# Development of Antisocial Behavior in Adolescent Girls

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This chapter assesses the state of knowledge on adolescent girls' trajectories of antisocial behavior. It takes a gender-sensitive perspective building on evidence suggesting that studies focusing solely on illegal antisocial behaviors fail to capture the variety and special characteristics of the deviant and maladaptive behaviors in which girls may engage (Johansson & Kempf-Leonard, 2009; Lanctôt & Le Blanc, 2002). For this reason, throughout this chapter, we define antisocial behavior as including not only delinquent behaviors (violations of criminal and other laws) but also behaviors that adults perceive as disruptive, reckless, or dangerous and that violate consensual social norms to which adolescents are expected to conform. Examples of such behaviors include substance abuse, oppositional behavior, risky sexual activities, and rebelliousness in school. This definition of antisocial behavior is empirically supported by a vast literature on general deviance as a latent construct (see Le Blanc & Bouthillier, 2003: Le Blanc & Loeber, 1998).

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This chapter first reviews findings related to differences and similarities in the distribution of antisocial behavior between girls and boys. I then assess evidence from studies of specific developmental trajectories of antisocial behavior in girls and of how these trajectories compare with those in boys. Lastly, I present a gender-sensitive theoretical model of girls' pathways to antisocial behavior.

# On the Gender Gap in Antisocial Behavior

Few social scientists today would question that there is a gender gap in the distribution of antisocial behavior. One of the best established findings in criminology and related disciplines is that boys are involved in antisocial behavior more often than girls. Gender differences in the prevalence and seriousness of antisocial behavior have been documented consistently (Lanctôt & Le Blanc, 2002; Rowe, Flannery, & Flannery, 1995; Steffensmeier & Allan, 2000; Tittle, Ward, & Grasmick, 2003). Overall, the prevalence of antisocial behavior among girls is only about half of the prevalence among boys (Fergusson & Horwood, 2002).

But when we consider the various forms of antisocial behavior and the settings in which they occur, a more complex picture emerges. For example, most studies show that boys engage in direct aggression (and especially the most serious forms of aggressive behavior) more often than

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girls, but the gender gap narrows considerably when it comes to indirect aggression (Card, Stucky, Sawalani, & Little, 2008) and aggression against family members (Lanctôt & Le Blanc, 2002). Similarly, Moffitt, Caspi, Rutter, and Silva (2001) report that the incidence of drug use and violence against domestic partners was about the same among boys and girls. Such findings underscore the need to develop an encompassing definition of antisocial behavior so that we can advance our understanding of girls' involvement in various forms of conduct that could compromise their development.

Gender differences in the prevalence of antisocial behavior can be observed at any age (Fergusson & Horwood, 2002; Jennings et al., 2010; Odgers et al., 2008), but the magnitude of these differences varies from one developmental stage to the next (Jang & Krohn, 1995; Lahey et al., 2006; Silverthorn & Frick, 1999). For example, Lahey et al. (2006), drawing on a national sample of children followed through age 17, observed that the size of the gender gap in the prevalence of conduct problems varied across developmental stages. In early childhood, this gap widened considerably, with girls showing a larger decrease in conduct problems than boys. During the transition to adolescence (ages 10-13), the pattern reversed, and this gap narrowed. Other empirical studies have reported that the beginning of adolescence (ages 12-14) seems to be a critical period in which antisocial behavior is likely to emerge faster among girls than among boys (Fergusson & Horwood, 2002; Galambos, Barker, & Almeida, 2003; Lanctôt, Bernard, & Le Blanc, 2002).

Boys and girls generally engage in the same types of antisocial behaviors, but to varying degrees. In an extensive review and empirical test of a latent construct of "general deviance" in mixed-gender samples, Le Blanc and Bouthillier (2003) concluded that general deviance is composed of four categories of behaviors that characterize both boys' and girls' behavioral repertoires, which suggests that the structure of the deviant syndrome is gender-invariant. The first category is overt behavior, which consists of interpersonal violence. The second category is covert behavior, which consists of property crimes. The third category of deviant behavior involves conflict with authority and consists of stubborn, defiant, and avoidant behaviors at home and at school. The fourth category consists of reckless behaviors, including substance abuse, risky sexual activity, and disorderly conduct.

This defined structure of general deviance has been confirmed in a wide variety of empirical studies, such as Le Blanc and Bouthillier (2003); for a review of this literature, see Culhane and Taussig (2009). Although a latent factor may explain a large proportion of the covariation between different antisocial behaviors among both boys and girls, the factor loadings for some specific behaviors tend to differ by gender. Studies of gender differences reported statistical fits that were slightly poorer for girls than for boys (Donovan & Jessor, 1985; Le Blanc & Bouthillier, 2003). In particular, in girls, risky sexual activity appears to be less correlated with other categories of antisocial behavior Culhane and Taussig (2009). From a feminist perspective, this finding suggests that risky sexual activity may operate more as a risk factor for antisocial behavior than as a symptom of the deviant syndrome (Belknap & Holsinger, 2006; Kerig & Schindler, 2013). However, this hypothesis has yet to be examined systematically in longitudinal studies.

To sum up, research strongly supports the existence of a gender gap in antisocial behavior, but this gender gap is neither constant across the spectrum of possible behaviors and settings nor is it stable over time. It seems to be wider when antisocial behavior takes more serious forms or occurs outside the family. This gap also widens and narrows over the life course. Despite these variations, the kinds of antisocial behaviors are similar for the two genders.

Past descriptive studies comparing the antisocial behavior of boys and girls have been informative but have provided limited knowledge. Some of these studies have relied excessively on aggregated data, so they have not adequately considered possible heterogeneity within each gender. Other studies have relied excessively on cross-sectional data, so they have not adequately considered continuity and change over the life course. But these studies have certainly demonstrated the importance of not dismissing girls' involvement in antisocial behavior as a marginal phenomenon (Tracy, Kempf-Leonard, & Abramoske-James, 2009). The next step must be to examine the developmental patterns of antisocial behaviors among different subgroups of boys and girls.

#### On the Gender Gap in the Development of Antisocial Behavior

Research that seeks to explain the developmental processes that contribute to continuity and change in antisocial behavior in girls is still in its infancy. Our knowledge of the mechanisms by which antisocial behavior emerges, develops, persists, and changes along the life course of girls and women is still limited. As reviewed by Brennan, Breitenbach, Dieterich, Salisbury, and Van Voorhis (2012), the first set of studies that examined girls' developmental pathways to antisocial behavior relied mostly on qualitative data and adopted a feminist perspective (Chesney-Lind & Sheldon, 1992; Daly, 1992). Based on case studies and narratives, these studies focused on girls' specific risks and specific needs to explain their involvement in antisocial behavior. These studies regarded childhood victimization, socioeconomic marginalization, and relational problems as contextual factors that drive girls and women into crime as a survival strategy (Bloom, Owen, & Covington, 2003; Covington, 1998; Daly, 1992).

Subsequently, a second group of studies questioned the usefulness of gender-specific risk factors for antisocial behavior. These socalled "gender-neutral" studies provided empirical support for a common set of individual, familial, and environmental risk factors for both boys and girls (see Lanctôt & Le Blanc, 2002 for a review). Both the gender-specific and the gender-neutral perspectives yielded meaningful insights on the context in which girls' antisocial behavior is activated, as well as on gender similarities in many risk factors associated with the emergence of antisocial behavior. But neither approach provided an understanding of continuity and change in antisocial behavior along the life course.

A third set of studies has now followed. Grounded in developmental criminology, they employ a group-based trajectory methodology, take continuity and change within the individual into account, and propose differing explanatory models according to the age at onset and the persistency of antisocial behavior. These studies tend to identify three to five distinct trajectories of antisocial behavior (Piquero, 2008; Piquero, Reingle, & Jennings, 2015). In particular, the two distinct typologies theorized by Moffitt (1993)—adolescence-limited offenders and lifecourse-persistent offenders-have been well established. So far, however, few studies in this third group have used samples composed solely of girls or even mixed-gender samples. Issues of measurement and statistical methodology have complicated comparisons between studies and led to contradictory findings (Andersson, Levander, Svensson, & Levander, 2012). Most importantly, most of the longitudinal studies that have been conducted with girls have focused mainly on childhood and early adolescence (Fontaine, Carbonneau, Vitaro, Barker, & Tremblay, 2009; Miller, Malone, & Dodge, 2010). Consequently, our understanding of antisocial trajectories and patterns of persistence and desistence among girls throughout the adolescent years and on into early adulthood remains quite limited (Miller et al., 2010). Even so, thanks to this last group of studies, we can now make a few statements, with some degree of confidence, about the development of antisocial behavior in girls and how it differs from the development of antisocial behavior in boys. To summarize these findings, we will follow the recommendations of Le Blanc and Loeber (1998) and examine both quantitative and qualitative differences in antisocial behavior over the life course.

#### Quantitative Gender Differences in Trajectories of Antisocial Behavior

Studies of quantitative gender differences in antisocial behavior over the life course look at differences in the degree, direction, and rate of change (Le Blanc & Loeber, 1998), as well as in the proportion of individuals who exhibit stability or change over time. Such analyses examine the relationships between various trajectory parameters (e.g., between age at onset and duration of antisocial behavior). It is now well documented that certain subgroups of individuals do not follow the general pattern of the aggregate age-crime curve: in most individuals, involvement in antisocial behavior remains low or declines rapidly over the life course, but a minority of individuals exhibit early, chronic antisocial behavior (Piquero, 2008).

Studies attest to a prominent gender gap in the trajectories of antisocial behavior. Girls are typically overrepresented in so-called low trajectories (Fergusson & Horwood, 2002; Lahey et al., 2006; Pepler, Jiang, Craig, & Connolly, 2010; Zheng & Cleveland, 2013). For example, Fergusson and Horwood (2002) found that in a large mixed-sex cohort, 71 % of the girls followed a low-risk trajectory, but only 41 % of the boys. In contrast, overrepresentation of boys in the early-onset/chronic trajectory is well documented (Andersson et al., 2012; Fergusson & Horwood, 2002; Miller et al., 2010, Moffitt & Caspi, 2001). For instance, in a birth-cohort study by Moffitt and Caspi (2001), the ratio of boys to girls among individuals who followed this trajectory was 10 to 1. Fergusson and Horwood (2002) reported similar findings for another birth cohort, in which 9.4 % of the boys and 2.1 % of girls followed a chronic trajectory of antisocial behavior. In clinical samples, the percentage of girls following chronic trajectories is higher than in birth cohorts (Lanctôt, 2005; Lanctôt & Le Blanc, 2000), but the gender gap is still as large as in the general population (Fontaine et al., 2009). For trajectories in which the antisocial behavior is limited to adolescence, the gender gap is smaller. In samples from general and high-risk populations, from 2 % to 27 % of all girls follow such a trajectory (Brennan & Shaw, 2013), and the ratio of boys to girls following such a trajectory tends to be less than 2:1 (Fergusson & Horwood, 2002; Moffitt & Caspi, 2001). In clinical samples, the proportion of girls following an adolescence-limited trajectory ranges from 40 % to 75 % (Fontaine et al., 2009).

Thus, as a group, boys are more likely to engage in antisocial behavior at a younger age and to exhibit persistent, serious antisocial conduct later on. Whether there is any such earlyonset, persistent trajectory of antisocial behavior among girls has been much debated over the past two decades (Silverthorn & Frick, 1999). But recent evidence suggests that a small yet significant subgroup of girls do exhibit chronic antisocial behavior, at least until the end of adolescence (Brennan & Shaw, 2013; Broidy et al., 2003; Fontaine et al., 2009; Lahey et al., 2006; Odgers et al., 2008). Indeed, in their critical review of 46 empirical studies of developmental trajectories of antisocial behavior in girls, Fontaine et al. (2009) concluded that all but three of these studies suggested that a subgroup of girls follows an early-onset, persistent trajectory of such behavior. However, many of these 46 studies covered only the period from late childhood to middle adolescence, so the true extent of the persistency is still in question.

Various authors have stated that the main conclusion to be drawn from all these studies of quantitative gender differences in antisocial behavior is that, other than the differences in the proportions of the two genders in the various trajectories, the ways that antisocial behavior evolves over the life course seem quite similar for both genders (Andersson et al., 2012; Fontaine et al., 2009; Miller et al., 2010). But this conclusion may be premature, especially because much of the work on girls' antisocial trajectories has relied on small samples of atrisk or justice-involved girls or has looked at only a limited age range. It remains unclear whether the developmental patterns of antisocial behaviors observed in such studies can be generalized to all girls and to the entire period of adolescence. But more importantly, to achieve a fuller understanding of continuity and change in antisocial trajectories among girls, we must also consider qualitative differences in their behavior.

#### Qualitative Gender Differences in Trajectories of Antisocial Behavior

Studies of qualitative gender differences in antisocial trajectories look mainly at the shape of the trajectories (i.e., the timing and peak age of antisocial behavior), the nature of the behaviors, and the developmental sequence of these behaviors over time (Le Blanc & Loeber, 1998). A number of studies have provided general descriptions of various developmental trajectories and the gender composition of the groups that follow each of them. But very few empirical studies have provided a detailed examination of the shape of girls' trajectories and the developmental sequence of behaviors contributing to continuity and change. A study by Pepler et al. (2010) demonstrates the need to examine the shape of girls' trajectories more specifically. In this study, the girls in the sample who were at higher risk of antisocial behaviors developed into and out of these behaviors more quickly than the high-risk boys. In other words, involvement in antisocial behavior rose faster, peaked earlier, and began to decline earlier among the high-risk girls than among the high-risk boys. These gender differences raise several questions for future research and underscore the need to consider gender-responsive explanatory factors for the development of antisocial behavior. In this regard, Pepler et al. (2010) have questioned how puberty and socialization experiences might shape girls' trajectories.

Another shortcoming of past empirical studies is that they have rarely provided details on the nature and intensity of the antisocial behaviors exhibited by the girls who have followed the various trajectories identified. The trajectory labels assigned to girls may differ considerably depending on whether they are compared with boys or with one another. In this regard, Brennan and Shaw (2013) have suggested that girls who exhibit levels of antisocial behaviors that are significant but not so high as boys' may be assigned to a lower trajectory in a mixed-gender classification model than they would be in a gender-specific model.

The types of developmental trajectories identified and the proportion of girls within each trajectory also tend to vary considerably according to how antisocial behaviors are measured. For example, in their study of developmental trajectories of nonviolent and violent delinquency from adolescence to young adulthood, Zheng and Cleveland (2013) found that the propensity to engage in moderately to seriously violent delinquency contributed significantly to differentiating the various trajectories in boys, but not in girls. In girls, nonviolent delinquency was the factor that differentiated the various trajectories (whereas violent delinquency did not). Similarly, Lanctôt (2005) observed that in a subgroup of justice-involved girls who persisted in antisocial behaviors from adolescence to early adulthood, the characteristic of persistent antisocial behavior was not violent delinquency, but rather chronic drug use. Another analysis of various types of antisocial behavior in women, by Brennan et al. (2012), has also yielded significant insights. These authors analyzed a sample of female offenders and identified four broad types of pathways to serious and habitual crime: drug-dependent, victimized, subcultural, and antisocial. These pathways differed largely according to whether the women were seriously involved in drug use, drug trafficking, or aggressive behavior.

As the studies cited above have shown, if we are to obtain a clearer picture of the various developmental pathways to antisocial behavior in girls, it will be crucial to differentiate among different subtypes of antisocial conduct. Nonviolent delinquency, violent delinquency, and drug use may all have different etiologies and may qualitatively different represent types of antisocial-behavior trajectories (Zheng & Cleveland, 2013).

Lastly, a few studies have documented developmental pathways escalating from less to more serious behaviors in girls (Lanctôt et al., 2002; Loeber, Capaldi, & Costello, 2013). For example, Loeber et al. (2013) found some support for the role of oppositional defiant disorder (ODD) as a stepping-stone to conduct disorder (CD), but this developmental pattern was not as strong among girls as among boys. This observation led the authors to assert that developmental pathways in girls "are more complex than formerly thought" (p. 146). Such complexity might be explained by heterotypic continuity in girls' pathways. In this regard, longitudinal studies covering the period from middle adolescence to the late 20s are particularly informative. For example, in a study focusing on previously institutionalized men and women, Lanctôt, Cernkovich, and Giordano (2007) showed that women in particular experienced difficulties in coping with adulthood. Although the women reported fewer antisocial behaviors in adulthood than the men, the women's ability to function as adults was negatively affected by many circumstances that compromised their quality of life, including poor socioeconomic conditions, perceived lack of caring and trust on the part of their parents and their domestic partners, the use of violence against their domestic partners, depressive symptomatology, and low selfesteem. The cumulative effects of all these adverse conditions place such women at high risk for social isolation and persistent negative emotionality.

#### Gender Sensitivity in Developmental Criminology

In developmental criminology, the theoretical literature on girls' involvement in antisocial behaviors has long been characterized by rigidly divided epistemological perspectives (for a review of this literature, see Lanctôt & Le Blanc, 2002). One group of authors has argued that mainstream theories of developmental criminology can explain girls' pathways to antisocial behavior, even though these theories were initially developed with a focus on boys. But another group of authors has argued that this male-dominated

construction of knowledge needs to be challenged by the recognition that gender differences in socialization processes may affect girls' pathways to antisocial behavior. There is still much debate about which theoretical perspective best explains continuity and change in girls' antisocial behavior over time, but research on female delinquency increasingly is setting more and more store on integrating a variety of theoretical perspectives (Hubbard & Matthews, 2008; Kerig & Schindler, 2013).

In his paper on the generic control theory of the criminal phenomenon, Le Blanc (1997) argued for the value of integrating a variety of theories. He suggested that to provide a more comprehensive explanation of any given phenomenon, one should apply constructs from a number of disciplines and many different theories. Applying this advice to provide a broader explanation of girls' pathways to antisocial behavior, Lanctôt and Le Blanc (2002) proposed a theoretical model that integrated distinct concepts from the mainstream and feminist criminological perspectives into a new whole. Though acknowledging that substantive integration can be extremely difficult or even impossible when differing epistemological stances are concerned, these authors asserted that some constructs from various theories can nevertheless be adopted and integrated.

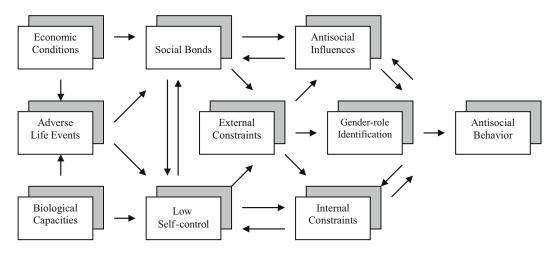
Lanctôt and Le Blanc (2002) based their theoretical model of girls' pathways to antisocial behavior primarily on Le Blanc's integrative control theory of deviant behavior (Le Blanc, 1997, 2005, 2006), adopting concepts from Le Blanc's theory as a frame of reference to choose constructs for their own model. They justified this approach by a review of empirical studies (Kempf, 1993; Moffitt et al., 2001) suggesting that mainstream theories, even though they have been developed mostly with reference to boys, can still be useful for explaining antisocial behavior in girls. Le Blanc's integrative model proposes an interaction among six major constructs: social status, biological capacity, bonds, self-control, constraints, and prosocial influences. This model posits that individuals will conform and continue to conform to conventional standards of behavior if the following four conditions are met: These individuals must have an adequate level of self-control, they must have firm bonds with social institutions, they must be subject to appropriate internal and external constraints, and they must be exposed to prosocial activities and individuals. The personal and social mechanisms thus regulating this conformity are conditioned by the individuals' biological capacities and their position in the social structure.

Lanctôt and Le Blanc (2002) made various adjustments to their theoretical model so as to take known gender differences and gender specificities into account. In particular, the authors incorporated gender-sensitive constructs so that the model would better explain how female gender roles and experiences may shape girls' pathways to antisocial behavior. Thus the model ensures that differences in the ways that girls and boys are socialized and in the ways that they learn to conform to certain social standards will not be overlooked.

The first adjustment that the authors made to their model was to add girls' exposure to adverse life events. One of the most significant weaknesses of current mainstream theories is that they take little account of the victimization and oppression that a large proportion of highrisk girls experience. For example, Van Vugt, Lanctôt, Paquette, Collin-Vézina, and Lemieux (2014) found that a substantial proportion of girls in residential care reported having experienced abuse. Moreover, within this group, the proportions who described their abuse as having been severe to extreme were quite high, ranging from 20 % among girls who reported sexual abuse to 33 % among those who reported emotional abuse. Lanctôt and Le Blanc's theoretical model states that the relationship between such adverse life events and antisocial behavior is mediated by a variety of factors, including social bonding, attitudes toward others, and exposure to delinquent peers.

The second major adjustment that Lanctôt and Le Blanc made in their theoretical model was to clearly differentiate between the internal and the external constraints to which girls are subject, so as to better capture experiences that could affect their antisocial pathways. Internal constraints consist of the girls' own beliefs in social norms, while external constraints consist mainly of the parental supervision and discipline to which they are subject. As noted in Le Blanc's original model, internal constraints are one of the most proximal protective factors against antisocial behavior. Research also suggests that internal constraints strongly influence girls' antisocial behavior and recidivism (Heimer, 1996; Van Vugt et al., 2011). Girls' antisocial behavior is thus largely governed by the kinds of values and attitudes that they have internalized.

The gender-difference literature proposes an interesting link between internalization of social norms and adherence to so-called feminine gender roles. Heimer (1996) pointed out that gender roles are internalized in a manner similar to attitudes regarding other social rules and standards. Girls' beliefs in gender roles-in particular, that females should take care of the people around them-can act as a moral obstacle to antisocial behavior. Hence Lanctôt and Le Blanc added another construct to Le Blanc's original model: gender-role beliefs. The inclusion of this construct may help to explain the heterotypic continuity in girls' trajectories of antisocial behavior. For example, when young women become mothers, the cost of antisocial behavior may simply become too high. Research clearly shows that such women feel constrained by the demands and responsibilities of motherhood and tend to become unwilling to jeopardize their children's well-being by engaging in antisocial activities (Giordano, Cernkovich, & Rudolph, 2002; Rönkä et al. 2003; Michalsen, 2011). Nevertheless, even though very few justice-involved girls persist in antisocial behavior into adulthood, a large proportion of them still face myriad difficulties attributable to problems in personal and social control (Lanctôt et al., 2007). Thus there is an urgent need for studies in developmental criminology to venture beyond antisocial behavioral outcomes. One research priority should now be to broaden the scope of the



**Fig. 25.1** Personal and social regulation of girls' antisocial behavior [originally published in Lanctôt and Le Blanc (2002): Fig. 3]

analysis to better understand the risks that girls' involvement in antisocial behavior during adolescence poses for negative adjustment outcomes later in life.

Figure 25.1 shows the model that Lanctôt and Le Blanc (2002) defined to explain girls' pathways into antisocial behavior. This model posits that precarious economic conditions may result in girls' experiencing more adverse life events, including various kinds of maltreatment, such as neglect and physical and sexual abuse. According to this model, girls who experience such events would subsequently have more trouble in forming bonds with social institutions and the people who belong to them. For example, maltreatment could compromise trusting relationships with parents, cause breakdowns in romantic relationships, and result in cognitive impairments that undermine commitment to school. Maltreatment could also produce trauma-related symptoms, including anger, and affect girls' ability to exercise self-control and solve problems by socially acceptable means.

The model goes on to predict that deficiency in girls' social bonds could increase their exposure to antisocial influences, especially through association with delinquent peers, and weaken their receptivenes to external constraints. At the same time, girls' low self-control not only makes it harder for them to establish strong bonds with other people but also makes them less likely to conform to external constraints such as social rules and standards. Girls' low receptiveness to external constraints also makes them less likely to develop internal constraints on their antisocial behavior. Lastly, the rejection of traditional beliefs about female gender roles would remove an important barrier against antisocial behavior.

The shaded box behind each component of the model in Fig. 25.1 represents the various phases of the life course, suggesting the possibility of examining the behaviors of girls and women from a developmental perspective. Such an approach remains virtually unexplored in the scientific literature on antisocial behavior in girls, and the impact of girls' antisocial behavior on their long-term personal and social development has therefore rarely been evaluated. There have, however, been a few longitudinal studies demonstrating a correlation between certain traits in girls' antisocial trajectories and the severity of their difficulties in adapting personally and socially. For example, one study of 123 justice-involved girls indicated that the earlier their antisocial trajectory began and the longer it lasted, the worse their personal and social deficits grew from ages 15 to 17 (Lanctôt & Le Blanc, 2000). Adolescent girls who followed the most serious antisocial trajectories were distinguished by having weaker ties to family and school, greater exposure to antisocial influences, and more antisocial personality traits, as well as by being less subject to internal and external constraints. Girls who gradually abandoned their delinquent activities toward the end of adolescence were on their way to a better personal and social balance (Lanctôt & Le Blanc, 2000). Similarly, Odgers et al. (2008) reported that females who followed a persistent trajectory of antisocial behavior experienced the worst economic, physical health, and mental health outcomes at age 32.

A major strength of developmental criminology is that it recognizes both change and continuity over time, thus focusing both on life transitions and on disadvantages that accumulate over the life course. In his generic control theory of the criminal phenomenon, Le Blanc (1997) adopts a comprehensive developmental perspective in which antisocial behavior is regarded as a transitional event that can play an additive, intervening role in individuals' pathways over the life course. By providing a more in-depth assessment of the mechanisms involved in within-individual changes in antisocial behavior, Le Blanc's theory provides a more meaningful understanding of why, how, and when individuals start, persist in, escalate, and desist from antisocial behavior. Furthermore, developmental theoretical models such as Le Blanc's identify not only the factors that predispose individuals to engage in antisocial behavior but also the factors that encourage desistance from such behavior (see Kazemian, 2015). For example, if individuals become less involved in maladaptive behavior as they exit adolescence and enter adulthood, the explanation might be that they are experiencing new life events that strengthen both personal and social controls. Many such new life events commonly occur in late adolescence-for example, living with someone as a couple for the first time, or becoming a parent, or getting one's first real job, or choosing a career-and their influence needs to be analyzed. The Lanctôt and Le Blanc (2002) model adopts a developmental perspective that supports such an analysis.

#### Summary

This chapter has highlighted, first and foremost, the many research avenues that still need to be explored in order to acquire a better understanding of gender differences in the development of antisocial behavior. As Loeber et al. (2013) have noted, much knowledge about girls' antisocial behavior has been gained from recent, major longitudinal studies with sizable samples of girls. However, current knowledge is still inadequate, and much more research needs to be done. Current knowledge is also limited by the lack of an integrated theory, as well as by ambiguities about what is regarded as antisocial behavior, the variety of measures used to capture it, and differences in the developmental stages covered by the various longitudinal studies. Hence, though few researchers would argue that there is no gender gap in antisocial behavior, the exact nature of this gap, the ways in which it is manifested, and the ways that it evolves from a developmental perspective all need to be further explored.

At present, it is therefore difficult to provide a systematic review of the evidence based on robust observations. However, the preliminary results of recent longitudinal studies all suggest that a focus on what Le Blanc and Loeber (1998) referred to as "qualitative gender differences" in trajectories of antisocial behavior might be a more promising way to compare the development of such behavior in boys and in girls.

The key conclusions of this chapter are as follows:

- There is robust evidence of a gender gap in criminal and antisocial behavior. In terms of both the prevalence and the seriousness of such behavior, boys are more antisocial than girls.
- The magnitude of this gender gap is not constant over time or across the spectrum of criminal or antisocial behavior.
- The same trajectories of antisocial behavior have been identified in both boys and girls, even including a chronic, persistent trajectory,

although the proportion of girls that follow such a trajectory is small.

- Preliminary evidence suggests gender differences in the shape of these trajectories, as well as in the nature and developmental sequence of the behaviors concerned.
- It might be more helpful to compare boys' and girls' trajectories of antisocial behavior using qualitative measures as well, rather than focusing solely on quantitative measures such as prevalence and number of trajectories.
- Theoretical models designed to explain girls' antisocial behavior could benefit from the inclusion of gender-sensitive constructs such as exposure to adverse life events and differences in the internal constraints to which girls and boys are subject.

#### **Future Research Needs**

- Longitudinal studies that apply an encompassing definition of antisocial behavior, examine sizable samples of girls, and cover adolescence and emerging adulthood as developmental stages
- A focus on both continuity and change in girls' and women's criminal and antisocial behavior over the life course and the mechanisms and developmental processes through which such behavior emerges, develops, persists, and changes
- Studies of qualitative gender differences in the shape of trajectories of antisocial behavior, the nature of the behaviors engaged in at various developmental stages, and changes in the degree of involvement in such behaviors over time
- Broader analyses of outcomes other than antisocial behavior (e.g., social adjustment and mental health outcomes) in girls who are on trajectories of antisocial behavior, particularly in late adolescence and early adulthood
- Inclusion of gender-sensitive constructs in theoretical models to better explain girls' trajectories of antisocial behavior-in particular constructs related to trauma, internalized problems, and drug use

## Marc Le Blanc's Contributions

Dr. Marc Le Blanc has played a pioneering role in conceptualizing the developmental perspective in delinquent and antisocial behavior and in defining the developmental processes involved. This perspective focuses on continuity and change by analyzing within-individual variations. It has guided a number of the studies reviewed in this chapter. This developmental perspective has provided a better understanding of why, how, and when individuals begin, persist in, escalate, and desist from antisocial behavior.

In addition, the work that Dr. Le Blanc and colleagues have done on the latent deviant construct (Le Blanc & Bouthillier, 2003; Le Blanc & Loeber, 1998) has been instrumental in operationalizing this concept and demonstrating the value of a more encompassing definition of antisocial behavior for both genders. Dr. Le Blanc has also participated in a number of studies in which his ideas—originally developed for data collection involving boys only—were tested and adapted for girls (Lanctôt & Le Blanc, 2002).

This chapter has provided an integrated review of a literature that does not lend itself readily to such an effort, because of the current state of research. In this regard, the distinction that Le Blanc and Loeber (1998) make between quantitative and qualitative indicators of trajectories of antisocial behavior has proven an invaluable organizing principle. This distinction can provide a useful framework for future research aimed at exploring gender differences more exhaustively.

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