The Social Functions of Antisocial Behavior: Considerations for School Violence Prevention Strategies for Students with Disabilities

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ABSTRACT: Research on school social dynamics suggests that antisocial behavior is often supported by peer group processes particularly during late childhood and adolescence. Building from a social interactional framework, this article explores how information on the social functions of aggressive and disruptive behavior may help to guide function-based interventions to prevent the involvement of students with disabilities in antisocial behavior. The conceptual foundations of a functional perspective of problem behavior are reviewed along with empirical research on the social factors and processes that contribute to the development and maintenance of antisocial patterns. From this background, the social problems that may occur among students with disabilities are examined as potential risk factors for involvement in antisocial behavior and implications for assessment and intervention are considered from a social functions perspective.

A number of students who receive special education services are at increased risk for involvement in antisocial behavior (i.e., bullying, teasing) both as perpetrators and as victims (Farmer, Hall, Weiss et al, 2011; Rose, Espelage, & Monda-Amaya, 2009). Many students with high incidence disabilities experience two key risks for involvement in antisocial behavior: social difficulties (Gresham & McMillian, 1997) and high rates of aggressive behavior (Farmer & Rodkin, 1996; Lane, Carter, Pierson, & Glaeser, 2006). This elevated risk for some students with disabilities to be involved in antisocial behavior has resulted in a conundrum for schools as they must balance between providing youth with disabilities a free and appropriate public education and promoting a safe environment for all students. To address these conflicting responsibilities, the Individuals with Disabilities Education Act Amendments of 1997 includes provisions that schools must conduct functional behavioral assessments to identify factors that contribute to a student's problem behavior and establish positive behavioral supports to promote alternative, productive behaviors to replace problem behaviors (Skiba, 2002).

In response to these provisions, schools across the United States have adopted Positive Behavior Intervention Support (PBIS) programs that involve school-wide approaches along with systematic multitiered strategies to address the behavioral support needs of students who are not responsive to universal interventions and require more individualized and intensive supports (Lane, Rogers et al., 2007). While school-wide PBIS programs have been shown to reduce office discipline referrals (Bradshaw, Mitchell, & Leaf, 2010), the effectiveness of such programs for reducing risk for severe antisocial behavior and involvement in antisocial behavior for students with high incidence disabilities has not been

demonstrated. Also, researchers have questioned the use of functional behavioral assessment to address complex antisocial behaviors in youth with high incidence disabilities and have argued that these approaches were developed to address chronic behavior problems in students with severe disabilities. However, their effective application to antisocial behavior in students with high incidence disabilities have not been adequately established (Sasso, Conroy, Stichter, & Fox, 2001). Further, severe antisocial behaviors in students with high incidence disabilities have a low base-rate and may reflect the impact of nonproximal factors including classroom social dynamics that place the student at risk for social roles and peer affiliations that contribute to these behaviors. Social dynamics may serve as setting events that promote antisocial patterns that increase students' risk for involvement in antisocial behavior. Accordingly, there is a need to link function-based approaches with research on the social functions of behavior in the classroom, particularly in relation to risk factors for antisocial behavior.

In response to this need, we review research on school social dynamics and outline a framework for addressing the function of antisocial behavior in the peer system. Our review is guided by four aims. First, we summarize the conceptual foundations of a functional perspective of problem behavior. Second, we review research on the social dynamics that support antisocial behavior patterns. Third, we summarize research on the social problems of students with disabilities and examine how these problems may be functionally linked to their risk for antisocial behavior. Fourth, we consider next steps and future research needs in the development of assessment and preventive intervention strategies to address the social functions of behavior that may contribute to involvement in antisocial behavior in students with disabilities.

The Foundations of a Functional Perspective of Problem Behavior

From a behavioral analytic perspective, behaviors are maintained by reinforcement. In the strictest sense, reinforcement takes place "when a stimulus change immediately follows a response and increases the future frequency of that type of behavior in similar conditions" (Cooper, Heron, & Heward, 2007, p.702). Specifically, behaviors serve to obtain (positive reinforcement) or avoid (negative reinforcement) attention; activities or tangibles; or sensory conditions (Umbreit, Ferro, Liaupsin, & Lane, 2007). For example, if a student engages in disruptive behavior during reading instruction, it may be he or she is acting out to escape an instructional activity or task demand that is either too difficult or too easy (see Umbreit, Lane, & Dejud, 2004). In this case, problem behavior is maintained by escape from the activity (negative reinforcement from undesirable activities or tasks). The same is true for nonacademic behaviors, for example a student may engage in bullying or taunting behavior to access social attention from his or her peers (positive reinforcement in the form of peer attention).

To determine the maintaining function of a given problem behavior, the process begins by identifying and operationally defining the target behavior. The goal is to select a keystone target behavior that, if eliminated from a students' repertoire and replaced with a socially valid, functionally-equivalent behavior, could yield meaningful and lasting changes in a student's life (Baer, Wolf, & Risley, 1968). Next, the motivation for the target behavior (e.g., bullying) is identified using descriptive (e.g., interviews, direct observations) and/or experimental (e.g., functional analysis) techniques. Data generated from these tools and strategies are analyzed to determine antecedent conditions that evoke the target behavior and the consequences maintaining the undesirable behavior. Through this analytic process, determinations are made as to whether or not the target is maintained by positive reinforcement, negative reinforcement, or both operations. Additionally, this process can provide information as to why identified reinforcers are more effective in some versus other situations (i.e., motivating operations).

Finally, an intervention linked to the function of the target behavior is developed with the goal of teaching the student a more reliable, efficient method for achieving his or her goal (Cooper et al., 2007). Functional assessment-based interventions traditionally include three components: (a) antecedent adjustments to set the stage for more effective/efficient replacement behaviors to occur and reduce the probability of the target behavior from occurring, (b) adjustments to the rate of reinforcement afforded when the

replacement behavior does occur, and (c) extinction techniques to reduce the occurrence of the target behavior.

This functional approach to intervention design is efficient and effective for a wide range of target behaviors, types of students, and contexts (Lane, Weisenbach, Phillips, & Wehby, 2007). However, as we continue to explore efforts to support students with high incidence disabilities who are at increased risk for involvement in antisocial behavior, additional attention to classroom social dynamics that may evoke and maintain antisocial patterns is warranted.

School Social Dynamics and the Social Functions of Antisocial Behavior

As described above, a proximal perspective can provide insight into classroom contextual factors that contribute to behavioral difficulties. However, the complexity of social behavior in the peer system can make it difficult to identify reinforcers and clarify the functions of antisocial behavior in the school context. The issue is that social behavior can be evoked and maintained by factors extending beyond the proximal antecedents and consequences of the targeted behavior. On this score, decades of research on school social dynamics has shown that social structures and peer group processes contribute to the types of bullying and aggression that undergird antisocial behavior in the school context (e.g., Cairns & Cairns, 1994; Espelage, Holt, & Henkel, 2003; Evans & Eder, 1993; Salmivalli, Huttunen, & Lagerspetz, 1997; Vaillancourt & Hymel, 2006).

Building from a social interactional framework and research on peer group dynamics (e.g., Cairns & Cairns, 1994; Piehler & Dishion, 2007), the social function of antisocial behavior can be understood at four distinct but complementary levels: (a) social interchanges, (b) social network membership and social structures, (c) social roles and reputations, and (d) inclusionary and exclusionary peer group processes. These four levels of social functions within the peer system collectively comprise the social dynamics contributing to the behavioral adaptation of individual students with high incidence disabilities and the general behavioral functioning of the entire classroom.

Social Interchanges

The term social interchange refers to interpersonal interaction in which two individuals behave in ways that contribute to each others' general patterns of behavior. From this perspective, interactions become synchronized over time so that one individual's behavior evokes, reinforces, and shapes the behavior of the other (Cairns & Cairns, 1994). Patterns of synchronized behavior include reciprocity and complementarity. With reciprocity, the two individuals respond to each other with similar behaviors. In complementarity, the two individuals have different levels of status and forms of behaviors, but the behavior of each is necessary for the behavior of the other (i.e., bully–victim; leader–follower). Synchronized behavior can result in deviancy training in which two or more individuals organize their behavior around deviant themes and encourage and reinforce increasingly problematic patterns in each other (Piehler & Dishion, 2007). It may also result in coercive peer processes in which youth escalate patterns of problem behavior to control social resources (positive reinforcement) or to escape agonistic interactions with others (negative reinforcement; Cairns & Cairns, 1994; Pellegrini, 2008; Wehby, Symons, & Shores, 1995).

For the purpose of understanding the social functions of antisocial behavior, the function of behavior within social interchanges is to either maintain or terminate patterns of interactions and corresponding relationships and social roles within the peer system (Cairns & Cairns, 1994). By synchronizing and adapting behavior in ways that correspond with the interactions of the other, individuals in an interchange are both reinforcing the immediate social interaction as well as future interactions and their broader social relationship. By interacting in ways that coercively control the behavior of the other (i.e., direct dominance, escalating and then terminating negative interactions when the other acquiesces), new patterns are shaped and reinforced either positively or negatively in ways that support the behaviors of both individuals and their relationship with each other. From this perspective, the maintenance of youths' behaviors depend on how their behaviors are synchronized and the strength of their relationship (i.e., propinquity, mutual attraction, interdependence), and the reinforcement schedule of their peer interactions.

Social Network Membership and Social Structures

The term social network membership refers to naturally occurring peer groups and the corresponding characteristics distinguishing the group from other peer groups or cliques within the broader social unit such as a classroom, grade level, or school. When youth are aggregated together in a defined social unit, they have the opportunity to interact with a broad range of individuals. Youth interactions in the peer system are not random but rather reflect a sorting process in which individuals with similar preferences and social needs tend to have similar patterns of interactions with the available pool of peers (Cairns & Cairns, 1994). Therefore, as youth synchronize their behavior across a large pool of classmates they tend to form distinct peer groups with peers that share similar characteristics (Espelage et al., 2003; Pearl et al., 1998). Yet, while youth who affiliate together are similar on many characteristics, they can also be dissimilar in ways that reflect complementary social relationships such as followers and leaders or bullies and victims (Farmer et al., 2012).

As youth coordinate their interchanges and establish distinct peer groups, hierarchical social structures are naturally formed. This means that individuals and peer groups establish differential levels of status (i.e., centrality) and influence within the broader social system (i.e., classroom, grade level, school; Adler & Adler, 1998; Cairns & Cairns, 1994; Salmivalli et al., 1997; Vaillancourt & Hymel, 2006). During late childhood and early adolescence, youths' social identity is strongly linked to both their peer group membership and their placement in the social hierarchy for their classroom or school. Within both the peer group and the general social structure, a major task for many early adolescents involves establishing and maintaining control of social resources by enhancing and protecting their social position and their corresponding social identity (Adler & Adler, 1998; Evans & Eder, 1993; Pellegrini, 2008).

For the purposes of understanding the social functions of problem behavior, both social network membership and the broader social structure must be considered. With regard to social network membership, youth are likely to sort themselves into groups with peers with whom they can easily coordinate their social activities and needs. In so doing, youth are likely to associate with peers who reflect and support their behavior. Also, through synchronized social interactions, youth who affiliate together are likely to become more similar over time and, therefore, further consolidate patterns of antisocial behavior (Cairns & Cairns, 1994; Espelage et al., 2003). To clarify the social functions of a student's problem behavior it is helpful to (a) identify the peer group in which he or she is embedded, (b) determine the social and behavioral characteristics of the youth he or she affiliates with, (c) identify general interaction patterns between the student and his or her associates, and (d) identify specific patterns that sustain problematic behavior.

The concept of social structures also has important implications for understanding the social functions of problem behavior. As youth establish independent social identities in late childhood, the collective peer system may adopt values and beliefs that are aimed at creating their own culture and demonstrating their autonomy from an adult directed social world (Adler & Adler, 1998). Thus, in some ways problem behavior and the defiance of adult rules is viewed as a way to establish social maturity and to enhance one's status in the social system (Evans & Eder, 1993). In fact, elevated levels of physical and social aggression, arrogance, and problematic behavior have been linked to the development and maintenance of high social positions in late childhood and adolescence (Bowker, Rubin, Buskirk-Cohen, Rose-Krasnor, & Booth-LaForce, 2010; Vaillancourt & Hymel, 2006). Thus, on one hand, problem behavior may function as a socially valued attribute viewed as a way to be perceived as popular or cool within the social structure. On the other hand, aggressive and disruptive behavior may also be used as a way to exert one's influence and control within a hierarchically organized social system. Hierarchically structured social systems may promote aggression (Adler & Adler, 1998; Evans & Eder, 1993). Therefore, aggressive behavior may function as a way to gain social power (positive reinforcement in the form of peer attention) and to manipulate, control, and dominate hierarchical social systems (Estell et al., 2009; Vaillancourt & Hymel, 2006). To clarify the social functions of problem behavior, it is necessary to identify the general values in the social system that are associated with perceived popularity and status and to also determine whether and how the classroom is hierarchically structured.

Social Roles and Reputations

The concept of *social role* refers to youths' social identity and status within both their immediate social network and the broader peer system. Typically, youth develop distinct reputations with peers that involve a blending of their salient characteristics and their general positions within the social hierarchy (Adler & Adler, 1998; Estell et al., 2009). From this perspective a student may be a leader or follower, a bully or a victim, central or peripheral, or a host of other social roles that impact how others respond to her or him. Yet, problem behavior may be differentially associated with youths' social position. Some early adolescents who engage in frequent problem behavior may be dominant leaders who are viewed as being highly popular by both peers and teachers (Vaillancourt & Hymel, 2006). Such youth may engage in aggressive, noncompliant, and disruptive behavior to exert their social influence, to protect their dominance in the social structure and to demonstrate their autonomy from adult valued activities. Other antisocial youth may be perceived by peers and teachers as being unpopular and may be targeted as social scapegoats by their peers (Hymel, Wagner, & Butler, 1990). Such students may engage in problem behavior as an attempt to impress peers and enhance their social status, to protect themselves against the taunting of others, or as a reactive response to victimization by peers. In any case, both popular and unpopular youth with problem behavior are likely to have social roles that evoke peer interactions that reinforce and sustain their maladaptive patterns.

Social network centrality and social roles

Some students are more influential than others both within the peer group and the broader social structure (Adler & Adler, 1998; Farmer et al., 2012). Such youth are viewed as having nuclear centrality and are core members of the peer group. The most central members tend to be leaders within the peer group and, in some cases, may be viewed as leaders for the classroom in general. Other nuclear youth are typically in supportive roles to the leader but sometimes they may actually vie for status and influence with the leader (Adler & Adler, 1998; Vaillancourt et al., 2003). Some group members have secondary levels of centrality. These students are clearly part of the group but are typically in the role of a follower, and their influence depends on their relationship with the leaders of the group. Still other group members may be viewed as peripheral, placing them in a less central role but still providing reinforcement to the social role of a more central member of the peer group. Some peripheral youth (i.e., wannabes) may make frequent attempts to interact with group members but their identity with the group is often not acknowledged by nuclear members, while other peripheral youth may float among several groups or aggregate together to form groups with marginal salience (Adler & Adler, 1998; Cairns & Carins, 1994). Finally, a small proportion of students are not members of peer groups. These students are considered to be socially isolated and are vulnerable to being victimized by peers (Estell et al., 2009; Salmivalli et al., 1997).

Bullies, Victims, and Bully-Victims

Three distinct types of bullying involvement have been identified (Farmer et al., 2012; Gumpel, 2008). Youth identified as bullies repeatedly perpetrate physical or social harm against peers but are not, themselves, bullied by peers. Youth who are identified as victims are routinely bullied by peers but do not bully peers. Youth who are identified as bully-victims perpetrate bullying against peers and are also bullied by peers.

These three bullying involvement subtypes are associated with distinct types of social relations and problem behavior in school. In general, as compared to youth identified as victims and bully-victims, those identified as bullies have lower rates of internalizing problems and are more likely to have socially valued characteristics even though they are viewed by both teachers and peers as being aggressive and disruptive (Farmer et al., 2012). In fact, some youth who are identified as bullies are socially prominent leaders and affiliate with perceived popular peers (Farmer, Hall, Leung et al., 2011; Witvliet et al., 2010). In contrast, youth identified as victims tend to be socially isolated or have smaller social networks than youth identified as bullies (Estell et al., 2009; Salmivalli et al., 1997), while youth identified as bully-victims often have the fewest positive interpersonal characteristics, associate with unpopular peers, have the lowest rates of social acceptance, and use aggressive strategies that are emotionally charged but socially ineffective (Estell et al., 2009; Toblin, Schwartz, Gorman, & Abou-ezzeddine, 2005).

The concepts of social roles and reputations provide an important vantage for clarifying the social functions of antisocial behavior. Social roles and reputations both elicit and constrain the interactions and opportunities youth are afforded in the school context (Evans & Eder, 1993). Within the peer system, the same aggressive or disruptive behavior may serve different functions and evoke different patterns of interaction and corresponding social outcomes depending on the social role and reputation of the youth who are involved in the interchange (Cairns & Cairns, 1994; Hymel et al., 1990). When youth are athletic, attractive, and socially competent, their antisocial behavior corresponds with high levels of social network centrality and social dominance (Adler & Adler, 1998; Estell et al., 2009; Pellegrini, 2008). For such youth, aggressive behavior may function as a way to consolidate their social power by demonstrating their social dominance and enhancing their status with peers who are of high value to them (Olthof & Goossens, 2008). In contrast, perceived unpopular aggressive youth are often identified as bully-victims who are socially marginalized and who tend to be targets of bullying (Farmer et al., 2012). For such youth, problem behavior may function as a reactive and ineffective effort to protect against or stop the taunting and teasing of peers (Evans & Eder, 1993).

Inclusionary and Exclusionary Peer Group Processes

By late childhood or early adolescence, the characteristics of one's peer group and the position that one has in the group can be an important part of her or his identity. Peer groups tend to take on salient identities that reflect the characteristics of their core members. Highly prominent and perceived popular youth tend to be concentrated in the same peer groups, while youth who are viewed by teachers and peers as having low social prominence and popularity tend to associate with low popular peers (Farmer et al., 2012; Witvliet et al., 2010). It appears that youth sort themselves into groups based on the perceived popularity and social prominence of the group members. Recent work suggests that aggression and bullying are associated both with peer groups that have high levels of social network centrality or perceived popularity and with groups that are perceived as being unpopular and socially marginalized (Estell et al., 2009; Farmer et al., 2012). This suggests there is a complex relationship between aggression and social prominence that reflect efforts to gain and maintain status at the individual and peer group level.

To enhance and maintain one's own status in the social structure, youth learn that it is necessary to protect both the boundaries of their group and their relationships with influential peers within the group (Evans & Eder, 1993; Olthof & Goossens, 2008). To do this, students develop a variety of inclusionary and exclusionary strategies that involve aggressive and disruptive behaviors. Accordingly, many youth engage in a high stakes game of protecting their social positions and the parameters of their peer group by building coalitions with influential peers, attacking the social standing of rivals, and thwarting the group membership of lower status peers or peers who are perceived as being potential competitors. This is done through a variety of strategies including gossiping, starting rumors, manipulation of friendships, abandoning existing friendships for higher status peers, and physically challenging or bullying peers (Adler & Adler, 1998; Cairns & Cairns, 1994; Evans & Eder, 1993). On one hand, youth may be compelled to establish as many close associations as possible to ensure a strong base of peer support. On the other hand, they must be careful not to compromise the boundaries of their peer group and jeopardize their own status by associating with others who do not fit the group's identity. This balancing act results in an interesting paradox as youth who are viewed as popular leaders may become highly disliked by their peers, and youth who are not considered to be popular may be able to reinvent themselves and achieve higher status.

The concepts of inclusionary and exclusionary group processes help bring together all four levels of the social functions of problem behavior and provide important insights into the complexity of assessing and intervening with aggressive and disruptive patterns in late childhood and early adolescence. To understand the function of specific patterns of social interaction in a particular student it is necessary to situate the behavior within the context of the student's peer group membership, her or his social roles and reputation both in the peer group and the broader social structure, the social roles and reputation of the youth that the student has the problematic interchanges with,

and the peer groups that each person who is involved in the interchange is embedded in. Information along these lines makes it possible to answer questions about the social function of the behavior such as: Is this an attempt to gain status over a rival within the individual's peer group? Are these youth within the same group and are they reinforcing each others' behavior and demonstrating the power or influence of their peer group? Are these youth from rival groups who are vying for power in the broader peer system? Are these students who are trying to protect the boundaries of the group or to prevent the group entry of a potential rival? Is this a socially marginalized student who is trying to deflect the taunts of others or who is scapegoating another marginalized youth in an attempt to elevate her or his own status? These types of questions and the information they generate can guide the assessment of the social functions of problem behavior during late childhood and early adolescence.

Social Problems and Risk for Violence in Students with Disabilities

The social dynamics that contribute to peer relationship problems can be viewed as an ecological factor or settings event that may place any student at increased risk for involvement in antisocial behavior regardless of their disability status. However, compared to nondisabled peers, a number of students with high incidence disabilities have significantly higher levels of social difficulties that have been linked to antisocial behavior patterns. In this section, we briefly summarize the literature on the social difficulties of students with high incidence disabilities with a focus on how these various peer relationship problems may function to support the establishment and maintenance of behaviors that increase risk for involvement in antisocial behavior.

Exclusion of Youth with High Incidence Disabilities in the Peer System

Students with high incidence disabilities and are more likely to be isolated in the social structure as compared to nondisabled peers (Farmer, Hall, Leung, Estell, & Brooks, 2011; Pearl et al., 1998). Further, many youth with high incidence disabilities have peer acceptance problems that contribute to bullying and victimization and involvement in antisocial behavior. Using sociometric measures of how well students are liked by their classmates, decades of research has shown that students with high incidence disabilities are more likely to have rejected sociometric status as compared to nondisabled peers (e.g., Sabornie & Kauffman, 1987; Sale & Carey, 1995). However, low peer acceptance does not necessarily mean exclusion from the peer system. Some youth with rejected sociometric status may be dominant leaders who use aggression to control resources and to support their dominance within the social structure (Farmer, Hall, Leung et al., 2011; Vaillancourt & Hymel, 2006). For example, some students with high incidence disabilities who engage in high rates of aggressive behavior have nuclear centrality and are perceived by teachers and peers as being popular and influential in the social system even though they are disliked, while in other cases youth with high incidence disabilities who engage in high rates of aggressive behavior appear to be social scapegoats who are marginalized in the social ecology (Farmer et al., 2012; Farmer & Rodkin, 1996; Pearl et al., 1998). These findings suggest that it is necessary to augment assessments of the peer acceptance of students with high incidence disabilities with measures of their social roles and reputations.

Social Roles and Peer Group Membership of Youth with High Incidence Disabilities

Social competence difficulties are a key factor that contributes to the problematic peer relations of a number of students with high incidence disabilities, their exclusion from positive relationships with productive peers, and their involvement in antisocial roles within the peer system. Many youth with high incidence disabilities have social competence problems that contribute to their low social acceptance (Cullinan & Sabornie, 2004; Gresham & MacMillan, 1997; Lane et al., 2006). Poor social competence is often associated with other risk factors including low academic performance, problems with physical appearance and hygiene, difficulties in the self-regulation of behavior, and low levels of athletic skills (Asher & Coie, 1990; Farmer, Rodkin, Pearl, & Van Acker, 1999). Youth who have social competence problems and

associated difficulties are likely to be marginalized (i.e., secondary or peripheral centrality) or isolated in the social structure and develop social reputations that make them easy targets for social ridicule and teasing from peers (Hymel et al., 1990).

Many youth with high incidence disabilities have secondary or peripheral status or are socially isolated (Farmer, Leung et al., 2011; Pearl et al., 1998). Within these marginalized roles, youth with disabilities are at increased risk to be victimized by peers and to engage in bullying (Estell et al., 2009; Farmer et al., 2012). On this score, Evans and Eder (1993) found that youth with disabilities had few social connections and developed negative social reputations that further evoked and amplified the degree to which they were taunted by peers. In turn, students who were victimized appeared to bully other marginalized peers as a way to deflect social assaults against themselves. This is consistent with recent studies which have found that students with disabilities have significantly elevated levels of being identified as bully-victims and that when they are members of social groups they tend to affiliate with socially marginalized peers (Estell et al., 2009; Farmer et al., 2012; Rose et al., 2009).

Social Interactions of Youth with High Incidence Disabilities

In general, very little is known about the social interactions of students with high incidence disabilities in relation to their social positions or their risk for involvement in antisocial behavior. Thus, while it is known that students with disabilities have a range of peer relationship problems, few studies have linked such relationship problems to observed social interactions in the classroom.

While there is very little research that has examined these issues directly, the available data that are related to this topic are compelling. In a national study of attitudes toward inclusion in middle school, nondisabled early adolescents indicated that that they had little contact with students with intellectual disabilities either in their classes or in the school, and only 40% or less reported that they were willing to have social contact with peers with disabilities outside of school (Siperstein, Parker, Bardon, & Widaman, 2007). This study suggests that many students with disabilities are unlikely to be productively engaged with prosocial peers. Further, Evans and Eder's (1993) three-year ethnographic study of middle school social dynamics suggests that many peers engage with students with high incidence disabilities in ways that promote victimization and reactive antisocial patterns. To illustrate this point, the authors describe a scene that one student reported in which a few male students encircled a girl in special education who attempted to ignore them. The boys would run up to her and kick her to aggravate her but not to cause physical harm. As she would react to the taunt of one boy another would kick her. According to the respondent, this situation turned into a mob of over 50 students taking turns kicking and hitting her or cheering her on to fight back. Clearly, there is a need for additional research that includes the development of measurement protocols that combine a focus on the assessment of classroom social dynamics, the social roles and social network membership of target students, and function-based observations of the social interactions of students with high incidence disabilities who demonstrate social risks for involvement in antisocial behavior.

Assessment and Intervention Implications of a Social Function Perspective

While the review above suggests that a focus on the social functions of aggressive and problematic social behavior may be a productive approach in intervening with youth with high incidence disabilities, little research has been conducted in this area. A recent randomized control trial has been conducted with universal interventions that include a focus on universal academic engagement, behavior management, and classroom social dynamic management strategies (e.g., Farmer et al., 2010; Hamm et al., 2011). Results from this program of research suggest that enhancing teachers' general awareness of classroom social structures increases their ability to create contexts that promote students' productive behavior and reduce problematic peer affiliations and negative perceptions of the peer environment. There is a need to complement this work with selected and targeted approaches that include assessment and intervention strategies that focus on the social functions of the problem behavior of youth who are not responsive to the universal

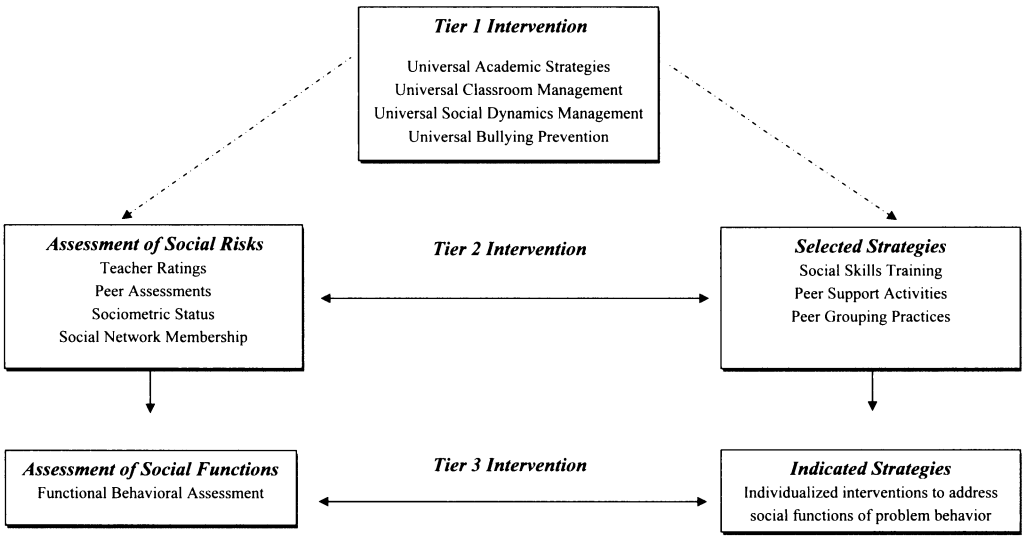

Figure 1. Intervention model to address social functions that promote risk for antisocial behavior in youth with high incidence disabilities.

intervention strategies. As depicted in Figure 1, it should be productive to establish a tiered intervention framework that merges universal, selected, and targeted strategies to address the interplay between social dynamics and social competence problems that contribute to the risk for involvement in antisocial behavior at school. We believe that a social functions perspective that leverages current knowledge and assessment approaches on classroom social processes should be paired with functional behavioral assessments to clarify both structural and interactional variables that contribute to involvement in antisocial behavior (e.g., bullying and violence) in youth with high incidence disabilities. The sections below outline the next steps and research needs in the assessment of the social functions of problem behavior and the development of interventions to address both individual and contextual risks for involvement in antisocial behavior in youth with high incidence disabilities.

Assessment of the Social Functions of Problem Behavior

By clarifying how the four levels of the social functions of problem behavior impact and are impacted by the social relations of students, assessment strategies and corresponding interventions can be established to positively realign patterns of antisocial and disruptive behavior. This involves pairing global ratings and microlevel interactional analyses to elucidate processes and patterns of social interaction and adaptation across time. It also involves settings level analyses to identify the contextual factors that contribute to the elicitation and maintenance of specific patterns of problem behavior (Conroy, Stichter, Daunic, & Haydon, 2008; Wehby et al., 1995). On this score, students' social roles and their membership in peer groups can be viewed as setting level events that potentially support problem behavior.

Accordingly, to assess the social functions of problem behavior it is necessary to begin with a global measure to identify students who have patterns of antisocial behavior. This can be accomplished with a brief screening instrument that targets a range of behaviors including aggression, disruption, noncompliance, and nonengagement in instructional activities. Possible screening techniques and instruments include the Systematic Screening for Behavior Disorders (SSBD; Walker & Severson, 1992), the Student Risk Screening Scale (SRSS; Drummond, 1994); the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997); the BASC 2: Behavior and Emotional Screening System (BASC 2 - BESS; Kamphaus & Reynolds, 2007); and the Social Skills Improvement System: Performance Screening Guides (SSiS - PSG; Elliott & Gresham, 2007). Each is a validated method of identifying students with externalizing behaviors whose characteristic behavior patterns were described previously. While it is beyond the

scope of this article to review the strengths and limitations of each screening tool, suffice it to say these tools range in resources required for acquisition, preparation, administration, scoring, and interpretation (see Lane, Menzies, Oakes, & Kalberg, 2012). Many schools across the country are adopting such systematic screening tools as part of regular school practices, with a goal of using data from behavioral and academic screening tools to identify students who are not responding to primary prevention efforts and who may require secondary (Tier 2) or tertiary (Tier 3) prevention efforts (Lane, Kalberg, & Menzies, 2009). The intent is to identify and support students early—early in their development of antisocial behavior patterns, before undesirable behaviors become more resistant to intervention efforts and early in the acting out cycle before aggression ensues (Lane et al., in press).

Once youth are identified as having problematic behavior patterns, it is necessary to identify students' social roles and reputations, classroom social structures, and the dynamics that contribute to inclusion/exclusion in peer cliques. Targeted students' social roles can be assessed by measuring how they are perceived by teachers and/or peers on key social constructs (i.e., popularity, leadership, social dominance, bullying involvement, and manipulation by peers). These data should be complemented by clarifying the student's affiliative patterns, identifying peers with whom the student has enemy or bully/victim relationships, and by determining the general processes of peer inclusion and exclusion in the social system. Again this can be done with teacher and/or peer reports. This information can be compiled and reduced to identify which peers may support the student's problem behavior through either positive or negative reinforcement. Once potential peer supports for problem behavior are identified, functional assessments can be conducted to examine how specific peers support the student's behavior.

The different levels of the social functions of problem behavior can be assessed with the types of measures summarized in Table 1. It is beyond the scope of this paper to provide a comprehensive description of all possible measures. A next step in future research should include using such procedures with functional behavioral assessments to develop and evaluate a standard measurement protocol that can be used in daily practice by special educators, behavior analysts, school psychologists, and intervention support personnel to assess the social functions of problem behavior in youth with high incidence disabilities.

Interventions to Address the Social Functions of Problem Behavior

In addition to developing a standard protocol for the assessment of the social functions of problem behavior, there is a need to develop selected and/or indicated intervention approaches to address the social functions of antisocial behavior in students who do not respond to universal strategies, including students with high incidence disabilities who have elevated social risks and nondisabled students who also demonstrate such risks. This involves individualized intervention plans to teach, evoke, and reinforce desired replacement behaviors of the target student as well as contextual interventions that focus on students who engage her or him in problematic behavior patterns.

This does not necessarily mean that new social interventions need to be created. In fact, there are a variety of social and behavioral interventions that have been shown to be effective at teaching students new social skills and behaviors. However, the impact of such interventions is often short-lived, not necessarily because the intervention is ineffective, but rather because it is likely that natural social dynamics processes are operating to elicit and maintain the problem behavior. This means that interventions to address antisocial behavior in students with high incidence disabilities should include a focus on the individualized skill deficits of the student and a corresponding individualized plan to address the social ecology or setting events that help to maintain the behavior. In many respects, the teacher can serve as an "invisible hand" to help negotiate the social experiences of students who have difficulties with peers (see Farmer, Lines, & Hamm, 2011). This should include a focus on managing the student's general social role, her or his affiliations with peers who reinforce the problem behavior, and any general agonistic interaction patterns with peers (see Farmer 2000).

In general, youth with high incidence disabilities are socially marginalized by peers (i.e., low social network centrality, affiliations with unpopular peers (Farmer, Leung, et al., 2011) and are at increased risk for either being

TABLE 1
Methods for Assessing Social Structures, Social Roles, and Peer Dynamics

Construct	Measure	Data Reduction
Social Structures		
Peer Group Membership	Social Cognitive Mapping (SCM)	SCM peer group identification procedures
Network Centrality–Group (NC-G)	SCM nominations–Group aggregate	SCM social network centrality classification system
NC-G Characteristics	NC-G and Peer Nominations (PN) of behaviors	SCM NC-G classification and group means for PN for key behaviors
Social Roles and Reputations		
Bullying Involvement	Teacher ratings (TR); peer nominations (PN)	Bullying/victimization classification procedures
Sociometric Status	PN of Liked Most (LM) and Liked Least (LL)	Sociometric status classification procedures
Class Leaders (CL)	Aggregate TR; PN	Leader classification procedures
Group Leaders (GL)	Aggregate teacher and PN for group leaders	Group leader classification procedures
Cooperative peers	Aggregate TR; PN	½ standard deviation above mean
Network Centrality–Individual (NC-I)	SCM peer aggregate	SCM individual classification procedures
Bully Isolates	NC-I, TR, PN of bullying	Bullying classification procedures and SCM isolate procedures
Victimized Isolates	NC-I, TR, PN of victimization	Victimization classification procedures and SCM isolate procedures
Aggressive Leaders	CL, GL, and TR, PN for aggression and bullying	½ SD above mean for aggression and bullying and leader classification
Prosocial Leaders	CL, GL, and TR, PN for prosocial and aggression	½ SD above mean for prosocial; ½ below aggression; and leader
Social Prominence	PN for cool, popular, and athletic	½ SD above mean for aggregate PN for cool, popular, and athletic
Group and Classroom Dynamics		
Within Group Allies	SCM and LM nominations	Within group mutual "liked most" nominations
Within Group Enemies	SCM and LL nominations	Within group mutual "like least" nominations
Cross Group Allies	SCM and LM nominations	Across group mutual "liked most" nominations
Cross Group Enemies	SCM and LL nominations	Across group mutual "liked least" nominations
High prominence aggressive groups	SCM, TR and PN for aggression and social prominence	Group mean for aggression and social prominence ½ SD above class mean
Unpopular aggressive groups	SCM, TR and PN for aggression and liked least	Group mean for aggression and "liked least" ½ SD above class mean
High social prominent groups	SCM, PN for social prominence	Group mean for social prominence ½ SD above class mean
Concentrated mutual enemies	LL nominations	Identification of youth with multiple "liked least" nominations

victims or bully-victims (Farmer et al., 2012). In such cases, an emphasis should be placed on helping the student to build social strengths and a more positive social role while also providing them with social skills instruction to develop strategies and skills to appropriately respond to teasing from peers. But this must all be done while also carefully managing the social ecology by promoting support from productive peers and utilizing social contingencies that reduce classmates' evocative taunts that serve to maintain coercive patterns of interaction. Conversely, a relatively small proportion of students with high incidence

disabilities are bullies who are not victimized but who associate with socially prominent peers who share and support their antisocial patterns (Estell et al., 2009). Such youth may use aggressive and bullying behaviors to control social resources in the classroom and interventions should include social contingencies to address the misuse of social power (see Farmer, 2000).

In conclusion, functional behavioral assessments have been shown to be an effective approach for understanding and intervening with problem behavior in students with high incidence disabilities. However, research on classroom social dynamics suggests that students' social roles and peer affiliations may contribute to social interaction patterns that support involvement in antisocial behavior. This area remains an untapped resource in the development of function-based assessment and intervention for students with high incidence disabilities. By viewing classroom social dynamic processes as setting events, it may be possible to reduce students' risk for involvement in antisocial behavior by developing strategies to assess and intervene with the social functions of this behavior.

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AUTHORS' NOTE

This work was supported by research grants (R305A04056, R305A110079) from the Institute of Education Sciences. The views expressed in this article are ours and do not represent the granting agencies.

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MANUSCRIPT

Initial Acceptance: 7/1/2012
Final Acceptance: 7/24/2012