Complex Roots and Branches of Antisocial Behavior

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This article gives a broad overview of the developmental characteristics and dynamics of antisocial behavior and its relationship to other concepts like social competence and well-being. It deals with some of the complexities in the domain of antisocial development related to its multitheory foundation and to normative development as well as the development of individual differences. Subgroups are described according to variations in developmental stage, age of onset, gender, and on individual as well as contextual risk factors. Several theoretical approaches are briefly presented, representing both the normative and the psychopathological perspective.

Several concepts are used to describe externalizing behavior problems in children and youth such as antisocial behavior, aggression, conduct disorder, conduct problems, crime, and delinquency. The constructs vary depending on the developmental level and age of the child, but also on the seriousness of the behavior itself and on the theoretical orientation of the authors. Behavior problems are sometimes described as *serious* in order to distinguish them from normative problems encountered by most parents when they bring up a child. The seriousness of the behavior problems might be described in several ways. First, serious behavior problems may be single acts like breaking the law, violence, and arson, which may have serious consequences. Second, serious behavior problems may constitute a cluster of behaviors which in sum are considered to be detrimental to both the victim and the perpetrator. One example is conduct disorder (CD). Third, serious behavior problems may be pervasive and persistent over time and be demonstrated in several settings such as the home, at school, and among peers. It is nevertheless difficult to determine how serious, comprehensive, and stable such problems should be before treatment, placement out of the home, or other steps are taken.

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Antisocial behavior in childhood and adolescence is predictive of long-term negative outcomes like criminal behavior and violence, drug use, failure at school and dropping out, social exclusion and loneliness, broken family relationships, and unemployment (Loeber 1990; Moffitt et al. 2001; Patterson and Yorger 2002). Few problem behaviors have such devastating consequences for the individual and society as externalizing problem behavior. The lack of social competence is often included among the characteristics of aggressive and antisocial children and youth. A social skills deficit includes difficulties with social information processing, problems in adapting to school, and rejection by peers and it may contribute to the development and maintenance of antisocial careers (Coie and Dodge 1998; Loeber and Farrington 2001). An inverse relationship between social competence and antisocial behavior seems likely, but it turns out that the cross-domain influences are rather complex (Burt et al. 2008).

89.1 Antisocial behavior

Antisocial behavior was introduced by Gerald Patterson (1982) as a construct that could measure childhood and adolescent externalized problem behavior in a reliable way. Previously, the term antisocial behavior had been used to describe aggressive and criminal behavior in adolescents and adults, but Patterson (1982) argued that the concept also could describe a child's aggressive, acting-out, and hyperactive behavior. In his opinion, it was the least controversial among relevant concepts and predictive of later antisocial careers. The antisocial trait is explained as a stable disposition for the use of aversive behaviors contingently in order to shape and manipulate the social environment (Patterson et al. 1992). Antisocial behavior is the outcome of interaction in close relationships over time, leading to changes in both the child and the caregivers. Parents who are not sensitive and responsive to children's needs for attention and care and who have children with difficult temperaments might experience a negative chain reaction leading to coercive interchanges in the family. An aversive event occurs when a child screams, shouts, or hits; these events are usually contingent upon the behavior of other family members. The child uses aversive behavior to maximize immediate gratification, to neutralize demands made by others, and ignore the long-term consequences or the feelings of others (Patterson et al. 1992). Consequently, coercive behavior is a primitive yet effective way of influencing the social environment. Consistent noncompliant behavior in the child may result in harsh and confrontational parenting. In addition, a parent's own problems such as depression, economic strain, and partner problems may amplify family coercion.

89.1.1 Subgroups of antisocial behavior

Much is known about the general course of the development of antisocial behavior based on longitudinal studies on the frequency, seriousness, variety, and ages at

onset and offset of such behavior. Estimates of the prevalence of antisocial behavior depend on the approach and criteria used, but also on the age group assessed. There are also variations across nationalities. In Norway, the estimate of CD was 3.2 % in an urban group of 8-10 year olds (Heiervang et al. 2007), and prevalence of antisocial behavior among teenagers seldom exceeds 5 % (Kaufmann 1988; Bendixen and Olweus 1999) which is low compared to the incidences in the US and the UK. In most countries, the prevalence of serious behavior problems is higher among adolescents than among children, and higher in variable-oriented than in person-oriented assessments. Subgroups of antisocial children and youth have been identified based on the age at onset as well as on the number and intensity of behavioral symptoms. The distinction between life-course persistent and adolescent-limited CD was established by Moffitt (1993). Moffitt indicated that those who start early are characterized by more individual risk factors than those who make their debut in adolescence and they seem more vulnerable to environmental risk factors like negative peers. Moffitt (1993) found that children with early onset of CD had neuropsychological deficits associated with language and impaired executive control functions. The taxonomy has been challenged in later studies, however, and more recent studies indicate that the two developmental courses are more closely associated than first assumed and that the distinction may be less relevant for girls (Loeber et al. 2000). The distinction between conduct problems in terms of severity has proven to have prognostic value [e.g., between CD and oppositional defiant disorder (ODD)], and children who develop serious problems at an early age seem generally to be more at risk than children with less serious and less comprehensive problems. However, the number of problems rather than their seriousness seems to be the best indicator of future problem behavior in both preschool age and early school age children (Robins 1978).

89.2 Assessment of serious behavior problems

A distinction can be made between a medical-diagnostic and a developmental-clinical approach to assessment, or between a person-oriented and variable-oriented approach. Variable-oriented approaches deal with single actions or concepts like aggression and noncompliance, and person-oriented approaches group together individuals based on patterns of homogeneous behavioral characteristics as in diagnoses (ICD 10), cutoff scores (Achenbach 1991), or longitudinal increasing or decreasing patterns or trajectories of problem behavior (Nagin and Tremblay 1999). In the medical-diagnostic tradition, ODD and CD are commonly used to describe children who are aggressive and acting out (APA 2001; ICD-10). For adolescents, the diagnosis of CD is often supplemented with an assessment of delinquency, which may transform and widen into an adult antisocial personality disorder. *Antisocial behavior* is rooted in the tradition of developmental and clinical psychology and may be defined as repetitious norm and rule-breaking behavior that causes harm to other people, oneself, or to material possessions and which has consequences for others (Kaufmann 1988). In this variable-oriented approach, antisocial behavior is socially

defined, which means that what is considered antisocial may vary over time depending on changing criteria for norm- and rule-breaking or criminal behavior. Antisocial acts in adolescence may include aggression or violence, theft, robbery, burglary, destruction of property, school truancy, and running away from home. The behavior is considered persistent and predictable and to a slight extent influenced by the social consequences it exerts (Walker et al. 2004).

89.3 Theories of Antisocial Behavior

Both attachment theory and social interaction learning theory have been used in research on the early development of externalizing problem behavior (Shaw et al. 2000; Dishion and Patterson 2006; Burt et al. 2008; Miner and Clarke-Stewart 2008). Both theories stress that during the first year of life, the child is dependent on the parent's sensitivity and responsiveness for development. The theories also agree on the fact that noncontingent parenting contributes to an increase in children's problems, and both theories acknowledge the influence of contextual factors like the mother's depression. However, while the behavioral perspective asserts that behavior is regulated by its consequences, attachment theory claims that the child's behavior is regulated by the level of attachment and the internalizing of the parent's values and standards. An attempt at integrating attachment and social learning theories has been put forward by Shaw et al. (2000) as they link the two by explaining how the quality of the parent-child affective relationship influences the course of the social learning process.

The social learning theory of Bandura (1973) explains that aggression is learned through imitation and reinforcement. This one-way influence of social model learning was challenged by theorists presenting a *reciprocal* view on childhood socialization (Bell 1968; Patterson 1982). For example, Patterson's (1982) social interaction learning model uses the microsocial analysis of observed parent-child interactions to describe the coercive family process. Both children and parents seem to learn aggressive behavior through family-based reinforcement processes. The social learning perspective on aggression was challenged by Tremblay and Côte (2005) and Alink et al. (2006) who described aggression as partly inborn and a natural way of expressing anger. Hay (2005) also argues that children gradually develop "aggressive competence," that is, the ability to use physical and verbal aggression effectively in conflict situations. According to this perspective, aggression is adaptive and during their first years of life, children learn to control aggression; rather than learn how to be aggressive, they learn how not to be aggressive. Underlying the increasing ability to control aggression are the development of the brain, language, and executive functions, and the moment-to-moment control of the child's actions (Tremblay and Côté 2005). According to Hartup (2005), aggression and antisocial behavior are overlapping but not identical constructs, although stable aggression has proven to predict antisocial behavior in male adolescents and adults. The theoretical positions are not necessarily incompatible, partly because they focus on different stages of

development in which the development of aggression in the first years of life may have other determinants than when children are 4–5 years old.

89.4 The Development of Antisocial Behavior

A number of longitudinal studies have added to our understanding of the long-term seriousness of antisocial behavior and the risk and protective factors involved. Equally important as the number and seriousness of the antisocial behavior problems is the risk level involved. Antisocial children, and adolescents who also are exposed to several individual and environmental risk factors, should be among those prioritized in the effort to treat and further prevent antisocial careers. When children are 3–4 years old or younger, it is possible to identify antisocial behavior and its precursors. Childhood conduct problems, such as aggression, defiance, noncompliance, and impulsivity, are commonly observed during the preschool years, especially among boys (Campbell et al. 2000). Although children's' physical aggression generally tends to decrease in frequency over the age period from 2 to 9 years, some children obtain new problems to those they already have when they enter school (Miner and Clarke-Stewart 2008). Some children have problems controlling their aggression, temper tantrums, and oppositional behavior at home and at school, and such problems are highly predictive of continued problems in adolescence and early adulthood (Moffitt et al. 2002), like peer rejection, delinquency, dropping out of school, criminal offenses, and interpersonal violence (Patterson and Yoerger 2002).

Longitudinal studies have supplied information on pathways, trajectories, and developmental sequences leading to negative outcomes, but also on how positive life events and protective factors may turn the development in a more positive direction. Trajectories leading to adaptive or maladaptive outcomes may be traced back to the developmental period from infancy to preschool age. A well-established fact in the research literature is that there is considerable stability and continuity in aggression and antisocial behavior, even if the manifestations change over time (Olweus 1979; Lavigne et al. 2001). Antisocial behavior has been found to be stable over time, and in a study of 13–14 year olds, Bendixen and Olweus (1999) found a high correlation in antisocial behavior, with $r = 0.80$ over 1 year and 0.60 over 2 years. Stability coefficients were higher for boys than for girls; this may be explained by the fact that girls are seldom involved in antisocial acts. Child and adolescent aggressive behavior is not only stable over time, but also resistant to change. This does not mean that intervention does not work, but the potential for change seems to be greater among the youngest children (Loeber and Stouthammer-Loeber, 1998). Therefore, there has been growing interest in early identification and intervention of antisocial behavior (Shaw and Winslow 1997).

Among *early predictors* of antisocial behavior are physical aggression, peer rejection, disruptive-hyperactive behavior (Kupersmidt and Patterson 1991; Kupersmidt and Coie 1990), low prosocial behavior, and academic failure (Hämäläinen and Pulkkinen 1995, 1996). Most studies of aggression have focused

on physical aggression, but other types have also been examined, including indirect offensive aggression (Card et al. 2008) and relational aggression (Crick et al. 1997). Difficult temperament is the most promising candidate for a biological risk factor (Patterson et al. 1992) and is often included among the early predictors identified by research (Caspi and Silva 1995; Loeber 1990; Moffitt 1993; Patterson 2002). Still, several authors claim that the search for early predictors have so far given inconsistent results (Hill 2003) and that our understanding of the developmental pathways in young children is limited (Shaw and Winslow 1997). Several studies have identified risk factors that may increase the probability of antisocial and criminal careers, but some studies also have identified protective factors (or processes or mechanisms) that may reduce this probability. However, few researchers have incorporated reciprocal or transactional processes into their data collection and few have examined child and parent behavior simultaneously or interactively (Petit and Dodge 2003). Even if individual factors seem to be the best predictors of antisocial behavior (like difficult temperament, attachment difficulties, and early aggressive behavior), family factors also seem to have a high predictive value. Therefore, research on environmental risk factors has focused to a large extent on family and parent characteristics. Among the variables studied are parent personality and adjustment, marital conflicts, parental responsiveness, coercive family process, family stress, and parenting (Lundahl et al. 2006; Reyno and McGrath 2006). Young children are very dependent on their parents early in life and parenting practices are amenable to change through interventions. Still, some are critical of how much parenting intervention studies really have contributed to the understanding of the development of aggression. Critics claim that studies of long-term causal effects have had difficulties attributing negative outcomes specifically to parenting skills (Tremblay and Côté 2005). Still, parenting variables are ranked among the most important precursors of coercive family processes and antisocial development.

89.5 Gender Differences in Prevalence and Development

The overrepresentation of boys in most prevalence studies of conduct problems is among the most robust findings in research on antisocial behavior (Bongers et al. 2004; Moffitt et al. 2001; Ogden and Amlund-Hagen 2009). Depending on the study, the prevalence rates of girls with conduct disorder in childhood have ranged from 0.86 % to 6 % (Webster-Stratton 1996). Moffitt et al. (2001) estimated that the ratio across different samples and methods was 2.4 males to 1 female in lifetime prevalence of antisocial behavior. Knowledge is still limited about antisocial development in girls compared to what is known about boys; this may be explained in part by the fact that such problems are less common among girls (Hipwell and Loeber 2006) and developmental models for antisocial behavior have been validated mainly for boys (Shaw et al. 2000; Patterson 1986). In addition, systematic gender differences seem difficult to detect before the age of 4 or 5 (Shaw et al. 2003). Girls, however, seem to grow out of age-normative problem

behaviors sooner than boys (Loeber and Hay 1994). In the early stages of development, disruptive behavior for the most part is expressed similarly by girls and boys (e.g., temper tantrums, noncompliance). Meta-analytic studies show that boys typically are more aggressive than girls, but gender differences are only trivial when it comes to indirect or relational aggression (Archer 2004; Card et al. 2008).

89.6 Early Development of Aggression

Among the essential questions raised in developmental studies is the origin of aggression and what the determinants of aggressive behavior are (Tremblay and Côte 2005). According to Hay (2005), aggression originates from a feeling of anger caused by a social conflict between the child and adults or peers. An infant's conflict behavior develops from general irritation and passive resistance to focused protest and explicit use of force. The most common act is to grab objects held by peers. In the period from 6 to 12 months, children become increasingly more active and passive resistance gives way to active defense; from 9 to 12 months the intentional use of force in interpersonal conflicts increases. Underlying this development is an increase in children's cognitive abilities and in their understanding of means-end relationships. Consequently, their reactions become more contingent on other people's behavior (Hay 2005). The first conflicts seem to occur during interactions with caregivers or other adults and gradually in encounters with siblings and peers. As children grow older, normative changes in aggression occur. Tracing early aggression during the first 3 years of life and examining change, continuity, and individual differences are among the pivotal points raised among researchers in the field (Hay 2005). Rather than clustering acting-out behavior in constructs like ODD, CD, or antisocial behavior, Tremblay and Côte (2005) recommend that aggression should be disaggregated in single acts or subcategories like hitting, biting, and kicking. Using this approach in studying a variety of simple, observable behaviors in 1,985 children at 17 and 29 months, Baillargeon et al. (2007a) found that frequent problem behaviors were not common among children under 2 years of age. The most common problem was hyperactivity which was reported for 20 % of the children, followed by prosocial-empathy which was reported for 10–25 % on a regular basis. Interindividual differences in problem behaviors were quite stable before the age of 2, and the findings indicated that behavioral and emotional problems in the clinical range emerged in toddlerhood. Contrary to reports on stability of adolescent antisocial behavior, the predictive accuracy of problem behaviors in infants has been limited; few of the children with frequent behavior problems at 17 months were reported to behave this way a year later.

A main trend described by Tremblay et al. (1996) showed that the frequency of hitting, biting, and kicking peaked at about 27 months for both genders and steadily declined thereafter until the age of 12. However, individual differences have to be taken into consideration. Hartup (2005) found that among boys, a small group demonstrated a high level of aggression across childhood and into adolescence, although a larger group showed a consistent low level of aggression over the same

developmental period. Baillargeon et al. (2007b) also found that the normative development of children was characterized by occasional physically aggressive behavior, but only a minority of the children were responsible for the majority of forceful actions. Commenting on the relationship between normative development and individual differences, Hartup concludes that: "Normative changes in aggressive behavior must be evaluated in the context of individual differences, and individual differences must be evaluated in the context of normative change" (Hartup 2005, p. 8).

89.7 Antisocial Behavior and Social Competence

In order to succeed with major developmental tasks, children need to acquire social skills necessary for getting along with other people, to perform adequately in school, and to comply with norms and rules at home and in school (Masten and Powell 2003). The degree to which children attain these goals has implications for how they will succeed later in life, in adolescence and young adulthood (Kupersmidt and Coie 1990). Social competence in adolescence refers to the ability to negotiate developmentally relevant social tasks and to utilize personal and interpersonal resources to achieve positive outcomes (Waters and Sroufe 1983). Children who fail socially are at risk for academic failure and for developing externalizing and internalizing problems, including delinquency (Loeber and Hay 1994). Social competence has a hypothesized negative relationship with antisocial behavior. Sørlie, Amlund-Hagen, and Ogden (2008) reported in their study of Norwegian eighth graders that low social competence (a latent construct of teacher, parent, self, and peer report) predicted antisocial behavior (a latent construct of teacher, parent, and self report) 2 years later, over and above earlier levels of antisocial behavior. Both social competence and antisocial behavior have proved to have considerable developmental stability, even if the empirical association between the two variables has proven to be moderate. And even if studies on the stability of social competence (Eisenberg et al. 1997) are outnumbered by longitudinal studies of antisocial or externalizing behavior, the lack of prosocial behavior, which is associated with low peer group status, unpopularity, and peer rejection, consistently predicts antisocial behavior (Coie and Dodge 1998; Loeber and Hay 1994). Webster-Stratton and Lindsay (1999) examined social competence in two groups of children aged 4–7 years; a clinic-referred group of aggressive children was compared to a matched control group of typically developing children. They found that early-onset conduct problems were accompanied by lack of social competence. Children as young as age 4–7 years already had a tendency toward hostile attributions toward peers and misperceptions or a distortion of their own social competence. They exhibited a high level of aggression and delayed play skills when interacting with their friends. They also showed a lack of knowledge of problem-solving strategies.

The moderate association found between social competence and antisocial behavior in empirical studies warrants that the concepts should be thought of as

two separate but related dimensions under the overarching concept of social functioning rather than as opposite ends of a single dimension (Caprara et al. 2001; Sørlie et al. 2008). Masten, Roisman, Long, Burt, Obradovic, Riley, Boelcke-Stennes, and Tellegen (2005) found that externalizing problems in childhood predicted problems in young adulthood, progressing from externalizing to academic and then to the internalizing domains of adaptation for both genders. However, even if these researchers found that childhood externalizing problems were predictive of adolescence internalizing problems, they did not find longitudinal associations between social competence in childhood and externalizing problems in adolescence (Burt et al. 2008). Thus, there are likely a number of children whose social functioning is characterized by seemingly contradictory combinations of social competence and externalization. For example, not all children who show social skills deficits act aggressively or exhibit externalizing problems. Likewise, not all children who engage in antisocial activities are socially inept.

89.8 Antisocial Behavior and Well-Being

Child and adolescent mental health is positively defined by the World Health Organization (WHO 2003) as "the capacity to achieve and maintain optimal psychological functioning and well being." In the same vein, Kazdin (1993) differentiates between two broad domains of mental health: one emphasizing dysfunction and impairment and another emphasizing optimal functioning or well-being. Dysfunction implies impairment in everyday life and is related to extreme forms of emotional distress or negative emotions that may be internalized by being directed toward the self (e.g., sadness, anxiety, shame, and guilt) or externalized by being directed against others (e.g., anger, frustration, and fear). The second domain is well-being which refers to personal and interpersonal strengths that promote optimal functioning in the psychological and social domain. Emotions of distress such as sadness, anxiety, and anger in extreme forms may be related to dysfunction and preclude optimal functioning. Positive mental health, according to Kazdin (1993), may include prosocial competence, positive interpersonal interactions, ability to cope with stress and adversity, and involvement in activities and relationships with others. Moreover, Skinner and Wellborn (1994) described events that were likely to be experienced as significant for personal well-being as fulfillment of basic psychological needs for competence, autonomy, and quality relationships. In line with the notion of a poor stage-environment fit (Eccles and Midgley 1989), emotional distress might be caused by environments that are perceived by the individual as a challenge or threat to the fulfillment of basic psychological needs. Good academic achievement is often associated with well-being and increased self-esteem, and to the extent that antisocial students fail at school, their well-being deteriorates (Gustafsson et al. 2010). Social and emotional competence is associated with well-being and positive school achievement, and lack of competence in these areas is predictive of personal, social, and academic difficulties (Durlak et al. 2011; Eisenberg 2006).

Among the less investigated topics is the reciprocal relationship between antisocial behavior and well-being. These two concepts seem to belong to separate lines of research, although they might be related. Antisocial behavior belongs to the mental illness approach to child development, while well-being belongs to indicators of positive mental health. Little is known about the general well-being of antisocial children and youth, but much has been written on the relationship between well-being as a self-perceived aspect of mental health and achievement in school. In a phenomenological perspective on schooling Roeser, Eccles, and Strobel (1998) discuss the specific ways that children make sense or construct meaning out of their experiences in school. They emphasize the importance of how well the environment supports or undermines the fulfillment of basic psychological needs. Well-being might be thought of as how experiences are appraised in relation to children's psychological needs, and it may be related to personal well-being in general or well-being in school. Adolescents typically need to develop their competence in a safe, nonjudgmental setting, and competition, which is often experienced in school, might have an adverse effect on students who are frustrated because they fail academically. Some adolescents also get angry when they feel they are given too little autonomy in school. In particular, students who are angry prior to entering a controlling classroom might act out when they are exposed to teachers who use controlling practices that they find provocative and are at odds with their need for autonomous functioning. Roeser et al. (1998) sum up: "To the extent that school settings provide developmentally appropriate affordances to children to actualize their competencies, exercise autonomy, and participate in caring and respectful relationships, children will feel academically competent, value school, feel good about themselves, achieve, and act in prosocial ways" (p. 168). It goes without saying that this is difficult for antisocial students who often fail academically, are socially excluded by their peers, and have teachers who withdraw their social and intellectual support. This might contribute to the academic problems of antisocial students but it may also reinforce their conviction that others are to blame for their difficulties. Antisocial students are prone to see others as responsible for their problems and attribute their academic difficulties and loneliness to the hostile intentions of others rather than to their own behavior. In other words, antisocial students tend to externalize the causes of their academic and social failure and may in fact overestimate their own competence because negative experiences are attributed to others.

In a qualitative review of studies on mental health and schooling among Swedish children and adolescents, their perceptions of mental health and well-being were examined in relation to their experiences of learning situations and schooling (Gustafsson et al. 2010). The review included studies examining both educational situations or learning environments and mental health or well-being. Among the topics investigated were general experiences related to well-being, emotions, good deeds, self-concept, stress, and choice situations. In the review, the loss of social support experienced by children who were isolated and had no friends was mentioned as a risk factor for their well-being. The loss of social support from friends was sometimes due to being placed in a low-ability group. For students who

fail academically, school can be a painful experience that undermines their self-esteem, and well being, and the consequences of educational reforms for the mental health and well-being of students have rarely been taken into account. The authors suggest that well-being should be considered an outcome in its own right, as well as a factor that may influence achievement.

89.9 Concluding remarks

Masten and Powell (2003) explain how a change in perspective in which researchers look at competence as well as problems or psychopathology might influence policy and practice in a direction where the overarching aim is to redirect development toward competence and wellness. Promoting competence is one of the best ways to prevent problems, and the prospect of fostering success in children might be much more appealing to parents and teachers than to prevent various aspects of antisocial behavior. In this way one can argue for a change in perspective that widens the search for competence rather than for problems or psychopathology. Dodge (2008) suggests that antisocial behavior should be framed as a form of social illiteracy and therefore a challenge to public education. He proposes a model in which chronic violence is described as social incompetence, that is, a failure of society to educate:

> "Although our society would not deny a child access to public education and then incarcerate him or her at 18 for being illiterate.... we fail to see the folly in denying a child access to appropriate instruction and opportunities for learning self-regulation and then holding him or her responsible for incompetent behavior that results in a violent act in young adulthood" (Dodge 2008, p. 19).

This perspective implies an educational model of antisocial behavioral development and opens up possibilities of new and different intervention approaches in childhood and adolescence. Short-term preventive or promotive interventions are probably not enough to reduce the prevalence of antisocial behavior in schools and communities. A comprehensive system of social competence education, with continued teaching and learning of vital social skills derived from social developmental research, could hold great promise for the future.

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