teacher for group 2, the group 3 teacher followed the lesson plans for the instruction and depending on students attitudes he made some adjustments. This group had more difficulty following the role playing; however they were able to eventually perform them. After the social skill instruction students participated in physical education with the same teacher who provided physical education to group 2. On some occasions due to lack of school personal both group 2 (participants 3 and 4, and the remaining students) and group 3 (participants 5 and 6 and the remaining students) had to participate together during physical education.

Baseline

Participants were observed for occurrence of all dependent variables during physical education sessions until stability was achieved. Stability refers to repeated measures of a participant’s behavior obtained on the absence of the variable to be evaluated (intervention) (Cooper et al., 1987).

Maintenance

The maintenance phase followed the completion of the intervention for all participants. Maintenance refers to withdrawing the intervention procedure while continuing to observe target behaviors. For example, after the first participant completed the assigned social skill instruction lesson plans, observations continued for three
additional physical education sessions. The same procedure was followed for the other remaining participants.

Generalization

Participants were observed individually during recess while playing sports (e.g. soccer) and games (e.g. chess).

Social Validity

A social validity questionnaire was developed and administrated to teachers and parents (Appendix G) to assess their attitudes and perceptions about the validity of the social skill instruction. This questionnaire consisted of 5 items. It was revised and content validated by three university faculty (one in special education, and two in adapted physical education). Social validity assesses the social acceptability of the target behaviors, and social importance of the results to consumers (Cooper et al., 1987).

Data Collection

First of all, it is important to know that data were collected primarily during competition as opposed to the end of the game or activity. The competitive phase (length of a game/activity) was longer in duration than observing behaviors following a game/activity. Data were recorded (Appendix E) during videotaped sessions of physical education and recess. Two cameras were used for coding purposes. For group one (pair 1, participants 1 and 2), only one camera was used due to the fact that one of the other members of the class was not allowed to be videotaped. However, special arrangements during the physical education class session were made (e.g., assign participants in pairs)
to allow the classmate to participate during physical education without being videotaped. For the other two pairs depending on activity and need, two video cameras were used to capture as many behavior occurrences as possible. The cameras were placed outside of the play area and strategically positioned to capture both video and audio without interfering with the participant or other members of the class.

Data Analysis

Visual analysis of the target behaviors was performed using a graphical representation of the data. Data analysis consisted of a trend analysis which allows one to inspect each student’s behavioral trends. In addition, mean scores and ranges as well as mean increases and decreases of appropriate and inappropriate behaviors during physical education class and recess sessions were presented.
CHAPTER 4

RESULTS

This chapter presents the results of social skill instruction on the acquisition, maintenance, and generalization of social behaviors of students with emotional or behavioral disorders during competitive sports/games activities. Interobserver agreement results are addressed in the first section. In the second section, procedural integrity information is provided. In the third section, data for all participants are presented following by a summary of results. Finally, social validity results are discussed in the last section of this chapter.

Interobserver Agreement

Table 4.1 summarizes the interobserver agreement (IOA) scores for all participants for appropriate and inappropriate behaviors during physical education class sessions. IOA was conducted in 30% of session during physical education class for all six students across all conditions. IOA was calculated by dividing the lower number of behaviors by the higher number of behaviors recorded and multiplying the result by 100 (Cooper et al., 1987). In the physical education class setting, Participant 1 had an overall IOA mean of 93.5% for appropriate behaviors, and overall IOA mean of 95.8% for inappropriate ones. Participant 2 had an overall IOA mean of 94.1% for appropriate
behaviors and overall IOA mean of 91% for inappropriate ones. Participant 3 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 94.7% for inappropriate ones. Participant 4 had an overall IOA mean of 94.6% for appropriate behaviors and overall mean of 92.7% for inappropriate ones. Participant 5 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 92.8% for inappropriate ones. Participant 6 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 93.8% for inappropriate ones.

An IOA average of 75% is considered to be acceptable when observing more than one participant and different behaviors simultaneously by two observers (Cooper et al., 1987). In the physical education class setting, the overall IOA average across participants was 95% with a range of 92.5% -100%. Thus, scores are considered to be acceptable.

Table 4.2 summarizes the interobserver agreement scores for all students’ appropriate and inappropriate behaviors during recess. IOA was conducted on 44% of the recess sessions for participant 1, 40 % for participant 2, 33% for participant 3, 29% for participant 4, 43% for participant 5 and 33% for participant 6.

For recess, participant 1 had an overall IOA mean of 100% for appropriate behaviors and an overall IOA mean of 100% for inappropriate ones. Participant 2 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 95% for inappropriate ones. Participant 3 had an overall IOA mean of 100% for appropriate behaviors and an overall mean of 100% for inappropriate ones. Participant 4 had an overall IOA mean of 100% with an overall IOA mean of 90% for inappropriate ones.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
<th>Session 7</th>
<th>Total Mean Score</th>
<th>Range</th>
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<tr>
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<td>100</td>
<td>100</td>
<td>80</td>
<td>90</td>
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<tr>
<td></td>
<td></td>
<td>Inappropriate</td>
<td>100</td>
<td>100</td>
<td>91</td>
<td>80</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tr>
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<td></td>
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<td>90</td>
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<td>83</td>
<td>100</td>
<td>93</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
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<td></td>
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<td>100</td>
<td>100</td>
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<td></td>
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<td>100</td>
<td>80</td>
<td>100</td>
<td>82</td>
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<tr>
<td></td>
<td></td>
<td>Inappropriate</td>
<td>83</td>
<td>100</td>
<td>93</td>
<td>100</td>
<td>88</td>
<td>100</td>
<td>85</td>
</tr>
<tr>
<td>Pair 4</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inappropriate</td>
<td>93</td>
<td>96</td>
<td>92</td>
<td>92</td>
<td>83</td>
<td>94</td>
<td>100</td>
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<td></td>
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<tr>
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<td></td>
<td>Inappropriate</td>
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<td>86</td>
<td>88</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>93.8</td>
</tr>
</tbody>
</table>

Table 4.1 Physical Education Interobserver Agreement Scores for each Participant
Participant 5 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 100% for inappropriate ones. Finally, participant 6 had an overall IOA mean of 100% for appropriate behaviors and overall IOA mean of 100% for inappropriate ones.

The overall IOA recess average across participants was 98.8% with a range of 95%-100%. Thus, IOA recess average is considered acceptable.

<table>
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<tr>
<th></th>
<th>P</th>
<th>Appropriate</th>
<th>Inappropriate</th>
<th>Total Mean</th>
<th>Range</th>
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<tr>
<td></td>
<td>2</td>
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<td>100</td>
<td>100</td>
<td>100-100</td>
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<tr>
<td></td>
<td>3</td>
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<td>100</td>
<td>100</td>
<td>100-100</td>
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<td>4</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100-100</td>
</tr>
<tr>
<td>Pair 2</td>
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<td>100</td>
<td>100-100</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100-100</td>
</tr>
</tbody>
</table>

Table 4.2 Recess Intrarobserver Agreement Scores for each Participant
Procedural Reliability

Table 4.3 summarizes the procedural reliability scores for all three teachers during the social skill instructional phase of the study. Procedural reliability was established by the use of a checklist (Appendix F). The first teacher for pair 1 (participants 1 and 2) had an overall mean score of 98% in 14 of the 15 social skill instruction sessions. The investigator was unable to collect data for one of the instructional sessions for teacher of pair 1 (participants 1 and 2). The second teacher assistant for pair 2 (participants 3 and 4) had an overall mean score of 91% across 12 social skills instructional sessions and the third teacher for pair 3 (participants 5 and 6) had an overall mean score of 90% across 7 social skill instruction sessions. Based on the obtained mean scores procedural reliability found to be acceptable.

<table>
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<tr>
<th>Session</th>
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<th>Teacher of Pair 2</th>
<th>Teacher Pair 3</th>
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<td>Participant 1 and 2</td>
<td>Participants 3 and 4</td>
<td>Participants 5 and 6</td>
</tr>
<tr>
<td>1</td>
<td>100%</td>
<td>100%</td>
<td>86%</td>
</tr>
<tr>
<td>2</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
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<td>3</td>
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<td>71%</td>
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<td>86%</td>
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<td>5</td>
<td>100%</td>
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<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>100%</td>
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</tr>
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<td>Na</td>
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<td>100%</td>
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<td>8</td>
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<td>86%</td>
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<tr>
<td>Range</td>
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<td>71%-100%</td>
<td>71%-100%</td>
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</tbody>
</table>

Table 4.3 Procedural Reliability Percentages
Participant 1

Physical Education

Figure 4.1 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention, and maintenance during the physical education class sessions. During baseline the mean number of appropriate sports/game behaviors for participant 1 was 1.6 (range 0-3). The mean for inappropriate sport/game behaviors was 22.3 (range 14-33).

During physical education intervention, the mean of appropriate sport/game behaviors was 12.1 (range 5 – 20). This was a mean increase of 10.5 which is equivalent to an increase of 656% from baseline. The mean of inappropriate sport/game behaviors was 8.5 (range 2 – 21). This was a mean decrease of 13.8 or a 62% decrease from baseline.

The mean of appropriate sport/game behaviors for maintenance was 14.3 (range 5 – 28). This was a mean increase of 12.7 or a 794% increase from baseline. The mean score for inappropriate sport/game behaviors was 2.7 (range 2 – 6). This was a mean decrease of 19.6 or an 88% decrease from baseline.

Recess

Figure 4.2 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during the recess sessions. During baseline, the mean number of appropriate sports/game behaviors for student 1 was 1.5 (range 0 – 3). The mean number for inappropriate sport/game behaviors was 5.0 (range 4 – 6).
During intervention, the mean number of appropriate sport/game behaviors was 3.5 (range 0 – 6). This was a mean increase of 2, equivalent to an increase of 133% from baseline. The mean number of inappropriate sport/game behaviors was 2.3 (range 0 – 4). This was a mean decrease of 2.7, or a 54% decrease from baseline.

During the recess maintenance phase, the mean number of appropriate sport/game behaviors was 1.0 (range 0 – 1). This was a mean decrease of 0.5, or a 33% decrease from baseline. The mean score for inappropriate sport/game behaviors was 3.0 (range 0 – 3). This was a mean decrease of 2, or a 40% decrease from baseline.

**Participant 2**

*Physical Education*

Figure 4.3 illustrate the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance for the physical education class sessions. During physical education baseline, the mean number of appropriate sports/game behaviors for participant 2 was 1.0 (range 0 – 2). The mean number for inappropriate sport/game behaviors was 8.8 (range 8 – 13).

During intervention, the mean number of appropriate sport/game behaviors was 13.0 (range 2 – 22). This was a mean increase of 12, equivalent to an increase of 1,200% from baseline. The mean number of inappropriate sport/game behaviors was 6.9 (range 2 – 11). This was a mean decrease of 1.9 or a 22% increase from baseline.

The mean of appropriate sport/game behaviors for maintenance was 6.7 (range 6 – 7). This was a mean increase of 5.7 or a 570% increase from baseline. The mean score or inappropriate sport/game behaviors was 8.3 (range 2 -14). This was a mean decrease of 0.5 or a 6% decrease from baseline.
Fig. 4.1 Appropriate and Inappropriate Behaviors during Physical Education for Participant 1

Fig.4.2 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 1
Recess

Figure 4.4 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention, and maintenance during recess setting. During baseline, the mean number of appropriate sports/game behaviors for participant 2 was 1.0 (range 0 – 2). The mean number for inappropriate sport/game behaviors was 5.0 (range 0 – 5).

During intervention, the mean number of appropriate sport/game behaviors was 3.5 (range 0 – 6). This was a mean increase of 2.5, equivalent to an increase of 250% from baseline. The mean number of inappropriate sport/game behaviors was 2.6 (range 0 – 6). This was a mean decrease of 2.4, or a 46% decrease from baseline.

During the recess maintenance phase, the mean number of appropriate sport/game behaviors was 1.5 (range 0 – 3). This was a mean increase of 0.5, or a 50% increase from baseline. The mean score for inappropriate sport/game behaviors was 0 (range 0 – 0). This was a mean decrease of 5 or a 100% decrease from baseline.

Participant 3

Physical Education

Figure 4.5 shows the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance for the physical education class sessions. During baseline in the physical education setting, the mean number of appropriate sports/game behaviors for participant 3 was 0.14 (range 0 – 1). The mean number for inappropriate sport/game behaviors was 6.7 (range 2 – 14).
Fig. 4.3 Appropriate and Inappropriate Behaviors during Physical Education for Participant 2

Fig 4.4 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 2
During physical education intervention the mean number of appropriate sport/game behaviors was 1.7 (range 0 – 5). This was a mean increase of 1.6, which equivalent to an increase of 1,600% from baseline. The mean number of inappropriate sport/game behaviors was 4.3 (range 0 – 13). This was a mean decrease of 2.4 or a 36% decrease from baseline.

The mean of appropriate sport/game behaviors for maintenance was 0.33 (range 0 -1). This was a mean increase of 0.2 or an 200% increase from baseline. The mean score for inappropriate sport/game behaviors was 1.0 (range 0 - 2). This was a mean decrease of 5.7 or an 85% decrease from baseline.

Recess

Figure 4.6 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during recess sessions. During recess baseline this participant did not have scores due to being absent. As a result, means and percentages could not be provided for this phase.

During intervention, the mean number of appropriate sport/game behaviors was 0.7 (range 0 – 2). The mean number of inappropriate sport/game behaviors was 0.7 (range 0 – 2).

For maintenance the mean number of appropriate sport/game behaviors was 0 (range 0 – 0). And, mean score for inappropriate sport/game behaviors was 1.3 (range 0 – 4).
Fig. 4.5 Appropriate and Inappropriate Behaviors during Physical Education for Participant 3

Fig. 4.6 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 3
Participant 4

*Physical Education*

Figure 4.7 illustrated the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during the physical education class sessions. During baseline, the mean number of appropriate sports/game behaviors for participant 4 was 0.8 (range 0 – 2). The mean number for inappropriate sport /game behaviors was 9.9 (range 5 – 20).

During intervention, the mean number of appropriate sport/game behaviors was 9.3 (range 1 -37). This was a mean increase of 8.5 which is equivalent to an increase of 1,062% from baseline. The mean of inappropriate sport/game behaviors was 7.3 (range 1 – 14). This was a mean decrease of 2.6 or a 26% decrease from baseline.

The mean of appropriate sport/game behaviors for maintenance was 2.7 (range 0 – 5). This was a mean increase of 1.9 or a 238% increase from baseline. The mean score for inappropriate sport/game behaviors was 2.7 (range 1 – 5). This was a mean decrease of 7.2 or an 73% decrease from baseline.

*Recess*

Figure 4.8 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during recess sessions. During recess baseline, the mean number of appropriate sports/game behaviors for participant 4 was 0 (range 0 – 0). The mean number for inappropriate sport /game behaviors was 1 (range 1 - 1).
During intervention, the mean number of appropriate sport/game behaviors was 1.7 (range 0 – 4). This was a mean increase of 1.7, equivalent to a 170% increase from baseline.

The mean number of inappropriate sport/game behaviors was 3.7 (range 0 – 6). This was a mean increase of 2.7 or an increase of 270% from baseline.

During maintenance the mean number of appropriate sport/game behaviors was 0 (range 0–0). Levels of appropriate behaviors during this phase remained at 0 compared to baseline. The mean score for inappropriate sport/game behaviors was 1 (range 0 – 2). Levels of inappropriate behaviors in this phase remained at the same level (1) compared to baseline.

Participant 5

Physical Education

Figure 4.9 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during the physical education class sessions. During physical education baseline the mean number of appropriate sports/game behaviors for participant 5 was 1.0 (range 0 – 3). The mean number for inappropriate sport/game behaviors was 25.1 (range 17 – 36).

During intervention, the mean number of appropriate sport/game behaviors was 3.8 (range 0 – 11). This was a mean increase of 2.8, which equivalent to an increase of 280% from baseline.

The mean number of inappropriate sport/game behaviors was 20.0 (range 13 – 35). This was a mean decrease of 5.1 or a 20% decrease from baseline.
Fig. 4.7 Appropriate and Inappropriate Behaviors during Physical Education for Participant 4

Fig. 4.8 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 4
Recess

The mean number of appropriate sport/game behaviors for maintenance was 1.0 (range 0 – 2). Behaviors for this participant remained at the same level (1) compared to baseline. The mean score for inappropriate sport/game behaviors was 24.3 (range 11 – 36). This was a mean decrease of 0.8 or an 3% decrease from baseline.

Figure 4.10 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during recess sessions. During recess baseline, the mean number of appropriate sports/game behaviors for participant 5 was 1.0 (range of 0 – 2). The mean number for inappropriate sport/game behaviors was 11.7 (range of 4 – 21).

During intervention, the mean number of appropriate sport/game behaviors was 0.0 (range 0 – 0). This was a mean decrease of 1, equivalent to a decrease of 100% from baseline. Behaviors for this phase remained at same mean level compared to baseline (11.7).

During maintenance phase, in recess time, the mean number of appropriate sport/game behaviors was 0.0 (range 0 – 0). This was a mean decrease of 1 or a 100% decrease from baseline. The mean score for inappropriate sport/game behaviors was 5.5 (range 3 – 8). This was a mean decrease of 6.2 or a 53% decrease from baseline.
Fig. 4.9 Appropriate and Inappropriate Behaviors during Physical Education for Participant 5

Fig. 4.10 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 5
Participant 6

Physical Education

Figure 4.11 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during the physical education class sessions. During physical education baseline the mean number of appropriate sports/game behaviors for participant 6 was 1.1 (range 0 – 5). The mean number for inappropriate sport/game behaviors was 6.5 (range 0 – 17).

During intervention, the mean number of appropriate sport/game behaviors was 1.3 (range 0 - 4). This was a mean increase of 0.2, equivalent to a increase of 21% from baseline.

The mean number of inappropriate sport/game behaviors was 4.3 (range 1 – 7). This was a mean decrease of 2.2 or a 34% decrease from baseline.

The mean number of appropriate sport/game behaviors for maintenance was 1.0 (range 0 - 2). This was a mean decrease of 0.1 or a 9% decrease. The mean score for inappropriate sport/game behaviors was 4.0 (range 1 - 7). This was a mean decrease of 2.5 or an 38% decrease from baseline.

Recess

Figure 4.12 illustrates the number of appropriate and inappropriate behaviors for each session during baseline, intervention and maintenance during the recess sessions. During baseline in recess time, the mean number of appropriate sports/game behaviors for participant 6 was 0.0 (range 0 - 0). The mean number for inappropriate sport/game behaviors was 1.0 (range 1 – 1).
During intervention, the mean number of appropriate sport/game behaviors was 0.5 (range 0 – 1). This was a mean increase of 0.5, equivalent to an increase of 50% from baseline. The mean number of inappropriate sport/game behaviors was 1.0 (range 0 – 2). Levels of inappropriate behaviors remain the same during this phase (1).

During maintenance the mean number of appropriate sport/game behaviors was 0.0 (range 0 – 0). Levels of appropriate behaviors during this phase remained the same (0). The mean score for inappropriate sport/game behaviors was 1.0 (range 1 – 1). Also levels of inappropriate behaviors during this phase remained the same (1).
Fig. 4.11 Appropriate and Inappropriate Behaviors during Physical Education for Participant 6

Fig. 4.12 Appropriate and Inappropriate Behaviors during Generalization (Recess) for Participant 6
Summary

Total mean scores of appropriate and inappropriate behaviors during baseline, intervention, and maintenance phases during physical education class sessions for all participants are provided in Table 4.4. Table 4.5 provides overall mean scores of appropriate and inappropriate behaviors during baseline, intervention and maintenance phases during recess sessions for all participants. Overall in the physical education class sessions, five of the six or 83% of the participants increased their appropriate behaviors with the implementation of the social skill instruction. Of those five participants, three increased their appropriate behaviors from baseline with mean increases of 12 (1,200%), 10.5 (656%) and 8.5 (1062%) respectively, while two other participants increased but at lower levels with 2.8 (280%) and 1.6 (1,600%), respectively. During maintenance, one of the 6 participants or 17% maintained and improved appropriate behaviors. Two participants or 33% did not maintain behaviors, although appropriate behaviors remained higher than baseline levels. Finally, the three remaining participants decreased their appropriate behaviors similar to baseline levels.

All six participants or 100% decreased their inappropriate behaviors with the implementation of the social skill instruction during physical education class sessions. Of the six participants, two or 33% decreased inappropriate behaviors 62% and 36% respectively while the remaining four decreased their inappropriate behaviors at lower levels 34%, 26%, 22%, and 20% respectively. During physical education maintenance, four of the six participants or 66% maintained their decreased inappropriate behaviors.

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Further, of these four participants, three continued to decrease their inappropriate behaviors during maintenance. On the other hand, the two remaining participants increased their inappropriate behaviors similar to baseline levels.

During the generalization phase (recess) four of six participants or 66% showed improvement in appropriate behaviors during intervention compared to baseline. However, during the maintenance phase none of the participants maintained behaviors at intervention levels. Regarding inappropriate behaviors during generalization (recess), three of the six participants or 50% decreased their inappropriate behaviors while two participants or 33% increased their inappropriate behaviors. One participant remained at a level similar to both baseline and intervention phases. Overall, data demonstrate some degree of generalization to a recess setting.
### Table 4.4 Mean Scores for Appropriate and Inappropriate Behaviors during Physical Education

<table>
<thead>
<tr>
<th>Participants</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1 Appropriate</td>
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<td>12.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>22.3</td>
<td>8.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Participant 2 Appropriate</td>
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<td>13</td>
<td>6.7</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>8.8</td>
<td>6.9</td>
<td>8.3</td>
</tr>
<tr>
<td>Participant 3 Appropriate</td>
<td>0.1</td>
<td>1.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>6.7</td>
<td>4.3</td>
<td>1</td>
</tr>
<tr>
<td>Participant 4 Appropriate</td>
<td>0.8</td>
<td>9.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>9.9</td>
<td>7.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Participant 5 Appropriate</td>
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<td>1</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>25.1</td>
<td>20</td>
<td>24.3</td>
</tr>
<tr>
<td>Participant 6 Appropriate</td>
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<td>1.3</td>
<td>1</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>6.5</td>
<td>4.3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 4.5 Mean Scores for Appropriate and Inappropriate Behaviors during Recess

<table>
<thead>
<tr>
<th>Participants</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
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<td>3</td>
</tr>
<tr>
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<td>1.5</td>
</tr>
<tr>
<td>Inappropriate</td>
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<td>2.7</td>
<td>0</td>
</tr>
<tr>
<td>Participant 3 Appropriate</td>
<td>Na</td>
<td>0.7</td>
<td>0</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>Na</td>
<td>0.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Participant 4 Appropriate</td>
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<td>0</td>
</tr>
<tr>
<td>Inappropriate</td>
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<td>3.7</td>
<td>1</td>
</tr>
<tr>
<td>Participant 5 Appropriate</td>
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<td>5.5</td>
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<tr>
<td>Participant 6 Appropriate</td>
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<td>0</td>
</tr>
<tr>
<td>Inappropriate</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Social Validity

A social validity questionnaire was developed and administrated to teachers and parents (Appendix G) to assess their attitudes and perceptions about the validity of the social skill instruction program. The questionnaire was distributed to a total of 19 people (6 school personnel and 13 parents). It was completed and returned by eight of them (42%). These eight individuals consisted of all six school personnel (1 classroom teacher, 3 teacher assistants, 1 therapist, and 1 therapist assistant) and two parents. The questionnaire consisted of 5 questions. First, when asked if they believed that the social skill instruction curriculum benefited their son/daughter / student when interacting with friends/relatives during recreation or games, all eight respondents agreed. One school respondent followed up by stating that he noticed a decrease in the number of fights and conflicts after losing games at school.

Also another school respondent stated that students seemed to be thinking about the skills and tried to be nice to each other by congratulating and making positive compliments about others’ performances. Another school respondent stated that these skills are important and that should be reinforced constantly to the students. One of the parents stated that it had been beneficial because his/her child plays and shares better at home. On other hand, one school respondent reported that while the program seemed to help and inappropriate actions decreased, the number of recorded incidents remained high. In addition, another school respondent reported that even if some students improved their behaviors during physical education, others still struggled. Improved
social skills were reported by another school respondent when participants played board games.

When asked if they believed that the social skill instruction benefited their son/daughter at home both parents replied in a positive manner. No further comments from any of the parents were provided to this question.

For the third question, when asked if they believe that the social skill instruction benefited students by improving appropriate behaviors when interacting in the school/classroom all six teachers/staff replied affirmatively. One, teacher responded that behaviors learned in physical education had transferred to group activities performed in the classroom. In addition, students had been making more positive comments to each other following intervention. Increase on congratulating peers especially when losing a game had also been noticed.

For the fourth question when asked if school and parents would recommend the social skill instructional program to others, all eight respondents agreed that they could recommend it. One school respondent stated that the program provided basic skills that everyone should know. Another school respondent stated that the program is a good way to review skills that students need and that provides many opportunities to learn and practice social skills. Further, another school respondent stated that the program is beneficial for students to be exposed to the principles of social skill development and the specific opportunity to learn social skills related to recess and sports.

Lastly, school personnel and parents were asked to provide additional comments and suggestions. A school respondent stated that it would be interesting to see what effect
showing the recorded videos sessions would have on the students so they can see their own behaviors. She believed this could be positive for student awareness. Finally, one parent suggested providing parents with information to continue the development of these skills at home.

In summary, results of the social validity questionnaire provided strong support for the implementation of the curriculum for participants in this study. The teaching of specific appropriate behaviors during physical education and recess was seen as a positive and effective manner to teach students appropriate ways to behave during a physical activity setting. Overall, respondents believed that the intervention was effective in increasing appropriate behaviors and decreasing inappropriate ones for the six participants in this study.
CHAPTER 5

DISCUSSION

This chapter provides a discussion of the results of the effect of social skill instruction on the acquisition, maintenance, and generalization of peer related social behaviors of students with emotional or behavioral disorders during competitive sports/games activities. The discussion focuses on each of the five research questions, perceived limitations of the study, implications for practice, and suggestions for future research. Finally, a summary of the study is presented.

Research Questions

Data gathered during this study are used to discuss each of the five research questions.

Question 1: What effect will social skill instruction have on increasing the number of appropriate game related behaviors exhibited during sport activities/games in physical education class for students with behavioral disabilities?

During baseline phase, the average appropriate sport/game behaviors by all six participants was .9 (1.6, 1.0, 0.1, 0.8, 1.0 and 1.1). During the instructional phase the average appropriate sport/games behaviors was 6.9 (12.1, 13.0, 1.7, 9.3, 3.8 and 1.3). When compared to baseline, these score averages reflect an increase mean score of 5.9 or 643%.
All six participants or 100% increased their appropriate behaviors during physical education class sessions as a result of the social skill instruction. Of those six, three participants increased their appropriate behaviors with mean increases of 12 (1200%), 10.5 (656%) and 8.5 (1062%) respectively, while two others of the remaining three participants increased but at lower levels with 2.8 (280%) and 1.6 (1600%) respectively, from baseline to intervention. The participant with the least amount of increased was participant 6 (mean increase of 0.2 which in essence reflect no increase). A possible reason for this lack of increase of appropriate behaviors could be that pair 3, who participant 6 was a member, received fewer social skill instruction sessions than others pairs of participants in the study. Another possible reason is that participant 6 did not demonstrate much interest during the intervention. For example participant 6 slept on occasion during intervention. Finally, the teacher who provided the instruction to pair 3 was the one with the lowest procedural integrity mean score percentage compared to the other two teachers in the study. These reasons coupled with the fact that adolescents have more social problems as they get older provides greater rationale for this participant’s lack of increased appropriate behaviors.

Overall however, these results support previous research dealing with the benefits of social skill instruction on developing appropriate social skills in physical activity environments or students with behavioral disabilities (Moore et al., 1995; Vidoni, 2003; Vidoni & Ward, 2006). In addition, these results are aligned with basic principles of the Social Learning Theory which asserts that people learn from one another when they observe, imitate, and model (Bandura, 1977). Moreover, observation learning can be
achieved more effectively by informing observers in advance about the benefits of adopting modeled behaviors than by waiting until they happen to imitate a model and then rewarding them for it. Further, the theory supports the use of modeling as a technique for the teaching of social behaviors to children and youth (Bandura, 1977). Moore et al., (1995) obtained similar results when three students with emotional disturbance had an overall improvement in their appropriate game related behaviors during the implementation of a social skill intervention during games in the classroom. In addition, they assert that teachers should not assume that students will develop or exhibit appropriate social behaviors just by participating in sports and games and that social skills should be taken in consideration in the area of physical education.

According to Kaufman, Alt, and Chapman (2001), students with emotional disturbance, when compared to their peers without disabilities, have shown disappointing outcomes due to their lack of social skills. And typically these individuals have difficulty getting along with others. By increasing appropriate behaviors and decreasing inappropriate behaviors in this study, participants should have a better opportunity to get along with others. Results of this study demonstrate that appropriate sport behaviors can be specifically defined and explicitly taught and assessed as regular content in schools (Vidoni, 2003; Vidoni & Ward, 2006). This was done in this study through the implementation of a social skill curriculum based on appropriate sport behaviors where social skills were defined, explicitly taught and assessed.
Question 2: What effect will social skill instruction have on reducing the number of peer-related inappropriate behaviors exhibited during sport activities/games in physical education class for students with behavioral disabilities?

During baseline, the average inappropriate sport/game behaviors by all six participants was 13.2 (22.3, 8.8, 6.7, 9.9, 25.1 and 6.5). During the instructional phase the average inappropriate sport/games behaviors was 8.6 (8.5, 6.9, 4.3, 7.3, 20 and 4.3). When compared to baseline, these scores reflect a decreased mean score of 4.7 or a 35.3% decrease. All six participants decreased their inappropriate behaviors from baseline to intervention during physical education sessions with mean decreases of 13.8 (62%) for participant 1, 1.9 (22%) for participant 2, 2.4 (36%) for participant 3, 2.6 (26%) for participant 4, 5.1 (20%) for participant 5 and 2.2 (34%) for participant 6, respectively. Participant 5 decreased the least in the number (not percentage) of inappropriate behaviors from baseline. A possible explanation for this observation was that participant 5 was the one who exhibited more disruptive behaviors and negative attitudes towards the skills being taught than other participants. Furthermore, this participant was the one with significant home problems and behaved in an overall negative manner. It was clear that participant 5 placed little to no value on the instructional process. Participant 5 was one of the older participants in the study. As a result, this participant could have been exhibiting inappropriate behaviors for so long that the intervention, coupled with the least number of intervention sessions, could very well have resulted outcome. Participant 5 was also a member of pair 3. In that pair, the teacher had the lowest procedural integrity mean score percentage compared to the other
two teachers in this study. These reasons coupled with the fact that adolescents have more social problems as they get older provides greater rationale for the participant’s inability to decrease inappropriate behaviors.

Inappropriate behaviors and conflicts between and among students during the physical education class are considered by experts to be the leading obstacle for effective instruction in physical education (Lavay et al. 2006). While some participants decreased inappropriate behaviors less than others, data demonstrate that the instructional program was effective in reducing inappropriate behaviors in the physical education setting. Thus, the implementation of this curriculum can be effective in improving instructional environment, so that teachers can focus on content rather than needing to address inappropriate behaviors. Further, this instructional approach ‘empowered’ students to learn new ways to appropriately behave rather than merely having their behaviors controlled (Lavay et. al, 2006).

Findings support the literature related to the benefits of reducing inappropriate behaviors in physical education and sport when an intervention focuses on appropriate behaviors and/or good sportsmanship. Further, these findings support Bandura’s (1977) Social Learning Theory about using modeling and prompting as effective strategies to decrease inappropriate behaviors (Gresham, 1981).

Moore et al., (1995), found similar results when three students with emotional or behavioral disorders decreased inappropriate behaviors when playing classroom games with the implementation of a social skill instruction intervention. Further, Giebink and McKenzie (1985) reported two studies that examined the development of appropriate
sportsmanship behavior; one in a physical education setting and the other in a recreation setting. Giebink and McKenzie’s study showed that all four students decreased their rates of negative social interaction and increased their rates of sportsmanship behaviors when intervention (consisting of skill explanation, modeling and a point system) was implemented. Vidoni (2005) found similar results when a fair play instruction program consisting of goals to be accomplished, teacher prompts/praise and pinpointing behaviors was implemented in two 8th grade physical education classes. Results demonstrated that the fair play instruction program was effective in reducing the number of harmful behaviors. These findings also support that of Vidoni (2005) in which teachers need to set up a physical education environment in order to: (a) teach a student who does not know certain social behaviors, (b) provide practice of social behaviors that are already in the student’s repertoire, or (c) activate performances of appropriate behaviors of a student who already has learned the behavior, but does not want to demonstrate it. This model is supported because some students come to physical education with or without the required behaviors needed in her or his repertoire to succeed.

Question 3: Will decreased inappropriate behaviors and increased appropriate behaviors be maintained following social skill instruction?

During maintenance, the social skill instruction and the prompting of appropriate behaviors were removed. The overall mean score of appropriate sport/game behaviors during the maintenance phase was 4.3 (14.3, 6.7, 0.3, 2.7, 1.0 and 1.0). This was an overall mean decrease of 2.5 or 37% from the intervention phase. Participant 3 had the least number of appropriate behaviors during maintenance. This participant on many
occasions was rejected by peers and tended to be alone most of the time. Participant 3 also exhibited constant delusional episodes, which coupled with the lack of prompts, may have led to the inability to maintained appropriate behaviors. These results demonstrate that the overall mean scores of appropriate sport/game behaviors were not maintained at intervention levels. Similar results were obtained by Vidoni and Ward (2006) when six students during volleyball games did not exhibit the same level of supportive behaviors during maintenance (follow up).

Results from this study maybe due to the fact that during maintenance, prompting to remind participants was removed. Praise and positive feedback are the most effective strategies on encouraging the use and maintenance of new learned behaviors (Bandura, 1977). However, individual scores show that only participant 1 maintained and improved appropriate sport/game behaviors during maintenance. Elementary participants (1 and 2) benefited from the instructional program to a greater extent that the other participants. Consistency of prompting and corrective feedback from the same teacher was present for these participants so they were able to continue using the learned behaviors during physical education. Furthermore, the teacher for pair 1 had the highest procedural integrity scores compared to the other two teachers. Overall, mean scores of appropriate sport/game behaviors remained higher than baseline with an increase of 3.4 or 375%. Similar results were obtained by Vidoni and Ward (2006) in which they demonstrated that even if all of their participants did not maintain the same levels of supportive behaviors compared to intervention, three of the six participants did.
The overall mean score for inappropriate sport/games behaviors during maintenance was 7.2 (2.7, 8.3, 1, 2.7, 24.3 and 4). This was an overall mean decrease of inappropriate sport/game behaviors of 1.4 or 19% from intervention. However, individual scores show that participants 2 and 5 increased their inappropriate behaviors compared to baseline levels. This suggests that the combination of modeling, prompting, and reinforcement was still necessary for both participants to maintain their behaviors during maintenance. Further, data show that both participants may have needed a greater number of intervention sessions in order to internalize the strategies taught during the intervention phase of the study. Overall however, when compared to baseline the mean scores of inappropriate behaviors during maintenance remained lower than baseline with a mean decrease of 6.1 or 46%.

The overall, maintenance mean score for appropriate sport/games behaviors during recess was 0.4, an increase of 1.3 or 75% from the intervention phase. However, these results also demonstrate that appropriate sport/games behaviors decreased from intervention to maintenance during recess. The behavioral maintenance scores for all six participants returned to baseline levels.

The overall, maintenance mean score for inappropriate sport/game behaviors during recess was 2.0. This is a overall mean score decrease of 1.7 or 47% from intervention. However, participants 1 and 3 increased their inappropriate behaviors from intervention phase. When compared to baseline there was an overall mean decrease of 2.8 or 12%. These results support previous literature which suggests that students are likely to misbehave if teachers do not supervise students’ behaviors closely (Vidoni,
2005; Supaporn, Dodds and Griffin, 2003). As mentioned previously, removing reinforcers and prompts could be a possible reason why participant 1 increased inappropriate behaviors during maintenance in the recess setting. Further these results demonstrate that the use of reinforcement and feedback are necessary to continue to reduce inappropriate behaviors, especially for students with emotional or behavioral disorders (Bandura, 1977, Gresham, 1981).

Question 4: What effect will social skill instruction have on increasing the number of appropriate game related behaviors exhibited during recess (generalization) when participating in sport activities/games for students with behavioral disabilities?

During baseline, the average appropriate sport/game behaviors exhibited by 5 of the six participants was 0.7 (1.5, 1, 0, 1, and 0). Baseline data for participant 3 were not recorded due to absenteeism. During the social skill instruction phase the average appropriate sport/games behaviors was 3.5 (3.5, 3.5, 0.7, 1.7, 0, and 0.5), respectively. When compared to baseline, these scores reflect an overall mean increase of 2.8 or 392%. Four of six participants or 65%, increased their appropriate behaviors during recess as a result of social skill instruction. Of those four participants, three increased their appropriate behaviors from baseline to intervention with mean increases of 2 (133%), 2.5 (250%) and 1.7 (170%), respectively, while the other participants increased but at a lower level with a 0.5 (50%) score. While generalization was observed from the physical education class to the recess setting, participants had greater overall improvement on appropriate behaviors during the physical education setting. There are a number of possible reasons as to explain why participants increased appropriate behaviors during
physical education rather than in recess (generalization). First, recess is a less structured setting in that participants have less direct supervision and guidance. Therefore, there are more opportunities to exhibit poor behavior. Second, the results could be attributed to the need for a longer intervention. Data reveal that those participants who had fewer social skill instruction sessions (pairs 2 and 3), exhibited less improvement in both physical education and recess settings. Finally, it could be that strategies supported by the literature to be effective for generalization like self monitoring (Moore et al., 1995) were not taking in place in during recess. The use of self monitoring could have helped these participants to better generalize the acquired behaviors from physical education to recess.

Nonetheless, overall, participants were able to generalize appropriate behaviors to the recess setting. One of the outcomes expected and derived form the Social Learning Theory (learning through observing modeled behaviors) is that the learned skills can be transferred to the needed context (e.g., work place, community) (Bandura, 1977). One of the most consistent and long standing criticisms of social skill interventions is that learned skills are often not generalized (Chen, 2006; Nelson & Rutherford, 1988). Previous research in social skill training indicates that generalization does not occur automatically and must be planned and programmed as part of the training process (Cartledge & Milburn 1995). For example, Giebink and McKensie (1985) found that appropriate behaviors of fours students did not generalize from physical education to recreation activities. However, in this study behaviors were able to be generalized but to a limited degree. One possible reason for generalization of appropriate sport/game behaviors from the physical education setting to the recess setting was due to the
similarity of the activities and the utilization of positive reinforcement (Chen, 2006) in addition to the use of social skill stimulus across settings (Gresham 1981). This study provides some evidence that appropriate behaviors can be improved and then generalized. Moore et al, (1995) found similar results and concluded that instruction in social skills can be generalized successfully to other environments like the classroom, community and work. Similarly Sharpe, Brown and Crider (1995), found that social behaviors taught in two elementary physical education classes appeared to generalize to general classroom group activities. In addition, these findings add to those by Vidoni and Ward (2006) about the generalization effect of social skills from physical education to other settings. They suggest that additional studies are to needed in order to determine whether or not behaviors taught and performed during physical education can be maintained and generalized in different physical activity (e.g., sports) settings. Therefore, this study was conceptualized in such a manner as to test whether or not behaviors could be successfully generalized.

Question 5: What effect will social skill instruction have on reducing the number of peer related inappropriate behaviors exhibited during recess (generalization) when participating in sport activities/games for students with behavioral disabilities?

During baseline, the average inappropriate sport/game behaviors exhibited by five of the six participants was 4.4 (5.0, 5.0, 1.0, 11.7, and 1.0). Baseline data for participant 3 were not recorded due to absenteeism. During social skill instruction phase the average inappropriate sport/games behaviors was 3.7 (2.3, 2.7, 0.7, 3.7, 11.7, and 1.0). When
compared to baseline, these scores reflect a decreased mean score of 0.7 or a 16% decrease from baseline. Only two participants (1 and 2) decreased their inappropriate behaviors during recess with mean decreases of 2.7 (54%) and 2.3 (46%), respectively. Participants 5 and 6 remained at the same baseline level during intervention with 11.7 inappropriate behaviors and 1 inappropriate behavior, respectively. Results in recess regarding the decrease of inappropriate behaviors show that generalization was minimal because only two participants decreased their inappropriate behaviors from baseline to intervention. The use of prompting and reinforcement (Chen, 2006), a more structured recess setting (Vidoni, 2005), and the use of strategies like self monitoring (Moore et al., 1995) could have helped participant to generalize the decreased inappropriate behaviors from physical education to recess. Unfortunately, none of the above mentioned strategies were used in this study during generalization (recess) thus giving participants more chances to misbehave during recess. Nonetheless, participants 1 and 2 (elementary grade level), who did reduce their inappropriate behaviors during recess, did so most likely because they had the same social skill instruction teacher for both physical education and recess settings. In other words the teacher was able to provide consistency with corrective feedback along with prompting and reinforcing the use of the appropriate social behaviors (Gresham, 1981). These findings align with previous research related to modeling strategies (Bandura, 1977) on the teaching of social behaviors. Chen (2006) supports the notion that praise and positive feedback are the most effective strategies for encouraging the use of new learned behaviors in across settings. The remaining participants (3, 4, 5 and 6) did not have the same teacher across all phases. Because of
this, participants 3, 4, 5 and 6 (middle / high school students) were provided with less corrective feedback and prompting than participants 1 and 2 (elementary grade level). Overall, generalization of the learned skills during physical education was evident for participants 1 and 2 (elementary students). This finding supports previous study by Sharpe, Brown and Crider (1995) which found similar results with two elementary classrooms that decreased their off task behaviors in the generalization settings. In addition, Giebink and McKensie (1985) found positive generalization effects on reducing unsportsmanlike behaviors of four students from physical education to recreation activity settings. This study provides evidence that planning and programming for generalization can be effective in promoting the performance of appropriate behaviors to other settings (Bandura, 1977; Cartledge & Milburn , 1995; and Gresham, 1981).

Limitations

When evaluating the results of this study some limitations are readily apparent. The first limitation was the use of three teachers to provide the intervention instead of one teacher across all participants. Using one teacher when implementing the instructional program in multiple baseline designs, provides more instructional consistency across all participants and increases the study’s internal validity. Procedural integrity data demonstrate that the teacher from pair 1 (participants 1 and 2) implemented the instruction more efficiently than the other two teachers. Thus, more positive results were obtained for increasing appropriate behaviors and decreasing inappropriate ones. Based on procedural integrity data, we can assume that if the same teacher provided instruction to all three pairs, results across participants may have been similar. However,
using one teacher to implement the instruction to all three pairs was not possible because participants were in different groups and in different schools. While this may have compromised the internal validity of the study, it did result in greater external validity (Horner, Carr, Halle, McGee, Odom & Wolery, 2005). That is implementing the instructional program by each class teacher is more functional than having a teacher deliver the program who does not otherwise teach the study’s participants. And, may result in a greater likelihood of the social skill instructional program being implemented. It is also assumed that participants with EBD in this study would respond more positively to their original teachers than someone else.

A second limitation lies in the data collection procedures during recess. Because videotaping was not possible to perform during recess for pair 1 (participants 1 and 2) and also for some recess sessions for pair 2 (participants 3 and 4) and 3 (participants 5 and 6), it was not possible to review the sessions like in the physical education setting.

A third limitation pertains to the relatively short data collection time for maintenance phase of this study. As such a longer maintenance phase was needed to determine the effect of the intervention on maintenance.

A fourth limitation is that physical education class sessions for every participant pair were not of equal time. For pair one (participants 1 and 2), physical education class sessions were 30 to 35 minutes, while physical education class sessions for pair 2 (participants 3 and 4) and 3 (participants 5 and 6) were between 20 and 30 minutes. Therefore, number of potential responses could be affected. However, the time for each class sessions was not under the investigator’s control.
A fifth limitation dealt with the lack of data collection. Teacher data on the numbers of prompts and feedback during the intervention phase were not recorded. The teacher in charge of the social skill instruction and physical education class for pair 1 (participants 1 and 2) was perceived to provide more prompts and positive and corrective feedback during intervention. However, no data were recorded to support this assumption. Data like these could provide more solid evidence about the impact of prompting and feedback during the learning process and the overall efficacy of SLT relative to the study. In addition, it would provide greater validity in terms of treatment integrity if such data were recorded.

Implications for Practice

This study demonstrates that explicitly teaching social skills can lead to increased appropriate behaviors as well as decreased inappropriate behaviors in physical education and those behaviors can be generalized to another setting (recess). Explicitly teaching social skills through a systematic method may be one way to deal with the issue that many physical educators face regarding student misconduct (Lavay et al., 2006). The implementation of a social skills curriculum could lead students with behavioral disabilities to engage in more positive relationships, thus having a better chance of succeeding in their communities and work place (Moore, 1994). However, it was beyond the scope of this study to assess whether or not this happened. Anecdotal evidence suggests that participants 1 and 2 progressively begin to better accept peers with less sport ability or low sport performance during games once the social skill instruction took
place. Data from this study support that the curriculum used can be of benefit to educators, especially physical educators when presented with students who exhibit behavioral disabilities (Samalot- Rivera & Porretta, in review). In addition, data from the social validity questionnaires demonstrate that teachers and parents valued the program.

The results of this study demonstrate that the integration of social skill instruction consisting of modeling, behavior rehearsal, and behavior transfer are appropriate and effective in physical education. Further, this type of instruction can be shown to generalize (to a limited degree) to another setting, a critical component to the learning process.

Suggestions for Future Research

While this study has shown that a social skill instructional program can increase appropriate behaviors and decrease inappropriate ones, research in the area of social skill intervention is still needed. Future studies could build upon Social Learning Theory (Bandura, 1977). The theory suggests that individuals, especially children, imitate or copy modeled behaviors from personally observing others, the environment, or the media (Ormond, 1999). As such, it might be helpful to develop videotapes with scenarios (role playing) depicting appropriate sport and games behaviors and show them to students prior to a physical education experience. One would then assess its effect on improving students’ behaviors.

Additional work could include collecting data on dependent measures relative to the key constructs of SLT. That is, investigator in future studies could include
reinforcement, modeling, prompting, and role playing as dependent measures to more thoroughly investigate the instructional model as it relates specifically to SLT.

Also, in following with the work of Lavay et al. (2006), it will be interesting to determine the effects of a social skill instruction program on decreasing the number of discipline incidents and off task behaviors of students with EBD in physical education and other physical activity settings. For example, anecdotal evidence suggests that participants 1 and 2 decreased the number of times they walked off the field/court during game/sports when they were frustrated. In addition participants 1 and 2 decreased the amount of time (latency) when they walked off the field/court during games/sports.

Implementing the instructional program for a greater length of time would be useful in future studies. For example, one might begin the instructional program at the beginning of the school year and complete it at the end of the first semester or continue it until the end of the academic year. This will allow greater time for students to practice and internalize the behaviors. This would be a specially important in future studies that utilize multiple baseline designs. The true test of whether or not skills/behaviors have been learned is whether or not they can be generalized or transferred to other settings. Therefore, future studies could be conducted in which multiple generalized settings could be used (e.g. recreation centers).

Finally, it will be interesting to determine if social skill instruction used in this study would have the same effect with Special Olympics athletes who exhibit EBD. While this study sought to change behaviors of individuals with EBD, the same or similar type of instructional program may have promise with individuals who possess intellectual
disabilities and also exhibit behavioral disorders. For example, one might implement an instructional program prior to a competitive season in order to minimize inappropriate behaviors and maximize appropriate behaviors relative to winning and losing.

Summary

The purpose of this study was to examine the effect of social skill instruction on the acquisition, maintenance, and generalization of peer related social behaviors of students with EBD during competitive sports/games activities. The experiment specifically addressed the effect of social skill instruction on the number of appropriate and inappropriate sport/games behaviors exhibited during physical education. A multiple baseline across participants design was used. The participants of this study were six students with EBD from two alternative education programs. The study consisted of baseline, intervention and maintenance conditions across both physical education class and recess (generalization). Results of this study indicate that the social skill curriculum focusing on appropriate sport and games behaviors was effective in improving appropriate behaviors and decreasing inappropriate ones across both physical education and recess settings. These findings have implications that go well beyond the educational environment in that exhibiting appropriate social skills permeates all segments of society.
REFERENCES:


Gresham, F.M. (1997). Social competence and students with behavior disorders: Where we’ve been, where we are, and where we should go, *Education and Treatment of Children, 20*, 233-250.


Moore, R.J. (1994). The effects of social skill instruction and self- monitoring on anger control, reaction to loosing and reaction to wining behaviors of ninth grade students with severe behavior handicaps. Unpublished master thesis. The Ohio State University, Columbus: Ohio.


PACER (2006). What is an emotional or behavioral disorder? *Action Sheet, 81, 1-4.*


APPENDIX A

PILOT STUDY DATA
Participant 1

Losing Behaviors

Winning Behaviors

Behaviors during Games

- \(\text{Appropriate}\)
- \(\text{Inappropriate}\)
APPENDIX B

IRB HUMAN SUBJECT REVIEW APPROVAL
November 29, 2006

Protocol Number: 2006B0306
Protocol Title: THE EFFECT OF SOCIAL SKILL INSTRUCTION ON SPORT AND GAME
RELATED BEHAVIORS OF ADOLESCENTS WITH BEHAVIORAL
DISABILITIES, David Forretta, Amaury Samalo-Rivera, Sport and Exercise
Education.

Type of Review: Initial
IRB Staff Contact: Cheri Ferrey
(614) 292-0526
Ferrey.8@osu.edu

Dear Dr. Forretta,

The Behavioral and Social Sciences IRB APPROVED the above referenced protocol.

Date of IRB Approval: November 29, 2006
Date of IRB Expiration: November 17, 2007

In addition, the protocol was approved for the inclusion of children (permission of one parent sufficient) and was granted a waiver of documentation of consent for parents and teachers.

If applicable, informed consent (and HIPAA research authorization) must be obtained from subjects or their legally authorized representatives and documented prior to research involvement. The IRB-approved consent form and process must be used. Changes in the research (e.g., recruitment procedures, advertisements, enrollment numbers, etc.) or informed consent process must be approved by the IRB before they are implemented (except where necessary to eliminate apparent immediate hazards to subjects).

This approval is valid for one year from the date of IRB review when approval is granted or modifications are required. This approval will no longer be in effect on the date listed above as the IRB expiration date. A Continuing Review application must be approved within 60 days from the date of approval of a new protocol. The final report must be provided to the IRB before the research (including signed consent forms) are submitted to the IRB for any serious, unexpected and related adverse events or potential unanticipated problems involving risks to subjects or others.

This approval is issued under The Ohio State University’s CHRO Federally Approved #00006378.

All forms and procedures can be found on the ORR website – www.orr.osu.edu. Please feel free to contact the IRB staff contact listed above with any questions or concerns.

[Signature]
Thomas Nygren, PhD, Chair
Behavioral and Social Sciences Institutional Review Board

[Approval]
Version 04/2006
APPENDIX C

APPROPRIATE SPORT BEHAVIOR CURRICULUM OUTLINE
Appropriate Sport Behavior Curriculum Outline

Unit I: Appropriate Behaviors to Losing

Skill I: Congratulating the winner

Skill II: Remaining calm and positive

Skill III: Ignoring teasing

Skill IV: Motivating oneself to practice

Skill V: Respecting own and others’ equipment

Unit II: Appropriate Behaviors to Winning

Skill I: Avoiding criticizing the loser (e.g., teasing)

Skill II: Accepting compliments from others

Skill III: Avoiding bragging

Skill IV: Congratulating the loser

Skill V: Rewarding yourself and keeping motivated

Unit III: Appropriate Behaviors during the Game

Skill I: Following Rules

Skill II: Making positive statements about others’ good performance

Skill III: Helping others during the game

Skill IV: Accepting other’s abilities

Skill V: Being a good team member: Working cooperatively
APPENDIX D

SOCIAL SKILL LESSON PLAN
EXAMPLE
Unit  I: Appropriate Losing Behaviors

Skill II: Congratulating the Winner

Objective: Students will be able to show appropriate behaviors after losing a game/match by congratulating the winner.

Rationale: Carl and Todd are playing a game of table tennis. Carl is about to beat Todd and he begins to make excuses for why he is not winning. After the loss, Todd tells Carl that he should not have won the game and that he just got lucky.

Step 1: Definition
1. Explain to students that behaving appropriately when loosing a game is important.
2. Explain to students that congratulating the winner is one way to express good losing behaviors.
3. Ask students to give examples of how to congratulate the winner when you lose a game.
4. Verbally praise all appropriate responses by saying, “Yes that would be a good example of how someone appropriately congratulates the winner.
5. The instructor will teach positive ways to congratulate the winner:
   a. Look at the person you are complementing
   b. Speak with a clear, enthusiastic voice
   c. Smile and say nice game
   d. Shake hands or give high fives
6. A discussion will follow to enhance understanding. Students will be asked the following questions:
   a. Why is it important to congratulate the winner after losing a game?
   b. Will you congratulate the winner after losing a game?
   c. Does someone have other examples on how to congratulate the winner?

Step 2: Skill Modeling
   o The instructor will assume the role of a losing player after a 2-minute table tennis game. At the conclusion of the game the instructor will say to the winner:
     1. The instructor looks at his/her opponent and smiles.
     2. The instructor says:
        1. Nice game Carl!
2. Thank you for playing with me!
3. You were hitting the ball pretty well today!

- Following this modeling, the instructor will ask students if they thought this was a good example of congratulating the winner.
- The instructor will ask for other appropriate alternatives to showing appropriate losing behaviors by congratulating the winner.
- Verbal praise will be given to those students who respond and participate appropriately.

**Step 3: Guided Practice**

- Every student will have a chance to imitate the modeled examples of appropriately congratulating the winner under the instructor supervision.
- Students will be given the opportunity to provide their own examples related to the behavior modeled by the teacher.

**Step 4: Role Playing**

- Students will be given scripts to read silently. (Assistance will be provided for those that can not read on their own). Each student will be given the opportunity to role-play at least one part.
- Following each reading the students will critique the action of those who lose a game. The scripts will show both positive and negative examples of how people show good loosing behaviors by congratulating the winner.

**Step 5: Students Assessment**

- Following the role plays the following questions will be asked:
  - Who congratulated the winner appropriately?
  - Who did not congratulate the winner appropriately?
  - (To the winner) How did you feel when you were congratulated?
  - (To the looser) How did you feel when you congratulated the winner?
  - Why is important to show good loosing behaviors?

- Personal Experiences:
  - Ask students to share any similar experience they have had.
Step 6: Homework Assignment

- Students will be asked to use the learned skill (congratulate the winner) on their house/community by doing an assigned task.
- Students will be provided with a written form to complete at home and turn back to the teacher by next day that include:
  - What activity/game they play
  - With whom
  - If they used the skill and how well did they use the skill

- Activities that can be play at home to use the learned skill
  - Board games
  - Video games
  - Bycicle Race
  - Baketball

Step 7: Follow up / practice

- Instructor will explain to students that a sport activity will be play in the gym and will ask to practice appropriate losing behaviors by congratulating the winner when they lost a game.

Role Play Skits for Skill II: Congratulating the winner.

Role Play #1:

Situation: Carl and Todd are playing their second table tennis game. In both games Carl had won the games.

Todd: Oh man! I am all sweaty. We had fun!
Carl: Yes we did.
Todd: Congratulations Todd you were awesome today.
Carl: Thank you! Nice game too.

Role Play #2

Situation: Same as above.

Todd: Oh my Gosh! Not again, arrrrrrr!
Carl: Chill out man, it is just a game.
Todd: You say that because you won both games.
Carl: Hey, nice game man.
Todd: What ever!
APPENDIX E

DATA RECORDING FORM
DATA RECORDING FORM

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PR=Peer reactive behaviors during game, A=appropriate, I=inappropriate
APPENDIX F

SOCIAL SKILL INSTRUCTION
TREATMENT INTEGRITY AND PROCEDURAL RELIABILITY CHECKLIST
Treatment Integrity and Procedural Reliability Checklist

1. Did the teacher provide a rationale and definition of the skill to be learned?
   YES   NO

2. Did the teacher provide students with positive examples of the target skill?
   YES   NO

3. Did the teacher model the target skill to the students?
   YES   NO

4. Did the teacher provide students time to role play the target behavior of the day?
   YES   NO

5. Did the teacher provide time to the students to recall outcomes of their personal experiences, positive and negative, related to the target behavior?
   YES   NO

6. Did the teacher provide students with a home assignment related to the target skill?
   YES   NO

7. Did the teacher ask students to practice the skill during free recreation sport activity time?
   YES   NO
APPENDIX G

SOCIAL VALIDITY QUESTIONNAIRE
Social Validity Questionnaire for both Parents and Teachers

Date:

PARENT or TEACHER (circle one)

Answer all that apply

1. Do you think that the social skill instruction program, provided to your son/daughter/student improved appropriate behaviors when interacting or playing with friends/relatives etc (during recreation leisure activity/games)?
   YES         NO
   WHY?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

2. Do you think that the social skill instruction program, provided to your son/daughter improved appropriate behaviors when interacting at home?
   YES         NO
   WHY?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

3. Do you think that the social skill instruction program, provided to your son/daughter/student improved appropriate behaviors when interacting at school or in the classroom?
   YES         NO
   WHY?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

4. Would you recommend the social skill instruction program to other parents and teachers?
   YES         NO
   WHY?
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

5. Further comments or suggestions:
   _________________________________________________________________
   _________________________________________________________________
   _________________________________________________________________

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APPENDIX H

PARENTAL CONSENT FORM
The Ohio State University Parental Permission
For Child’s Participation in Research

THE EFFECT OF SOCIAL SKILL INSTRUCTION ON
SPORT AND GAME RELATED BEHAVIORS OF
ADOLESCENTS WITH BEHAVIORAL DISABILITIES

Study Title:

Researcher: David Porretta, PhD and Amaury Samalot – Rivera, MA

This is a parental permission form for research participation. It contains important information about this study and what to expect if you permit your child to participate.

Your child’s participation is voluntary.

Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to permit your child to participate. If you permit your child to participate, you will be asked to sign this form and will receive a copy of the form. In addition we will like to request your authorization to access behavioral information about your child by contacting teachers and having access to his/her school files.

Purpose:
The purpose of this study is to examine the effectiveness of a program for teaching students how to be appropriate during physical education class activities.

Procedures/Tasks:

Students will be taught appropriate behaviors related to physical education by their classroom teacher. After the instruction, students will have 20 minutes of physical education activities. Students will be videotaped during this interactive physical activity time.

Duration:

Duration of this study will be about 6 to 10 weeks (18 to 20) sessions of baseline, intervention and generalization. There will be 3 sessions per week (Monday, Wednesday and Fridays) consisting of 45 minutes between the social skill instruction and the physical education time. You will also be asked to complete a social validity questionnaire regarding your perceptions of this instruction effectiveness at the end of the study.

Your child may leave the study at any time. If you or your child decides to stop participation in the study, there will be no penalty and neither you nor your child will lose
any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with The Ohio State University.

**Risks and Benefits:**

The study adds not risk beyond what is experienced in a normal gym class. In addition the social skill instruction is not different to what students participate during the school year. They will be supervised by the school staff all the time. In the other hand, there are various benefits by participating in this study. Intended benefits of participation include:

- Using more appropriate ways to interact with classmates and peers.
- Learning new social skills (appropriate behaviors) that can be used in the classroom, community and home.
- Developing sports skills.
- Learning to identify social skills in need of improvement.

**Confidentiality:**

Efforts will be made to keep your child’s study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your child’s participation in this study may be disclosed if required by state law. Also, your child’s records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
- The sponsor, if any, or agency (including the Food and Drug Administration for FDA-regulated research) supporting the study.

**Incentives:**

No incentives will be provided for participating in this study.

**Participant Rights:**

You or your child may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you or your child is a student or employee at Ohio State, your decision will not affect your grades or employment status.

If you and your child choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights your child may have as a participant in this study.

An Institutional Review Board responsible for human subjects research at The Ohio State University reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

**Contacts and Questions:**

For questions, concerns, or complaints about the study you may contact:
For questions about your child’s rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

If your child is injured as a result of participating in this study or for questions about a study-related injury, you may contact Amaury Samalot-Rivera.

**Signing the parental permission form**

I have read (or someone has read to me) this form and I am aware that I am being asked to provide permission for my child to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to permit my child to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

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**Investigator/Research Staff**

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

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