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Understanding the Female Offender

Elizabeth Cauffman

Summary

Although boys engage in more delinquent and criminal acts than do girls, female delinquency is on the rise. In 1980, boys were four times as likely as girls to be arrested; today they are only twice as likely to be arrested. In this article, Elizabeth Cauffman explores how the juvenile justice system is and should be responding to the adolescent female offender.

Cauffman begins by reviewing historical trends in arrest rates, processing, and juvenile justice system experiences of female offenders. She also describes the adult outcomes commonly observed for female offenders and points out that the long-term consequences of offending for females are often more pronounced than those for males, with effects that extend to the next generation. She also considers common patterns of offending in girls, as well as factors that may increase or decrease the likelihood of offending. She then reviews what is known about effective treatment strategies for female offenders.

Female delinquents have a high frequency of mental health problems, suggesting that effective prevention efforts should target the mental health needs of at-risk females before they lead to chronic behavior problems. Once girls with mental health problems come into the juvenile justice system, says Cauffman, diverting them to community-based treatment programs would not only improve their individual outcomes, but allow the juvenile justice system to focus on cases that present the greatest risk to public safety.

Evidence is emerging that gender-specific treatment methods can be effective for female offenders, especially when treatment targets multiple aspects of offenders' lives, including family and peer environments. But it is also becoming clear that female offenders are not a homogeneous group and that treatment ultimately should be tailored to suit individual needs defined more specifically than by gender alone.

Despite myriad differences between male and female offending, many of the primary causes of offending, says Cauffman, are nevertheless similar. The most effective policies for reducing juvenile crime, she argues, will be those that foster development in a safe and nurturing environment throughout childhood. Cauffman concludes that female offenders are likely to require continued support long after their direct involvement with the juvenile justice system.

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ince the inception of the juvenile justice system, policies and practices regarding juvenile offending have focused on the behavior, treatment, and outcomes of a population heavily dominated by males. The lion's share of research on offending has focused on males as well. Such an emphasis makes good sense, given that males have historically accounted for a far greater share of offenses than females and for an even greater share of violent offenses in particular. In such a world, a relative lack of knowledge about female offending behavior is not surprising.

Recent changes in the prevalence of female offending and the proportion of females in the care of the juvenile justice system have led many to wonder whether historically based assumptions and approaches to juvenile crime need to be reconsidered. In a culture in which men are from Mars and women are from Venus, it is tempting to leap straight to the conclusion that if the juvenile justice system is now dealing with a sizable proportion of female offenders, then something must be done to make the system more responsive to their presumably genderspecific needs. But is such a conclusion really so obvious? Medical research is rife with examples of diseases that infect men and women at different rates and through different mechanisms, but for which the prescribed treatment is the same, regardless of gender. For such diseases, one might employ gender-specific prevention or detection protocols, despite gender-neutral treatment methods. Other diseases may manifest themselves differently in males and females and thus require gender-specific treatment as well.

Analogously, answers to the question of whether policy and practice should change in response to the growing share of females in the population of juvenile offenders may vary, depending on whether the focus is on diagnosis, prognosis, prevention, or treatment. In this article, my goal is to summarize what research has to say about these interrelated areas, what policy implications can be inferred when sufficient evidence exists, and what additional research is required when sufficient evidence is lacking.

I begin with a review of historical trends in arrest rates, processing, and juvenile justice system experiences of female offenders. I also describe the adult outcomes commonly observed for female offenders, which underscore the motivation for pursuing improved policy approaches to female offending. I next consider common trajectories of offending in girls, as well as factors that may increase or decrease the likelihood of offending. I then review what is known about effective treatment strategies for female offenders and what can be reasonably inferred. Finally, I summarize the ways in which current research findings about female offenders can improve policy and practice, as well as the areas in which further research is needed before definitive conclusions can be drawn.

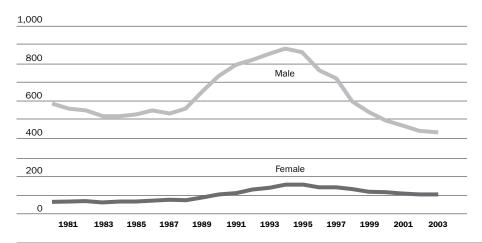
Trends in Juvenile Arrest Rates

Both official records and self-reports confirm that males engage in more delinquent and criminal acts than do females. This gender difference in offending patterns is observed both nationally and internationally. Although official records tend to underreport crime, they nevertheless provide a baseline indication of juvenile justice system involvement. According to the Federal Bureau of Investigation's Uniform Crime Reporting (UCR), females accounted for 29 percent of all juvenile arrests in 2003. Proportionally more girls were arrested for certain offenses, such

as running away from home (59 percent) and prostitution and commercialized vice (69 percent), but most other types of arrests are more common for boys.3 As shown in figure 1, between the mid-1980s and the mid-1990s, juvenile arrests for violent crime increased significantly, with male arrest rates rising 75 percent and female rates rising almost 150

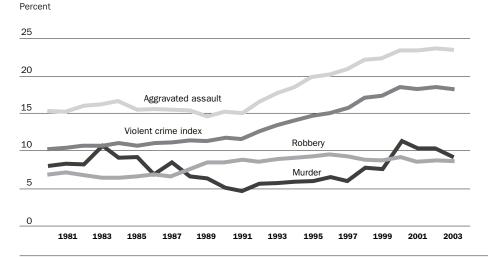
percent. Since the mid-1990s, arrest rates for violent crimes among juveniles have fallen, with male arrest rates falling below their 1980s levels and female rates declining about half as much. Overall, because female arrest rates increased more sharply and then fell more gradually, the share of female juvenile arrests grew from 20 percent to 29 percent between

Figure 1. Male and Female Juvenile Arrests per 100,000 Individuals, Ages 10-17, 1980-2003



Source: Howard N. Snyder and Melissa Sickmund, Juvenile Offenders and Victims: 2006 National Report (Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2006).

Figure 2. Breakdown of Female Contribution to Juvenile Violent Arrest Rates, 1980-2003



Source: Howard N. Snyder and Melissa Sickmund, Juvenile Offenders and Victims: 2006 National Report (Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2006).

1980 and 2003.⁴ Consequently, boys are now about twice as likely as girls to be arrested, down from four times as likely in 1980.

Changes in self-reported offending and in female juvenile arrest rates suggest that girls are becoming more violent, although interpretation of arrest data is complicated by variations in policy. Some have argued that the changes in gender-role expectations accompanying the progress of the women's liberation movement have "masculinized" female behavior and thus produced a greater proclivity for physical aggression.⁵ The female share of juvenile arrests for some types of violent crimes, such as robbery and murder, remained relatively stable between 1980 and 2003, but the share of female arrests for aggravated assault increased substantially, from 15 percent to 24 percent, and appears to be a primary factor in the overall increase of females' contribution to the violent crime index, as shown in figure 2.

Because property offending (for example, burglary, motor vehicle theft, and arson) for males and females changed in similarly distinct patterns during this time, it seems safe to conclude that there is some variation in the structural forces shaping the violent offending rates of females and males. But analysts cannot agree on how to interpret these arrest statistics. For example, a study by Darrell Steffensmeier and several colleagues argues that the statistical shift in aggressive offending among females may be nothing more than an artifact of changes in criminal justice policy and practice.⁶ The study compared the 1980-2003 trends in homicide, sexual assault, aggravated assault, and simple assault using both the UCR arrest statistics and the National Crime Victimization Survey (NCVS) to determine whether the changes were attributable to behavior or to policy.

(UCR data come from law enforcement agency records, whereas NCVS data come directly from crime victims and thus provide an indication of criminal trends independent of changes in agency policy.) Although both sources indicate general stability in the gender gap for homicide and sexual assault, the NCVS data did not show the rise in femaleto-male arrests for criminal assaults indicated by the UCR data. Increases in female arrest rates for violent offenses may therefore be due, at least in part, to net-widening policies, such as more aggressive policing of low-level crimes, and the increasingly common reclassification of simple assaults as aggravated assaults. Regardless of whether increased arrest rates represent a true increase in violent behavior among female adolescents compared with males or a policy shift toward arrest rather than alternative treatment of violent females, it is indisputable that the juvenile justice system is handling a rapidly growing share of girls.

Trends in Processing of Juvenile Offenders

Male juvenile offenders are not only more likely than females to be arrested but, once arrested, they are more likely to be petitioned (the juvenile court equivalent of being charged)—63 percent compared with 54 percent. If petitioned, boys are more likely to be adjudicated (the equivalent of being found guilty)—63 percent compared with 60 percent—and eventually to receive residential placement as a sanction—27 percent compared with 19 percent.7 Although the share of youth waived to criminal court is extremely small (less than 1 percent), the share of female juvenile offenders tried as an adult is even smaller. Of the 1 percent of youth transferred to adult court, only 7 percent of those are female.8 However, although boys still dominate the delinquency caseloads, the

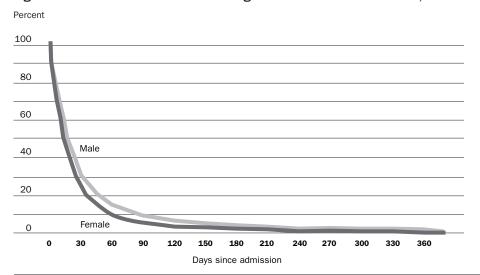


Figure 3. Percent of Residents Remaining in Placement after Detention, 2003

Source: Howard N. Snyder and Melissa Sickmund, Juvenile Offenders and Victims: 2006 National Report (Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2006).

prevalence of cases involving girls increased 92 percent between 1985 and 2002, while the caseload for boys increased only 29 percent.9

The sentencing applied to females varies greatly, with some studies suggesting that girls receive lighter sentences, other studies, harsher ones, than boys. These conflicting findings have led to debate about whether the system is generally more lenient (more "chivalrous") with girls or more punitive with them because they are deemed either too "masculine" or in need of protection. Cecilia Saulters-Tubbs found that district attorneys were less likely to file charges against female drug offenders than against male offenders, while Donna Bishop and Charles Frazier found, similarly, that boys were treated more punitively than girls for delinquency offenses and that girls were less likely than boys to receive a sentence involving incarceration.¹⁰ Such studies suggest that the system treats girls as less criminally dangerous than boys.¹¹ Other research, however, notes that once legal variables are controlled, girls are treated similarly to boys in the early stages of court processing but more harshly in the later stages. 12 Earlier studies pointing toward more "chivalrous" treatment of girls may thus have failed to consider differences in the underlying seriousness of the offenses involved.

Analysts have also begun to examine the influence of race and ethnicity on juvenile case processing and the ways in which racial and ethnic differences vary with gender. Taken as a whole, racial differences seem to matter less for female defendants. For example, young black male defendants receive significantly harsher sentences than young white males, whereas the sentencing of female offenders does not vary meaningfully with race.13

Trends in Experiences in the **Juvenile Justice System**

Boys and girls also tend to have different experiences in the juvenile justice system after adjudication. As with gender differences in processing, however, the direction

of some experiential differences is unclear, with different studies coming to different conclusions. For example, Joanne Belknap found that although boys are more likely to be sentenced to detention, girls who are detained spend more time in detention than do boys. ¹⁴ More recent data, however, suggests the opposite, with males staying longer than females (see figure 3). ¹⁵

In addition, detained female offenders may be more aggressive than their male counterparts within the system. For example, one study found that institutionalized girls are more violent than boys toward staff. ¹⁶ In fact, Candice Odgers, Marlene Moretti, and Debra Pepler found that the underlying structure of aggression (as measured by the Child Behavior Checklist–Youth Self Report) among high-risk girls differs from both that for girls in normative settings and that for boys in both normative and high-risk settings. ¹⁷ Girls who enter the juvenile justice system may differ fundamentally from both male offenders and female non-offenders.

Youth who enter the juvenile justice system have high rates of mental health problems. Among non-delinquent populations, girls generally exhibit more internalizing disorders than boys, while boys generally exhibit more externalizing disorders than girls. 18 These findings, however, do not extend to juvenile justice populations. A substantial body of research indicates that regardless of race and age, female offenders have higher rates of mental health problems, both internalizing and externalizing, than male offenders.¹⁹ In a study of serious "deep-end" offenders, females exhibited both more externalizing problems and more internalizing problems than males.²⁰ Moreover, a recent study using common measures and a demographically matched sample of community and detained

youth found that gender differences were greater among detained youth than among community youth, with detained girls having more symptoms of mental illness than would be predicted on the basis of gender or setting alone.²¹

The observed gender differences in aggression and mental health symptoms among incarcerated youth have several possible explanations. It may be, for example, that law enforcers and judges are less likely to send girls to detention and that those sent to detention therefore have the most serious behavioral problems.²² It may also be that female delinquency itself is a symptom of significant mental health problems. Accordingly, more mentally disturbed girls than boys may engage in delinquent behavior. Additional filtering out of all but the most visibly troubled girls by police and judges could understandably result in a population of detained females with significantly higher levels of disturbance than their male counterparts (who need not be as "troubled" to engage in illegal behavior and who need not appear as "troublesome" to be detained). Because female offenders make up a rapidly growing share of the population of incarcerated youth, they pose significant challenges to correctional systems.

Consequences of Female Offending

The negative impact of female offending extends well beyond the immediate consequences of the behavior itself and the cost of juvenile justice system intervention. A review of twenty studies on the adult lives of antisocial adolescent girls found higher mortality rates, a variety of psychiatric problems, dysfunctional and violent relationships, poor educational achievement, and less stable work histories than among non-delinquent

girls.²³ Chronic problem behavior during childhood has been linked with alcohol and drug abuse in adulthood, as well as with other mental health problems and disorders, such as emotional disturbance and depression.²⁴ David Hawkins, Richard Catalano, and Janet Miller have shown a similar link between conduct disorder among girls and adult substance abuse.²⁵ Terrie Moffitt and several colleagues found that girls diagnosed with conduct disorder were more likely as adults to suffer from a wide variety of problems than girls without such a diagnosis.²⁶ Among the problems were poorer physical health and more symptoms of mental illness, reliance on social assistance, and victimization by, as well as violence toward, partners.

Data collected over a period of years show that antisocial behavior among young people predicts school dropout, and there is ample evidence of high dropout rates among aggressive girls.27 Data from the Ohio Serious Offender Study indicates that only 16.8 percent of incarcerated females graduate from high school.²⁸ Consequently, antisocial women tend, later in life, to have lower occupational status, more frequent job changes, and greater reliance on welfare than nonoffender females.29

Females who exhibit early-onset (by age seven) persistent offending are more likely than other girls to engage in antisocial behavior at age thirty-two.30 For example, 75 percent of these early-onset persistent female offenders had, by age thirty-two, engaged in one or more violent acts, including violence toward partners (44.8 percent) and children (41.7 percent). Adolescent-onset women were less likely than early-onset women to experience problems with violence at age thirty-two.

Regardless of gender, adolescents with a history of antisocial behavior are more likely to marry people who are involved in crime or who exert an antisocial influence.³¹ For males, there is a link between assuming adult responsibilities, such as marriage and childrearing, and desisting from crime, but this pattern is less common among females. 32 In fact, for females, the inverse is often the case: marriage to an antisocial mate reinforces antisocial behaviors throughout adulthood. For some female offenders, marriage is linked to increased drug use and crime.33 The marital relationships of female offenders may be typified by conflict and instability.³⁴ Antisocial girls facing the transition to young adulthood have more general relationship problems than their male counterparts.³⁵ In such relationships, women are often victims of abusive partners, but also often perpetrate abuse. According to measures of self- and partner-reported violence, female offenders matched or exceeded male offenders' rates of partner abuse.³⁶ Several different studies come to similar conclusions: antisocial women inflict abuse that is serious enough to lead to medical treatment, that elicits fear, and that cannot always be explained as self-defense.³⁷ According to observational data from the Oregon Youth and Couples studies, females were consistently more likely to have *initiated* physical aggression than males.³⁸ Such findings for females are notable because among males, adolescent antisocial behavior typically wanes during adulthood. It appears that, at least for female offenders, adolescent antisocial behavior is supplanted in adulthood by violent behavior within the home and against family members.³⁹

Antisocial women tend to reproduce at a younger age and most often with an antisocial mate.40 Such mating and reproductive tendencies interact to leave young antisocial mothers

and their children with inadequate social, emotional, and financial support. While early parenthood can pose many challenges for anyone, it is particularly problematic for early and chronic female offenders, who face increased risks of pregnancy complications, socioeconomic disadvantage, relationship violence, and compromised parenting skills. 41 Several studies have linked a history of maternal conduct disorder with unresponsive parenting. 42 Particularly troubling are data suggesting that mothers with a history of aggression or conduct disorder, or both, pass on at least three risk factors to their offspring: antisocial biological fathers (because of assortative mating), prenatal exposure to nicotine, and coercive (hostile) parenting style.43 The most common trajectories followed by female offenders tend to increase the odds that their children will follow in their footsteps.

Taken as a whole, these research findings indicate that for female offenders, the long-term prognosis is even poorer than it is for male offenders. Moreover, the observed impact on the subsequent generation underscores the importance of attempting to mitigate the effects of female offending.

Trajectories of Offending Behavior

Having reviewed trends in female offending patterns, subsequent interactions with the justice system, and the ultimate outcomes of such offending, I now turn my attention to what is known about how girls get into trouble in the first place, including typical trajectories of offending (in this section) as well as risk and protective factors (in the section that follows).

Age of Onset

Some studies indicate that both boys and girls tend to begin their antisocial careers around the age of fifteen, with the average age of onset differing by no more than six months across genders. 44 Other research, however, finds that females begin offending when they are younger than males are. 45 Notably, gender differences in the age of onset tend to be most pronounced for serious or aggressive types of delinquency, while less serious problem behaviors, such as drug and alcohol-related offenses, have less gender-differentiated progressions. 46

Duration

On average, males tend to have longer criminal careers than females. Because it is difficult to assess when a criminal career is "finished," convincing evidence about the duration of criminal careers is sparse. A longterm study by Roger Tarling followed a sample of male and female offenders who were born in 1958 through age thirty-one, finding that the average duration of offending was 4.9 years for females, and 7.4 years for males.47 A follow-up of the same subjects nine years later found that although the average length of criminal careers had increased (to 5.6 years for females and 9.7 years for males), careers remained significantly shorter for females than for males. 48 A study that examined the criminal careers of the sisters and wives of life-course-persistent male offenders found that the women's careers averaged eight years, compared with ten years for the males. (Applicability of this result to broader populations of male and female offenders is unclear. because the males were chosen on the basis of their long-term criminality, whereas the females were chosen on the basis of their relationships with the males.)

Developmental Pathways

Important gender differences exist not only in the typical progressions of offending behavior, as just noted, but also in the developmental course of aggression. Such differences emerge very early. For example, although the typical disruptive behaviors of preschool boys and girls differ little, these behaviors evolve over time in strongly gender-dependent ways, with girls outgrowing such behavior more quickly than boys.⁴⁹ Starting in middle childhood, further differences emerge. Girls are less likely than boys to be physically aggressive in general, but by adolescence, they become more likely than boys to direct aggression at family members and romantic partners, as well as at familiar females.50

In a detailed investigation using data from six sites and three countries, Lisa Broidy and several colleagues examined the evolution of physical aggression and other problem behaviors during childhood to predict violent and nonviolent offending outcomes in adolescence. Boys were more physically aggressive than girls during childhood, but their trajectories of aggression otherwise looked similar. As boys and girls entered adolescence, the trajectories of aggression began to diverge. For boys, problem behavior tended to continue from childhood into adolescence, especially in cases of early physical aggression. Girls, however, generally showed fewer clear links between childhood aggression and offending during adolescence.⁵¹ This difference may be attributable to low base rates of offending outcomes among females, or it may indicate gender differences in trajectories of offending. Notably, other studies have also found that female adolescent offending was much more difficult to predict than male adolescent offending.⁵² Early aggression is a robust correlate of adolescent aggression among males but a much less effective predictor of adolescent female aggression.53 Such findings suggest that although ongoing aggression and offending are the hallmarks of persistent male

offending, female persistence may be a consequence of different and less overtly criminal behavioral precursors.54

A complicating factor in the study of antisocial characteristics over long periods (for example, from childhood through adulthood) is that the measures used do not always appear to be assessing the same underlying construct throughout the entire period. For example, in a recent study by Candice Odgers and several colleagues, the measure of conduct disorder symptoms remained stable for males from age seven through twenty-six but remained stable for females only from age seven to fifteen, suggesting that the latent trait being assessed changed, for girls, during mid-adolescence.55

Another explanation for the lack of clear links between childhood aggression and subsequent offending among females has emerged from comparisons of female offending patterns with those of both adolescent-limited and life-course-persistent male offenders. Studies find that aggressive behavior in the latter typically begins early. Some observers have argued that female offenders can, in theory, be either adolescent-limited or life-course-persistent and that the relative scarcity of early-onset aggression in females indicates that they are generally less likely to follow the latter pathway.⁵⁶ Others, however, have argued that the relative prevalence of adolescent-onset aggression in girls (compared with childhood-onset) indicates that persistent delinquency simply manifests at a later age in girls than it does in boys.⁵⁷ In Persephanie Silverthorn and Paul Frick's model, girls and boys are influenced by similar risk factors during childhood, but the onset of delinquent behavior in girls is delayed by the more stringent social controls imposed on them before adolescence. Silverthorn, Frick,

and Richard Reynolds report evidence from a sample of seventy-two incarcerated youth that supports the contention that adolescent-onset females more closely resemble early-onset than adolescent-onset males in their early risk exposure.⁵⁸ Norman White and Alex Piquero similarly conclude that late-onset females exhibit constellations of risk similar to those of early-onset males. However, they also report evidence that some girls did, in fact, begin to act antisocially in childhood.⁵⁹ Other recent studies have identified groups of early-onset females as well. Two studies have identified groups of girls exhibiting chronically high levels of antisocial behavior across childhood and early adolescence and having an increased risk for continued antisocial behavior. 60 In addition, Odgers and several colleagues found that 7.5 percent of all girls between the ages of seven and fifteen displayed an early-onset of offending that persisted into adolescence

and that this pattern was similar to boys of the same age. ⁶¹ Other studies suggest that although strongly aggressive behavior in girls before the age of seven is rare, continuity of offending for such girls may be stronger than that among comparable boys and that such early problem behavior in girls should be considered a significant warning sign of potential future problems. ⁶²

Taken as a whole, these findings suggest that persistent offending among females may be more common than was first believed, but that it is harder to distinguish from adolescent-limited offending in girls, because unlike in boys (for whom persistent offending commonly shows outward signs during childhood), persistent offending in girls surfaces across a wider range of ages, sometimes not until adolescence. It is thus more difficult to differentiate between the two pathways solely

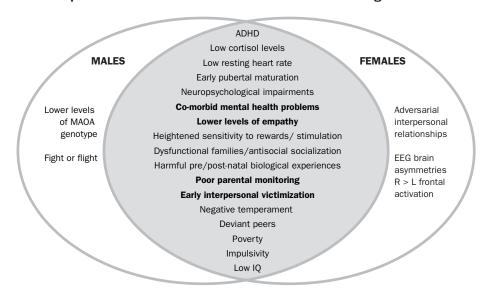


Figure 4. Gender-Specific and Gender-Invariant Risk Factors for Offending

Note: Although the items in bold in the center of the diagram are relevant risk factors for both males and females, they are particularly salient for females.

Source: Asha Goldweber, Lisa Broidy, and Elizabeth Cauffman, "Interdisciplinary Perspectives on Persistent Female Offending: A Review of Theory and Research," in *The Development of Persistent Criminality*, edited by J. Savage (Cambridge University Press, forthcoming).

on the basis of behavioral problems during childhood.⁶³ Several studies, however, have observed a small group of very young girls with severe problem behavior who persist in such behavior into adolescence. Because these girls impose significant costs on society, on themselves, and on their children, efforts to identify and assist them at a young age could yield considerable benefits.

In sum, although evidence is mixed about the relative ages at which boys and girls are most likely to begin offending, female offending careers tend to be shorter than those of males. Ironically, however, these shorter careers do considerable damage in the offender's adulthood, including persistent behavioral and emotional problems that are often more detrimental than those encountered by persistent male offenders.

Risk and Protective Factors

Males and females tend to share many of the same risk factors for offending (see figure 4).64 Moreover, these risk factors tend to occur in highly correlated clusters. Though there are numerous putative risk factors, many of which overlap, certain of them are particularly salient or even unique to females. 65 In addition, some analysts have noted an apparent "gender paradox": despite the lower prevalence of exposure to risk factors among females in general, those girls who are clinically referred show more severe behavior problems than boys.⁶⁶

Biological

Biological risk factors have often been cited to explain gender differences in aggressive behavior. Exposure to high levels of testosterone before birth is more common among males, for example, but has been linked with aggressive behavior in both males and females.⁶⁷ Likewise, lower resting heart rates have been associated with delinquent behavior in both males and females.⁶⁸

Evidence of gender-specific risk factors also exists at the level of basic brain biology. For example, certain biological events during early development, such as excessive androgen production, exposure to synthetic androgens, thyroid dysfunction, Cushing's disease, and congenital adrenal hyperplasia, can combine with environmental influences to predispose women to antisocial behavior. 69 Additionally, EEG research has uncovered asymmetries in the frontal activation of antisocial females' brains. 70 Normative males and females tend to exhibit asymmetric frontal brain activation, with boys having greater right frontal activation and girls having greater left frontal activation. In contrast, antisocial females tend to exhibit a pattern of greater right frontal activation (more like that of normative males), while antisocial males exhibit no asymmetry at all. These findings underscore the genderspecificity of this particular marker and suggest that antisocial girls may not exhibit the enhanced verbal abilities or emotion regulation associated with dominance of the left hemisphere, as is more commonly observed in normative girls.

Another gender difference in biological risk factors involves biological responses to stressful situations. Males and females both exhibit "fight or flight" neuroendocrine responses to stress, but males appear to be more likely to engage in fight or flight behaviors. Females, in contrast, tend to react with behaviors more accurately described as "tend and befriend," using social interactions to protect against threats.71

Victimization

Victimization during childhood or adolescence is a risk factor for both male and female offending but is a stronger predictor among females. Research within clinical populations consistently finds that girls are more often abused than boys, although research focused on the broader population of community youth has not shown such gender differences in rates of physical maltreatment.72 Female offenders typically are abused before their first offense. 73 Among girls in the California juvenile justice system, 92 percent report some form of emotional, physical, or sexual abuse.74 Self-reported victimization rates among boys in the juvenile justice system are considerably lower, though boys may be more likely than girls to underreport certain forms of abuse.75 Some studies report abuse rates for males between 25 percent and 31 percent, while others report rates of 10 percent for sexual abuse and 47 percent for physical abuse.⁷⁶ Closer comparison reveals that delinquent males and females tend to report different types of traumas as well. One study that I conducted with several colleagues found that males were more likely than females to report having witnessed a violent event, such as seeing a friend or family member killed, while females were more likely to mention being the victim of violence, such as sexual or physical abuse.⁷⁷

Some observers have suggested that abuse is directly linked with subsequent violent behaviors, with one in four violent girls having been sexually abused compared with one in ten nonviolent girls. Abuse and exposure to uncontrollable stressors are undeniably common precursors to conduct problems in female offenders. And dysfunction in girls stress-coping mechanisms may further exacerbate the negative effects of childhood trauma and victimization. In other words, female offenders have not only experienced higher rates of victimization, but they also tend to have more limited abilities to cope with such stressors, thereby magnifying their effect.

Interpersonal

Researchers have long known that family dynamics are a key contributor to delinquency.82 In general, aspects of the family environment influence both male and female antisocial behavior.83 But the specific mechanisms affecting behavior are sometimes gender-specific. For example, among children of substance-abusing parents, parenting disruptions are linked more strongly with delinquency and drug abuse among girls than among boys.84 Similarly, although a lack of parental supervision is associated with delinquency in boys and girls, conflict over supervision appears to influence offending more strongly in girls than in boys.85 Poor emotional ties to family are more strongly associated with violence in girls than in boys.86 Not surprisingly, incarcerated females view their parents more negatively than do nonincarcerated females.87

Interpersonal relationships with romantic partners also can affect delinquent behavior, in some cases even more than relationships with parents. Wim Meeus and several colleagues report that parental influence on adolescent offending is strongest when an adolescent has no intimate partners; parental support did not influence delinquency for youth who consistently had a romantic partner over the course of the six-year study.⁸⁸ In another recent study of serious adolescent offenders, girls who self-reported delinquent behavior were more likely to be strongly encouraged in that behavior by their current romantic partner.89 Interestingly, the association between partner encouragement and self-reported offending was strongest among youth reporting warm relationships with their opposite-sex parent.

Interpersonal factors beyond family and romantic relationships also affect male and

female offending in different ways. For females more than for males, adversarial interpersonal relationships are a notable risk factor.90 Indeed, girls tend to be more sensitive to perceived threats to their social relationships. 91 Some observers posit that girls' perceptions of others' expectations of them have a profound impact on emotional well-being, attachment, and delinquency.⁹² This view has been bolstered by studies demonstrating that self-representation and self-interpretation are key determinants of aggression among girls.93 Some evidence suggests that female offenders use aggression as a way to sustain relationships through coercion, but further evidence shows that this strategy is generally not successful. Girls who bully are more likely than boys to be rejected by peers, putting them at even greater risk for chronic offending.94

Victimization during childhood or adolescence is a risk factor for both male and female offending but is a stronger predictor among females.

More disruptive girls tend to show less empathy than girls without behavior problems, and this deficit is greater among females than among males.95 It may be that lower levels of empathy pose a greater risk for girls than for boys because empathy strengthens the ability to foster the strong attachments and relationships that girls value more highly than boys do.⁹⁶

Interestingly, risk factors involving socioeconomic status and child-rearing were more

strongly related to the prevalence (rather than the frequency) of offending for females compared with males. 97 Some observers have thus concluded that the risk factors for engaging in delinquent behaviors may not be the same as those for frequency of offending and that both may be different between the genders. For example, self-reinforcements, the internal rewards associated with illegal behavior, were found to be more strongly related to frequency of offending than to engaging or not engaging in violent behaviors.98

Notwithstanding these gender-specific risk and protective factors, in most cases, the same factors—ADHD, negative temperament, impulsivity, compromised intelligence —predict antisocial behavior in both males and females, as suggested by the substantial overlap shown in figure 4.99 Although some analysts have argued the need to concentrate on the commonalities in predictors of male and female offending, it is also important to note the areas in which risk factors differ by gender.¹⁰⁰ Even if the differences between male and female offenders are confined to only a few key areas, the differences in these areas—for example, sensitivity to victimization, timing of onset of persistent offending, prevalence of mental health problems—can be substantial and can profoundly influence the effectiveness of risk assessments and treatment programs.

Risk Assessment, Intervention, and Treatment

Although most research on antisocial behavior has focused on males, male and female offending differs in many ways, including in the risk factors that influence offending, the trajectories of criminal careers, the mental health needs of incarcerated offenders, the handling of offenders by the juvenile justice

system, and the ultimate adult outcomes of offenders. It thus seems unlikely that risk assessment methodologies developed for male offenders would apply equally well to females. ¹⁰¹ For example, in a study of adult psychiatric patients, clinicians were able to predict future violence among males moderately accurately but performed no better than chance at predicting future violence among females. ¹⁰²

Few, if any, risk assessment instruments have been designed specifically for females within forensic settings. 103 Those that do exist assume that the questions employed apply equally well to males and females. There is a similar paucity of effective treatment programs for adolescent female offenders.¹⁰⁴ When the Office of Juvenile Justice and Delinquency Prevention (OJJDP) identified a list of promising programs, it cited twenty-four programs for boys, but only two for girls. 105 New Web-based resources developed to help identify programs for females also locate alarmingly few programs. A 2007 search using OJJDP's Model Programs Guide (www. $dsgonline.com/mpg2.5/mpg_index.htm)$ identified only eleven prevention programs, one immediate sanctions program, and no intermediate sanctions, residential, or reentry programs. Antisocial behaviors of boys and girls look relatively similar during childhood, so gender-specific programming may not be warranted until the adolescent years. 106 But there appears to be a critical need for genderspecific programming to address the unique needs of adolescent female offenders.

There is some evidence that gender-specific programs can be effective. One study found that girls placed in gender-specific Multidimensional Treatment Foster Care (MTFC) have lower levels of delinquent behavior than girls who receive group care when evaluated

two years later.¹⁰⁷ Although these findings are similar to those for males who receive MTFC, the study could not determine whether the gender-specific modifications made to the MTFC influenced the intervention effectiveness. Another promising intervention is the Earlscourt Girls Connection intervention, which targets multiple systems—for example, family and peers—and focuses on young girls with aggressive and antisocial problems.¹⁰⁸ Although this intervention made positive changes in defiant attitudes and behavior over a one-year period, the changes were based on reports by the participants' mothers, who were also involved in and affected by the intervention. It is thus difficult to know the extent to which the positive changes took place in the girls themselves and the extent to which they resulted from the mothers' altered parenting styles and attitudes toward their daughters. Nevertheless, even the apparent improvement reported by mothers (whose involvement in their children's lives has presumably increased due to program participation) is highly encouraging.

The default approach to treating young women who engage in serious forms of aggression and antisocial behavior has been either to treat them the same as male offenders or to treat them differently, but as an otherwise homogeneous group. This approach presupposes that one theory, model, or program can be used to understand and respond to the needs of all young women in the juvenile justice system. 109 The prevalence of such one-size-fits-all approaches to female offenders may, in fact, explain why little progress has been made on understanding the etiology of female offending. Odgers and her colleagues identified three subgroups of female juvenile offenders based on self-reported offending profiles. 110 Within a sample

of incarcerated female offenders, the study found a low-offending group, a delinquent group, and a highly violent and delinquent group. Female offenders are thus highly heterogeneous, and future studies, as well as future treatment programs, need to account for such diversity.

Implications for Practice and Policy

As data on female offenders accumulate, what conclusions can practitioners and policymakers draw from the emerging picture? First, a growing body of evidence makes clear why policies and practices for female offending must be improved: not only are females accounting for a growing share of the total population of offenders (because of a combination of increases in female violence. changes in enforcement policy, and reductions in male arrest rates), but the long-term consequences of offending for females are often more pronounced than those for males, with effects that extend to the next generation.

Second, studies of the experiences of female offenders in the juvenile justice system point to a number of conclusions regarding treatment of female offenders at the "front-end" of the system. Different studies have reached different conclusions about whether the juvenile justice system is more or less lenient toward female offenders at various stages of processing. In part, the studies are inconclusive because it is difficult to account properly for the accumulated selection effects at each stage of processing. For example, females are less likely to be arrested for most offenses, and once arrested, are less likely to be formally charged. Once charged, however, they appear more likely to receive secure confinement—whether because of a fundamental bias or because previous processing steps

have filtered out the less serious offenders remains unclear. The large number of female offenders with mental health problems (see the article in this volume by Thomas Grisso), however, combined with the relative scarcity of community-based treatment options (see the article in this volume by Peter Greenwood), suggests that the juvenile justice system is functioning as a source (however ineffective) of otherwise unavailable mental health treatment, especially for girls. Diverting female offenders with mental health problems to community-based treatment programs would not only improve individual outcomes, but allow the juvenile justice system to focus on cases that present the greatest risk to public safety.

Third, reliable risk assessment tools for female offending are in dramatically short supply (see the article in this volume by Edward Mulvey and Anne-Marie Iselin). Although boys and girls share many of the same risk factors for offending, tools developed for use with boys often measure different underlying characteristics in girls and boys. Moreover, the characteristics measured can change with age in ways that vary by gender. Assessing risk using inaccurate tools will lead to inaccurate predictions. Practitioners are thus cautioned to avoid relying on such tools until their validity is demonstrated or until tools designed specifically for females are developed and tested.

Although proven risk assessment tools for girls are notably lacking, some research on risk factors for persistent offending suggests that early childhood aggression in girls may prove to be an important precursor (even more so than for boys) and that prevention efforts responding to such early warning signs could pay large dividends. In general, however, most female offending behavior does not arise until

adolescence, which makes it more difficult to distinguish between persistent and adolescent-limited offending in girls. The high frequency of mental health problems among offending girls suggests that effective prevention efforts should target these mental health needs before they lead to chronic behavior problems.

The need for more effective treatment of female offenders is underscored by studies suggesting that females are poorly served by the present system. Despite a high prevalence of mental health problems, conductdisordered girls use mental health and social services less frequently than conductdisordered boys. 111 Similarly, conductdisordered girls receive fewer special services, are less likely to complete treatment, and are more likely to abandon in-patient treatment programs.¹¹² Community-based services for girls are less prevalent than those for boys. As such, girls are less likely to receive help from service agencies, and are more likely to be detained because of a lack of communitybased treatment options.¹¹³

Not only are the excessive mental health problems observed in female offenders a likely contributor to offending behavior, but they also interfere with rehabilitation efforts. As with prevention, effective treatment

policies must grapple with these mental health problems before antisocial or aggressive behavior can be effectively treated. Evidence is emerging that gender-specific treatment methods can be effective, especially when they target multiple aspects of offenders' lives, including family and peer environments. It is also becoming clear that female offenders are not a homogeneous group and that treatment approaches ultimately should be tailored to suit individual needs defined more specifically than by gender alone.

In conclusion, it should be noted that, despite myriad differences between male and female offending, many of the primary causes are nevertheless similar, and many, such as victimization and trauma, have roots that extend into childhood.¹¹⁴ The most effective policies for reducing juvenile crime will be those that foster development in a safe and nurturing environment throughout childhood. Effective prevention and treatment programs for female offenders must address their unique mental health needs. Finally, it should be recognized that female offenders are likely to require continued support long after their direct involvement with the juvenile justice system. Without such support, these offenders may be unable to avoid passing on their legacy to future generations.

Endnotes

- 1. Kenneth A. Dodge, John D. Coie, and Donald Lynam, "Aggression and Antisocial Behavior in Youth," in Handbook of Child Psychology, vol. 3: Social, Emotional, and Personality Development, edited by Nancy Eisenberg, William Damon, and Richard Lerner (Hoboken, N.J.: John Wiley & Sons, Inc., 2006), pp. 719-88.
- 2. Jane Sprott and Anthony Doob, Justice for Girls? Stability and Change in the Youth Justice Systems of the United States and Canada (University of Chicago Press, forthcoming); Alex R. Piquero, David P. Farrington, and Alfred Blumstein, "The Criminal Career Paradigm: Background and Recent Developments," in Crime and Justice: A Review of Research, vol. 30, edited by M. Tonry (University of Chicago Press, 2003), pp. 359-506.
- 3. Howard N. Snyder and Melissa Sickmund, Juvenile Offenders and Victims: 2006 National Report (Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2006).
- 4. Ibid.
- 5. Freda Adler, Sisters in Crime: The Rise of the New Female Criminal (New York: McGraw Hill, 1975), p. 287.
- 6. Darrell Steffensmeier and others, "Gender Gap Trends for Violent Crimes, 1980 to 2003: A UCR-NCVS Comparison," Feminist Criminology 1, no. 1 (2006): 72–98.
- 7. Snyder and Sickmund, Juvenile Offenders and Victims (see note 3).
- 8. Ibid.
- 9. Ibid.
- 10. C. Saulters-Tubbs, "Prosecutorial and Judicial Treatment of Female Offenders," Federal Probation 57 (1993): 37-42; Donna Bishop and Charles Frazier, "Gender Bias in Juvenile Justice Processing: Implications of the JJDP Act," Journal of Criminal Law and Criminology 82, no. 4 (1992): 1162-86.
- 11. Stacy L. Mallicoat, "Gendered Justice: Attributional Differences between Males and Females in the Juvenile Courts," Feminist Criminology 2, no. 1 (2007): 4-30.
- 12. John M. MacDonald and Meda Chesney-Lind, "Gender Bias and Juvenile Justice Revisited: A Multiyear Analysis," Crime & Delinquency 47, no. 2 (2001): 173–95.
- 13. Cassia Spohn and Dawn Beichner, "Is Preferential Treatment of Female Offenders a Thing of the Past? A Multisite Study of Gender, Race, and Imprisonment," Criminal Justice Policy Review 11, no. 2 (2000): 149-84; Darrell Steffensmeier and Stephen Demuth, "Does Gender Modify the Effects of Race-ethnicity on Criminal Sanctioning? Sentences for Male and Female White, Black, and Hispanic Defendants," Journal of Quantitative Criminology 22, no. 3 (2006): 241-61.
- 14. Joanne Belknap, The Invisible Woman: Gender, Crime, and Justice (Belmont, Calif.: Wadsworth, 1996), p. 290.
- 15. Snyder and Sickmund, Juvenile Offenders and Victims (see note 3).

- Chad R. Trulson and others, "In between Adolescence and Adulthood: Recidivism Outcomes of a Cohort
 of State Delinquents," Youth Violence and Juvenile Justice 3, no. 4 (2005): 355–87.
- 17. C. L. Odgers, M. M. Moretti, and D. J. Pepler, "Antisocial and Aggressive Behavior in Girls: Are We Measuring the Same Construct?" Paper read at International Association of Forensic Mental Health Services, Miami, Fla., April 2003; Thomas Achenbach, Manual for the Youth Self-Report and 1991 Profile (Burlington, Vt.: University of Vermont, Department of Psychiatry, 1991).
- 18. Dodge, Coie, and Lynam, "Aggression and Antisocial Behavior in Youth" (see note 1).
- Elizabeth Cauffman, "A Statewide Screening of Mental Health Symptoms among Juvenile Offenders in Detention," *Journal of the American Academy of Child and Adolescent Psychiatry* 43, no. 4 (2004): 430–39; Thomas Grisso, "Double Jeopardy: Adolescent Offenders with Mental Disorders," *Adolescent Development and Legal Policy* (University of Chicago Press, 2004), p. 251.
- D. L. Espelage and others, "A Cluster-Analytic Investigation of MMPI Profiles of Serious Male and Female Juvenile Offenders," *Journal of the American Academy of Child and Adolescent Psychiatry* 42, no. 7 (2003): 770–77.
- 21. Elizabeth Cauffman and others, "Gender Differences in Mental Health Symptoms among Delinquent and Community Youth," *Youth Violence and Juvenile Justice* 5, no. 3 (2007): 287–307.
- 22. Girls Incorporated, *Prevention and Parity: Girls in Juvenile Justice* (Indianapolis: Girls Incorporated, 1996).
- 23. Kathleen A. Pajer, "What Happens to 'Bad' Girls? A Review of the Adult Outcomes of Antisocial Adolescent Girls," *American Journal of Psychiatry* 155, no. 7 (1998): 862–70.
- David M. Fergusson, L. John Horwood, and Elizabeth M. Ridder, "Show Me the Child at Seven: The Consequences of Conduct Problems in Childhood for Psychosocial Functioning in Adulthood," *Journal of Child Psychology and Psychiatry* 46, no. 8 (2005): 837–49.
- 25. J. David Hawkins, Richard F. Catalano, and Janet Y. Miller, "Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Adulthood: Implications for Substance Abuse Prevention," *Psychological Bulletin* 112, no. 1 (1992): 64–105.
- Terrie E. Moffitt and others, Sex Differences in Antisocial Behaviour: Conduct Disorder, Delinquency, and Violence in the Dunedin Longitudinal Study (Cambridge University Press, 2001), p. 278.
- 27. Ibid.; Dale M. Stack and others, Girls' Aggression across the Life Course: Long-Term Outcomes and Intergenerational Risk (Cambridge University Press, 2005).
- 28. Peggy C. Giordano, Stephen A. Cernkovich, and Allen R. Lowery, "A Long-Term Follow-Up of Serious Adolescent Female Offenders," in Aggression, Antisocial Behavior, and Violence among Girls: A Developmental Perspective, Duke Series in Child Development and Public Policy, edited by Martha Putallaz and Karen Bierman (New York: Guilford Publications, 2004), pp. 186–202.
- 29. Lea Pulkkinen and Tuuli Pitkanen, "Continuities in Aggressive Behavior from Childhood to Adulthood," *Aggressive Behavior* 19, no. 4 (1993): 249–63.
- 30. Candice L. Odgers and others, "Female and Male Antisocial Trajectories: From Childhood Origins to Adult Outcomes," *Development and Psychopathology*, forthcoming.

- 31. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 32. R. J. Sampson, J. H. Laub, and C. Wimer, "Does Marriage Reduce Crime? A Counter-Factual Approach to Within-Individual Causal Effects," Criminology 44, no. 3 (2006): 465–508; Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 33. M. Brown, "Gender, Ethnicity, and Offending over the Life Course: Women's Pathways to Prison in the Aloha State," Critical Criminology 14, no. 2 (2006): 137-58.
- 34. Pulkkinen and Pitkanan, "Continuities in Aggressive Behavior from Childhood to Adulthood" (see note 29).
- 35. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 36. Deborah M. Capaldi, Hyoun K. Kim, and Joann Wu Shortt, "Women's Involvement in Aggression in Young Adult Romantic Relationships: A Developmental Systems Model," in Aggression, Antisocial Behavior, and Violence among Girls: A Developmental Perspective, Duke Series in Child Development and Public Policy, edited by Martha Putallaz and Karen Bierman (New York: Guilford Publications, 2004), pp. 223-41.
- 37. Ibid.; Peggy C. Giordano and Stephen A. Cernkovich, "Gender and Antisocial Behavior," in Handbook of Antisocial Behavior, edited by David Stoff, James Breiling, and Jack Maser (Hoboken, N.J.: John Wiley & Sons Inc., 1997), pp. 496–510.
- 38. Capaldi, Kim, and Shortt, "Women's Involvement in Aggression in Young Adult Romantic Relationships" (see note 36).
- 39. Pamela Clark Robbins, John Monahan, and Eric Silver, "Mental Disorder, Violence, and Gender," Law and Human Behavior 27, no. 6 (2003): 561-71.
- 40. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 41. Stack and others, Girls' Aggression across the Life Course (see note 27); Sara R. Jaffee and others, "When Parents Have a History of Conduct Disorder: How Is the Caregiving Environment Affected?" Journal of Abnormal Psychology 115, no. 2 (2006): 309-19; D. Huh, J. Tristan, and E. Wade, "Does Problem Behavior Elicit Poor Parenting? A Prospective Study of Adolescent Girls," Journal of Adolescent Research 21, no. 2 (2006): 185-204.
- 42. Lauren S. Wakschlag and Sydney L. Hans, "Relation of Maternal Responsiveness during Infancy to the Development of Behavior Problems in High-Risk Youths," Developmental Psychology 35, no. 2 (1999): 569-79.
- 43. Mark Zoccolillo, Daniel Paquette, and Richard Tremblay, "Maternal Conduct Disorder and the Risk for the Next Generation," in The Development and Treatment of Girlhood Aggression, edited by Debra Pepler and others (Mahwah, N.J.: Lawrence Erlbaum Associates Publishers, 2005), pp. 225–52.
- 44. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26); Alex R. Piquero and He Len Chung, "On the Relationship between Gender, Early Onset, and the Seriousness of Offending," Journal of Criminal Justice 29, no. 3 (2001): 189-206.
- 45. Delbert S. Elliott, "Serious Violent Offenders: Onset, Developmental Course, and Termination. The American Society of Criminology 1993 Presidential Address," Criminology 32, no. 1 (1994): 1–21.

- 46. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 47. Roger Tarling, Analyzing Offending: Data, Models, and Interpretations (London: Her Majesty's Stationery Office, 1993), p. 40.
- 48. Home Office Statistical Bulletin, *Criminal Careers of Those Born between 1953 and 1973* (London: Home Office, 1995).
- 49. Kate Keenan and Daniel S. Shaw, "Starting at the Beginning: Exploring the Etiology of Antisocial Behavior in the First Years of Life," in *Causes of Conduct Disorder and Juvenile Delinquency*, edited by Benjamin Lahey, Terrie E. Moffitt, and Avshalom Caspi (New York: Guilford Press, 2003), pp. 153–81; Rolf Loeber and Dale Hay, "Key Issues in the Development of Aggression and Violence from Childhood to Early Adulthood," *Annual Review of Psychology* 48 (1997): 371–410.
- 50. Kathleen M. Heide, "Youth Homicide: A Review of the Literature and a Blueprint for Action," *International Journal of Offender Therapy and Comparative Criminology* 47, no.1 (2003): 6–36; Kaj Björkqvist and Pirkko Niemelä, "New Trends in the Study of Female Aggression," in *Of Mice and Women: Aspects of Female Aggression*, edited by Kaj Björkqvist and Pirkko Niemelä (San Diego: Academic Press, 1992), pp. 3–16.
- Lisa M. Broidy and others, "Developmental Trajectories of Childhood Disruptive Behaviors and Adolescent Delinquency: A Six-Site, Cross-National Study," *Developmental Psychology. Special Issue: Violent Children* 39, no. 2 (2003): 222–45.
- 52. J. A. Landsheer and C. V. Dijkum, "Male and Female Delinquency Trajectories from Pre- through Middle Adolescence and Their Continuation in Late Adolescence," *Adolescence* 40, no. 160 (2005): 729–48.
- 53. Piquero and Chung, "On the Relationship between Gender, Early Onset, and the Seriousness of Offending" (see note 44).
- 54. Asha Goldweber, Lisa Broidy, and Elizabeth Cauffman, "Interdisciplinary Perspectives on Persistent Female Offending: A Review of Theory and Research," in *The Development of Persistent Criminality*, edited by J. Savage (Cambridge University Press, forthcoming).
- 55. Odgers and others, "Female and Male Antisocial Trajectories" (see note 30).
- 56. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 57. Persephanie Silverthorn and Paul J. Frick, "Developmental Pathways to Antisocial Behavior: The Delayed-Onset Pathway in Girls," *Development and Psychopathology* 11, no. 1 (1999): 101–26.
- Persephanie Silverthorn, Paul J. Frick, and Richard Reynolds, "Timing of Onset and Correlates of Severe Conduct Problems in Adjudicated Girls and Boys," *Journal of Psychopathology and Behavioral Assess*ment 23, no. 3 (2001): 171–81.
- N. A. White and A. R. Piquero, "A Preliminary Empirical Test of Silverthorn and Frick's Delayed-Onset Pathway in Girls Using an Urban, African American, U.S.-Based Sample," *Criminal Behaviour and Men*tal Health 14, no. 4 (2004): 291–309.
- 60. Cindy M. Schaeffer and others, "A Comparison of Girls' and Boys' Aggressive-Disruptive Behavior Trajectories across Elementary School: Prediction to Young Adult Antisocial Outcomes," *Journal of Consulting*

- and Clinical Psychology 74, no. 3 (2006): 500–10; Benjamin B. Lahey and others, "Testing Descriptive Hypotheses Regarding Sex Differences in the Development of Conduct Problems and Delinquency," Journal of Abnormal Child Psychology 34, no. 5 (2006): 737–55.
- 61. Odgers and others, "Female and Male Antisocial Trajectories" (see note 30).
- 62. Dale Hay, "The Gradual Emergence of Sex Differences in Aggression: Alternative Hypotheses," Psychological Medicine 37 (2007): 1527-37; Odgers and others, "Female and Male Antisocial Trajectories" (see note 30).
- 63. Goldweber, Broidy, and Cauffman, "Interdisciplinary Perspectives on Persistent Female Offending" (see note 54).
- 64. Ibid.
- 65. Richard Tremblay and D. LeMarquand, "Individual Risk and Protective Factors," in Child Delinquents: Development, Intervention, and Service Needs, edited by Rolf Loeber and David Farrington (Thousand Oaks, Calif.: Sage Publications, 2001).
- 66. Rolf Loeber and Kate Keenan, "Interaction between Conduct Disorder and Its Comorbid Conditions: Effects of Age and Gender," Clinical Psychology Review 14, no. 6 (1994): 497-523.
- 67. Lee Ellis, "Neurohormonal Bases of Varying Tendencies to Learn Delinquent and Criminal Behavior," in Behavioral Approaches to Crime and Delinquency: A Handbook of Application, Research, and Concepts, edited by Edward Morris and Curtis Braukmann (New York: Plenum Press, 1987), pp. 499–518.
- 68. Adrian Raine, The Psychopathology of Crime: Criminal Behavior as a Clinical Disorder (San Diego: Academic Press, 1993), p. 377.
- 69. Diana Fishbein, "The Psychobiology of Female Aggression," Criminal Justice and Behavior 19, no. 2 (1992): 99-126.
- 70. Lioba Baving, Manfred Laucht, and Martin H. Schmidt, "Oppositional Children Differ from Healthy Children in Frontal Brain Activation," Journal of Abnormal Child Psychology 28, no. 3 (2000): 267-75.
- 71. L. C. Klein and E. J. Corwin, "Seeing the Unexpected: How Sex Differences in Stress Responses May Provide a New Perspective on the Manifestation of Psychiatric Disorders," Current Psychiatry Reports 4 (2002): 441–48.
- 72. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 73. C. Schoen and others, The Commonwealth Fund Survey of the Health of Adolescent Girls (New York: Commonwealth Fund, 1997).
- 74. Office of Juvenile Justice and Delinquency Prevention, National Council on Crime and Delinquency (Washington, D.C.: U.S. Department of Justice, 1998).
- 75. Elizabeth Cauffman and others, "Posttraumatic Stress Disorder among Female Juvenile Offenders," Journal of the American Academy of Child and Adolescent Psychiatry 37, no. 11 (1998): 1209-16.
- 76. For the former, see Joseph Cocozza, Responding to the Mental Health Needs of Youth in the Juvenile Justice System (Seattle: National Coalition for the Mentally Ill in the Criminal Justice System, 1992). For

- the latter, see W. Evans and others, "Suicide Ideation, Attempts, and Abuse among Incarcerated Gang and Nongang Delinquents," *Child and Adolescent Social Work Journal* 13, no. 2 (1996): 115–26.
- 77. Cauffman and others, "Posttraumatic Stress Disorder among Female Juvenile Offenders" (see note 75).
- 78. Sibylle Artz, Sex, Power, and the Violent School Girl (New York: Teachers College Press, 1999), p. 248.
- 79. David F. Tolin and Edna B. Foa, "Sex Differences in Trauma and Posttraumatic Stress Disorder: A Quantitative Review of 25 Years of Research," *Psychological Bulletin* 132, no. 6 (2006): 959–92.
- 80. Elizabeth J. Susman and Kathleen Pajer, "Biology-Behavior Integration and Antisocial Behavior in Girls," Aggression, Antisocial Behavior, and Violence among Girls: A Developmental Perspective, Duke Series in Child Development and Public Policy, edited by Martha Putallaz and Karen Bierman (New York: Guilford Publications, 2004), pp. 23–47.
- 81. Maude Dornfeld and Candace Kruttschnitt, "Do the Stereotypes Fit? Mapping Gender-Specific Outcomes and Risk Factors," *Criminology* 30, no. 3 (1992): 397–419.
- 82. Sheldon Glueck and Eleanor Glueck, One Thousand Juvenile Delinquents: Their Treatment by Court and Clinic (Harvard University Press, 1934).
- 83. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 84. T. E. Keller and others, "Parent Figure Transitions and Delinquency and Drug Use among Early Adolescent Children of Substance Abusers," *American Journal of Drug and Alcohol Abuse* 28 (2002): 399–427.
- 85. Meda Chesney-Lind, "Girls and Violence: An Exploration of the Gender Gap in Serious Delinquent Behavior," in *Childhood Aggression and Violence: Sources of Influence, Prevention, and Control. Applied Clinical Psychology*, edited by David Crowell, Ian Evans, and Clifford O'Donnell (New York: Plenum Press, 1987), pp. 207–29.
- 86. Karen Heimer and Stacy De Coster, "The Gendering of Violent Delinquency," *Criminology* 37, no. 2 (1999): 277–318.
- 87. Steven E. Kroupa, "Perceived Parental Acceptance and Female Juvenile Delinquency," *Adolescence* 23, no. 89 (1988):171–85.
- 88. W. Meeus, S. Branje, and G. J. Overbeek, "Parents and Partners in Crime: A Six-Year Longitudinal Study on Changes in Supportive Relationships and Delinquency in Adolescence and Young Adulthood," *Journal* of Child Psychology and Psychiatry 45, no. 7 (2004): 1288–98.
- 89. Elizabeth Cauffman, Susan Farruggia, and Asha Goldweber, "Bad Boys or Poor Parents: Relations to Female Juvenile Delinquency," *Journal of Research on Adolescence*, forthcoming.
- 90. Candice L. Odgers and Marlene M. Moretti, "Aggressive and Antisocial Girls: Research Update and Challenges," *International Journal of Forensic Mental Health* 1, no. 2 (2002): 103–19.
- 91. Eleanor E. Maccoby, "Gender and Relationships: A Developmental Account, *American Psychologist* 45, no. 4 (1990): 513–20.
- 92. Marlene M. Moretti, Kimberley DaSilva, and Roy Holland, "Aggression from an Attachment Perspective: Gender Issues and Therapeutic Implications," in *Girls and Aggression: Contributing Factors and*

- Intervention Principles. Perspectives in Law and Psychology, edited by Marlene Moretti, Candice Odgers, and Margaret Jackson (New York: Kluwer Academic/Plenum Publishers, 2004), pp. 41–56.
- 93. Marlene M. Moretti, Roy Holland, and Sue McKay, "Self-Other Representations and Relational and Overt Aggression in Adolescent Girls and Boys," Behavioral Sciences and the Law. Special Issue: Youth Violence 19, no. 1 (2001): 109-26.
- 94. Debra J. Pepler and Wendy M. Craig, "A Peek behind the Fence: Naturalistic Observations of Aggressive Children with Remote Audiovisual Recording," Developmental Psychology 31, no. 4 (1995): 548–53.
- 95. Lisa Broidy and others, "Sex Differences in Empathy and Its Relation to Juvenile Offending," Violence and Victims 18, no. 5 (2003): 503-16.
- 96. Marlene M. Moretti and E. Tory Higgins, "Own Versus Other Standpoints in Self-Regulation: Developmental Antecedents and Functional Consequences," Review of General Psychology 3, no. 3 (1999): 188-223.
- 97. David P. Farrington and K. Painter, Gender Differences in Risk Factors for Offending (London: Home Office, 2004).
- 98. Karen M. Ramoutar and David P. Farrington, "Are the Same Factors Related to Participation and Frequency of Offending by Male and Female Prisoners?" Psychology, Crime and Law 12, no. 5 (2006): 557-72.
- 99. Giordano and Cernkovich, "Gender and Antisocial Behavior" (see note 37).
- 100. Moffitt and others, Sex Differences in Antisocial Behaviour (see note 26).
- 101. Candice L. Odgers, Marlene M. Moretti, and N. Dickon Reppucci, "Examining the Science and Practice of Violence Risk Assessment with Female Adolescents," Law and Human Behavior 29, no. 1 (2005): 7-27.
- 102. Charles Lidz, Edward Mulvey, and William Gardner, "The Accuracy of Predictions of Violence to Others," Journal of the American Medical Association 269 (1993): 1007–11.
- 103. Odgers, Moretti, and Reppucci, "Examining the Science and Practice of Violence Risk Assessment with Female Adolescents" (see note 101).
- 104. Alison E. Hipwell and Rolf Loeber, "Do We Know Which Interventions Are Effective for Disruptive and Delinquent Girls?" Clinical Child and Family Psychology Review 9, nos. 3-4 (2006): 221-55.
- 105. J. Howell, Guide for Implementing the Comprehensive Strategy for Serious, Violent, and Chronic Offenders (Washington: Office of Juvenile Justice and Delinquency Prevention, 1995).
- 106. Hipwell and Loeber, "Do We Know Which Interventions Are Effective for Disruptive and Delinquent Girls?" (see note 104).
- 107. Patricia Chamberlain, Leslie D. Leve, and David S. DeGarmo, "Multidimensional Treatment Foster Care for Girls in the Juvenile Justice System: 2-Year Follow-Up of a Randomized Clinical Trial," Journal of Consulting and Clinical Psychology 75, no. 1 (2007): 187-93.
- 108. Debra J. Pepler, Margaret M. Walsh, and Kathryn S. Levene, "Interventions for Aggressive Girls: Tailoring and Measuring the Fit," in Girls and Aggression: Contributing Factors and Intervention Principles. Perspectives in Law and Psychology, edited by Marlene Moretti, Candice Odgers, and Margaret Jackson

- (New York: Kluwer Academic/Plenum Publishers, 2004), pp. 131–45; Margaret M. Walsh, Debra J. Pepler, and Kathryn S. Levene, "A Model Intervention for Girls with Disruptive Behaviour Problems: The Earlscourt Girls Connection," Canadian Journal of Counseling. Special Issue: Violence in the Lives of Adolescents and Children: Research, Prevention, and Intervention 36, no. 4 (2002): 297–311.
- 109. Candice L. Odgers and others, "A Latent Variable Modeling Approach to Identifying Subtypes of Serious and Violent Female Juvenile Offenders," *Aggressive Behavior* 33, no. 4 (2007): 339–52.
- 110. Ibid.
- 111. David R. Offord, Michael H. Boyle, and Yvonne Racine, "Ontario Child Health Study: Correlates of Disorder," in *Annual Progress in Child Psychiatry and Child Development*, edited by Stella Chess and Margaret Hertzig (Philadelphia: Brunner/Mazel, 1990), pp. 194–204.
- 112. P. Wells and B. Faragher, "In-patient Treatment of 165 Adolescents with Emotional and Conduct Disorders: A Study of Outcome," *British Journal of Psychiatry* 162 (1993): 345–52.
- 113. L. Siegel and J. Senna, *Juvenile Delinquency: Theory, Practice, and Law*, 7th ed. (Belmont, Calif.: Wadsworth, 2000).
- Goldweber, Broidy, and Cauffman, "Interdisciplinary Perspectives on Persistent Female Offending" (see note 54).