## Full Length Research Paper

# Social Skills Intervention for Students with Emotional/Behavioral Disorders: A Literature Review from the American Perspective

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The main purpose of this paper is to review literature associated with social skills training for students with behavioral difficulties in both the general and special education settings. Research findings presented in this review were based on data collected from books, research papers, and reports published from the 1970s to 2004 in the United States of America.

**Key words:** social skills training, emotional/behavioral disorders, interventions.

#### INTRODUCTION

This paper presents a part of a research report from a study conducted to investigate the social skills competence of students with emotional/behavioral disorders (E/BD) by the author (Chen, 2004). The purpose of this paper is to review literature published from 1970 through 2004 that are associated with social skills training for students with behavioral difficulties in both the general and special education settings. Studies are reviewed in order to investigate the effectiveness of the various social skills training (SST) programs and methods. Another purpose of this paper is to identify trends in SST during the past thirty years.

Social skills are critical for the ability to interact with, adapt to, and function within the environment. In addition, being able to interact successfully with others is a key to many of the experiences that enrich life, such as having friendships, participating in recreational activities, or joining groups. Furthermore, the acquisition of social skills is essential to becoming a contributing member of society. However, for children and youth with E/BD, difficulties with interpersonal relationship are common; in fact, having difficulties in social interaction is often a key feature in the diagnosis of these disabilities. However, due to the emphasis on academics, social skill instruction is not a common curriculum component (Kolb and Hanley-Maxwell, 2003).

According to Cartledge and Milburn (1995), social skills are seen as socially acceptable learned behaviors that enable individuals to interact in ways that elicit positive responses and assist in avoiding negative responses from them. They are specific strategies used by an individual to perform social tasks effectively and thus be judged socially competent. Social skills are composed of competencies necessary for students to initiate and maintain positive social relationships with their peers, teachers, family, and other community members (Walker et al., 1995).

Educators have been searching for the most effective methods for promoting social competence in students with E/BD. To this end, a great deal of attention and tremendous efforts have been focused on the social competence of children with E/BD, resulting in unprecedented growth in this research field. As a result, literature devoted to interventions specific to social skill development addresses numerous training methodologies and approaches. The majority of these interventions has involved individual programs and has concentrated on developing specific skills or reducing inappropriate behaviors.

#### **METHODOLOGY**

The key findings presented here were research results of a critical review of literature associated with social skills training for students

with behavioral difficulties. Research findings were based on data collected from books, research papers, and reports published from the 1970s to 2004 in the United States of America. Wilson Select Plus, ERIC, and Academic Search Premier were databases examined by using descriptors social skills training, social skills intervention, social skills assessment, and social skills and emotional/behavioral disorders.

Articles selected are data-based with either quantitative or qualitative designs. However, dissertations and other non-English articles are not included. Approaches currently used to improve students' social competence, and explore issues related to the implementation of social skills curricula are identified and described. The author's intent is to observe common practices and comment upon their versatility and effectiveness.

Social skills training: A chronological overview as mentioned earlier, considerable research has been done in order to determine the efficacy of social skills intervention. In the late 1970s, SST emerged as a way of facilitating or teaching prosocial skills to children who demonstrated problems in peer relationships (Cooke and Apolloni, 1976; Oden and Asher, 1977).

The decade of the 80's saw a number of educators (Hersh and Walker, 1982; Muscott, 1988b) call for schools to take a more formal and systematic approach to teaching social skills to students with both skill and performance deficits. Muscott (1988) strongly advocated social skills intervention as a necessary component of programs that reintegrate students with special needs into less restrictive educational placements in general education settings.

In the 1990s, the reauthorization of Individuals with Disabilities Education Act (IDEA) in 1997 gave new impetus to finding appropriate methods to facilitate social competence in students with E/BD (Gresham et al., 2001). Results from recent research on social skills intervention have provided some insights into the characteristics of effective SST programs. Applying this knowledge to the design and implementation of SST programs can increase the probability that the training will result in students' gaining access to enriching interactions and activities.

Unfortunately, social skills programs have changed significantly from their lauded beginnings in the mid-seventies (Nangle and Hansen, 1998). One of the most consistent and long-standing criticisms of SST programs is that the skills which students learn during the training are often not maintained or generalized (Nelson and Rutherford, 1988). In other words, students do not use the skills in different settings with different people across time. Often, social skills instruction provides little or no opportunity for students to practice skills in a variety of settings, especially if the training occurs in pull-out classes outside the natural environment. Indeed, social skills intervention cannot be successful if it occurs in isolation. Goldstein et al. (1998) practice of implementing "social skills homework" addresses this problem by assigning social skills activities for the students to practice in settings outside of the training setting. The student is taught the social skill, then expected to practice the skill independently and report the outcome. From this report, the student and coach then work together to generate new, appropriate strategies if the new skill was not successful. Another approach is one in which the coach accompany the student outside the training setting and help him or her apply the target skills in various contexts.

Many have also pointed out that SST programs have not had the socially important effect desired for students with E/BD (Farmer et al., 2001; Gresham, 1998; Mathur et al., 1998). One of the hypotheses given for the lack of effect was that the length of most packaged social skills instruction programs was insufficient (Anderson, 2000; Kavale et al., 2000) and of low intensity especially given the severity of the social problems of the students (Farmer et al., 2001; Quinn et al., 1999).

Another consideration was that most social skills curricula could

not prepare a student for competence in our highly complex social interactions (Mathur et al., 1998; Scott and Nelson, 1998). The need for social validity and treatment adherence has been discussed by these researchers. Students may not necessarily agree with the relevance of the social skills the teacher has selected for instruction (Hansen et al., 1998), particularly if interfering antisocial behaviors are positively reinforced within the students' usual peer groups or families (Erdley and Asher, 1999). Regardless of their opinions as to the cause, the authors of the referenced articles all agreed, in statement or by implication, that social skills instruction as a single intervention did not effectively promote social competence in students with behavioral problems.

In the early years of SST popularity, there was an unrealistic expectation that the student would use the appropriate social skill in situations that result in a desired response. Social responses, however, vary wildly depending on the specific stimuli (Scott and Nelson, 1998). There is a difference between social competence and social skills (Bullock and Fitzsimmons-Lovett, 1998; Gresham et al., 2001). The student needs to display social competence, but he or she may know the skill but fail to perform it when it is required. This situation indicates a performance deficit, not a skill deficit (Gumpel and Sholmit, 2000). In order to appropriately address the problem, the cause and the circumstances of the problem must be investigated (Marcus et al., 2001). There is widespread agreement that functional behavioral assessments (FBA) are essential to appropriately determining effective interventions (Guetzloe and Rockwell, 1998; Quinn et al., 1999; Lewis et al., 2000). In addition to the function of the behaviors, the context or the environment needs to be analyzed for effective intervention. A structural analysis provides information about the discriminative stimuli or antecedent conditions that set the stage for responses (Sasso et al., 1998). With this information, educators are able to set up positive behavioral supports that focus on teaching and encouraging desirable, acceptable behaviors while discouraging problem ones (Lewis et al., 2000).

It is important for teachers and educators to consider the complexity of learning social competence and how difficult it is for students to gain mastery (Elksnin and Elksnin, 1998). Researchers generally agree that a social skill which brings positive consequences to a student is a skill which he or she will be likely to repeat (Scott and Nelson, 1998). Research has shown that naturally occurring reinforcers, such as praise, attention, and positive feedback are the most effective way to encourage new behaviors in different settings (Elksnin and Elksnin, 1998). We must not lose sight of the fact that social skills taught are also reinforced in other settings. For example, students may learn at school that phrasing requests to adults in a respectful fashion leads to praise and also makes it more likely that the student will get what he or she asks for. If the same is true at home, there is a greater probability that the desired skill will become a part of the student's behavioral repertoire (Scott and Nelson, 1998).

Indeed, social competence requires fluency, discrimination and the company of others. In order for learning to be meaningful, it must take place in the context of a classroom, as well as other unstructured settings such as cafeteria, hallway, or playground where peers and adults are present. Prosocial behavior must be positively reinforced in order for it to recur, even if it means a reward for a better choice (Guetzloe and Rockwell, 1998). With regard to meaningful contextual learning, there is considerable discussion in the literature about peer involvement in the acquisition and performance of social skills. In order to perform learned social skills fluently, students need the opportunity to practice in a natural environment (Scott and Nelson, 1998). The use of peer tutoring (Kamps et al., 1998; Kamps et al., 2000) and peers as trainers (Presley and Hughes, 2000) as strategies for generalization and maintenance of skills has shown promise. Although it has been fou-

In social skill research, a variety of strategies that hold benefit in teaching social skills for students with interpersonal difficulties have been documented. The following section delineates the different teaching techniques and instructional designs of social skill programs. Universal versus selected methods. Many social skills programs emphasize teaching skills to small groups of children (selected method), whereas, others are designed for use with the entire class (universal method). Some of the most promising social skills programs include the entire school setting (Sugai, 1996). These programs hold all students accountable for appropriate social behaviors rather than singling out students with behavioral difficulties. Positive, school-wide, behavioral programs promote desired student behaviors and communicate consistent, high, and positive behavioral expectations. Some of the components of behavioral interventions include the circumstances: behavior expectations are defined and taught where teachers model the expected behavior.

The selected method allows the trainer to focus on the most important behavioral characteristics and needs of individual students (Fox et al., 2002). These researchers indicated that small group instruction is very effective in teaching social skills to students who display fewer positive social behaviors, less positive reinforcement to others, and fewer cooperative behaviors than other students. As a means of formal instruction, Gresham (1995) suggested using social skills curriculum for formal social skills instruction in a small group setting or for classroom instruction.

Walker et al. (1995), however, pointed out significant disadvantages of selected skills training. First, the negative reputation of students with E/BD is often extremely resistant to change. Therefore, students and teachers often do not notice and reinforce the child's use of prosocial skills when they return to the classroom setting following selected social skills training. Second, "pull-out" social skills programs often inhibit generalization because the training setting and the individuals involved in the training are not part of the child's natural environment. Finally, selected programs often do not involve adequate peer role models to enhance generalization. The universal or whole-group design for teaching social skills allows for multiple peer role models and reduces the stigma and labeling associated with separate, selected training. It is, however, often difficult for one teacher to monitor and train an entire group of individual students with multiple social skills deficits.

Modeling and role-play. Some researchers who have studied the impact of social skills development have reported positive effects of role-playing targeted social skills and modeling appropriate social behaviors. The use of modeling and role-play reinforces the concept of social skills and has been widely accepted as a technique for teaching a variety of social behaviors to children and youth (Bandura, 1977; McGinnis and Goldstein, 1997). Procedures that combine modeling with directive teaching strategies, such as structured learning appears to be successful in teaching specific prosocial behaviors in a wide variety of training settings from schools to juvenile detention centers (Goldstein, 1999; Nelson and Rutherford, 1988). However, these educators also agreed that, whi-

le students involved in systematic training packages have learned many of the skills in the program under training conditions in artificial situations, in most cases the learned behaviors fail to transfer to natural environments (e.g., playground, community).

Teachers, as well as peers, can model strategies such as self-talk or managing anger so that students with difficulties can see what the strategies look like in context (Frey et al., 2000). Students with behavioral problems benefit through the observation of more competent students using targeted language, strategies, and skills. Care must be given by teachers to provide good modeling behaviors, as it is more meaningful to students for educators to behave in a manner consistent to the values they teach than to listen to the educators lecture about those same values (Curwin and Mendler, 2000). At the same time, students will be more strongly influenced by the observation of behaviors of people similar to themselves. The greater the perceived similarity to the model, the greater is the impact for learning (Bandura, 2000).

Effective modeling specifies what should be taught, involves a variety of student models, and targets students with developmental and cognitive delay. The modeled behavior should be simplified, in addition, both model and target student rewarded/reinforced. Roleplay, positive feedback/reinforcement, corrective feedback, avoidance negative comments, and repeat steps are some of the factors that need to be considered. In some situations, videotaping and review may be helpful. The use of modeling in the social learning process is widely accepted as a technique for teaching a variety of social behaviors to children and youth (Bandura, 1977).

Cooperative learning Cooperative learning opportunities is an excellent strategy for encouraging positive peer interactions and generalization of social skills as well as promoting academic achievement (Goldstein, 1999). Teachers have utilized cooperative learning structures to facilitate development in the students' emotional intelligence or self-control and compassion (Henley and Long, 1999). Cooperative learning and gaming that are under certain structured conditions can enhance the likelihood of future cooperation and channel behaviors in prosocial directions (Goldstein, 1999).

Cooperation involves students working together to accomplish shared goals. Cooperative learning is the instructional linking of small groups of three or more students working together to maximize their individual learning as well as the learning of others. Students in cooperative learning groups are given two important responsibilities: to learn the assigned material and to assure that every other member of their group learns the material as well. Everyone in the class participates in the exploration or application of the class material rather than simply listening to the instructor's presentation or explanation of it.

Cooperative learning groups retain the efficiency of whole-group or universal training, while enhancing the effectiveness and individualization of selected group training. Cooperation also approaches instruction of social skills in a sequential, deliberate manner. Rather than teaching the specific social skill needed for today's lesson or worse, assuming students will gain these skills as a side effect of the group process, the simple cooperation model incorporates specific social skills as part of the curriculum. Cooperative learning groups have been found to be effective settings for teaching social skills (Goodwin, 1999). It appears to be a viable method to promote a sense of community within the classroom while teaching and providing for positive, prosocial peer interactions in a context that is personally beneficial and beneficial to others.

Peer mediation and conflict resolution. In peer mediated strategies, a peer without disabilities is trained by an adult to interact effectively with a student with disabilities (Schrumpf et al., 1991). Following training, the two students meet for pre-selected social activities and the trained peer models reinforces and prompts

appropriate social responses and behavior from the target student. Peer-mediated procedures remove the adult from the intervention, increasing the probability that the student will initiate interactions and not just respond to prompts, in an environment conducive to ongoing, age-appropriate interactions.

Peer mediation recognizes that students can utilize conflict resolution practices and social skills to play a leadership role in increasing peace and reducing violence in their school (Daunic et al., 2000). Using peers allows positive behavior to be naturally rewarded, increasing the chances that positive behavior changes will last and be used in different situations.

Cognitive-behavioral interpersonal problem solving. Cognitivebehavioral interpersonal problem-solving is a treatment designed to enhance overt behavioral change by teaching children to change their thought processes as well as teaching the specific prosocial skills necessary for positive social interactions (Durlak et al., 1991). As its name implies, these programs combine a strategy approach, designed to teach children the process of how to think, with a skills approach, to teach the overt behavior necessary to improve social functioning. The use of cognitive problem-solving skills, such as generating alternative solutions to social problems and developing means-ends thinking, is combined with various behavioral training strategies such as practice, modeling, role play, corrective feedback, self-control strategies, and social or token reinforcement. Researchers have demonstrated that an individual's ability to behave appropriately in various social problem contexts is increased with effective social meta-cognitive skills that enable the individuals to identify variables that assist in discriminating response requirements (Mathur and Rutherford, 1996).

Anger management. Personal coping skills, such as anger management, are abilities to focus on problems and triggers of problems. Children who are hungry, anxious, or of lower intelligence, tend to show less of an ability to control their anger (Tolan and Guerra, 1994). The teaching of positive self-talk, problem-solving techniques, and relaxation to aid in recognition and reduction of stress and anger is critical. Skills essential for anger management include: non-antagonistic response skills, personal awareness of personal anger-arousal signals, use of personal arousal signals as cues to use non-antagonistic strategies, perception of self-control over situation, and self-instruction techniques to deal with each stage of provocation, and maintaining high self-esteem (Novaco, 1975). Direct instruction with social reinforcement to encourage has also been continually used to help students to manage anger (Hughes, 1989).

Self-control strategies. Self-control is a powerful generalization tool and is not dependent on a special education teacher or being in a special environment. Generalization of self-control strategies that are strengthened by self-monitoring, self-evaluation, and self-reinforcement can be used as a complement to teacher-mediated behavior management approaches in the classroom (Hughes, 1989; Kazdin, 1994; Lewis et al., 1991). According to these researchers, three steps are involved:

- 1. Self monitoring. Self-monitoring should occur after target behavior is clearly defined (e.g., self-monitoring for increasing ontask behavior during independent seatwork).
- Self-evaluation. Students can compare their behaviors to externally determined standards and render a judgment of quality and acceptability.
- 3. Self-reinforcement. Guidelines for using self-control strategies include defining target behavior, providing rationale for self-control, developing self-control system, providing direct instruction, monitor accuracy, fading overt procedures, provide program for generalization, and valuations considerations.

Curriculum-based intervention. A number of authors recommend the integrating of social skills training into the regular curriculum.

The learning of social skills, emotional discrimination, and problemsolving has been successfully integrated with literature (Muscott and O'Brien, 1999). Using children's literature has been found to be effective in improving the comfort level of friendship skills in young students with learning disabilities (DeGeorge, 1998). Some of the scenes from Shakespeare's *Romeo and Juliet* lend themselves to discussions of social skills, problem-solving, and alternatives to aggression (Anderson, 2000).

Social skill literature strategy (SSLS) programs provide a model for integrating social and emotional skill development into the elementary and middle school language arts curriculum (Anderson, 2000). Teachers can use story tools and strategies to bring literature alive. The story approach teaches and motivates students to explore conflict, discuss character, appreciate diversity, utilize reading strategies and increase comprehension. Literature helps connect the written world to the students' own lives and their relationships with others.

Through stories, students can develop cooperative problemsolving skills, explore what it means to be ethical, and address issues such as violence, discrimination, bullying, and harassment (DeGeorge, 1998). The SSLS model is adaptable to a variety of learning environments and is easily implemented in any language arts program because teachers work with the literature they already teach (Anderson, 2000). History and social studies also provide opportunities for learning of social behaviors.

Vaughn (1987) teaching, learning, and caring (TLC) approach offers an appropriate framework for considering how social skill intervention can be integrated into literature instruction. TLC, which was originally developed to teach social skills to adolescents with behavior problems, identifies specific goals in the following areas: (a) empathy—interpreting events and recognizing the feelings of self and others; (b) cue sensitivity—encouraging awareness of verbal, nonverbal, and environmental signs; (c) alternative thinking—considering different points of view and different solutions to social problems; (d) consequential thinking—learning to predict consequences; (e) skills implementation—identifying, implementing, and evaluating the best solution, and (f) integration—observing and using problem-solving skills in hypothetical and real situations. Teachers can modify these goals as they integrate curricula into social skills teaching.

Multiage grouping. Multiage grouping is an excellent means to develop students' social competence (Winsler and Espinosa, 1990). It provides a good environment in which to practice interpersonal skills and develop feelings of individual self worth because they better reflect the diverse natures of the families from which the students come and larger society into which they move. In addition, multiage grouping makes it easier and more acceptable for children to find and work at their own level because of the wide range of materials and learning experiences available. In a multiage classroom, children benefit from exploring issues from varying points of view.

According to Furman et al. (1979); Katz et al. (1990); Winsler and Espinosa (1990), compared with children in graded settings, those in non-graded programs exhibited more positive outcomes in the following areas: social skill development, and particularly improvements in social skills on the parts of socially withdrawn older children in non-graded settings. Furman et al. (1979) have found that improvement among the isolated children who were exposed to younger children was so marked that post treatment interaction was almost twice as frequent as pretreatment interaction essentially at the same level as the social interaction of the children (Katz et al., 1990; Furman et al., 1979) and frequency of interaction with other-age peers (Winsler and Espinosa 1990) are also improved.

In review, regarding other teaching techniques and instructional designs, SST programs have utilized a variety of methods which include using functional analysis to determine the communicative function of the aberrant social behaviors, using strategies that incorporate a cognitive-behavioral approach, using coaching or direct instruction to teach targeted social skills, the use of prescribed medications, videotaping and viewing desired social behavior tapes, using recreation or social skills games (Williams, 1989), reinforcing appropriate behavior and providing positive verbal, social, and physical feedback, and teaching theory of mind, or the ability to infer emotions and mental states of other people (Ozonoff and Miller, 1995).

As a result of the growing numbers of students with E/BD, and the emphasis placed on the potential effectiveness of SST, two things appear to be happening: teachers and educators have begun to recognize the importance of explicit SST in schools for these children, and numerous skill intervention programs have been developed. Unfortunately, many of the commercially available SST programs fail to yield successful results. Obstacles of implementation include the lack of support or poor cooperation between the staff and faculty. Findings of selected studies on SST programs.

While scholarly literature is replete with suggestions about dealing with the social difficulties that are often concomitant to the academic deficits of students with learning disabilities, practitioners have struggled with the best intervention for alleviating these problems. Kavale and Forness (1996) conducted a meta-analysis of 53 studies of SST in the 15 years prior to the date the research was published. The results of this meta-analysis revealed that little measurable progress has been made with these students in terms of social skill growth. Forness and Kavale suggested that a number of variables may be responsible for the lack of significant social skill growth, including insufficient training periods, questionable measurement techniques, lack of pilot testing of intervention strategies, and insufficient emphasis on cognitive, linguistic, or academic components. These researchers suggested that social skills instruction may need to be more closely coordinated with academic training to achieve maximum results.

With the intent to provide guidelines for selecting an appropriate program for adolescents with mild disabilities, Schumaker et al., (1983) discussed 12 social skills curricula, four of which were designed for individuals with disabilities. Although the authors presented useful information in terms of skills, methodology, target populations, and physical descriptions, they cited no research to support the efficacy of the curricula programs.

Many other researchers (DuPaul and Eckert, 1994; Schloss et al., 1986) have conducted similar investigations in an effort to examine the effects of commercial social skills curricula. According to these researchers,

some of the most common programs include: (a) ACCEPTS (Walker et al., 1983), (b) Skillstreaming (Goldstein et al., 1979; McGinnis and Goldstein, 1984), (c) Think Aloud (Camp and Bash, 1981), (d) ASSET (Hazel et al., 1981), and (e) PEERS (Hops et al., 1978). However, these researchers offered little encouragement for the use of commercially available curricula in terms of curriculum individualization, generalization, and maintenance.

In contrast, Quinn et al. (1999) findings from a 35-study analysis of commercial programs are slightly more encouraging. Curricula utilized in 13 of the 35 studies are: ACCEPTS, ASSET, Skillstreaming, Prepare Curriculum (Goldstein, 1999), and Aggression Replacement Training (Goldstein and Glick, 1987). On the basis of their analysis, the researchers did not discourage the use of these curricula, but they did conclude that SST may be more effective if integrated across the school curriculum and settings and at home.

In a review of the literature on social skill intervention in the schools, Morgan and Jenson (1988) suggested that more effort should be devoted to changing the perception that social skills instruction is a frill rather than a necessity for special needs students. They recommended the following considerations for integrating a social skills intervention program: (a) social skills instruction should have equal emphasis with academic instruction; (b) teachers and other school personnel should adequately trained in social skill instruction; (c) sufficient instructional time must be given to SST; (d) SST should be a collaborative effort among all professionals who are involved in the student's instructional program; (e) SST should be threaded throughout the curriculum and take advantage of incidental teaching opportunities, and (f) student progress in social skills should be evaluated in the same way that academic skills are measured.

#### **Conclusions**

Over the past three decades, a variety of social skills programs have been developed to help teachers with the difficult task of teaching children and adolescents prosocial, interpersonal behaviors. These programs are driven by a number of underlying theoretical orientations that generally fall into one of four categories: affective, behavioral, cognitive and multidimensional (Cartledge and Milburn, 1995). The literature has established that that there is a need for some intervention to improve the social and interpersonal behaviors of students with E/BD. For the most part, SST has been shown to be effective in improving the social behaviors of students with E/BD at certain period of time and in a limited number of settings. There is a plethora of theoretical and empirical literature on teaching social skills to students suggesting that social skills instruction involves the purposeful and structured

presentation of materials and direct instruction of the target skills. A close examination of the literature about SST curriculum also indicates that (a) direct teaching of social skills helps develop positive socially accepted patterns of behavior and contribute to the development of positive relationships and assist in avoiding negative social competences; (b) the direct teaching of social skills can be an effective intervention; (c) interpersonal or social skills interventions have positive effects on a wide range of measured outcomes which include increase of academic success in school as well as positive relationships with family, peers, and adults. These outcomes lead students with E/BD to become more socially acceptable in school and the society. In the meantime, it is also important to note that students with E/BD typically learn in a non-traditional manner, and it is unlikely that they will automatically or naturally acquire leaning of skills in a commensurate manner with their peers without E/BD.

The present review of the literature also reveals that despite several decades of theorizing, practicing, debating, and researching, the educational community has not been able to arrive at a best practice model for the identification, measurement, training, generalization, and maintenance of social skills for students with E/BD. Failure to arrive at the ideal training program has resulted from lack of consensus among researchers and practitioners regarding many issues, such as definition of terms, testing and training procedures. In addition, the identification of which specific skills to target in training is often subjective, and skills are commonly selected with no empirical justification of their need of identified students (Jones et al., 1993). Further, procedures used in practice such as modeling and coaching are often selected arbitrarily, with little individualization based on the nature of students' performance or skill deficits (Gresham, 1998). Finally, professionals agree that far too many commercially available SST programs have been published without documented empirical evidence of their efficacy.

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