PEER RELATIONSHIP PROBLEMS OF CHILDREN WITH AD/HD: CONTRIBUTING FACTORS AND IMPLICATIONS FOR PRACTICE

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Research has consistently documented that children with attention deficit/hyperactivity disorder (AD/HD) have significant problems in peer relationships and are strongly rejected by their typically developing peers. There is a growing recognition that traditional interventions, such as social skills trainings are no longer sufficient to address the staggering social needs of children with AD/HD. This paper introduces new directions in interventions for children with AD/HD and advocates that multi-component interventions can be highly beneficial to ameliorate the social problems of children with the disorder. Studies examining the peer relations in children with AD/HD are reviewed and available interventions are explored. In addition, problems with the application of various interventions are discussed and suggested practices are presented.

Attention Deficit/Hyperactivity Disorder is the most commonly diagnosed childhood disorder, affecting an estimated three to five percent of the kindergarten and school age children in the U.S. (American Psychiatric Association, 1994). This prevalence estimate means that almost one in every twenty children, or at least one child per classroom, is likely to be identified as having AD/HD (Mc Goey, Eckert, & DuPaul, 2002). Some AD/HD symptoms include being easily distracted by outside stimuli, failing to listen to directions, making comments out of turn, initiating conversations at inappropriate times, having difficulty organizing tasks, excessive talking, feelings of restlessness, and failing to finish school work (Barkley, 2006; DuPaul & Stoner, 1994; Rowland, Umbach, Stallone, Naftel, Bohlig, & Sandier 2002). Secondary features associated with the disorder are also often quite problematic; such difficulties involve aggression, poor peer relations, academic underachievement, learning problems, and low self-esteem and depressive symptoms (Barkley, 2006; Hinshaw, 1994; Treuting & Hinshaw, 2001).

Extensive research has shown that children with AD/HD have seriously disturbed social relations. More specifically, children with the disorder are less popular among their peers, and are more often rejected by their peers (Gaub & Carlson, 1997; Hodgens, Cole, & Boldizar, 2000; Landau & Moore, 1991). Problems caused by inattention and impulse control effect negatively the social performance of children with this disorder in a number of areas (DuPaul & Stoner, 2003). First, they may enter ongoing peer activities in a sudden, disruptive manner. Second, their communication style often differs than their typically developing counterparts. Children with AD/HD have difficulty in following the implicit rules of good conversation. They are likely to interrupt others, pay minimal attention to what others are saying, and respond in an irrelevant fashion to the queries or statements of peers. Third, these children frequently approach interpersonal problems in an aggressive manner, lose their temper, and become angry quite easily. Therefore, arguments and fights with peers are common (DuPaul & Stoner, 2003). In addition, the interpersonal behaviors of children with AD/HD are often described as more impulsive, intrusive, excessive, disorganized, engaging, aggressive, intense, and emotional (Barkley, 2006; Mikami & Hinshaw, 2003; Stroes, Alberts, & Van der Meere, 2003). Thus they are disruptive of the smoothness of the ongoing stream of social interactions, reciprocity, and cooperation, which is an increasingly essential part of the children’s social lives with others (Barkley, 2006). Furthermore, children with AD/HD appear to perceive social and emotional cues from others in a more limited and inaccurate fashion, as if they were not paying as much attention to emotional information provided by others. However, research also shows that these children do not differ in terms of their capacity to understand the emotional expressions of other children (Casey, 1996). It is not surprising then, that children with AD/HD are rejected at higher rates than are their non-AD/HD peers (Hinshaw &
Although peer rejection does not, in itself, indicates an externalizing behavior disorder, it is well known that low social status with peers significantly predicts a host of negative outcomes in later life (Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998; Parker & Asher, 1987; Young, 2000) and co-varies positively with disruptive and particularly aggressive behavior.

It is also important to note that, when tracking children diagnosed with AD/HD into adolescence and adulthood, those who ultimately experience the most serious clinical problems (e.g., substance abuse, criminal arrests and incarceration, psychiatric hospitalization) were previously identified as having difficulties with aggression (Hinshaw, 1987) or social relations (Parker & Asher, 1987). Thus, most of these risks seem to be increased further by the coexistence of hostile, conduct disordered behavior patterns, or oppositional defiant disorder (ODD), with early onset hyperactive-impulsive behavior (Anastopoulos, Guevremont, Shelton, & DuPaul, 1992; Stormont-Spurgin & Zentall, 1995). To make the case worse, researchers have found that children with high ratings in kindergarten on hyperactivity and aggression were more likely than those initially rated average or low on hyperactivity and aggression to have third and fourth grade outcomes of peer rated aggression and self-reported delinquency (Vitaro, Tremblay, Gagnon, & Pelletier, 1994).

**Emotion Regulation Problems**

The social behaviors of children with AD/HD are suggestive of underlying difficulties with emotion regulation (Maedgen & Carlson, 2000; Melnick & Hinshaw, 2000; Southam-Gerow & Kendall, 2002). Children with AD/HD frequently exhibit increased emotionality, displaying greater degrees of explosive, unpredictable, and oppositional behavior. Over reactions to minor inconveniences are common, and such children may seem overly aroused when in stimulating situations (Guevremont & Dumas, 1994). According to Barkley (1997a), most children with AD/HD (except for those with purely inattentive symptoms) have a disinhibitory deficit, which causes secondary impairments in domains of self-regulation such as emotion. Barkley (1997a) emphasized that children with the disorder display greater proponent emotional reactivity to charged events and less capacity to regulate emotion/arousal states in the service of goal-directed behavior. However, research has also revealed that only high aggressive children with AD/HD have poorer emotional regulation skills than low aggressive children with AD/HD (Hinshaw & Melnick, 1995). Melnick and Hinshaw (2000) demonstrated that a high-aggressive subgroup of AD/HD boys showed a significantly less constructive pattern of emotional coping than did both a low-aggressive AD/HD subgroup of boys and nondiagnosed comparison boys, who did not differ. In another study, Maedgen and Carlson, (2000) compared children with AD/HD combined type, children with AD/HD predominantly inattentive type (AD/HD-I), and controls on parent and teacher ratings of social status and performance, self-report of social knowledge and performance, and observations of behavior on an emotional regulation task. Their analyses indicated that children with AD/HD-C were rated as showing more aggressive behavior; furthermore, they displayed emotional dysregulation characterized by high intensity and high levels of both positive and negative behavior. In contrast, children with AD/HD-I were perceived as displaying social passivity and showed deficits in social knowledge on the self-report measure but did not evidence problems in emotional regulation.

Deficits in emotion regulation signify one of the primary areas of impairment in AD/HD, which eventually result in various problems in peer relationships (Barkley, 1997a). In fact, research suggests that children with AD/HD often display unpredictable, explosive behaviors and fail to regulate their emotions effectively (Mercugliano, Power, & Blum, 1999). Children with the disorder have also been described as overly exuberant (Whalen & Henker, 1985), emotionally labile and inflexible to the situational demands (Landau & Milich, 1988), and intense and hyperactive (Barkley, 1997a). Likewise, peers tend to view these children as more aggressive, inflexible, intrusive, disruptive, and annoying (Taylor, 1994).

Overall, limited research in the area of emotion regulation in children with AD/HD has provided preliminary evidence that emotion regulation abilities are modestly related to underlying problems with impulse control and hyperactivity, and also represent a different domain of skills that add incremental information to the prediction of social functioning in children with AD/HD (Melnick & Hinshaw, 2000). Developmentally inappropriate inattention and /or hyperactivity and impulsivity, posited to be central to AD/HD, appear to overwhelm a child’s capacity to self-regulate at each developmental level, thereby interfering with the development of age appropriate emotion regulation.
Social Skills Deficit versus Social Performance Deficit

Social skills deficits reflect knowledge deficits in the social domain. In other words, children who have social skills deficits do not know appropriate social behaviors to make friends, respond to social situations, or read social cues (Landau, Milich, & Diener, 1998; Maedgen & Carlson, 2000). Research has shown that inattention in children may function to delay the acquisition of skills and reasoning related to social competence. Thus, children with inattention may compensate for their poorer social skills or social understanding by engaging in more solitary or parallel play. Accordingly, by engaging in fewer interactions with peers, children with AD/HD may restrict their opportunities for social learning and for positive social interactions. As children enter school, peer interactions become more complex and involve more cooperative and competitive interaction and less solitary or parallel play (Hartup, 1983). In this context, less skilled children easily may be overlooked, resulting in social isolation and higher levels of social problems.

In addition, Wheeler and Carlson (1994) indicated that children with AD/HD-Inattentive type might have deficits in both social performance and knowledge, whereas children with AD/HD-Combined type have performance deficits. They further argued that these deficiencies might be differentially mediated by symptoms typically co-occurring with each subtype. Thus, impulsivity and hyperactivity may prevent a child with AD/HD-C from using social knowledge appropriately, whereas the anxiety and disorganization that characterize children with AD/HD-I may limit social interactions and thereby restrict acquisition of adequate social knowledge (Wheeler & Carlson, 1994). If such a pattern is the nature of children with AD/HD-I, they may be too fearful to experience social interactions and therefore have fewer opportunities to learn appropriate social behaviors than children with AD/HD-C.

Children who have performance deficits in the social domain also have difficulty in consistently and efficiently implementing their social skills in response to daily social challenges (Maedgen & Carlson, 2000). In fact, children with AD/HD engage in higher rates of unmodulated behaviors that are often inappropriate in the given context and insensitive to social expectations (e.g., yelling, running around, or talking at inappropriate times) both as verbal (teasing, commanding) and physical (hitting) (Barkley, 2006).

Social performance deficit in children with AD/HD-C is based on research findings showing that children with AD/HD interact with other people as much as their peers. Thus, they have enough opportunity to learn about proper social behaviors (Wheeler & Carlson, 1994). Since these children engage in prosocial behaviors such as social initiation, which supports the fact that they do have appropriate social knowledge. Moreover, according to DuPaul and Stoner (2003) children with AD/HD-C are able to state the rules for appropriate social behavior as well as their typically developing peers. However, what makes them have problems in social situations is that they often do not act in accord with these rules. This performance deficit is consistent with the hypotheses that children with AD/HD-C are impaired in delaying responses to the environment. Thus, in many social situations, they behave before they have a chance to think about the consequences of their behaviors.

Additionally, extant research has emphasized that impulsivity and hyperactivity can be the reasons that obstruct a child with AD/HD-C from displaying social knowledge properly (Maedgen & Carlson, 2000). In particular, impulsivity may effect the social interactions of children with AD/HD negatively by causing them to act without thinking and to have a difficult time waiting their turn in games. Consequently, this behavioral style is expected to meet with dislike and subsequent peer rejection (Wheeler & Carlson, 1994).

Aggression

Aggression has been a popular topic of study in children with AD/HD (Melnick & Hinshaw, 1996). Researchers have shown that children with AD/HD display social behavior that is described as disruptive, controlling, trouble making, and frequently aggressive (Melnick & Hinshaw, 1996; Reid, 1993). The primary features of AD/HD combined with aggression often interfere negatively with a child’s ability to interact effectively with peers, family members, and others. They demand a great deal of attention from others, with their behaviors often being more intense or forceful than the situation requires (Sheridan, 1998).

Researchers have found that at least one-half of all children with AD/HD are known to have comorbid problems with aggressive conduct (Hinshaw, 1987; Hodgens et al., 2000; Maedgen and Carlson, 2000). These children are more likely to propose aggressive solutions to a problem situation and are less able
to anticipate negative consequences when compared to non-AD/HD peers. They frequently misinterpret neutral behaviors as hostile and confrontational, which may prompt an aggressive response (Hinshaw, 1987). It is also important to note that in various studies, children with AD/HD were rated by their peers as significantly more aggressive (Hodgens, Cole, & Boldizar, 2000; Maedgen & Carlson, 2000). To make matters worse, aggression is one of the most pervasive social problems for children with the disorder (Landau, Milich, & Diener, 1998). Researchers showed that 67% of preschoolers at risk for AD/HD with aggression at age three continued to have behavior problems when they reached nine years old (Campbell & Ewing, 1990).

Aggression seems to be differentially linked to many factors including the type of attentional disorder (Stormont, 2001). The negative social outcome of aggression is associated with children with AD/HD who have both hyperactivity-impulsivity and attention problems (combined type) but not with children with AD/HD-I without excessive hyperactivity and impulsivity (Maedgen & Carlson, 2000). In particular, boys diagnosed with AD/HD-C have consistently been found to be more aggressive than boys with AD/HD-I (Lahey, Schaughency, Strauss, & Frame, 1984; Lahey, Schaughency, Hynd, Carlson, & Nieves, 1987). In addition, children with AD/HD overestimated their social skills when compared to same-age peers (Diener & Milich, 1997). Hoza et al., (1993) found that children with AD/HD view themselves just as competent as comparison children in the social domain. Consistent with this result, current research has documented that following a failed dyadic social interaction children with AD/HD rated their social interaction more positively than their non-AD/HD peers (Hoza, Waschbusch, Pelham, Molina, & Milich, 2000). Such findings show that children with AD/HD may not perceive clearly the effects of their social behaviors on their relationships with peers and overestimate their social skills.

**Psychosocial Interventions**

Interventions for children with AD/HD and disruptive behaviors often include parent management training and behavioral intervention along with social skills training. Various training programs exist but all strive to promote more positive, compliant, and generally prosocial behavior while decreasing negative, defiant, and disruptive behavior in children (Shelton et al., 2000). These programs generally focus on peer relations, classroom conduct, and school achievement (Arnold et al., 1997; Bierman, Miller, & Stabb, 1987). One of the most widely used psychosocial interventions that directly targets peer relationships is social skills training (SST). Social skills training was developed for the purpose of enhancing the peer relationships of rejected and neglected children. It is based on the social skills deficit model, which posits that a child’s lack of social skills results in less positive peer interactions and lower social status. Although short-term effects of SST are positive, long-term outcomes reveal discouraging results on social, vocational, and academic measures (Carlson & Bunner, 1993; Charles & Schain, 1981). Apparently, the nature of AD/HD requires certain changes in both the content and the form of the interventions (Mrug, Hoza, & Gerdes, 2001). In particular, research showed that children with AD/HD-C display performance deficit rather than a skill deficit. In other words, children with AD/HD are able to express the socially appropriate rules and behaviors, but they often do not act accord with these rules (DuPaul & Stoner, 2003). Social performance deficits are more complicated to ameliorate than social skills deficits for two reasons. First, existing social relationship interventions focus on deficits in skills rather than deficits in performance. Furthermore, social performance problems exist across settings (e.g., classroom, playground, neighborhood), interventions addressing these difficulties must be carried out by various individuals in a cross-situational fashion (DuPaul & Stoner, 2003).

The other main problem is that most SST programs are designed for children who are apparently rejected without considering the unique topography of each child's performance in the social domain. In other words, pretreatment assessment data may not have been gathered to clarify the specific needs of each treated child, thus leading to a poor fit between presenting problems and SST objectives (Landau, & Milich, 1998). Obviously, children with AD/HD-I who are withdrawn and isolated are different than children with AD/HD-C who display hyperactive and impulsive symptoms (Wheeler & Carlson, 1994). Thus, a social skills deficit approach may be applied to the children with AD/HD-I whereas performance deficit approach may work with children with AD/HD-C.

Another important area to review is related to the structure of social skills interventions. Social knowledge and the acquisition of prosocial behaviors are thought and practiced generally in group therapy formats. However, research indicates that traditional group therapy format do not lead to stable changes in social relationships of children with AD/HD in real-world environments (DuPaul & Stoner,
The lack of maintenance and generalization of social skills training become a major problem because of the fact that appropriate social behaviors are not essentially prompted by adults and peers on a consistent basis (DuPaul & Stoner, 2003). Thus, the generalization of the newly acquired skills to other contexts requires their reinforcement across different settings in the child’s natural environment for an enough period of time (Mrug, Hoza, & Gerdes, 2001). Essential components of environmental programming may involve teaching parents and teachers to reinforce children to perform the behaviors trained in the social skills sessions and developing contingency management programs at home and at school to prompt trained skills (DuPaul & Eckert, 1994). Therefore, it is critical to accomplish the inclusion of teachers and parents as crucial members of the social skills treatment team for generalization.

A considerable problem is that once the child is rejected, peers cognitive processing of the child behavior becomes biased. In other words, the peers may develop a negative stereotypical perspective of the child, and as a result of their view, the peers may selectively perceive and respond to the stereotype-consistent behaviors (Mrug, Hoza, & Gerdes, 2001). Thus, social skills interventions not only should work on changing the negative social behaviors of children with AD/HD, but also the interventions should attempt to increase peers awareness of positive changes in children behaviors (Mrug, Hoza, & Gerdes, 2001). In order to do that, peers should be allowed to play active roles in every phases of social skills intervention. Specifically, peers can participate in the social skills training sessions as role models and encourage the enactment of positive social behaviors of children with AD/HD (DuPaul & Stoner, 2003). Indeed, research supports that including diverse peer group rather than using only children with disturbed behaviors increases the success of social skills training (Ang & Hughes, 2002).

Further, individuals within the child's natural environment such as parents typically have not been involved in training. Thus providing parents with necessary knowledge and training not only increases the continuity of the program but also, the intensity. Indeed, parents are generally with their children more than are teachers; this puts parents in the top position to create difficult behavior environments, or, more constructively, to provide long-term interventions. Parents who are educated in the description, causes, prognosis, and treatment of AD/HD are better able to facilitate behavioral change in their children (DuPaul, Guevermont, & Barkley, 1991). Likewise, interventions can be more effective especially with respect to generalization of improved behavior across settings, when parental involvement is combined with social skills training programs.

In addition, family characteristics and secondary symptoms with regard to family functioning, such as aggressive behavior, have been shown to be among the most significant predictors of long-term negative outcome for children with AD/HD (Weiss & Hechtman, 1986). Positive future outcome for all children has been associated with stable family environments, consistent discipline, positive parental expectations for their future, positive parents-child relationships, perceptions of competence perceived by parents, and low rates of parental criticism. Behavioral treatment that teaches parents to modify their reactions to the child’s primary symptoms, should directly alter parental negative responses, and also train parents to increase their positive responses to children (Wells et al., 2000). However, the use of their relationship as a positive corrective experience in changing the relationship patterns of the child requires insight and support over time. Family members should learn skills to apply behavioral interventions in a supportive environment and gain knowledge to identify indicators of emerging negative manifestations that will need assessment and intervention modifications (Barkley, 2006). Observing the child/parent interaction and then coaching parents in providing corrective behavioral interventions can be used via home visits while utilizing an empathic approach to the child and parents.

Finally inclusion of parents in the SST program establishes consistency between the school and home environments. There must be a continuity of behavioral expectations between home and school. Discussing behavioral strategies, rewards, and limits with parents to ensure continuity of approach to dealing with challenging behaviors between home and school is crucial. In that way, parents can encourage the same skills and performance at home and in different peer groups. Indeed many children with AD/HD appear to need very strong and intense levels of reinforcement to produce appropriate behavior in certain settings (Barkley, 1997b; Landau & Moore, 1991). Parents must learn to identify the specific behaviors they want to substitute and then by giving rewards for the new more appropriate behavior, teach the child how to control his actions and reactions. This is particularly important for children who have difficulty with anger management. An anger management program focused on adaptive ways of managing anger in children with AD/HD and a behavioral skills training program
focused on both social skills and motivation can be used to help children with AD/HD experience more positive social outcomes.

Another most widely used form of psychosocial interventions for young children is parent management training. Parent management training aims to alter parental disciplinary practices, including reducing the frequency of coercive exchanges between parents and children. In addition, parents are encouraged to consistently monitor their children to prevent antisocial behavior (e.g., physical aggression) and to prevent accidental injuries associated with impulsive behavior (DuPaul & Stoner, 2003). Despite the success of training programs for parents of children with AD/HD, improvements in child behavior within the family do not significantly transfer to school or to other environments (Anastapoloulos, Barkley, & Shelton, 1996). Anastopoulos and colleagues (1996) posit such programs work because they lower parental stress by teaching them to regard disruptive behaviors as less severe than previously thought. The teaching of skills to ignore minor missteps is a common element in parental training programs (Barkley, 1997b). Furthermore, parent training only treats one of the many environments of which a child is a part. In fact, research indicates that the key to change is connecting conduct at home with conduct at school while creating a system of communication between the two (Goldstein & Goldstein, 1998). Results of such psychosocial interventions, at least in the short term, have been promising, but evaluations of the longer-term effects of these programs are quite limited at the moment (Shelton et al., 2000). Conversely, prospective studies of children with AD/HD provide the best opportunity to understand more thoroughly the adult outcomes of AD/HD. Due to the heavy burden of suffering of AD/HD and the short-term effectiveness of the interventions, there is a compelling argument in favor of an increased emphasis on primary prevention efforts. However, until recently, minimal research has been conducted to aid practitioners in identifying and supporting young children at risk for this disorder.

Among the few empirically supported early intervention programs for at-risk children for antisocial behaviors, the First Step to Success (FSS) has been shown to be effective in decreasing the number of psychosocial risk factors associated with antisocial behavior and in increasing the overall well-being and adjustment of kindergartners at risk (Kashani, Jones, Bumby, & Thomas, 1999). The FSS was designed to achieve secondary prevention goals with its three main components: kindergarten-wide screening process, the classroom-based CLASS curriculum, and HomeBase, which recruits parents as partners with the school in teaching the at-risk child a behavior pattern contributing to school success and the development of friendships (Walker, Kavanagh, Stiller, Golly, Severson, & Feil, 1998).

In a recent review study, Leff, Power, Manz, Costigan, and Nabors (2001) has critically reviewed literature in an effort to identify best practices in aggression prevention programming. Thirty-four programs were evaluated on the following standards (a) an experimental group design including the use of random assignment procedures; (b) a well-documented treatment procedure; (c) uniform therapist training and treatment integrity monitoring procedures; (d) multimethod outcome measures demonstrating adequate reliability and validity; (e) assessment of effects at follow-up (at least six-month follow-up); and (f) replication conducted by different investigators. The results of this study showed that the First Step to Success program provided strong empirical support for the maintenance of certain treatment gains several years following treatment and information documenting that their intervention was viewed as important, acceptable, and feasible, though costly and somewhat intensive.

Recent investigations have showed that the FSS intervention produced extremely robust effect sizes in the following areas as indicated by teacher ratings and direct observations: adaptive behavior, aggressive behavior, maladaptive behavior, and average percentage of academic engaged time in teacher-assigned tasks (Walker et al., 1998). For example, Ozdemir (2006) evaluated the efficacy of the First Step to Success Early Intervention program on Turkish children identified with AD/HD. Findings from the study revealed that all participant children displayed increased levels of academic engagement behavior with the introduction of the program and at three months follow-up. Study results also showed that all participant parents and three teachers reported substantial decreases on participant children’s social emotional problems, and problem behaviors. The results of this study indicate compelling evidence that implementing a multicomponent early intervention program, the First Step to Success, can yield important benefits for children with AD/HD.

**Conclusion**

Many articles have been written about the AD/HD treatment options for children over the past several decades. Currently, most professionals argue that children with AD/HD should be treated with a
combination of interventions that typically involves stimulant medication along with behavior management in the home and at school (Barkley, 2006; Hinshaw, 1994). However, some professionals are hesitant to medicate young children with AD/HD and instead often suggest behavior management and parent training. Furthermore, although medications have been effective in reducing aggressive problems (Hinshaw, Henker, Whalen, Erhardt, & Dunnington, 1989), it does not increase positive behavior nor does it normalize the peer status of AD/HD children (Landau & Moore, 1991). Thus, despite the popularity of pharmacotherapy, a psychosocial intervention is necessary to enhance children with AD/HD’s social functioning with peers and adults (Whalen & Henker, 1991).

Several programs have already initiated to intervene early in the lives of children having disruptive behavior patterns or having other factors that place them at risk for developing later antisocial behavior. These interventions have typically focused on either parent or classroom interventions or a combination of these programs (Shelton et al., 2000). Although short-term effects of such interventions are positive, long-term outcomes reveal discouraging results on social, vocational, and academic measures (Carlson & Bunner, 1993; Charles & Schain, 1981). Apparently, the nature of AD/HD requires certain changes in both the content and the form of the interventions (Mrug, Hoza, & Gerdes, 2001). The First Step to Success program is a successful early intervention program, which involves careful and sensitive consideration of the individual characteristics of children, the intensity of behaviors, specific strengths and weaknesses, social and emotional needs, environmental and family factors. Furthermore, program’s many critical components such as CLASS curriculum and Home Base, parent-training module, address the unique needs of children with AD/HD. However, when the program used with children with AD/HD, incorporating a teacher training module on the nature of the disorder and behavioral and instructional methods to address the specific needs of children with AD/HD would be an important adaptation for the First Step to Success program to achieve the expected behavioral changes while working with children with AD/HD. Indeed, research showed that teachers with more training and experience in the area of AD/HD expressed more confidence in modifying the behavior of children with the disorder (Reid, Vasa, Maag, & Wright, 1994).

A review of the literature indicates a large research base on the negative effects of AD/HD on children’s social relationships and emotional well being (Hinshaw & Melnick, 1995; Hoza, Pelham, Dobbs, Owens, & Pillow 2002; Hoza et al., 2005). Therefore, helping children with AD/HD with well-designed interventions is crucially important. The First Step to Success program is a successful early intervention program, which involves careful and sensitive consideration of the individual characteristics of children, the intensity of behaviors, specific strengths and weaknesses, social and emotional needs, environmental and family factors. However, incorporating an AD/HD training module designed specifically for teachers and parents would strengthen the program outcomes and in turn, increase the effectiveness of the program with children with AD/HD.

References


