CHAPTER 6

The Development of Dr. Jekyll and Mr. Hyde: Prosocial and Antisocial Behavior in Adolescence

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This chapter is about the development of prosocial and antisocial behavior in children and adolescents. Prosocial behavior can be defined as voluntary behavior that is aimed at fulfilling another person's need for support (Bar-Tal, 1984; Eisenberg and Fabes, 1998). It includes spontaneous acts of comforting (physically or verbally expressing sympathy or reassurance), sharing (giving materials or work space that one is using or giving a "turn" to another person), and helping (physically assisting or offering physical assistance).

Antisocial behavior can be defined as acts that inflict physical or mental harm or property loss or damage on others. It is behavior that is intended to lower the well-being of other persons, which may or may not constitute the breaking of criminal laws (Coie and Dodge, 1998; Loeber and Schmaling, 1985; Rutter, Giller, and Hagell, 1998).

Research on the development of prosocial behavior and research on the development of antisocial behavior have been rather independent of each other. Whereas prosocial behavior has been studied mainly by social-developmental psychologists, antisocial behavior has been studied mainly by criminologists and developmental psychopathologists. Perhaps because of the greater salience of the consequences of aggression, delinquency, and criminality, scientists have devoted much more attention to antisocial behavior than to prosocial behavior. Many large-scale, prospective, longitudinal studies of general population samples have been carried out to untangle the roots and consequences of antisocial behavior across the life span. Well-known examples are studies in Christchurch (Fergusson, Horwood, and Nagin, 2000), Dunedin (Silva and Stanton, 1996), and Stockholm (Wikström, 1987).

Whereas the development of antisocial and criminal behavior has long been the subject of investigation, interest in the development of

prosocial behavior only started in the 1970s. Eisenberg and Fabes (1998) argue that "both, relevant theory and the conceptual integration of existing empirical findings are in need for further development" (p. 702).

The differing interest in antisocial and prosocial behavior is mirrored in the number of articles and books that have been published on these issues. At the end of 2003, prosocial behavior was a keyword in 1,600 records of PsycINFO, whereas antisocial behavior was a keyword in 3,850 records. Based on these numbers, Bierhoff (2002) concluded that social scientists have invested much more time and effort in the study of antisocial behavior than in the study of prosocial behavior.

Personality Factors Related to Prosocial and Antisocial Behavior

A number of personality dispositions (in terms of the general framework of this book, characteristics of the person) have been shown to influence the development of antisocial or prosocial behavior. For example, hyperactivity and inattention have a rather robust association with antisocial behavior, mainly as a result of poor social functioning in general (Rutter et al., 1998). Antisocial behavior accompanied by hyperactivity and attention deficit has its onset in early or middle childhood and a high likelihood of persistence into adulthood. It has a strong genetic component and a strong association with cognitive impairment, social malfunction, and poor peer relationships (Feehan, McGee, and Williams, 1993; Moffitt, 1990).

Numerous studies have shown that delinquents differ from nondelinquents in temperament (Caspi, 1998). For example, Caspi et al. (1994) showed that high impulsiveness as well as negative emotionality (meaning a ready tendency to be angry, anxious, or irritable) are associated with delinquency. The absence of self-control (Gottfredson and Hirschi, 1990), or effortful control (Rothbart and Putnam, 2002), also plays a major role in the development of antisocial behavior. Children with low self-control are less likely to consider the possible consequences of their actions, especially consequences that are likely to be long-delayed. High-intensity pleasure or sensation seeking is also a temperamental risk factor for antisocial behavior.

It has long been known that low intelligence, especially poor verbal and planning skills, and poor school attainment have an influence on antisocial behavior. However, the finding of a relationship between poor cognitive function and antisocial behavior leaves the question unanswered why such a relationship exists. It has been suggested that there is interplay between cognitive impairments and psychosocial risk factors. Moffitt (1993) argues that cognitively impaired children evoke negative behaviors in other people and are more vulnerable to risks such as coercive parenting and ineffective discipline. This in turn sets up a spiraling cycle of risk factors and a high likelihood of lifecourse persistent antisocial behavior. Crick and Dodge (1994) suggest that antisocial children may be less skilled in social intelligence and hence less likely to behave in appropriate ways. According to these authors, the effect of biased cognitive processing on antisocial behavior is the result of a tendency to wrongly perceive negative information in others' behavior, to misinterpret social interactions, and to focus on aggressive behavior of others. Farrington (1997) argues that children with low intelligence may be more likely to offend because they tend to fail in school, which in turn leads to truancy, a lack of educational qualifications, low-status jobs, and periods of unemployment, all of which make it harder to achieve goals legally.

Numerous scientists have hypothesized that cognitive and social skills and temperamental characteristics are associated with prosocial behavior, because cognitive abilities may underlie the ability to discern others' needs or distress and the capacity to respond adequately to others' needs. Eisenberg and Fabes (1998) argued that measures of intelligence or social cognition and prosocial behavior should at least be modestly correlated. Although empirical results have been somewhat mixed, in most studies a positive relation between cognitive skills and prosocial behavior was found. Furthermore, prosocial children tend to be sociable, well regulated, low in impulsiveness, and not shy or anxious (Eisenberg and Fabes, 1998). They are simultaneously able to communicate and resolve their own needs, feel guilt and remorse about wrongdoing, exercise self-control when tempted to do wrong, and feel compassion for others (Hoffman, 1970; Mischel, Shoda, and Rodriguez, 1989).

There is accumulating evidence that determinants of antisocial behavior such as impulsiveness and hyperactivity have a genetic component (Rutter et al., 1998). Genes may produce an effect by increasing vulnerability to life experiences and stress or by indirect routes such as influencing behaviors that in turn lead to changes in the individual's environment and set up a spiraling cycle of risk factors. Biological factors, such as low autonomic reactivity and disturbed serotonergic functioning, also affect antisocial behavior (Raine, 1993).

Research has also shown that male children and juveniles are much more often antisocial and deviant than are female children and juveniles (Moffitt, Caspi, Rutter, and Silva, 2001). Prosocial behavior is more prominent among females (Eisenberg and Fabes, 1998). Sex differences in prosocial and antisocial behavior deserve special attention, because earlier research has shown that girls and boys differ not only quantitatively but also qualitatively in social behavior. For example, boys like to spend time playing with groups of others, whereas girls are said to engage in reciprocal conversations. Girls rely more on their best friends, and report more intimacy and affection in their friendships than do

boys, whose friendships are broader and looser. Adolescent boys report more often than girls that they have leaders in their peer groups (Gavin and Furman, 1989). However, boys are not always more aggressive than girls. Although boys outperform girls in physical aggression, girls outperform boys in relational (i.e., nonverbal) aggression (Crick, 1996).

Family Characteristics and the Development of Prosocial and Antisocial Behavior

A number of family characteristics are related to the development of prosocial and antisocial behavior in children and adolescents. For example, teenage parenting, large family size, and broken homes are robust predictors of antisocial behavior (Rutter et al., 1998). Presumably, these factors influence children's behavior via family discord and ineffective parenting (Rutter et al., 1998). Similarly, poverty and social disadvantage indicate increased risks of antisocial behavior, but the effects seem to be indirect and to be mediated by parental depression and family conflict.

Parenting is a central and critical psychosocial risk factor. Coercive or hostile parenting, abuse and neglect, ineffective parenting, and poor supervision or monitoring are all associated with (life-course persistent) antisocial behavior (Patterson, 1982). These effects may potentially be mediated by attachment processes (implying damage to social development or social bonding with parents and peers) or by learning processes (i.e., children might learn that antisocial behavior pays). Farrington (1997) argues that children who are exposed to poor parenting practices may be more likely to offend because they do not build up internal inhibitions against socially disapproved behavior. Eisenberg and Fabes (1998) conclude that the development of prosocial behavior is enhanced by exposure to parental warmth (which fosters a positive identity and sense of self as well as attachment), adult guidance, and children's participation in prosocial activities. However, numerous factors believed to contribute to prosocial development have seldom been examined.

In sum, a number of personality dispositions and family characteristics that affect antisocial behavior have the opposite effect on prosocial behavior. There are also some differences in the determinants of prosocial and antisocial behavior.

Adolescence-Limited Versus Life-Course Persistent Antisocial Behavior

As has been emphasized by Moffitt (1993), when discussing the determinants of antisocial behavior, it is necessary to distinguish between adolescence-limited and life-course persistent antisocial

behavior of juveniles. She argues that the antisocial behavior of the vast majority of juvenile delinquents is limited to their teenage years. For them, the onset of antisocial behavior occurs when they enter adolescence. Problem conduct usually ceases during young adulthood. Moffitt (1993) reasons that the delinquent activities of adolescencelimited antisocials stem from factors endemic to the social context of juveniles. According to Moffitt, such behavior is an adaptive response to modern teens' social context, and not the product of a cumulative history of pathological maldevelopment. For these juveniles, an emerging appreciation of adult privileges is met with the awareness that those privileges are still withheld from them. Adolescence-limited antisocial youths often commit crimes that symbolize adult privileges (being powerful, having dates) and that demonstrate freedom from parental control. Many of these delinquent acts are committed with the collaboration of peers, such as vandalism, public order offenses, drug and alcohol offenses, running away, and theft. The most important risk factor for adolescence-limited antisocial behavior is peer delinquency, as peer relationships increase in their importance during adolescence. When these juveniles get access to adult privileges, they readily desist from law-breaking, using the prosocial skills they mastered before they entered puberty. Juveniles on the adolescence-limited path show more potential than juveniles on the life-course persistent path for future desistance from crime (less likely to drop out of school, closer to their families). Nagin, Farrington, and Moffitt (1995) showed that, at age 18, the adolescence-limited group was indistinguishable from the lifecourse persistent group in terms of attachment to work and family, but by age 32, they had established much better work records and relationships with their spouses than had the life-course persistent group. At that age, they were indistinguishable from the nondelinquent group. However, the adolescence-limited antisocials continued to drink heavily and use drugs, and get into fights. According to Nagin et al. (1995), individuals are deterred from deviant behavior by the threat that their accumulated investments in social relations and in their education will be lost if their involvement in deviance is discovered. In their opinion, adolescence-limited antisocial youths restrict their deviance to the forms of behavior that are least likely to jeopardize their jobs and marriages. They seem to avoid committing crimes with a comparatively high risk of conviction or that might harm familial relationships. Instead, they seem to restrict their deviance to behaviors less likely to result in official sanction or to disrupt intimate attachments, such as theft, heavy drinking, and barroom brawling.

The life-course persistent antisocial youths are a small group of offenders whose antisocial behavior is long-standing. As children, these youths behaved antisocially, as adolescents they are delinquent, and as adults they will be criminal. According to Moffitt (1993),

life-course persistent antisocial behavior begins early in childhood because subtle neuropsychological dysfunctions disrupt the normal development of language, memory, and self-control. These early temperamental and cognitive restrictions in turn increase vulnerability to criminogenic aspects in the child's social environment, such as rejection by peers and school failure. The result is that these youths miss out on opportunities to acquire and practice prosocial alternatives, and are less likely than their adolescence-limited counterparts to stop their antisocial activities. This behavior of the life-course persistent group is self-defeating and they have few opportunities to reach a high status in society. However, only in a small number of people, mainly males, is antisocial behavior life-course persistent (Moffitt, Caspi, Dickson, Silva, and Stanton, 1996).

Studies of the Relationship Between Prosocial and Antisocial Behavior

The empirical evidence on determinants of prosocial and antisocial behavior in children and adolescents is summarized above. The evidence cited with regard to determinants of antisocial behavior mostly stemmed from studies other than those that provided evidence on determinants of prosocial behavior. The reason for this is that most researchers concentrated on either antisocial or prosocial behavior, and both kinds of behavior were rarely investigated in the same study. As a result, in PsycINFO, there are only 100 records that contain both prosocial and antisocial behavior as keywords. Thus, as Fabes, Carlo, Kupanoff, and Laible (1999) emphasize, more studies are needed in which prosocial and antisocial development are examined concurrently to account more adequately for social development. "To examine one set of behaviors without examining the other set presents a skewed and limited description of the complexity of adolescents" (p. 13).

Such studies are of utmost importance as it is far from clear whether prosocial and antisocial behavior are two sides of the same coin. Although some overlap exists between the predictors of prosocial and antisocial behavior, the relationship between these behavioral tendencies is far from clear. Even if these tendencies are substantially (negatively) correlated with each other, it appears plausible that some children and adolescents may score either high or low on both dimensions. Referring to the title of this chapter, it seems plausible that at least some adolescents are like Dr. Jekyll and Mr. Hyde: helpful and prosocial in some situations and selfish and antisocial in others. Therefore, I will summarize below some of the few studies in which both dimensions were investigated in the same sample.

- 1. The study by Rodkin et al. (2000), who investigated elementary (fourth- to sixth-grade) school boys. Prosocial and antisocial configurations were identified using teacher ratings (using cluster analysis on seven factors: popularity, physical competence, affiliation, academic competence, aggressiveness, shyness, and internalizing problem behavior) and compared with peer and self-assessments and social centrality measures.
- 2. The studies by Hawley, who conducted research into prosocial and coercive control strategies in early childhood (Hawley, 2003b), late childhood (Hawley, Little, and Pasupathi, 2002), and early adolescence (Hawley, 2003a). She used self-, peer, and teacher reports to measure prosocial and coercive strategies of control. The above-mentioned studies can be regarded as among the few that dealt with both prosocial and antisocial behavior during adolescence.
- 3. The study by Krueger, Hicks, and McGue (2001), who investigated monozygotic and dizygotic pairs of adult twins to determine whether prosocial and antisocial characteristics can be attributed to the same or to different sources (genes and kinds of environment).
- 4. Some sociometric studies of popularity of pupils also contribute to this question. They dealt with whether popular children can be both prosocial and antisocial.
- 5. The study by Pakaslahti and Keltikangas-Järvinen (2001), who investigated the behavioral differences between four types of preferred (prosocial) and aggressive (antisocial) adolescents. They collected self- and peer-report data from Finnish boys and girls, aged 14.

Rodkin et al. (2000) found six clusters of boys: model (prosocial), tough (prosocial and antisocial), passive (low-social), bright antisocial (antisocial), troubled (antisocial), and low-academic boys. The first subtype (26.8% of all the boys) were the "model boys" who had mainly prosocial characteristics. Teachers viewed these boys as popular, physically and academically competent, friendly, and neither shy nor internalizing nor aggressive. Peers nominated model boys as cool, athletic, leaders, cooperative, and studious, and rarely nominated them as shy or antisocial. Model boys saw themselves as nonaggressive and academically competent.

The second subtype (13.1% of all the boys) were the tough boys who combined, in a sense, prosocial and antisocial characteristics. Tough boys were viewed by their teachers as popular, extremely aggressive, physically competent, and average to below average in friendliness, academic competence, shyness, and internalizing behavior. Peers perceived tough boys as cool, athletic, and antisocial. Tough boys saw themselves as popular, aggressive, and physically competent.

The third subtype (26.3% of all the boys) were the passive boys, who lacked both prosocial and antisocial characteristics. Based on teacher and self-reports, this group of boys can be viewed as low in aggressiveness and high in shyness. Peers did not nominate them as cool, athletic, popular, or aggressive.

The fourth (9.7% of all the boys) and the fifth subtypes (11.9% of all the boys) were the bright antisocial boys and the troubled boys, respectively, who both had mainly antisocial characteristics. Teachers viewed both subtypes as unpopular, physically incompetent, unfriendly, internalizing, and aggressive. Peers rarely nominated these boys as cool, athletic, leaders, or cooperative. The self-perceptions of these two subtypes were also similar. The main difference between these two antisocial subtypes was that bright antisocial boys scored moderately high in academic competence, whereas troubled boys scored much lower in academic competence.

The sixth subtype (12.2% of all the boys) consisted of the low-academic boys, who were mainly an average group. Teachers viewed them as above average in friendliness and below average in academic competence. They had average scores for all other characteristics. Peers rarely nominated them as cooperative or studious. Low-academic boys saw themselves neither as academically competent nor as having internalizing problems.

The findings of Rodkin et al. (2000) suggest that antisocial boys can be among the most popular and the socially best-connected children in elementary classrooms. Both model and tough boys were central members of prominent classroom cliques. They conclude:

When antisocial behavior was conjoined with high levels of athleticism and/or physical attractiveness, or when antisocial behavior was *not* in the presence of high levels of shyness or extremely low levels of friendliness, academic competence, or internalizing behavior, antisocial boys were popular. Otherwise, antisocial boys were unpopular. (p. 22)

Based on evolutionary theory and the literature on child development, Hawley distinguished two strategies of control: prosocial strategies (that foster interpersonal relationships) and coercive strategies (that do not foster interpersonal relationships). At first, it seemed that prosocial strategies were consistently associated with positive characteristics, whereas coercive strategies were associated with negative characteristics. According to Hawley, however, a more complex pattern emerged when a typological approach was adopted. She distinguished five types of control strategies: prosocial (high in prosocial control and average or low in coercive control), coercive (average or low in prosocial control and high in coercive control), bi-strategic (high in both control strategies), typical (low in both control strategies), and noncontrolling (low in one control strategy or average in both strategies). For all age groups, Hawley found that a prosocial control strategy was related to positive social characteristics and a high level of wellbeing of the participants. Children using this strategy reported that social relationships were important for them and that they were intrinsically motivated to pursue them. They effectively met their needs in ways that won the affection of their peers. Early adolescents using a prosocial control strategy were perceived as popular, agreeable, conscientiousness, high in attention to social cues, and low in aggression, hostility, and tendency to cheat. In all three studies, there were more females than males in this group of participants.

Coercive (antisocial) controllers were the least preferred group (especially in the study of preschoolers). Rather than pursuing relationships for enjoyment, they reported pursuing them for status and to fulfill external expectations. They indicated more loneliness, sadness, and anxiety than did all other groups. Curiously, coercive controllers felt as connected to the peer group as did the average group (similar to the average type). In the study of adolescents, they scored above average in the tendency to cheat, aggression, and hostility. They were rated about average in perceived popularity. In late childhood (Hawley et al., 2002) and early adolescence (Hawley, 2003a), more males than females adopted a coercive control strategy.

Participants applying a bi-strategic control strategy (i.e., combining prosocial and antisocial elements) described themselves as having the highest need for recognition and the highest level of influence. In all three studies by Hawley they reported being more agreeable, conscientious, and socially perceptive than average. At the same time, they reported being as aggressive and hostile as antisocial children. They saw themselves in the same positive light as the prosocial children, but in the same negative light as the antisocial children. They were intrinsically and extrinsically motivated to pursue friendships at the same time. They were perceived as popular at all ages. With regard to the bistrategic control strategy, no gender differences were identified.

Noncontroller (nonsocial) participants reported the lowest levels of influence and the lowest need for recognition. In all three studies by Hawley these children were ineffective communicators and low in sensitivity to social cues, and tended to be anxious, withdrawn, and submissive. There were no gender differences with regard to the noncontroller subtype.

A twin study on male adults born in Minnesota with an average age of 33 years (170 monozygotic pairs, 105 dizygotic pairs, and 121 individuals whose twin did not participate) (Krueger, Hicks, and McGue, 2001) indicated that altruism (a facet of prosociality) and antisocial behavior were independent and that they had distinct etiologies. Altruism was linked primarily to familial (shared) environments, nonfamilial (unique) environments, and personality traits reflecting positive emotionality.

Antisocial behavior was linked primarily to genes, nonfamilial (unique) environments, and personality traits reflecting negative emotionality and a lack of constraints. Krueger et al. (2001) argued:

If the sources of desirable and undesirable behaviors are distinct, strategies designed to diminish undesirable behavior need not result in the promotion of desirable behavior, and vice versa. Moreover, researchers' tendency to focus on undesirable behavior appears to result in an incomplete picture of human functioning; desirable and undesirable qualities can coexist in the same persons. (p. 401)

The sociometric literature can also be described in terms of prosocial and antisocial behavior. Newcomb, Bukowski, and Pattee (1993) reviewed the literature on sociometric status. Based on peer information on social preference (likeability) and social impact (salience), a distinction is usually made between popular (7-11% of all the children), controversial (3–7%), neglected (9–15%), rejected (11–13%), and average youths (60-65%). The behavioral repertoire of the popular (prosocial) group can be said to consist primarily of socially skilled behaviors that lead to positive social outcomes. Their behavior facilitates and enhances rather than undermines the goals of their peers. Their low level of disruptive aggressive behavior coupled with their high levels of positive traits, actions, and problem-solving skills make them ideal prospective friends. The rejected (antisocial) group is at risk of social adjustment difficulties (Crick, 1996). They are likely to be more aggressive and withdrawn and less sociable and cognitively skilled. Their less favorable social reputation may also lead to isolation and ostracism. LaFontana and Cillessen (2002) suggested that they often behave aggressively because of the frustration that comes with being victimized. Their aggressive behavior is hostile and reactive. The rejected (antisocial) group is the polar opposite of the popular (prosocial) group. The neglected (low-social) group displays little social interaction and few positive social actions and positive social traits. Their future prospects are better than those of the antisocial group, but remain very limited. Their social isolation at a young age creates a high risk of path-dependency toward less successful lives as adults (Farrington, Gallagher, Morley, St. Ledger, and West, 1988). The controversial (prosocial and antisocial) group is likely to be overly engaged with their peers and viewed as both more aggressive and more sociable as a result.

Pakaslahti and Keltikangas-Järvinen (2001) provided evidence for a group of adolescents that combine and a group of adolescents that lack both prosocial and antisocial behavior. They distinguished four groups of adolescents: preferred nonaggressive (prosocial), preferred aggressive (prosocial and antisocial), nonpreferred nonaggressive (low-social), and nonpreferred aggressive (antisocial). The group of preferred aggressive adolescents scored high in leadership, whereas the group of nonpreferred nonaggressive adolescents scored low in leadership. The nonpreferred nonaggressive adolescents scored high in friendliness, but, according to the authors, friendliness was not an effective way to increase one's social status among peers. They concluded that, in contrast to the preferred aggressive group, the friendly nonpreferred nonaggressive group was invisible to their peers. Pakaslahti, Karjalainen, and Keltikangas-Järvinen (2002) pointed out that preferred aggressive adolescents were socially very active and used by far the most prosocial problem-solving strategies.

In sum, all of the above studies provide evidence that some adolescents are prosocial and antisocial at the same time, or are neither prosocial nor antisocial. As Table 6.1 shows, this result was independent of the different samples and the different measures that were used in the studies.

Dr. Jekyll and Mr. Hyde From a Framing Perspective

It seems that adolescents are not always either prosocial or antisocial, but that some combine both attributes. In the following I aim to reinterpret these findings from the perspective of the framing theory as it was outlined in Chapters 1 and 2 of this volume.

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|-------------------------------|--------------|--|--------------------------|---|
| | | Degree of Prosocial Behavior: | | |
| | | Low | Intermediate | High |
| Degree of antisocial behavior | Low | R: passive P: nonpreferred nonaggressive H: noncontroller S: neglected | | R: model P: preferred nonaggressive H: prosocial S: popular |
| | Intermediate | | H: typical S: average | |
| | High | R: bright antisocial or troubled P: nonpreferred aggressive H: coercive S: rejected | | R: tough P: preferred aggressive H: bi-strategic S: controversial |

TABLE 6.1. Combinations of Prosocial and Antisocial Behavior.

Source: R: Rodkin et al. (2000); P: Pakaslahti and Keltikangas-Järvinen (2001); H: Hawley et al. (2002); S: Sociometric literature.

According to this theoretical perspective, a person can approach a situation applying one of three different basic frames: (1) a hedonic frame, (2) a gain frame, and (3) a normative frame. Being in a hedonic frame implies the danger of harming the long-term well-being of both oneself and others. Children and adolescents in a hedonic frame can be characterized by Gottfredson and Hirschi's (1990) description of low self-control:

The offender appears to have little control over his or her desires. When such desires conflict with long-term interests, those lacking self-control opt for the desires of the moment, whereas those with greater self-control are governed by the restraints imposed by the consequences of acts displeasing to family, friends and the law. (p. xv)

One can argue that those adolescents who consistently behave in an antisocial manner tend to structure their social environments by permanently using a hedonic frame. This tendency has its origin in individual deficiencies that assume influence when difficult children interact with difficult home environments. Beginning in childhood, individual deficiencies accumulate increasing momentum, cutting off opportunities to practice prosocial behavior. As time passes, recovery is precluded by maladaptive individual dispositions and narrowing life options. Thus, the strongest predictors of persistent antisocial behavior are measures of individual and family characteristics (Moffitt, 1993). Often, these adolescents do not possess ordinary means to reach social status and a high level of subjective well-being (Ormel, 2002). Poor cognitive and social skills and temperamental deviancies such as high impulsiveness and novelty seeking make it difficult for them to invest in normal resources. Moreover, they have an unclear understanding of relational expectations. As a consequence, they often fail in social relations and are mainly perceived as unfriendly. It is exactly this group of juveniles that Moffitt (1993) describes as life-course persistent antisocial.

On the contrary, children and adolescents that can be characterized as "prosocials" (i.e., those who score high in prosocial and low in antisocial behavior) tend to structure their social environments and their own lives using a normative frame. They have the skills to ignore incidental temptations and they also tend to forgive each other if things go wrong once in a while. As a consequence, these juveniles have good relationships with friends and family. In the long run, their prosociality pays off for them as it is a means to achieve a high level of subjective well-being.

As the studies cited above show, however, being consistently prosocial and refraining from antisocial behavior may not always lead to a high social status. An alternative way to reach that goal is to be prosocial at some times, but to be antisocial at other times. According to Hawley (2003a), this group is overall well adapted and highly effective. Hawley argues that the Machiavellian approach of this group entails the balancing of "getting along" and "getting ahead." These adolescents admit that they are aggressive, claim to be hostile, and confess that they cheat in school. Peers cast them in a similar light, but also see them as effective, socially central, and reasonably well liked. Teachers do not see them as more aggressive than average. According to Hawley, it is possible that such bi-strategic juveniles are skilled at hiding their aggression from authority figures. They have been found to be well in tune with others' goals and perspectives, and appear to operate well within social norms without, perhaps, actually doing so. With regard to the classification of Moffitt, these juveniles tend to be adolescence-limited antisocials. During their adolescence. they start to engage in delinquent acts but are able to refrain from such activities if the costs of such behavior increase (e.g., if they risk losing their jobs or families). The focus on control allows for the possibility that the bi-strategic children are strategic also in both their prosocial and antisocial control efforts. This casts a different light on what might be meant by the co-occurrence of prosocial and antisocial behavior.

A recent study by Boxer, Tisak, and Goldstein (2004) suggests that prosocial actions by youths can stem from motivations other than simply "being nice": "An adolescent who appears to be 'good' and prosocial in his or her orientation to others may in fact hold beliefs that disregard the welfare of others" (p. 99). A similar point is made by LaFontana and Cillessen (2002). Such instrumental or proactive prosocial behavior may at times even turn into indirect or relational forms of aggression such as gossip and social exclusion (Crick and Grotpeter, 1995). Thus, in terms of Lindenberg's theory (see Lindenberg, this volume; Lindenberg et al., this volume), such juveniles can be characterized as habitually applying a gain frame when dealing with their social environment. They follow the social norms of fairness and justice if it is in their best interest to do so, but they refrain from solidarity if it does not pay off for them.

In sum, our aim was to show that prosocial and antisocial behavior in children and adolescents are not simply two sides of the same coin. Few researchers have investigated prosocial and antisocial behavior within the same sample; however, the empirical evidence shows that although the two dimensions are substantially negatively correlated with each other, this negative correlation is far from perfect. Thus, some people resemble the metaphor of Dr. Jekyll and Mr. Hyde they are prosocial in some situations, but behave selfishly and brutally in others.

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