The Development of Habitual Criminal Behavior

CHAPTER OBJECTIVES

- Define criminal behavior and juvenile delinquent.
- Define antisocial behavior, conduct disorder, and antisocial personality disorder.
- Review the offenses for which juveniles are most frequently charged.
- Provide an overview of the developmental approach to criminal behavior.
- Summarize Moffitt’s and Patterson’s theories.
- Identify developmental factors most relevant to habitual criminal behavior.
- Identify psychological factors associated with school violence.
- Specify the relationship between ADHD and delinquency.
- Identify those fire-setting behaviors that are precursors of habitual offending.
- Review research on adult psychopathy and juveniles with psychopathic characteristics.
Crime can be defined as “an intentional act in violation of the criminal law committed without defense or excuse, and penalized by the state as a felony or misdemeanor” (Tappan, 1947, p. 100). In other words, criminal behavior is intentional behavior that violates a criminal code. It is intentional in that it did not occur accidentally or without some justification or excuse. To be held criminally responsible, a person must have known what he or she was doing during the criminal act and must have known that it was wrong under the law. To convict someone of a criminal offense, the prosecution (the government) generally must prove that the defendant committed a voluntary act (actus reus) intentionally, or with a guilty state of mind (mens rea). The statute defining the offense will specify what actions and what mental states (together called “elements”) constitute a particular crime (La Fond, 2002). If a case goes to trial, the judge or jury can convict the defendant only if the prosecutor proves all elements beyond a reasonable doubt (the burdens of proof were outlined in In Focus Box 5.1 in Chapter 5). However, if a defendant pleads guilty, the prosecutor is spared the burden of doing so, and a conviction is still entered on the record.

The spectrum of criminal behavior is extremely wide, ranging from minor traffic violations to murder. In 2002, the public became much more aware of corporate crimes, a category of offenses that has long captured the interests of criminologists who believe that extensive harm is perpetrated by persons in power. During that year, it became apparent that several powerful corporations, such as Enron (the world’s dominant energy trader), Worldcom (a telecommunications giant), Global Crossing (worldwide computer networking services), and others were involved in serious accounting improprieties that misled and betrayed investors. In the case of Enron, the wrongdoing affected the retirement, security, and jobs of its employees. The scandals prompted Congress to pass a financial accountability bill—the Sarbanes-Oxley Act of 2002—that tries to address financial abuses by corporations.

Although many people from all socioeconomic groups break laws, only a few become persistent offenders who commit numerous serious crimes, including crimes of a violent nature. Consequently, we restrict our discussion to offenders who demonstrate a habitual, persistent offending history of committing serious crimes. We will especially concentrate on those offenders who often lead a lifelong criminal career of engaging in a wide variety of criminal offenses. Good examples of repetitive, chronic offenders will be found in the life course–persistent offender discussed in the following section on juvenile delinquency, as well as the section on the psychopath reviewed later in the chapter.

In the next two chapters, we will narrow our focus to crimes involving sexual assault, intimidation, and violence, such as murder, stalking, hate crime, and arson—crimes that lend themselves particularly well to psychological research and theory. The purpose of the present chapter is to provide an overview of criminal behavior, with a focus on the developmental factors that are involved in the formation of serious or repetitive criminal behavior. Empirical research indicates that persistent antisocial behavior does not normally begin in adulthood but begins quite early in life, with signs
sometimes appearing even during the preschool years (Moffitt, 1993a, 1993b). Consequently, the best place to start is by examining the developmental trajectory of the emerging juvenile offender. Before we do, though, it is important to avoid the temptation to seize on one cause or single explanation of crime. The causes of crime and delinquency are multiple, complex, and probably result mostly from some complicated interaction of several influences.

Although “the crime problem” as a whole can be attributed to any number of broad societal factors—racism, poverty, glorification of violence, sexism, and the availability of handguns are examples—the cause of a given individual’s criminal behavior is unlikely to be unidimensional.

The Juvenile Offender

Definition of Juvenile Delinquency

Juvenile delinquency is an imprecise, social, clinical, and legal label for a broad spectrum of law- and norm-violating behavior. At first glance, a simple legal definition appears to be adequate: Delinquency is behavior against the criminal code committed by an individual who has not reached adulthood. But the term delinquency has numerous definitions and meanings beyond this one-sentence definition. In some states, the legal definition also includes status offending, which is not behavior against the “adult” criminal code but is behavior prohibited only for juveniles. For example, running away, violating curfew laws, and truancy all qualify as status offenses.

In addition, social, legal, and psychological definitions of delinquency overlap considerably. Social definitions of delinquency encompass the gamut of youthful behaviors considered inappropriate, such as aggressive behavior, truancy, petty theft, vandalism, drug abuse, sexual promiscuity, and even incorrigibility. The behavior may or may not have come to the attention of the police and, in fact, often does not. If the behavior is known to the police, it is not unusual for “social delinquents” to be referred to community social service agencies or to juvenile courts, but these youth do not qualify for the legal definition of delinquent unless they are found at a court hearing to have committed the crime for which they are charged. Therefore, legally speaking, a juvenile delinquent is one who commits an act against the criminal code and who is adjudicated delinquent by an appropriate court. The legal definition is usually restricted to persons younger than age 18, but states vary in their age distinctions. A handful of states give criminal courts, rather than juvenile courts, automatic jurisdiction over juveniles at age 16. Furthermore, all states allow juveniles to be tried as adults in criminal courts under certain conditions and for certain offenses.

Psychological or psychiatric definitions of delinquency include the symptom-based labels of “conduct disorder” or “antisocial behavior.” Conduct disorder (often abbreviated CD) is a diagnostic designation used to represent a group of behaviors characterized by habitual misbehavior, such as stealing, setting fires, running away from home, skipping school, destroying property, fighting, being cruel to animals and people, and
frequently telling lies. Under this definition, the “delinquent” may or may not have been
arrested for these behaviors. Some of the behaviors, in fact, are not even against the crim-
inal law. CD is described more fully in the fourth edition of the American Psychiatric
Association’s (1994) *Diagnostic and Statistical Manual of Mental Disorders*, commonly
referred to as the *DSM-IV*, and the more recent, slightly modified version of the manual,
referred to as the *DSM-IV-TR* (American Psychiatric Association, 2000). The *TR* stands
for “text revision.” The *DSM-IV* divides conduct disorders into two categories, depend-
ing on the age at onset of the misbehaviors. If the misconduct began in childhood
(before age 10), it is called *conduct disorder: childhood-onset type*. If the misconduct
began in adolescence, it is called *conduct disorder: adolescent-onset type*.

The more psychological term *antisocial behavior* is usually reserved for more seri-
ous habitual misbehavior, which involves actions that are directly harmful to the well-
being of others. It is to be distinguished, however, from *antisocial personality disorder
(ASP)*, a psychiatric diagnostic label reserved primarily for *adults* at least 18 years of
age who displayed conduct disorders as children or adolescents and who continue seri-
ous offending well into adulthood. Our main focus throughout this chapter will be on
the chronic, repetitive offender who moves from adolescence to adulthood in a con-
tinuing cycle of offending and reoffending.

Although many psychologists do subscribe to the designations of conduct disor-
der and antisocial behavior, a growing number of them also approach the issue of
crime and delinquency with an emphasis on developmental and cognitive processes
in an effort to describe and understand offending behavior. For example, Moffitt’s
(1993a) developmental theory provides a cogent sketch of explaining crime from a
developmental perspective, and Hare’s (1996) concept of criminal psychopathy offers
an intriguing delineation of the emotional, cognitive, and biopsychological factors
involved in repetitive, serious offending over a lifetime. We will review each of these
perspectives shortly. First, it is important that we understand the nature and extent of
juvenile offending in the United States.

**The Nature and Extent of Juvenile Offending**

The amount of delinquent behavior—what is both reported and unreported to law
enforcement agencies—is essentially an unknown area (Krisberg, 1995). We simply do
not have complete data on the national incidence of juvenile delinquency, broadly
defined. Although data are incomplete, we do have some statistics collected by law
enforcement agencies, the courts, and juvenile correctional facilities.

Unlawful acts committed by juveniles can be divided into five major categories:

1. Unlawful acts against persons
2. Unlawful acts against property
3. Drug offenses
4. Offenses against the public order
5. Status offenses
American juvenile courts handled an estimated 1.6 million delinquency cases in 2002 (Stahl, 2006). In addition, approximately 30 million youths are under some form of juvenile court jurisdiction in any given year, and 80% of them are between the ages of 10 and 15. According to the most recent data, 23% of the cases handled by juvenile courts concerned person offenses (violent offenses), 39% of the cases were property offenses, 12% dealt with drug law violations, and 26% were public order offenses (Puzzanchera et al., 2004). Public order offenses include obstruction of justice, disorderly conduct, weapons offenses, liquor law offenses, and nonviolent sex offenses.

The first four categories listed above are comparable in definition to crimes committed by adults. Status offenses, on the other hand, are acts that only juveniles can commit and that can be adjudicated only by a juvenile court. As discussed earlier, typical status offenses range from misbehavior, such as violations of curfew, underage drinking, running away from home, and truancy, to offenses that are interpreted very subjectively, such as unruliness and ungovernability (beyond the control of parents or guardians). The most common status offenses referred by law enforcement agencies are underage drinking (92%), running away from home (40%), ungovernability (11%), and truancy (10%) (Sickmund, 2003).

The juvenile justice system historically has supported differential treatment of male and female status offenders. Adolescent girls, for example, have often been detained for incorrigibility or running away from home, while the same behavior in adolescent boys was ignored or tolerated. As we approached the end of the 20th century, about three times as many girls were detained for status offenses as boys (U.S. Department of Justice, 1988). In recent years, as a result of suits brought on behalf of juveniles, many courts have put authorities on notice that this discriminatory approach is unwarranted. For example, the status offense of runaway has now dropped to a 3 to 2 ratio, with three females taken into custody for every two males (Federal Bureau of Investigation [FBI], 2002b; Sickmund, 2003). The largest proportions of status offenses that involve females are running away from home (61%), truancy (46%), ungovernability (45%), and underage drinking (29%) (Sickmund, 2003). The practice of confining status offenders in correctional institutions is also diminishing.

It has been argued that, because status offenses lend themselves to so much subjectivity, they should be removed from the purview of all state juvenile courts (American Bar Association, 1979). Some states have clearly moved in this direction. On the other hand, many states do not call status offenders “delinquents” but do allow their detention or supervision. They are presumed to be in need of protection from either their own rash behavior or the behavior of others. The statutes allowing this are usually referred to as PINS or CHINS (person or child in need of supervision) laws. Under these laws, runaways or incorrigible youngsters are subject to juvenile court jurisdiction, often at the instigation of their parents, even though they may not have committed an act comparable to a crime. These statutes also allow juvenile or family courts to address the needs of neglected and dependent children.

Youth crime data are collected from a mixture of sources: (1) official records of police arrests, such as the FBI’s Uniform Crime Reports (UCR); (2) reports from
victims, such as the National Crime Victimization Survey (NCVS); (3) self-reports of delinquent involvement, in which national samples of youth are asked to complete questionnaires about their own behavior, such as in the National Youth Survey (Elliott, Ageton, & Huizinga, 1980) and Monitoring the Future (MTF); (4) juvenile court processing, as reported by the National Center for Juvenile Justice (NCJJ); (5) juvenile corrections, as reported in the monograph *Children in Custody* (CIC); and (6) probation and parole statistics, as reported in various governmental publications. The last three sources of information have the major disadvantage of greatly underestimating the number of actual offenses because, even more than in the criminal system, a very high proportion—perhaps a majority—of cases are either undetected or dismissed before reaching the courts. In other words, because of parental involvement, negotiations, and community programs, many offenders are diverted before they go to juvenile court. To add to the problem of obtaining statistics on juvenile offenders, juvenile court dockets do not always reflect serious offending. Referrals by parents, schools, probation officers, and other courts, either for status offenses or for supervision, make up much of a court’s delinquency workload. Because of this confusion, perhaps the most complete official nationwide compilation of juvenile offenses today remains the FBI’s UCR. Consequently, we will touch briefly on the juvenile offending data as presented in this document.

### The Uniform Crime Reports

The FBI’s UCR, first compiled in 1930, is the most frequently cited source of U.S. crime statistics. The UCR is an annual document containing accounts of crime known to law enforcement agencies across the country, as well as arrests. It is important to note that the UCR does not include conviction data. It is strictly law enforcement information. The UCR is available on the FBI Web site at www.fbi.gov.

The UCR divides crimes in several ways, including by age, gender, and race of persons arrested, as well as by city and region of the country. Crimes are also categorized according to seriousness. According to the UCR format, serious crimes that are indicators of the crime problem are called index crimes (or Part I offenses). However, this distinction may be misleading. For instance, larceny-theft is categorized as an index crime, whereas fraud, embezzlement, child sexual abuse, stalking, and drug offenses—all crimes about which the public is concerned—are classified as nonindex crimes. The UCR recognizes eight index crimes: (1) murder and non-negligent manslaughter, (2) forcible rape, (3) robbery, (4) aggravated assault, (5) burglary, (6) larceny-theft, (7) motor vehicle theft, and (8) arson. Table 7.1 illustrates the distribution of juvenile arrests for these offenses for 2005.

The UCR is no longer the sole method of recording police data on reported crimes and arrests. Since 1989, the FBI has collected data through the National Incident-Based Reporting System (NIBRS). The NIBRS collects data on crime incidents and arrests within 22 categories. For each offense known to law enforcement within these categories, incident, victim, property, offender, and arrestee information is gathered when available. The goal of the NIBRS is to modernize crime information and address many of the shortcomings that had been identified in the UCR.
Nationally, juveniles made up about 17% of the persons arrested in the United States during 2005. They were arrested for 16% of the violent crime and 26% of the property crime (FBI, 2006). It should also be emphasized that crime and arrest rates move in cycles, often due to the social, economic, and political climates that occur within a society at any given time. Therefore, although rates have decreased in recent years, they may—for a variety of reasons—also suddenly increase in future years.

One point needs to be made clear at the outset: a small percentage of offenders are responsible for a large proportion of the total crimes committed (Chaiken, 2000; Coid, 2003). In any given population, the most persistent 5% or 6% of offenders are responsible for at least 50% to 60% of known crimes (Farrington, Ohlin, & Wilson, 1986; Lynam, 1997). It is also important to note that only 3% to 15% of reported serious offenses ever result in a police contact (Bartol, 2002). Self-report surveys suggest that serious, repetitive juvenile offenders escape detection about 86% of the time (Elliott, Dunford, & Huizinga, 1987). These figures clearly indicate that measures of juvenile offending substantially underestimate the overall juvenile crime rate. In addition, frequent offenders usually do not specialize in any one particular kind of offending, such as theft, larceny, or drug trafficking. Instead, they tend to be involved in a wide variety of offenses, ranging from minor property crimes to highly violent ones.

We do not intend to dwell on offending statistics, except to provide some perspective on official offending rates and to emphasize that juvenile and adult offending have significantly decreased in recent years. At this point, however, it is time to turn our attention to identifying some of the known major individual causes of crime, beginning with developmental factors.

Table 7.1 Juvenile Arrests for Index Crimes, 2005

<table>
<thead>
<tr>
<th>Offense Charged</th>
<th>Total Arrests, All Ages</th>
<th>Under Age 18</th>
<th>Under Age 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total index crimes</td>
<td>1,641,408</td>
<td>381,369</td>
<td>3,749</td>
</tr>
<tr>
<td>Violent crimes</td>
<td>445,846</td>
<td>70,482</td>
<td>642</td>
</tr>
<tr>
<td>Murder</td>
<td>10,335</td>
<td>929</td>
<td>0</td>
</tr>
<tr>
<td>Forcible rape</td>
<td>18,733</td>
<td>2,888</td>
<td>12</td>
</tr>
<tr>
<td>Robbery</td>
<td>85,309</td>
<td>21,515</td>
<td>73</td>
</tr>
<tr>
<td>Aggravated assault</td>
<td>331,469</td>
<td>45,150</td>
<td>557</td>
</tr>
<tr>
<td>Property crimes</td>
<td>1,195,560</td>
<td>310,887</td>
<td>3,103</td>
</tr>
<tr>
<td>Burglary</td>
<td>220,391</td>
<td>57,506</td>
<td>697</td>
</tr>
<tr>
<td>Larceny-theft</td>
<td>854,856</td>
<td>219,881</td>
<td>2,014</td>
</tr>
<tr>
<td>Motor vehicle theft</td>
<td>108,301</td>
<td>27,666</td>
<td>79</td>
</tr>
<tr>
<td>Arson</td>
<td>12,606</td>
<td>6,178</td>
<td>313</td>
</tr>
</tbody>
</table>

The Developmental Perspective

Over the past three decades, the contemporary study of crime and delinquency has shifted toward a developmental perspective. As observed by Hartup (2005), following groups of individuals from birth to adulthood teaches us a great deal about how antisocial behavior develops. There is solid research evidence, for example, that serious, persistent delinquency patterns and adult criminality begin in early childhood. Some signs begin during the preschool years. Researchers have discovered discernible differences between young children who ultimately became serious delinquents and those who did not. These differences are in childhood experiences, biological and genetic predispositions, social skills, and feelings for others. The emerging developmental approach has emphasized the neurological, biological, mental, emotional, and social changes in children and how these changes influence the emergence of delinquency and adult criminal behavior.

Perhaps the most fruitful approach is to conceptualize development as following a path or trajectory. Research has strongly supported the hypothesis that people follow different development pathways in their offending or nonoffending histories. Some youth, for example, engage in defiant and disobedient behavior at very young ages, which sometimes progresses into more severe forms of violence and criminal behavior during adolescence and young adulthood (Dahlberg & Potter, 2001). Other youth display early signs of cruelty to animals, bullying, fire setting, and substance abuse, behavioral patterns that continue well into adulthood. And many young people display very few signs of antisocial behavior during their childhood, but participate in some vandalism, theft, alcohol consumption, and drug experimentation during adolescence. Developmental theory has clearly been the most instrumental in identifying and documenting the various developmental pathways.

Developmental Theory

The Moffitt Theory

Research conducted by Terrie Moffitt (1993a, 1993b) and her colleagues indicates that a very helpful way to understand delinquency is to view it as progressing along at least two developmental paths. Because the Moffitt theory is one of the dominant theories in the psychology of crime and delinquency today, it is important that we cover it in some detail. We must emphasize at the outset that, although most of Moffitt’s research identifies the two paths that will be covered below, more recent research by Moffitt and many other scholars strongly suggests that a two-path theory is not sufficient. The two-path theory is, however, a good place to begin.

On one path, we see a child developing a lifelong trajectory of delinquency and crime beginning at a very early age, probably around 3 or even younger. Moffitt (1993a) reports that “across the life course, these individuals exhibit changing manifestations of antisocial behavior: biting and hitting at age four, shoplifting and truancy at age ten, selling drugs and stealing cars at age sixteen, robbery and rape at age twenty-two, and fraud and child abuse at age thirty” (p. 679). These individuals, whom Moffitt calls life course–persistent offenders (LCPs), continue their antisocial ways across all
kinds of conditions and situations. Moffitt (1993a, 1993b) finds that many of these LCPs exhibit neurological problems during their childhood, such as difficult temperaments as infants, attention deficit disorder or hyperactivity as children, and learning problems during their later school years. Some of these neurological problems are present before or soon after birth. These same children may develop judgment and problem-solving deficiencies that become apparent when the children reach adulthood.

LCPs generally commit a wide assortment of aggressive and violent crimes over their lifetimes. Moreover, LCPs as children miss opportunities to acquire and practice prosocial and interpersonal skills at each stage of development. This is partly because they are rejected and avoided by their childhood peers and partly because their parents and other caretakers become frustrated and give up on them (Coie, Belding, & Underwood, 1988; Coie, Dodge, & Kupersmith, 1990; Moffitt, 1993a). Furthermore, disadvantaged living conditions, inadequate schools, and violent neighborhoods are factors that are very likely to exacerbate the ongoing and developing antisocial behavioral pattern. Based on available data, the number of LCPs in the male juvenile offender population is estimated to be somewhere between 5% and 10% (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). “Less than 10% of males should show extreme antisocial behavior that begins during early childhood and is thereafter sustained at a high level across time and across circumstances, throughout childhood and adolescence” (Moffitt, 1993a, p. 694). Less than 2% of females can be classified as early starters in a persistent career of crime (Coid, 2003).

The great majority of “delinquents” are those individuals who begin offending during their adolescent years and stop offending somewhere around their 18th birthday. In essence, these adolescent delinquent behaviors arise from peer and social environmental factors, and the offending tends to be temporary. Moffitt labels these individuals adolescent-limited offenders (ALs). Moffitt (1993a) estimates that a majority of adolescents are involved in some form of antisocial behavior during their teens, but then the antisocial behavior stops as they approach the responsibilities of young adulthood.

The developmental histories of the ALs do not demonstrate the early and persistent antisocial problems that members of the LCP group manifest. However, the frequency—and, in some cases, the violence level—of the offending during the teen years may be as high as that of the LCP youth. In effect, the teenage offending patterns of ALs and LCPs may be highly similar during the teenage years (Moffitt et al., 1996):

The two types cannot be discriminated on most indicators of antisocial and problem behavior in adolescence; boys on the LCP and AL paths are similar on parent-, self-, and official records of offending, peer delinquency, substance abuse, unsafe sex, and dangerous driving. (p. 400)

That is, a professional could not easily identify the group classification (AL or LCP) simply by examining juvenile arrest records, self-reports, or the information provided by parents during the teen years.

The AL delinquent is most likely to be involved in offenses that symbolize adult privilege and demonstrate autonomy from parental control (Bartol, 2002). Examples
include vandalism (usually school property), drug and alcohol offenses, theft, and status offenses such as running away or truancy. In addition, AL delinquents may engage in crimes that are profitable or rewarding, but they also have the ability to abandon these actions when more socially approved behavioral patterns become more rewarding and acceptable to significant others. For example, the onset of young adulthood brings on new opportunities, such as leaving high school for college, obtaining a full-time job, and entering a relationship with a prosocial person. AL delinquents are quick to learn that they have something to lose if they continue offending into adulthood. During childhood, in contrast to LCP children, AL youngsters have learned to get along with others. Research has consistently shown that social rejection by peers in the elementary school grades is a potent risk factor for the development of antisocial behavior problems in adolescence and adulthood (Dodge & Pettit, 2003; Laird, Jordan, Dodge, Pettit, & Bates, 2001). Therefore, by adolescence, AL youth normally have a satisfactory repertoire of academic, social, and interpersonal skills that enable them to “get ahead” and develop normal, lasting relationships. Their developmental histories and personal dispositions allow them the option of exploring new life pathways, an opportunity not usually afforded the LCP youth.

A growing body of research is finding, though, that a simple dual developmental path may not adequately capture all the variations in criminal careers (Donnellan, Ge, & Wenk, 2000). Using data from three studies of crime and delinquency conducted in London; Philadelphia; and Racine, Wisconsin, some researchers (D’Unger, Land, McCall, & Nagin, 1998; Nagin, Farrington, & Moffitt, 1995; Nagin & Land, 1993) have identified four developmental paths that perhaps more comprehensively reflect the reality of offending patterns. The four paths are (1) the adolescent-limited offenders, (2) the life course–persistent offenders (also called “high-level chronic offenders”), (3) the low-level chronic offenders (LLCs), and (4) a nonoffending pattern (NCs). The ALs followed Moffitt’s (1993a, 1993b) hypothesized offending pattern, beginning in their early teens, peaking at around age 16, and then showing a steady decline during their late teens and early adulthood (Nagin et al., 1995). The LLCs, on the other hand, exhibited a rise in offending through early adolescence, reached a plateau by mid-teens, and remained at the same offending level well past age 18. The LCPs demonstrated their usual pattern of beginning antisocial behavior early and at a high level throughout their lifetimes. Interestingly, research by White, Bates, and Buyske (2001) suggests that it might be meaningful to introduce a fifth category, characterized by youth who engage in relatively little delinquency in early adolescence but for whom delinquency increases from late adolescence into adulthood.

**Coercion Developmental Model**

Like Moffitt and others, Gerald Patterson and his colleagues also believe that early starters in antisocial behaviors are at greater risk for more serious criminal offending as they grow older. The major difference between other developmental theories and the coercion developmental model is that the Patterson group focuses far more on the role of parenting than on specific characteristics of the child. The Patterson model argues that poor parental monitoring of child activities, disruptive
family transitions (e.g., divorce), and inconsistent parental discipline are major psychosocial contributors to early-onset delinquency (Brennan, Hall, Bor, Najman, & Williams, 2003; Patterson, 1982). More specifically, the model posits that the key predictor of early-onset offending is the family environment in which the child learns to utilize coercive behaviors (e.g., temper tantrums, whining) to escape aversive parental discipline and authority.

Coercion theory acknowledges that certain children—especially those with irritable temperaments and dispositions—are more likely to elicit inept parenting strategies. Essentially, the parent and the child each behave in a way that is aversive to the other in an attempt to control the other’s behavior. As the child's aversive and coercive behaviors increase in intensity and frequency, the parent eventually acquiesces, unwittingly reinforcing the child’s behavior. As the child becomes increasingly irritating, the parent further escalates power-assertion techniques and tries to apply coercive or forced-compliance methods on the child. In simple terms, coercive theory explains how parents and children mutually “train” each other to behave in ways that increase the children’s aggressive behavior and decrease the parents’ control over these aversive and aggressive behaviors (Granic & Patterson, 2006).

Coercive exchanges between parents and children may emerge as early as 18 months of age (Granic & Patterson, 2006). At approximately 18 to 24 months, a normal behavioral pattern for children is to become oppositional to authority, saying “no” to just about anything, and throwing occasional attention-getting tantrums. For most children, these behaviors peak at the end of the second year. However, for some, the beginnings of coercive exchanges may be triggered by the reinforcing nature of parental responses to these oppositional patterns and outbursts. In other words, by throwing a tantrum the child gets the attention she wants and, possibly, the outcome she was seeking, such as being allowed to watch one more video. Under these conditions, coercion eventually becomes the child’s primary interpersonal strategy and thus generalizes to environments outside the home. According to the theory, antisocial behaviors progress from coercive parent–toddler interactions to similar interactions with teachers, peers, and others in the social environment. The socially inept child who uses coercive methods in dealing with others, however, soon finds she is rejected by peers.

The theory identifies two developmental trajectories of antisocial behavior. “One trajectory leads to early arrest (prior to age 14) and adult crime and the other to late-onset arrests and desistence from adult crime” (Patterson & Yoerger, 2002, p. 147). Overall, though, the model takes the position that both the early- and late-start trajectories represent variations of the same basic processes. Specifically, social-environmental influences—such as divorce, poverty, or parental depression—work in combination with inept parenting and deviant peer socialization to engender different levels of delinquent and antisocial behavior.

Hartup (2005) considers coercive developmental theory to be one of the most brilliant achievements of the 20th century for explaining the links between parent–child relationships and the development of antisocial behavior. Zoccolillo et al.
(2005) call the theory one of the most comprehensive models in the field of child aggression. In general, the theory has been well supported in the research literature.

**Developmental Factors in the Formation of Crime and Delinquency**

Daniel Waschbusch (2002) reports that “disruptive behavior problems in childhood typically include hyperactivity, impulsivity, inattention, oppositional behaviors, defiance, aggression, and disregarding the rights of others” (p. 118). According to Waschbusch, these disruptive behavior problems affect 5% to 10% of children and adolescents and account for more than 50% of referrals to mental health clinics. When left untreated, disruptive children are likely to experience peer rejection, have problems in school, demonstrate difficulties getting along with others, and exhibit delinquent behaviors. Similarly, four of the most prominent features of LCPs or serious, persistent offenders that are continually reported in the research literature are (1) hyperactive-impulsive-attention problems, (2) conduct problems, (3) deficient cognitive ability, and (4) poor interpersonal or social skills (often resulting in peer rejection). It is important, therefore, that we cover each in some detail.

**Attention Deficit/Hyperactivity Disorder (ADHD) and Delinquency**

The term attention deficit/hyperactivity disorder (ADHD) encompasses a wide variety of terms frequently used in mental and educational contexts, such as minimal brain dysfunction (MBD), attention deficit disorder (ADD), and hyperactive-impulsive attention (ADHD) problems or simply “hyperactivity.” We will use the term most commonly used today, ADHD. All the terms, however, refer basically to three central behaviors: (1) excessive motor activity (cannot sit still, fidgets, runs about, is talkative and noisy), (2) impulsivity (acts before thinking, shifts quickly from one activity to another, interrupts others, does not consider consequences of behavior), and (3) inattention (does not seem to listen, is easily distracted, loses things necessary for tasks or activities).

Another symptom cluster that should not be confused with ADHD is oppositional defiant disorder (ODD), which has often been linked to crime. ODD symptoms include arguing with adults, refusing adults’ requests, deliberately trying to annoy others, blaming others for mistakes, and being spiteful or vindictive (Kosson, Cyterski, Steuerwald, Neuman, & Walker-Matthes, 2002).

Although ADHD is the leading psychological diagnosis for children living in the United States (Flory, Milich, Lynam, Leukefeld, & Clayton, 2003; Nigg, John, et al., 2002), estimates of the incidence of ADHD in school-age children range widely from 1% to 20% (American Psychiatric Association, 2000; Developmental Disabilities Branch, 2000). To date, however, no systematic nationwide research has been conducted to identify the extent, seriousness, or nature of ADHD. The research has
consistently revealed that boys outnumber girls, but the ratios reported have ranged from 2:1 to 9:1 (Root & Resnick, 2003). According to Root and Resnick, black children appear to receive the diagnosis more often than other racial or ethnic minority children, although the reasons for this finding are debatable. It is important to realize that all children (and adults) have certain levels of inattention, overactivity, and impulsivity in situations, but for the diagnostic label of ADHD to be assigned, the symptoms must be unusually persistent and pronounced (Root & Resnick, 2003). Although most studies have been carried out in the United States and Europe, research has also supported the validity of ADHD in developing countries (Rohde et al., 2001) and across different cultures (Barkley, 1998).

Furthermore, a significant percentage of ADHD children show the same persistent symptoms into adulthood (Nigg, Butler, Huang-Pollock, & Henderson, 2002; Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998). In other words, many people do not “outgrow” ADHD. The observation that ADHD is prevalent among adults is a recent conclusion, however, and remains somewhat controversial (Barkley, 1998; Faraone, Biederman, & Friedman, 2000; Nigg, John, et al., 2002).

Educators note that ADHD children have difficulty staying on task, remaining cognitively organized, sustaining academic achievement in the school setting, and maintaining control over their behavior. ADHD is a puzzling problem, the cause of which is largely unknown. Some scientists contend that ADHD children are born with a biological predisposition toward inattention and excessive movement; others maintain that some children are exposed to environmental factors that damage the nervous system. Loeber (1990) reveals how exposure to toxic substances during the preschool years can interfere with a child’s neurological development, often resulting in symptoms of ADHD. For example, children exposed to low levels of lead toxicity (from paint) are more hyperactive and impulsive and are easily distracted and frustrated. They also show notable problems in following simple instructions. Some researchers observe that ADHD children do not possess effective strategies and cognitive organization with which to deal with the daily demands of school. These children often have particular difficulty in understanding and using abstract concepts. ADHD children also seem to lack cognitive organizational skills for dealing with new knowledge and information.

More recent research suggests that one of the primary causal factors appears to be inhibitory problems due to neuropsychological deficits (Barkley, 1997, 1998; Nigg, Butler, et al., 2002). The inhibitory problems may be primarily due to motor (behavioral) control (Nigg, 2000). Overall, the extant research underscores the possibility that the causes of ADHD are probably multiple and extremely difficult to tease out of the many ongoing interactions occurring between the nervous system and the environment.

Although many behaviors have been identified as accompanying ADHD, the major theme is that ADHD children are perceived as annoying and aversive to those around them. ADHD children are continually seeking and prolonging interpersonal contacts and eventually manage to irritate and frustrate those people with whom they interact. Because of these annoying and socially inappropriate
behaviors, they are often rejected by peers, especially if they are perceived as aggressive (Henker & Whalen, 1989). This pattern of peer rejection appears to continue throughout the developmental years (Dodge & Pettit, 2003; J. B. Reid, 1993). In many ways, ADHD appears to be more a disorder of interpersonal relationships than simply a disorder of hyperactivity. Some researchers find that ADHD children generally lack friendship and intimacy (Henker & Whalen, 1989). Moffitt (1990) reports that children between the ages of 5 and 7 who demonstrate the characteristics of both ADHD and delinquent behavior not only have special difficulty with social relationships but also have a high probability of demonstrating these problems into adolescence and beyond.

Experts argue that the most common problem associated with ADHD is delinquency and substance abuse (Beauchaine, Katkin, Strassberg, & Snarr, 2001). The data strongly suggest that youth with symptoms of both ADHD and delinquent behavior are at very high risk for developing lengthy and serious criminal careers (Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998; Moffitt, 1990; Pfiffner et al., 1999; Satterfield, Swanson, Schell, & Lee, 1994). David Farrington (1991), in his well-regarded research, also found that violent offenders often have a history of hyperactivity, impulsivity, and attention deficit problems. The relationship between ADHD and delinquency and adult crime is an area demanding much more research by forensic psychologists interested in studying crime and delinquency during their careers.

The most common method of treatment for ADHD is medication (especially methylphenidate, more commonly known as Ritalin, and its derivatives). However, although it apparently helps many children, many others exhibit numerous side effects, some of them severe. Counseling and psychotherapy are often used, often in conjunction with medication, but with limited success with this puzzling phenomenon, particularly over the long term. As many practitioners realize, ADHD children generally demonstrate multiple problems that can be best managed through treatment strategies that take into account all the factors impinging on the child at any given time (see Root & Resnick, 2003, for an excellent review). These treatment approaches are called “multisystemic” and will be dealt with more fully in Chapter 13.

**Conduct Disorders**

ADHD frequently co-occurs with a diagnostic category called “conduct disorders” (Coid, 2003; Offord, Boyle, & Racine, 1991; J. B. Reid, 1993). Waschbusch (2002) reports, for instance, that about 50% of disruptive children exhibit the basic symptoms of both ADHD and conduct disorders (CD). If disruptive children have the symptoms of one, about half the time they have the symptoms of the other. Not only does the presence of CD increase the symptoms of ADHD, but the combination of the two is an especially powerful predictor of a lifelong course of violence, persistent criminal behavior, and drug abuse (Flory et al., 2003; Molina, Bukstein, & Lynch, 2002; Pfiffner et al., 1999). As mentioned previously, conduct disorder consists of a cluster of maladaptive behaviors characterized by a variety of antisocial behaviors. Examples of this misbehavior include stealing, firesetting, running away from home, skipping school, destroying property, fighting, telling lies on a frequent
basis, and being cruel to animals and people. CD is generally considered to be a serious childhood disorder because it appears to be a precursor to chronic criminal behavior during adulthood (Lahey et al., 1995). According to the DSM-IV (American Psychiatric Association, 1994), the central feature of conduct disorder is the repetitive and persistent pattern of behavior that violates the basic rights of others. The DSM-IV recognizes two types of conduct disorder: childhood onset and adolescent onset. Childhood-onset CD occurs when the pattern begins before the age of 10. This pattern often worsens as the child gets older and is more likely to lead to serious and persistent criminal behavior in adulthood (Frick et al., 2003). According to Frick and colleagues, “In addition, children in the childhood-onset group are characterized by more aggression, more cognitive and neuropsychological disturbances, greater impulsivity, greater social alienation, and more dysfunctional backgrounds than are children in the adolescent-onset group” (p. 246).

On the other hand, adolescent-onset CD is characterized by the absence of any maladaptive behavior before the age of 10. After age 10, those with adolescent-onset CD tend to exhibit fewer problems in interpersonal and social skills but do reject traditional rules and formal procedures. They often associate with deviant peers in forbidden activities to show their independence and self-perceived maturity (Frick et al., 2003). In many respects, the two types of CDs follow the developmental paths of Moffitt’s (1993a, 1993b) LCPs (childhood onset) and ALs (adolescent onset).

Behavioral indicators of childhood-onset CDs can be observed in children’s interactions with parents or caretakers well before school entry (Reid, 1993). For instance, children who are aggressive, difficult to manage, and noncompliant in the home at age 3 often continue to have similar problems when entering school. Furthermore, as we noted, these behaviors show remarkable continuity through adolescence and into adulthood. CD children frequently have significant problems with school assignments, a behavioral pattern that often results in their being mislabeled with a “learning disability.” It is important to note that students with genuine learning disabilities are not necessarily conduct disordered. In other words, the two designations may overlap, but each is also a distinct categorization. Similar to ADHD children, aggressive CDs are at high risk for strong rejection by their peers. This rejection generally lasts throughout the school years and is very difficult to change (Reid, 1993). As described above, children who are consistently socially rejected by peers miss critical opportunities to develop normal interpersonal and social skills. Lacking effective interpersonal skills, these youth may meet their needs through more aggressive means, including threats and intimidation.

An estimated 6% to 16% of the male population is believed to have behavioral features of CD (American Psychiatric Association, 2000). The prevalence in girls ranges from 4% to 9.2% (Cohen, Cohen, & Brook, 1993; Zoccolillo, 1993). A study by Anna Bardone and her colleagues (Bardone, Moffitt, & Caspi, 1996) found that CD patterns in girls are a strong predictor of a lifetime of problems, including poor interpersonal relations with partners/spouses and peers, criminal activity, early pregnancy without supportive partners, and frequent job loss and firings. Similar to CD boys, CD girls—without intervention—often lead a life full of interpersonal conflict.
We must remind ourselves that there are multiple factors associated with delinquency, including serious and chronic offending. The previous section has focused on various deficiencies within the individual—hyperactivity, conduct disorder, and impulsivity, to name a few. Children live within a social system, however. The behavior and reactions of adults such as parents, caretakers, and teachers significantly affect the child’s behavior. In some cases, the “deficiencies” described here are due to abuse, maltreatment, neglect, or simply ignorance about effective child-rearing techniques. In these, as well as in other cases, intervention by competent and caring adults can avert a lifetime of continual offending.

**Cognitive Ability and Crime**

In addition to the emphasis on developmental pathways, ADHD, and conduct disorders, recent research on crime and delinquency has identified the importance of cognition and mental processes in the development of antisocial behavior and violence. These include language acquisition, self-regulation, and executive functions. Developmental research also has been instrumental in identifying the enormous influence of multiple contexts (e.g., school, peers, and families) in the learning and continuation of delinquency and criminal behavior. This emphasis has highlighted the importance of considering the many complex interactions among genes and the environment, family members, peers and friends, and cultural and ethnic background in all discussions of antisocial behavior.

**Intelligence**

A number of developmental theories posit a role for intelligence in the development of delinquency. For example, Moffitt (1993a) hypothesizes that the more serious, persistent offenders should demonstrate lower intelligence or cognitive ability than nonoffenders. She writes, “The verbal deficits of antisocial children are pervasive, affecting receptive listening and reading, problem solving, expressive speech and writing, and memory” (p. 680). It is clear that a person’s intellectual performance will vary on different occasions, in different domains—as judged by different criteria—and across the life span. In the past two decades, there has been a concentrated effort to develop the idea of broader, multiple intelligences, rather than just one single type of intelligence, and to have an appreciation of abilities that previously were either ignored or considered not very important in understanding human behavior. Although intelligence is a controversial topic—particularly due to skepticism about the validity of “IQ” testing, it has become apparent today that intelligence exists in multiple forms and relates to a wide assortment of abilities. Howard Gardner (2000), for example, describes nine different types of intelligence or cognitive style (see Table 7.2). There are probably many more types, such as wisdom, spirituality, synthesizing ability, intuition, metaphoric capacities, humor, and good judgment (Gardner, 1983, 1998, 2000), many of which have been used to describe resilient persons. Gardner considered the last two of the primary nine—insight into oneself and the understanding of others—features of emotional intelligence.
Emotional intelligence is the ability to know how people and oneself are feeling and the capacity to use that information to guide one’s thoughts and actions. A deficiency in this form of intelligence may play a prominent role in human violence.

Standard intelligence tests (IQ tests) measure only the first three forms of the Gardner multiple intelligence model. Even if we presume that standard tests are valid (and caution is urged here), the delinquents who scored low on the standard tests may well be higher in other types of intelligence.

Individuals who chronically engage in violence may lack significant insight into their own behavior and possess little sensitivity toward others. They tend to misread emotional cues from others and become confused and angry in ambiguous social situations. For example, highly aggressive children often have a hostile attribution bias. That is, children prone to unusually aggressive actions are more likely to interpret ambiguous actions of others as hostile and threatening than less aggressive children. Research consistently indicates that highly aggressive and violent adolescents “typically define social problems in hostile ways, adopt hostile goals, seek few additional facts, generate few alternative solutions, anticipate few consequences for aggression, and give higher priority to their aggressive solutions” (Eron & Slaby, 1994, p. 10). These hostile cognitive styles, combined with deficient interpersonal skills, are more likely to result in aggression and violence in certain social situations.

Highly aggressive and antisocial children appear to be less equipped cognitively for dealing with ambiguous or conflictual situations. Research strongly supports the idea that highly aggressive individuals possess biases and cognitive deficits for dealing with and solving problematic social encounters with others. Research also indicates that chronic delinquent offenders are deficient in being able to cognitively put themselves in the place of others or to empathize (Pepler, Byrd, & King, 1991). As a result,
these youth are less concerned about the negative consequences of violence, such as the suffering of the victim or the social rejection they receive from their peers.

Ironically, although the early research on IQ and delinquency can be criticized for its lack of attention to social factors, it is likely that intelligence, in a broader sense, does play a role. Most particularly, Gardner’s (1983) concept of emotional intelligence may be a key factor in the development of habitual offending. More important, however, is the fact that early school failure seems to play a more critical role in the development of delinquency and crime than measures of intelligence predict (Dodge & Pettit, 2003). In addition, research indicates that retention in kindergarten and in the early grades—being “held back”—has significant detrimental effects on healthy development (Dodge & Pettit, 2003).

Related to verbal intelligence and thinking is language development. There have been a number of studies indicating that low language proficiency is associated with antisocial behavior, as will be discussed in the next section.

Language Development

Antisocial behavior and aggression has been linked to low language proficiency as early as the second year of life and throughout the life span (Dionne, 2005). According to Keenan and Shaw (2003), language is the “primary means by which children learn to solve problems nonaggressively and effectively decrease negative emotions such as anger, fear, and sadness” (p. 163). By the end of the preschool period, the average child has internalized—primarily through the use of language—rules that are associated with the ability to inhibit behavior, follow rules, and manage negative emotions (Keenan & Shaw, 2003; Kochanska, Murray, & Coy, 1997). In addition, according to Keenan and Shaw, the child demonstrates more empathy and prosocial behavior toward others as a result of language development. As noted by Dionne, “language becomes for most children a social tool for increased prosocial interactions” (p. 335).

Delayed language development appears to increase stress and frustration for many children and impede normal socialization (Keenan & Shaw, 2003). Toddler language development at ages 6 months, 18 months, and 24 months predicts later delinquency and antisocial behavior for boys, even when other influences are accounted for (Nigg & Huang-Pollock, 2003; Stattin & Klackenberg-Larrson, 1993). A higher incidence of language delay also has been observed among male children who display disruptive behaviors during the preschool years and antisocial behavior during the school years (Dionne, Tremblay, Boivin, Laplante, & Pérusse, 2003; Stowe, Arnold, & Ortiz, 2000). The evidence for a similar pattern for girls remains sparse and inconclusive.

Early language delay and limited communication skills may predispose a child to use more physically aggressive tactics for dealing with others, especially peers. Frustrated about not getting his needs met through normal communication and social strategies, the child is drawn to more physically aggressive behaviors to get his way. This aggressive behavioral pattern, however, is likely to produce a circular effect, since aggressive and disruptive behaviors interfere with creating a conducive social environment for language development and normal peer interactions. Therefore, aggressive or antisocial behaviors may, in turn, curtail language development. In contrast to
children with language deficits, verbally advantaged children may benefit from their verbal skills by developing prosocial behaviors and may thus steer away from the antisocial trajectories (Dionne, 2005; Dionne et al., 2003).

N. J. Cohen (2001) asserts that language provides an important cognitive tool for controlling one’s own behavior, impulses, and emotions. According to Dionne (2005), “Emotion regulation and self-regulation are generally viewed as requiring complex linguistic tools such as the ability to analyze social situations, organize thoughts about one’s own emotions, and plan behavior according to social roles” (p. 346).

Self-Regulation Skills

Self-regulation is one of the most important skills in the prevention of antisocial behavior. Self-regulation is defined as the capacity to control and alter one's behavior and emotions. It also includes the ability to shift focus and attention and to activate and change behavior (Eisenberg et al., 2004). The reader will recognize that self-regulation includes both behavioral and emotional regulation. Being able to control and shift emotions, especially anger, is a pivotal skill important for maintaining prosocial behavior and avoiding aggressive or violent behavior. Research documents that, not only is poor behavioral and emotional self-regulation related to aggression and violent delinquency, but it is also related to the early onset of substance use and the escalation of use during adolescence (Wills & Stoolmiller, 2002; Wills, Walker, Mendoza, & Ainette, 2006).

In their relationships with adults, children begin to acquire strategies that enable them to control their behavior and emotions in numerous ways. Although self-regulation skills may reflect some temperamental qualities whose origins may have some genetic component, it is clear that self-regulation skills are malleable and can be taught or improved upon by parents, caregivers, or others in the social environment (Buckner, Mezzacappa, & Beardslee, 2003). Sensitive and consistent caregiving and warm but firm parenting styles have been associated with the development of self-control and compliance with social rules.

Features of self-control begin to emerge in the second year, as does the concern for others. During the third year of life, children are expected to become reasonably compliant with parent requests and to internalize the family standards and values for behavior. By 17 months of age, approximately 80% of children show some form of physically aggressive behavior (Tremblay et al., 1996). Moreover, this physical aggression is not usually learned but appears to be a “natural” development of childhood. In addition, while most demonstrate physical aggression at 17 months, not all do so at the same frequency and with the same vigor (Tremblay & Nagin, 2005). As self-regulation develops, physically aggressive behavior usually decreases substantially from the third year onward. During mid-adolescence, however, many boys exhibit another peak in physical aggression but show a decrease during early adulthood (Dionne, 2005). However, there is a significant increase in verbal and indirect aggressions with age (Vaillancourt, 2005), suggesting that physical aggression may still exist but that children learn how to be aggressive in different ways (Tremblay & Nagin, 2005). A large factor in this learning or socialization is the development of self-regulation and enhanced executive functions.
Executive Functions

Closely related to self-regulation is the concept of executive functions, which refers to deliberate problem solving and the regulation of one’s thoughts, actions, and emotions (Tremblay, 2003; Zelazo, Carter, Resnick, & Frye, 1997). Not only do executive functions recognize and inhibit inappropriate behavior, they also direct focus and attention to external events and organize information for higher-order reasoning. In addition, they prioritize the steps necessary for solving problems. Executive functions are best described as neuropsychological processes that reside largely in the frontal lobes of the human brain.

Several studies of children and adolescents have documented a relationship between different aspects of executive functions and antisocial behavior (Morgan & Lilienfeld, 2000; Nigg, Quamma, Greenberg, & Kusche, 1999; Séguin & Zelazo, 2005; Tremblay, 2003). Children and adults with good executive functions are well-organized, diligent, focused on completing tasks, and skillful in their approach to resolving problems (Buckner et al., 2003). They are adept at focusing attention, able to concentrate well, and flexible in their thinking. All these features are the opposite characteristics of those persons who manifest persistent and violent offending histories.

Research examining social influences has discovered that peer rejection is one of the strongest predictors of later involvement in persistent, serious offending, especially violence (Cowan & Cowan, 2004; Dodge, 2003). This rejection starts early. Even around age 5, aggressive, belligerent children are unpopular and are excluded from peer groups (Dodge & Pettit, 2003; Patterson, 1982). We will begin our discussion of the developmental factors involved in the formation of crime and delinquency with peer rejection, and move on to other factors such as biological and genetic ones.

Deficient Interpersonal Skills and Peer Rejection

Children may be rejected by peers for a variety of reasons, but aggressive behavior appears to be a prominent one. Kids reject those peers who rely on various forms of physical and verbal aggression as a method of getting what they want. Peer-rejected children are not only aggressive, but also tend to be argumentative, inattentive, and disruptive. In most instances, it appears that aggressive behavior precedes the peer rejection. Furthermore, research finds that boys who are both peer rejected and aggressive have a variety of behavioral, social, and cognitive deficits and display low levels of prosocial behavior in general (Coie & Miller-Johnson, 2001). This cluster of deficits frequently results in poor school and academic performance (Buh & Ladd, 2001; Dodge & Pettit, 2003). Peer acceptance is crucial during early development, and those who receive it usually turn out far different from their rejected peers. Children who are liked and accepted by their peer group in the early school years are far less likely to become antisocial in their later years (Laird et al., 2001; Rubin, Bukowski, & Parker, 1998). It should be emphasized, however, that almost all the research on the effects of peer rejection, aggression, and delinquent behavior has focused on boys.
As pointed out previously, recent research on the development of delinquent and criminal behavior has identified ADHD features, which appear to have a strong biological component. There are many other potential biopsychological factors that may contribute to the development of antisocial behavior. In the next section, we will consider some of them.

**Biological Factors**

Children are born with a range of genetic makeups, neurological predispositions, and temperaments. During the past two decades, researchers have made significant advances in discovering the many biological and neurological factors that may play important roles in the development of antisocial and violent behavior (see Raine, 2002, and Tremblay, Hartup, & Archer, 2005, for comprehensive reviews). Tremblay and Côté (2005) note that the increasing number of biopsychosocial studies appear to be largely due to the development of sophisticated biological measures that are relatively easy to use with humans. They use molecular genetics, brain scans, and radioimmunoassays of saliva as examples of the improved measuring techniques. For example, the latest neurodevelopmental imaging studies indicate that the brain is still growing and maturing well beyond adolescence (DeMatteo, 2005c). A recent National Institute of Mental Health (NIMH) investigation suggests that brain maturation may not peak until age 25 (Beckman, 2004).

One important point must be noted, however. Researchers have continually emphasized that biological or neurological factors do not act in isolation. Neurobiological development is continually influenced by the psychosocial and physical environment across the life span. For example, it is becoming increasingly apparent to behavioral scientists that a lack of physical contact, verbal stimulation, and social responsiveness from parents and caregivers can substantially alter the rate of intellectual, emotional, and social development in children (Dahlberg & Potter, 2001). Tremblay and Côté (2005) use the example of mothers who smoke during pregnancy as another environmental influence on the neurological and biological development of infants: “Children of mothers who smoked during pregnancy are at higher risk of numerous problems, including low birth weight, hypertension, hyperactivity, inattentiveness, impulsiveness and aggression” (p. 455). To add to the complexity of the biology-environmental issue, Tremblay and Côté also observe that women who smoke during pregnancy tend to have low education, to be poor, to have a history of psychological problems, and to have many of the same problems as their children.

**Temperament**

Developmental scientists have continually documented the strong association between a child’s difficult temperament and the development of persistent antisocial behavior (e.g., Bates, Pettit, Dodge, & Ridge, 1998; Rubin, Burgess, Dwyer, & Hastings, 2003; Shaw, Owens, Giovannelli, & Winslow, 2001). According to the research literature, temperament is assumed to (1) have a constitutional or biological basis, (2) exist at birth and continue across the life span, and (3) be influenced by the psychosocial environment
Temperament is generally viewed as individual differences in emotional expression, motor activity, and sensitivity to simulation. Ill-tempered or difficult children are often described by caregivers as impulsive, unmanageable, and poorly self-regulated.

An understanding of temperament is important, because heritable or biological predispositions may be a critical factor in the early formation of delinquency and crime. “Ill-tempered” children may be at higher risk to engage in antisocial behavior than “easy” children. Specifically, a smiling, relaxed, socially interactive child (easy) is apt to generate a different social response from caregivers than a fussy, tense, and withdrawn one (ill-tempered). A chronically ill-tempered child may become so frustrating and discouraging to his parents or caregivers that they feel overwhelmed and helpless in their ability to deal effectively with the child. The caregiver’s resulting frustration may feed into the behavior of the child in a reciprocal fashion, engendering a disruption in the caregiver–child relationship. This frustration may progress into physical or emotional abuse or neglect by the caregivers.

**Genetic Influences**

Over the past 30 years, more than 100 twin and adoption studies have examined the relationship between genes and aggression or violence (Pérusse & Gendreau, 2005). Not surprisingly, most scientists have concluded that both genetic and environmental factors are important in the development of antisocial behavior. Some scholars (e.g., Rhee & Waldman, 2002) have estimated that environment plays a significantly more important role in the development of antisocial behavior than does genetics. Moreover, some researchers have further suggested that genetics may play a more prominent role in the development of those who commit property crimes, and plays a less important role in the development of those who commit violent crimes (Pérusse & Gendreau, 2005). However, despite a fairly large quantity of research on the relationship between genetics and antisocial behavior, the evidence remains largely inconclusive.

**Brain Chemistry**

Earlier, we discussed self-regulation and executive functions and their involvement in antisocial behavior. Scientists have discovered that, to a large extent, these functions are found in the front parts of the brain, known as the frontal cortex. According to Pihl and Benkelfat (2005), “the frontal lobes are seen as responsible for planning, controlling, and verifying behavior in the presence of goals, working within a context and providing control over the more automatic subcortical systems” (p. 273). Moreover, the frontal cortex is one of the last parts of the brain to mature, probably as late as age 25 (Gogtay et al., 2004).

A biochemical that is found in heavy concentrations in this region of the brain is dopamine. Dopamine is actually one of the neurotransmitters, which are biochemicals involved in the transmission of neural impulses within the nervous system. Without neurotransmitters, communication within the mammalian nervous system would be impossible. The assumption by the scientific community is that low concentrations of
dopamine in the frontal cortex may be linked to poor self-regulation and faulty executive functions.

Another neurotransmitter that has been linked to poor impulse control and violent behavior is serotonin. Basically, many individuals who act aggressively or violently toward others may have abnormally low levels of serotonin (Coscina, 1997; Lesch & Merschdorf, 2000; Loeber & Stouthamer-Loeber, 1998). There is also some evidence that levels of serotonin may explain to some extent the differences in physical aggression between men and women (Verona, Joiner, Johnson, & Bender, 2006). Low levels of serotonin are also linked to depression and suicide (Pihl & Benkelfat, 2005).

Other neurotransmitters are believed to be associated with violence and antisocial behavior, such as norepinephrine and GABA. There will probably be many more as the research continues, but it is unlikely that research will discover that neurotransmitters are the sole causes of violent or aggressive behavior.

Hormones and Aggression

The two hormones that have been implicated in influencing physical aggression and antisocial behavior are the androgen testosterone and the stress hormone cortisol (Van Goozen, 2005). Several studies have found that antisocial children and adults often have low levels of cortisol. The evidence to date suggests that the more aggressive the behavior, or the more serious the antisocial behavior, the lower the level of cortisol (see Van Goozen, 2005, for a review). As with neurotransmitters, it is highly likely that many additional hormones will be linked to aggressive or antisocial behavior.

Other Social Developmental Influences

Many other developmental factors have been identified as contributing to a child’s trajectory toward a life of committing serious crime and violence. The experience of physical abuse in early life significantly increases the risk of future antisocial conduct (Dodge & Pettit, 2003; Mayfield & Widom, 1996). On the other hand, warmth and appropriate behavioral management by parents have been found to have very positive outcomes on the developmental trajectories of their children (Dishion & Bullock, 2002; Dodge & Pettit, 2003). The amount of exposure that a child has to aggressive peers in day care or preschool also appears to have significant effects on the child’s later aggressive behavior. In addition, children who spend large amounts of time in unsupervised afterschool self-care in the early elementary grades are also at high risk for participating in antisocial behavior (Sinclair, Pettit, Harrist, & Bates, 1994).

Poverty is also a powerful risk factor. Although many children who grow up poor do not engage in serious antisocial behavior or delinquency, poverty does create multiple barriers to healthy development. Communities under financial strain are often plagued by inadequate educational and health systems and often have a large number of families experiencing disruption brought about by limited occupational resources and family breakdown. In these areas, schools tend to be inadequate and day care services limited. Unsafe levels of lead and other toxic materials have been found in significantly higher amounts in economically deprived areas than in middle- or upper-income communities.
School Violence

As alluded to in Chapter 1, a rash of school shootings across the United States made headlines and brought the topic of school violence into sharp focus during the 1990s. The most infamous case was the mass murder of 12 students and 1 teacher at Columbine High School in Littleton, Colorado, in April 1999. The shooters were two teenage boys who committed suicide during the incident. An additional 20 students were injured. School shootings promote concern and fear among parents, students, and the nation as a whole. In addition, the media and experts are often quick to make inaccurate generalizations about the school violence problem. O’Toole (2000, p. 4) lists the usual wrong or unverified impressions of school shooters often promoted by the news media (see In Focus Box 7.1).

As we also mentioned in Chapter 1, it is important to keep school violence in perspective. Although school shootings are terrifying and shocking, they are not representative of the juvenile crime picture. Still, each school-based attack has had a stressful and lasting effect on the school in which it occurred, the surrounding community, and the nation as a whole. Consequently, although many parents, teachers, and school officials across the nation are pleased that the nationwide statistics of school crime and violence are decreasing, they—understandably—want their children and the children in their local district to have a safe school environment. One way to improve the safety of youth in our nation’s schools is through threat assessment, a strategy in which many mental health professionals and forensic psychologists are becoming increasingly involved.

Threat Assessment

Threat assessment is a set of investigative and operational activities designed to identify, assess, and manage individuals who may pose a threat of violence to identifiable targets, such as the school environment (Borum, Fein, Voskuil, & Berglund,

In Focus 7.1 Public Myths About School Shooters

News coverage magnifies a number of widespread incorrect or unverified impressions of school shooters. Among them are the following:

- School violence is an epidemic.
- All school shooters are alike.
- The school shooter is always a loner.
- School shootings are exclusively revenge motivated.
- Easy access to weapons is the most significant risk factor.
- Unusual or bizarre behaviors, interests, and hobbies are the hallmarks of the student destined to become violent.

Source: O’Toole (2000, p. 4).
A threat is an expression of intent to do harm or act out violently against someone or something. A threat can be spoken, written, or symbolic—for example, motioning with one’s hands as though shooting at another person” (O’Toole, 2000, p. 6).

Threat assessment is innovative in two ways: (1) it does not rely on descriptive, demographic, or psychological profiles, and (2) it does not rely directly on verbal or written threats as a threshold for risk (Borum et al., 1999). More specifically, threat assessment is different from “profiling” in that it looks at the pathways of ideas, thinking patterns, and behavior that may lead to violent action. Profiling is designed to reduce the number of possible suspects within any given population by sketching the “type” of person who may have committed a certain category of crime. Threat assessment, on the other hand, concentrates on determining the seriousness of a threat that has already been made and—if the assessment suggests it is serious—setting up procedures and strategies to protect the intended target. “Instead of looking at demographic and psychological characteristics, the threat assessment approach focuses on a subject’s thinking and behaviors as a means to assess his/her progress on a pathway to violent actions” (Borum et al., 1999, p. 328).

Therefore, the crucial step in threat assessment is to determine whether the threatener is making a threat or posing a threat. Thousands of threats are made on public officials (and schools) every year, but a vast majority of them are not based on real intentions to carry them out. On the other hand, those who pose a threat are regarded as serious and may not even communicate their intentions to the threatened target directly. Interestingly, none of the 43 people who attacked a public figure (such as the U.S. president) over the past 50 years in the United States ever communicated a threat directly to the intended target (Borum et al., 1999; Fein & Vossekuil, 1999). However, in several of the school shooting cases, the shooters had communicated their intentions to other students who did not take them seriously; did not tell adults; or, in one case, even turned out to watch. It should be emphasized that all threats should be taken seriously and evaluated. Competent threat assessment tries to distinguish who is serious and who is not.

Because of their expertise in working with threats against public figures and other members of the public, several federal agencies, including the FBI and the Secret Service, have put together threat assessment guidelines to help school personnel, students, and parents identify warning signs of potential violence directed at the school environment. In response to the demand for such, the U.S. Secret Service has been especially involved, establishing the Secret Service National Threat Assessment Center (NTAC) (see In Focus Box 11.2 in Chapter 11). In June 1999, following the attack at Columbine High School, the U.S. Secret Service and the Department of Education launched a collaborative effort called the Safe School Initiative (SSI) (Borum et al., 1999). This included an intensive study of 37 U.S. school shootings involving 41 perpetrators that have occurred over the past 25 years (see In Focus Box 7.2). The focus of the project was a thorough examination of the thinking, planning, and behaviors engaged in by students who carried out school attacks. In addition, the perceived rash of school violence has thrust mental health professionals and school psychologists into the role of assisting school districts and the local communities in the development of prevention and treatment programs directed at juvenile violence (Evans & Rey, 2001). It also has initiated considerable applied research by forensic psychologists across the country.
According to the FBI (O'Toole, 2000), threats may be divided into four types: (1) direct, (2) indirect, (3) veiled, and (4) conditional. A direct threat specifies a target and is delivered in a straightforward, clear, and explicit manner. For example, a caller might say, “I placed a bomb in the school cafeteria and it will go off at noon today.” An indirect threat is more vague and ambiguous. The specific motivation, the intention, and the target are unclear and open to speculation: “If I wanted to, I could kill many at the school at any time.” This is the type of threat that had most frequently been made, according to the SSI.

A veiled threat strongly implies but does not explicitly threaten violence. For example, a student might receive an anonymous note in his locker that reads, “We would be better off without you around anymore.” The message clearly hints at a potential violent act but leaves the seriousness and meaning of the note for the threatened victim to interpret. A conditional threat is most often seen in extortion cases. It often warns that a violent act will occur unless certain demands or terms are met, such as occurred during the Washington, D.C., sniper killings in the fall of 2002. The message was this: “If you don’t pay us $10 million, none of your children will be safe.” Without the condition attached, this would have been a veiled threat.

Researchers from the SSI have concluded that those involved in school shootings did not “just snap”; they planned their attacks ahead of time (Vossekuil, Fein, Reddy, Borum, & Mozeleski, 2002). In many cases, the incident was planned at least 2 weeks beforehand. Interestingly, the researchers found that when juveniles plan targeted violence, they often tell at least one person about their plans, give out specifics before the event takes place, and obtain the weapons they need—usually from their own home or a relative’s home. Unfortunately, the person or persons who were told about the impending incident were peers and friends, and rarely did these informed youth bring the information to an adult’s attention.

Another observation from the SSI report was that, in many school shootings, friends and fellow students influenced or encouraged the attacker to act. For example, Evan Ramsey, age 16, who killed his principal and a student and wounded two others in Bethel, Alaska, in 1997, explained, “I told everyone what I was going to do.” In fact, so many students had heard about his planned attack that 24 students crowded the lobby mezzanine to watch. One student even brought a camera to record the event.

According to the SSI report, for more than half of the school shooters, the motive was revenge. In many cases, long-standing bullying or harassment played a key role in the decision to attack. However, there are many other motives or reasons for school violence. O’Toole (2000) suggests a list:

Threats are made for a variety of reasons. A threat may be a warning signal, a reaction to fear of punishment or some other anxiety, or a demand for attention. It may be intended to taunt; to intimidate; to assert power or control; to punish; to manipulate or coerce; to frighten; to terrorize; to compel someone to do something; to strike back for an injury, injustice, or slight; to disrupt someone’s or some institution’s life; to test authority, to protect oneself. The emotions that underlie a threat can be love; hate, fear, rage; or desire for attention, revenge, excitement, or recognition. (p. 6)

In summary, it should be emphasized that there is no accurate or useful profile of “the school shooter” or threatener. According to the SSI report, the personalities and
social characteristics of the shooters varied considerably. They came from a variety of social backgrounds and varied in age from 11 to 21 years. Family situations ranged from intact families to foster homes. Academic performance ranged from excellent to failing. Most were not diagnosed with any mental disorder, and a majority had no history of drug or alcohol abuse. However, more than three-fourths of school shooters did threaten to kill themselves, make suicidal gestures, or try to kill themselves before their attacks. Nevertheless, serious, long-standing, major depression did not appear to be a prominent feature in their backgrounds.

Most school shooters did have easy access to guns. In nearly two-thirds of the incidents, school shooters obtained guns from their own home or from that of a relative. The SSI report suggests, therefore, that although guns may be easy to obtain for many youth, when the notion of an attack exists, any effort to acquire, prepare, or use a weapon may signal an attacker’s progression from a thought to an action.

**Juvenile Firesetting**

A particularly important offense category that most often involves juveniles is arson or firesetting. In 2004, a total of 63,215 arson fires were reported in the United States. Nearly 50% of those fires were set by juveniles (FBI, 2006). Of those juveniles arrested,
nearly 60% were under the age of 15. The majority (76.3%) of these arson fires involved community or public buildings such as churches, jails, or schools. In a typical year in the United States, fires set by children and youth claim the lives of approximately 300 individuals and destroy more than $300 million worth of property (Putnam & Kirkpatrick, 2005). Children are also often the victims of firesetting and arson fires, accounting for 85% of the lives lost as a result of arson in the United States (U.S. Fire Administration, 2004). Next to deaths caused by motor vehicle accidents, fires are the leading cause of death among young children (Stickle & Blechman, 2002).

The term firesetting refers to “intentional acts planned to produce a disturbance or to bring about damage or harm” (Chen, Arria, & Anthony, 2003, p. 45). Most firesetters are young males. Some studies have found that between 75% and 85% of all firesetting is done by males, with increasing percentages of females in the 13- to 17-year-old group (FBI, 2003; Stadolnik, 2000). In a comprehensive study of 1,016 juveniles and adults arrested for arson and fire-related crimes, Icove and Estepp (1987) discovered that vandalism—prompted by a wish to get back at authority—was the most frequently identified motive, accounting for 49% of the arsons in the sample. This finding has been consistently supported in other research (e.g., Robbins & Robbins, 1964), which reveals that most fires set by juveniles are motivated by the wish to get back at authority or gain status, or are prompted by a dare or a need for excitement. Feelings of anger, being ignored, or depression are commonly reported before acts of firesetting (Chen et al., 2003).

Many arson fires set by youth go undetected, unreported, or unsolved (Zipper & Wilcox, 2005). It is estimated, for example, that less than 10% of the fires set by juveniles are reported (Adler, Nunn, Northam, Lebnan, & Ross, 1994). Zipper and Wilcox report that, of the 1,241 Massachusetts juveniles referred for counseling services because of firesetting, only 11% of the blazes these youths started were reported. No one reported these incidents because witnesses or caretakers did not consider the behavior dangerous; no loss of life or significant destruction of property occurred. In these situations, many people worry that charging juveniles with arson will give them a criminal record that will hamper their future careers.

**Developmental Stages of Firesetting**

Child firesetters have attracted considerable interest among developmental psychologists. The general consensus is that childhood firesetting goes through discernible stages. For example, Gaynor (1996) identifies three developmental phases: (1) fire interest, (2) fireplay, and (3) firesetting. Fascination and experimentation with fire appear to be common features of normal child development. Kafrey (1980) discovered that fascination with fire appears to be nearly universal in children between 5 and 7 years old. This fascination with fire begins early, with one in five children setting fires before the age of 3. As the child gets older, fireplay (experimentation) normally takes place between the ages of 5 and 9. During this stage, the child experiments with how a fire starts and how it burns. Unfortunately, children during this phase are especially vulnerable to the hazards of fire because of their lack of experience with fire and ways to extinguish it once it flares out of control (Lambie, McCardle, & Coleman,
By age 10, most children have learned the dangers of fire. However, if they continue to set fires at this point—especially damaging ones—they probably have graduated into the firesetting stages. These youths most often intend to use fires to destroy, as a form of excitement, or as a communicative device to draw attention to themselves and their perceived problems.

Experts find that children who continue to set fires after age 10 frequently demonstrate poor social skills, inadequate social competence, and poor impulse control compared to their peers (Kolko, 2002; Kolko & Kazdin, 1989). Some experts have found that persistent firesetters, compared to non-firesetters, are more likely to have attention deficit/hyperactivity disorder (Forehand, Wierson, Frame, Kempton, & Armistead, 1991), and many are rejected by their peers. Some studies report that approximately 74% of youth firesetters have been diagnosed with a conduct disorder (Chen et al., 2003). In addition, a majority of children who set fires beyond the normal fascination and experimental stages tend to have poor relationships with their parents and also appear to be victims of physical abuse (Jackson, Glass, & Hope, 1987).

Lambie et al. (2002) report that firesetting is often only one segment of a cluster of antisocial behaviors, the motives for which occur for a variety of reasons and typically include impulse control problems and misdirected anger and boredom. The range of criminal offending has also been noted by other researchers. For instance, there is some evidence that children who are consistently cruel to animals and other children also tend to engage in consistent firesetting behavior (Slavkin, 2001). Furthermore, a very large majority of firesetters known to the juvenile justice system have committed many other serious juvenile acts besides arson (Ritvo, Shanok, & Lewis, 1983; Stickle & Blechman, 2002). Interestingly, Stickle and Blechman found that “firesetting juvenile offenders exhibit a pattern of developmentally advanced, serious antisocial behavior consistent with an early starter or life-course-persistent trajectory” (p. 190). As might be expected, research has revealed that a far greater proportion of the persistent firesetters are boys than girls, at a ratio of about 9 to 1 (Zipper & Wilcox, 2005).

**Firesetting Typologies**

Based on clinical assessments of known firesetters, Kolko (2002) developed a typology that identifies four types of firesetters: (1) curious, (2) pathological, (3) expressive, and (4) delinquent. The typology is built on the assumption of differences in motivation, although it does take into consideration individual and environmental influences. In brief, the curious firesetter uses fire for fascination purposes, the pathological is driven by psychological or emotional problems, the expressive uses fire as a cry for help, and the delinquent sets fires as a means to antisocial or destructive ends (Putnam & Kirkpatrick, 2005). The types are not mutually exclusive, in that a juvenile could use fire as a cry for help for his or her psychological distress.

**The Criminal Psychopath**

Probably no topic has caught the attention of forensic psychologists interested in the development of habitual criminal behavior more in recent years than the topic of psychopathy. The term *psychopath* is currently used to describe a person who demonstrates...
a discernible cluster of psychological, interpersonal, and neuropsychological features that distinguish him or her from the general population. In addition, the psychopath, according to this definition, may or may not engage in habitual criminal behavior.

Many psychopaths have no history of serious antisocial behavior, and the converse may also be true. That is, many persistent, serious offenders are not necessarily psychopaths. For our purposes here, the term criminal psychopath will be reserved for those psychopaths who demonstrate a wide range of persistent antisocial behavior. As a group, they tend to be “dominant, manipulative individuals characterized by an impulsive, risk-taking and antisocial life-style, who obtain their greatest thrill from diverse sexual gratification and target diverse victims over time” (Porter et al., 2000, p. 220). As further noted by Stephen Porter and his colleagues, “Given its relation to crime and violence, psychopathy is arguably one of the most important psychological constructs in the criminal justice system” (p. 227).

**General Behavioral Characteristics of Psychopaths**

Hervey Cleckley (1941) was one of the first to outline the behavioral characteristics of psychopaths. He was a professor of psychiatry and neurology at the Medical College of Georgia during the 1930s and remained there until the 1950s. Cleckley is credited with completing one of the most comprehensive works on the psychopath, titled *The Mask of Sanity*. The book went through five editions, and his clear writing style, in combination with the subject area, captivated public and scholarly interests for many years.

Cleckley (1941) identified what he thought were 10 cardinal behavioral features characteristic of the true psychopath: (1) selfishness (also called egocentricity), (2) an inability to love or give genuine affection to others, (3) frequent deceitfulness or lying, (4) lack of guilt or remorsefulness (no matter how cruel the behavior), (5) callousness or a lack of empathy, (6) low anxiety proneness, (7) poor judgment and failure to learn from experience, (8) superficial charm, (9) failure to follow any life plan, and (10) cycles of unreliability. By no means do all researchers in the field of psychopathy agree with this list, but the behavioral features outlined serve as a starting point for further discussion in this section.

An important distinction underlying much of the behavioral descriptions is what Quay (1965) refers to as the psychopath’s profound and pathological stimulation seeking. According to Quay, the actions of the psychopath are motivated by an excessive neuropsychological need for thrills and excitement. It is not unusual to see psychopaths drawn to such interests as race-car driving, skydiving, and motorcycle stunts.

**Antisocial Personality Disorder and Psychopathy**

Psychiatrists, clinical psychologists, and mental health workers often use the term antisocial personality disorder (ASP) to summarize many of the same features found in the criminal psychopath. Antisocial personality disorder refers specifically to an individual who exhibits “a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood” (American Psychiatric Association, 1994, p. 645). In other words, the antisocial personality disorder appears closely aligned with the persistent offender, such as the LCP offender.
It should be emphasized that, although there are many behavioral similarities, the
terms antisocial personality disorder and psychopathy are not synonymous. Antisocial
personality disorder refers to broad behavioral patterns based on clinical observations,
whereas psychopathy refers not only to specific behavioral patterns but also to mea-
surable cognitive, emotional, and neuropsychological differences. In addition, ASP is
so broad in its scope that between 50% and 80% of male inmates qualify as meeting
its criteria (Correctional Services of Canada, 1990; Hare, 1998; Hare, Forth, &
Strachan, 1992). In contrast, only 11% to 25% of male inmates meet the criteria for
psychopathy (Hare, 1996; Simourd & Hoge, 2000). These data suggest that the con-
struct of psychopathy may be a more precise indicator—and a better predictor of
violence—than the more global construct of ASP.

Prevalence of Criminal Psychopathy

Overall, Hare (1998) estimates that the prevalence of psychopaths in the general
population is about 1%, whereas in the adult prison population, estimates range from
15% to 25%. Some researchers (e.g., Simourd & Hoge, 2000) wonder, however, whether
these estimates are not somewhat inflated. Simourd and Hoge report that only 11% of
the inmate population they studied could be identified as criminal psychopaths. The
inmates used in the Simourd and Hoge study were not simply inmates in a medium-
security correctional facility. All 321 were serving a current sentence for violent offend-
ing, more than half of them had been convicted of a previous violent offense, and
almost all of them had extensive criminal careers. Therefore, percentage estimates of
criminal psychopathy within any given population should be tempered by the type of
facility, as well as the cultural, ethnic, and age mix of the targeted population.

Offending Patterns of Criminal Psychopaths

Although some psychopaths have little contact with the criminal justice system,
many have continual contact with the system because of persistent, serious offending.
For example, Gretton, McBride, Hare, O'Shaughnessy, and Kumka (2001) point out
that criminal psychopaths generally “lack a normal sense of ethics and morality, live by
their own rules, are prone to use cold-blooded, instrumental intimidation and
violence to satisfy their wants and needs, and generally are contemptuous of social
norms and the rights of others” (p. 428). Criminal psychopaths manifest violent and
aggressive behaviors—including verbal abuse, threats, and intimidation—at a much
higher rate than is found in other populations (Hare, Hart, & Harpur, 1991). In some
cases, this persistent offending is extremely violent in nature.

Criminal psychopaths are “responsible for a markedly disproportionate amount of
the serious crime, violence, and social distress in every society” (Hare, 1996, p. 26). Hare
posits, “The ease with which psychopaths engage in . . . dispassionate violence has very
real significance for society in general and for law enforcement personnel in particular”
(p. 38). Hare refers to a 1992 report by the FBI that found that nearly half of the law
enforcement officers who died in the line of duty were killed by individuals who closely
matched the personality profile of the psychopath. In addition, the offenses of psycho-
pathic sex offenders are likely to be more violent, brutal, unemotional, and sadistic than
those of other sex offenders (Hare, Clark, Grann, & Thornton, 2000). Some serial murderers described as unusually sadistic and brutal also tend to have many psychopathic features (Hare et al., 2000; M. H. Stone, 1998). It should be emphasized, though, that very few psychopaths are serial killers!

The relationship between psychopathy and sexual offending appears to be a complex one. For example, the prevalence of psychopaths among child molesters is estimated to be from 10% to 15%; among rapists, it is between 40% and 50% (Gretton et al., 2001; Porter et al., 2000). Research also indicates that rapists who have psychopathic characteristics are more likely to have “nonsexual” motivations for their crimes, such as anger, vindictiveness, sadism, and opportunism (Hart & Dempster, 1997).

Many of the murders and serious assaults committed by nonpsychopaths occurred during domestic disputes or extreme emotional arousal. On the other hand, this pattern of violence is rarely observed for criminal psychopaths (Hare et al., 1991; Williamson, Hare, & Wong, 1987). Criminal psychopaths frequently engage in violence as a form of revenge or retribution or during a bout of drinking. Many of the attacks of nonpsychopaths are toward women they know well, whereas many of the attacks of criminal psychopaths are directed toward men who are strangers. Hare et al. (1991) observe that the violence committed by criminal psychopaths was callous and cold-blooded “without the affective coloring that accompanied the violence of nonpsychopaths” (p. 395).

According to Porter et al. (2000), research suggests that psychopaths reoffend faster, violate parole sooner, and perhaps commit more institutional violence than nonpsychopaths. In one study (Serin, Peters, & Barbaree, 1990), the number of failures of male offenders released on an unescorted temporary absence program was examined. The failure rate for psychopaths was 37.5%, whereas none of the nonpsychopaths failed. The failure rate during parole was also examined. Although 7% of nonpsychopaths violated parole requirements, 33% of the psychopaths violated their requirements. In another study (Serin & Amos, 1995), 299 male offenders were followed for up to 8 years after their release from a federal prison. Sixty-five percent of the psychopaths were convicted of another crime within 3 years, compared to a recidivism rate of 25% for nonpsychopaths. Quinsey, Rice, and Harris (1995) found that within 6 years of release from prison, more than 80% of the psychopaths convicted as sex offenders had violently recidivated, compared to a 20% recidivism rate for nonpsychopathic sex offenders.

High recidivism rates are also characteristic of psychopathic adolescent offenders. According to Gretton et al. (2001), these offenders are more likely than other adolescent offenders to escape from custody, violate the conditions of probation, and commit nonviolent and violent offenses over a 5-year follow-up period. The high recidivism rates among adult and juvenile offenders have prompted some researchers to conclude that there is “nothing the behavioral sciences can offer for treating those with psychopathy” (Gacono, Nieberding, Owen, Rubel, & Bodholdt, 1997, p. 119), partly because psychopaths tend to “be unmotivated to accept their problematic behavior and often lack insight into the nature and extent of their psychopathology” (Skeem, Edens, & Colwell, 2003, p. 26). Other researchers take a decidedly different perspective and believe that untreatability statements concerning the psychopath are unwarranted (Salekin, 2002; Skeem, Monahan, & Mulvey, 2002; Skeem, Poythress, Edens, Lilienfeld, & Cale, in press; Wong, 2000). There is some evidence that psychopaths who receive larger “doses” of
treatment are less likely to demonstrate subsequent violent behavior than those who receive less treatment (Skeem, Edens, & Colwell, 2003).

**Psychological Measures of Psychopathy**

Currently, the most popular instrument for measuring criminal psychopathy is the 22-item **Psychopathy Checklist (PCL)** (Hare, 1980) and its 20-item revision (PCL-R) (Hare, 1991). More recently, the PCL-R has been published in a second edition, which includes new information on its applicability in forensic and research settings. It has been expanded for use with offenders in other countries and includes updated normative and validation data on male and female offenders.

A 12-item short-form version has also been developed, called the **Psychopathy Checklist: Screening Version (PCL:SV)** (Hart, Cox, & Hare, 1995; Hart, Hare, & Forth, 1993), as well as the **Psychopathy Checklist: Youth Version (PCL:YV)** and the **P-Scan: Research Version**. The P-Scan is a screening instrument that serves as a rough screen for psychopathic features and as a source of working hypotheses to deal with managing suspects, offenders, or clients. It is designed for use in law enforcement, probation, corrections, civil and forensic facilities, and other areas in which it would be useful to have some information about the possible presence of psychopathic features in a particular person. Of course, the P-Scan needs much more research before it can be used as a valid instrument in practice. All five checklists are conceptually and—with the exception of the P-Scan—empirically similar.

The instruments are largely based on Cleckley’s (1941) conception of psychopathy but are specifically designed to identify psychopaths in male prison, forensic, or psychiatric populations. Because the PCL-R is currently the most frequently used as both a research and clinical instrument, it will be the center of attention for the remainder of this section. The PCL:YV is beginning to be researched more extensively and will be covered in more detail in the section on the juvenile psychopath.

The PCL-R assesses the affective (emotional), interpersonal, behavioral, and social deviance facets of criminal psychopathy from various sources, including self-reports, behavioral observations, and collateral sources, such as parents, family members, friends, and arrest and court records, which can help to establish the credibility of self-reports (Hare, 1996; Hare et al., 1991). In addition, item ratings from the PCL-R, for instance, require some integration of information across multiple domains, including behavior at work or school; behavior toward family, friends, and sexual partners; and criminal behavior (Kosson et al., 2002). Typically, highly trained examiners use all this information to score each item on a point scale of 0 to 2, which measures the extent to which an individual has the disposition described by each item on the checklist (0 = consistently absent, 1 = inconsistent, 2 = consistently present). Scoring is, however, quite complex and requires substantial time, extensive training, and access to a considerable amount of background information on the individual. A score of 30 or above usually qualifies a person as a primary psychopath (Hare, 1996). In some research and clinical settings, cutoff scores ranging from 25 to 33 are often used (Simourd & Hoge, 2000). Hare (1991) recommends that persons with scores between 21 and 29 be classified as “middle” subjects who show many of the features of psychopathy but do not fit all the criteria. Scores below 21 are considered “nonpsychopaths.”
So far, the research has strongly supported the reliability and validity of the PCL-R for distinguishing criminal psychopaths from criminal nonpsychopaths and for helping correctional psychologists in risk assessments of inmates (Hare, 1996; Hare et al., 1992). In addition, the instrument provides researchers and mental health professionals with a universal measurement for the assessment of psychopathy that facilitates international and cross-cultural communication concerning theory, research, and eventual clinical practice (Hare et al., 2000). Currently, the PCL-R is increasingly being used as a clinical instrument for the diagnosis of psychopathy across the globe, although it appears to be most powerful in identifying psychopathy among North American white males (Hare et al., 2000).

**Core Factors of Psychopathy**

One finding that has clearly emerged from the research on the PCL-R is that psychopathy is multidimensional in nature. **Factor analysis** is one of the statistical procedures designed to find different dimensions or factors in test data. When expert ratings of psychopathy on the PCL-R were submitted to a factor analysis, at least two behavioral dimensions or factors came to light (Hare, 1991; Harpur, Hakstian, & Hare, 1988; Hart et al., 1993). Factor 1 reflects the interpersonal and emotional components of the disorder and consists of items measuring remorselessness, callousness, and selfish use and manipulation of others. The typical psychopath feels no compunction about using others strictly to meet his or her own needs. Factor 2 is most closely associated with a socially deviant lifestyle, as characterized by poor planning, impulsiveness, an excessive need for stimulation, proneness to boredom, and a lack of realistic goals. In criminal psychopaths, some researchers have found that Factor 1 appears to be associated with planned predatory violence, whereas Factor 2 appears to be related to spontaneous and disinhibited violence (Hart & Dempster, 1997). Factor 1 is also linked to resistance to and inability to profit from psychotherapy and treatment programs (Seto & Barbaree, 1999). Factor 2 appears related to socioeconomic status, educational attainment, and cultural/ethnic background, whereas Factor 1 may be more connected with biopsychological influences (Cooke & Michie, 1997). Research also suggests that Factor 1 may be a more powerful indicator of psychopathy than Factor 2 (Cooke, Michie, Hart, & Hare, 1999).

More recent research with both children and adults, however, reveals that there may be three behavioral dimensions at the core of psychopathy rather than just the original two (Cooke & Michie, 2001; Frick, Bodin, & Barry, 2000; Kosson et al., 2002). Cooke and Michie (2001), for example, found from their factor analysis of PCL-R data that psychopathy probably consists of three core factors: (1) arrogant and deceitful interpersonal style, (2) impulsive and irresponsible behavioral style (highly similar to the original Factor 2), and (3) deficient affective experience. Factors 1 and 3 are actually subdivisions of the original Factor 1 reported in earlier studies. The term *deficient affective experience* refers to the lack of sincere positive emotions toward others and the demonstration of callousness and lack of empathy. The terms *arrogant* and *deceitful interpersonal style*, on the other hand, refer to the glibness, superficial charm, and grandiose sense of self-worth that are so characteristic of the psychopath.
Recent research has shown that adult psychopaths usually exhibit significant anti-social behavior in their childhoods (Seagrave & Grisso, 2002). It is reasonable, therefore, to expect researchers to begin searching the developmental trajectory of psychopathy to identify tomorrow’s psychopaths. The next section examines what we currently know about the childhood of the psychopath.

**Juvenile Psychopathy**

One of the serious shortcomings of the extensive research conducted on psychopathy is that it has focused almost exclusively on white adult males (Frick et al., 2000). Consequently, research on juvenile (adolescent and child) psychopathy is limited, but it is rapidly growing (see, e.g., Salekin & Lochman, in press). However, attempts to apply the label *psychopathy* to juvenile populations “raise several conceptual, methodological, and practical concerns related to clinical/forensic practice and juvenile/criminal justice policy” (Edens, Skeem, et al., 2001, p. 54). Some debate has focused on whether psychopathy can or should be applied to juveniles at all. Can features of adult psychopathy be found in children and adolescents in the first place? Others are concerned that—even if psychopathy can be identified in adolescents—the label may have too many negative connotations. More specifically, the label implies that the prognosis for treatment is poor, a high rate of offending and recidivism can be expected, and the intrinsic and biological basis of the disorder means little can be done outside of biological interventions. A third debate contends that psychopathy assessments of youth must achieve a high level of confidence before they can be employed in the criminal justice system (Seagrave & Grisso, 2002).

Several instruments for measuring preadult psychopathy have been developed in recent years, including the Psychopathy Screening Device (PSD) (Frick, O’Brien, Wootton, & McBurnett, 1994), the Childhood Psychopathy Scale (CPS) (Lynam, 1997), and the PCL:YV (Forth et al., 1997). All three instruments are currently being used primarily as research measures rather than as clinical-diagnostic measures and, as Seagrave and Grisso (2002) point out, may eventually have important implications for the prevention of future serious delinquency. Consequently, they may soon become extensively used in forensic clinical practice. According to Seagrave and Grisso,

> It is not overstated to imagine that juvenile psychopathy measures will become one of the most frequently used instruments in forensic assessments of delinquency cases of any kind within a few years after they are made generally available to forensic clinical examiners. (p. 220)

The PCL:YV, designed for assessing psychopathy in adolescents age 13 or older, is a modified version of the PCL-R. Basically, the instrument attempts to assess psychopathy across the youth’s life span, with an emphasis on school adjustment and peer and family relations. Similar to the adult PCL-R, the PCL:YV requires a lengthy standardized, semistructured clinical interview and a review of documents by a well-trained psychologist. Scores of 0 (*consistently absent*), 1 (*inconsistent*), or 2 (*consistently present*) for each of the 20 behavioral dimensions of psychopathy represent the scoring system. The instrument—like the PCL-R—generates a total score and two factor...
scores. Factor 1 reflects an interpersonal/affective dimension and includes items that measure glibness/superficial charm, grandiosity, manipulativeness, dishonesty, and callousness. Factor 2 reflects behavioral or lifestyle features such as impulsiveness, irresponsibility, early behavioral problems, and lack of goals.

The PSD is a behavior rating scale in which some of the items on the PCL-R were rewritten for use with children (Frick et al., 2000). Currently, the PSD comes in three versions: (1) a teacher version, (2) a parent version, and (3) a self-report version. Using the teacher and parent versions of the PSD, Frick et al. (1994) found (through a factor analysis) that juvenile psychopathy may be made up of two major dimensions. One dimension was labeled callous-unemotional and the other impulsivity-conduct problems. Later, however, Frick et al. (2000) found evidence (again through a factor analysis) to support a three-dimensional core for childhood psychopathy. Two of the factors (callous-unemotional and impulsivity) were similar to the core dimensions found for adults in Frick et al.’s earlier study. However, the construct of impulsivity seems to be much more complex in children than in adults, and the researchers discovered that the construct may be subdivided into impulsivity and narcissism (grandiose sense of self-worth).

One of the major problems of identifying juvenile psychopaths is that psychopathy may be very difficult to measure reliably because of the transient and constantly changing developmental patterns across the life span, especially during the early years. For example, psychopathic symptoms in childhood may look very different from those exhibited in adulthood (Hart, Watt, & Vincent, 2002). That is, some of the behavioral patterns of children and adolescents may be similar to psychopaths for a variety of reasons but may not really be signs of psychopathy.

Children in an abusive home often demonstrate an abnormally restricted range of emotions that are similar to the emotional characteristics of psychopathy. Actually, they may be the child’s way of coping in a very stressful home environment (Seagrave & Grisso, 2002). Furthermore, Seagrave and Grisso note that “Some adolescent behavior may . . . appear psychopathic by way of poor anger control, lack of goals, and poor judgment, but is actually influenced by parallel developmental tasks encountered by most adolescents” (p. 229). Going against the rules is part of many adolescents’ attempts to gain autonomy from adult dominance, such as what is found in adolescent-limited offending. In addition, adult criminal psychopaths often have been psychologically scarred by years of drug and alcohol abuse, physical fighting, lost opportunities, and multiple incarcerations (Lynam, 1997). Consequently, adult psychopaths may present a very different population pool compared to the juvenile psychopath.

Edens, Skeem, et al. (2001) also point out that some of the items on the various psychological measures of psychopathy (especially the PCL-R and the PCL:YV) are inappropriate for use with adolescents. For example, some items focus on such things as the lack of goals and irresponsibility. If these features are not present, then the adolescent might receive scores in the psychopathy direction. However, adolescents generally have not crystallized their life goals and responsibilities to any great extent, and consequently such items “seem less applicable as definitive markers of psychopathy for adolescence than for adults” (p. 58). We must be careful, then, not to generalize what we know about the adult psychopath to a juvenile who has been given the same label.
Nevertheless, many researchers are persisting in their attempts to identify juvenile psychopaths and measure psychopathic tendencies. In a study examining the prevalence rate of psychopathy among children, Skilling, Quinsey, and Craig (2001) found in a sample of more than 1,000 boys in Grades 4 to 8 that 4.3% of the sample could be classified as psychopathic on every measure employed in the study. These data suggest that the percentages reported in the prison population may not be as inflated as some researchers suppose.

Lynam (1997) designed a research project that compared juvenile and adult psychopaths. Using the CPS, Lynam reported results that suggested psychopathy begins in childhood and can be measured reliably in children ages 12 and 13. Lynam found that psychopathic children, like their adult counterparts, were the most aggressive, severe, frequent, and impulsive offenders, a characteristic that was stable across time. Moreover, he discovered that the CPS was a better predictor of serious delinquency than socioeconomic status, previous delinquency, IQ, or impulsivity. Just as importantly, however, recent research is directed at identifying “protective” factors in children who might otherwise be at risk of becoming adult psychopaths (Salekin & Lochman, in press). This research is still in its nascent stages, however.

Research so far does indicate that there is some validity in measures of juvenile psychopathy (Edens, Skeem, et al., 2001; Kosson et al., 2002; Murrie & Cornell, 2002), but a vast majority of the researchers also believe that much more research needs to be done before forensic psychologists can make valid recommendations to the courts. Edens, Skeem, et al. (2001) report that, although some researchers

have implied or asserted that assessments of psychopathy will aid in deciding whether to transfer juvenile offenders to the adult court system, whether to decertify adolescents already transferred to the adult system, and/or what type of sentence juveniles should receive, the research still has a way to go before forensic psychologists can confidently make such recommendations. (p. 74)

In addition to the ethical issues discussed above, Edens, Skeem, et al. (2001) admonish that the extant research remains unclear as to whether juvenile psychopathy is related to persistent violence in adulthood and whether juvenile psychopathy is untreatable, as commonly supposed for adult psychopathy. Given the emphasis usually placed on offender rehabilitation in the juvenile justice system, the second point is especially important. Edens, Skeem, et al. conclude that “it is imperative that we learn more about the stability, nature, and manifestations of psychopathy during the adolescent years, and develop and refine age-appropriate risk assessment tools based on this knowledge” (p. 77).

The Female Psychopath

Similar to the research on juvenile psychopathy, very little research has been conducted on the extent to which psychopathy exists in females. There are few statistics on the ratio of male to female psychopaths, but it has been generally assumed that males far outnumber their female counterparts. Based on PCL-R data, Salekin, Rogers, and Sewell (1997) reported that the prevalence rate of psychopathy for female offenders in a jail setting was 15.5%, compared to a 25% to 30% prevalence rate estimated for men.
In another study, Salekin, Rogers, Ustad, and Sewell (1998) found, using a PCL-R cutoff score of 29, that 12.9% of their sample of 78 female inmates qualified as psychopaths. In a more recent investigation involving 528 adult women incarcerated in Wisconsin, Vitale, Smith, Brinkley, and Newman (2002) reported that 9% of their participants could be classified as psychopaths, using the recommended cutoff score of 30 on the PCL-R. Because the known psychopathic population is dominated by men, little research has been directed at women, although both Hare and Cleckley included female psychopaths in some of their work. Nevertheless, Hare’s PCL and PCL-R (Hare, 1980, 1991, respectively) have been developed almost exclusively for use with male criminal psychopaths. Some preliminary studies using the PCL-R suggest that female criminal psychopaths may demonstrate different behavioral patterns from those of male criminal psychopaths (Hare, 1991; Vitale et al., 2002).

There is some preliminary evidence that female psychopaths may be less aggressive and violent than male psychopaths (Mulder, Wells, Joyce, & Bushnell, 1994). Female psychopaths may also recidivate less often than male psychopaths. In fact, the evidence suggests that psychopathic female inmates may have recidivism rates that are no different from the recidivism rates reported for nonpsychopathic female inmates (Salekin et al., 1998).

Recent research using the PCL-R shows considerable promise in identifying gender differences in psychopathy. Salekin et al. (1997) have found evidence of at least two broad categories of female psychopaths. One category appears to be characterized by interpersonal deception, sensation seeking, proneness to boredom, and a lack of empathy or guilt. The other group appears to be characterized by early behavioral problems, promiscuous sexual behavior, and adult antisocial (not violent) behavior. In recent years, we have seen a renewed interest in studying the female psychopath.

Racial/Ethnic Differences

Kosson, Smith, and Newman (1990) noticed that most measures of psychopathy have been developed using white inmates as subjects. In their research, they found that psychopathy, as measured by Hare’s (1980) PCL, does exist in African American male inmates in a pattern that resembles that of white male inmates. However, Kosson et al. found one important difference: African American criminal psychopaths tended to be less impulsive than white criminal psychopaths.

This finding raises some questions as to whether the PCL is entirely appropriate to use with African American inmates. On the other hand, Vitale et al. (2002) found no significant racial differences in the scores and distributions of female psychopaths. More specifically, Vitale et al. reported that 10% of the 248 incarcerated white women who participated in their study reached the cutoff scores of 30 or higher on the PCL-R compared to 9% of the 280 incarcerated African American women who had similar scores. A meta-analysis by Skeem, Edens, and Colwell (2003) supports the conclusion that the differences between blacks and whites are minimal. Questions remain, however, as to the potential differences among other minority or disadvantaged groups.

Some researchers have raised the intriguing and serious issue of whether the stigmatizing diagnosis of psychopathy is likely to be used in a biased manner among minority or disadvantaged groups (Edens, Petriila, & Buffington-Vollum, 2001; Skeem, Edens, & Colwell, 2003; Skeem, Edens, Sanford, & Colwell, 2003). In essence, the
consequence of being diagnosed a psychopath is becoming more serious (Skeem, Edens, Sanford, & Colwell, 2003). As pointed out by Skeem, Edens, and Colwell (2003), Canada and the United Kingdom use the diagnosis of psychopathy to support indeterminate detention for certain classes of offenders, and furthermore,

There is evidence that psychopathy increasingly is being used as an aggravating factor in the sentencing phase of U.S. death penalty cases, where it has been argued that the presence of these personality traits renders a defendant a “continuing threat to society.” (p. 17)

In addition, as we learned in the juvenile psychopathy section, there is concern that a diagnosis of psychopathy may be used to justify decisions to transfer juvenile offenders to the adult criminal justice system, typically based on the assumption that psychopathy is untreatable. Therefore, any differences in psychopathy scores related to race, ethnicity, or age would raise significant criminal justice and public policy issues (Skeem, Edens, & Colwell, 2003). Edens, Petrila, et al. (2001) suggest that perhaps the PCL-R should be excluded from capital sentencing until more solid research on its ability to predict future dangerousness in minority and disadvantaged individuals is established. It would be wise, therefore, for forensic psychologists to refrain from using diagnostic indicators of psychopathy at the sentencing phase until considerably more research is undertaken.

Summary and Conclusions

Criminal behavior involves an extremely wide range of human conduct and is committed by individuals of all ages and across all social classes. In this chapter, we have been concerned with that subset of criminal behavior that includes persistent, serious offending over time. Consequently, we have examined early origins of such offending by focusing on developmental factors associated with the antisocial acts of chronic juvenile offenders. In addition, we have examined offending patterns over the life span by focusing on the criminal psychopath.

As a group, juvenile offenders tend to grow out of crime—which is to say, they do not grow up to become chronic adult offenders. From the statistics on juvenile arrests, it is impossible to tell how many different juveniles are involved (some are arrested more than once) as well as which of these particular juveniles will become long-term offenders. We know from the research that a small percentage (5%–6%) of offenders is responsible for a large proportion of juvenile crime. We know also that chronic offenders do not specialize but rather are involved in a wide variety of offenses. Forensic psychologists attempt to identify those juveniles who are at risk of serious, chronic offending. They are also involved in providing treatment for these juveniles, a topic we will return to in Chapter 13.

In their attempts to identify juveniles at risk, many psychologists today have adopted developmental or cognitive approaches. Developmental studies—such as those conducted by Terrie Moffitt and her colleagues—suggest that differences in impulsivity, aggressiveness, social skills, and empathy for others can distinguish
persistent from nonpersistent offenders. Moffitt’s (1993a) dual-pathway hypothesis (LCP vs. AL offenders) has contributed significantly to theory development in this area. Most recently, though, Moffitt as well as other researchers have suggested that more than two developmental pathways are needed.

The most recent developmental studies have identified such factors as early exposure to aggressive peers and rejection by peers as contributing to later antisocial conduct. Developmental theory also suggests that conduct disorders, differences in cognitive abilities, and ADHD all play a significant role in facilitating chronic antisocial behavior in children and adolescents. However, they certainly do not “cause” it. Although each of these correlates with delinquency, a cautionary note is necessary.

“Deficiencies” in children may well be due to abuse, neglect, or lack of resources or understanding on the part of the adults in their lives. Focusing on behavioral problems in children without attending to their broader social systems is unwarranted.

The topic of school violence became salient after highly publicized school shootings in the 1990s. Although victimization in school is a problem, it must be kept in perspective. Studies show that serious school crime is declining and that children are safer in school than in many communities and, unfortunately, many homes. Nevertheless, forensic psychologists have been increasingly asked to conduct threat assessments when school officials are concerned that a particular student or students may pose a threat to others in the school.

Recent data suggest that juvenile firesetting is a considerable social problem, with juveniles responsible for almost half of all arsons. As a group, children are fascinated with fire, and some experimental play with matches or other incendiary devices is not unusual. Persistent firesetting, as well as that which continues past age 10, is a sign of serious developmental problems, however. Researchers have concluded that firesetting is usually only one in a cluster of antisocial behaviors and have begun to develop and test typologies of juvenile firesetters.

We discussed in some detail the criminal psychopath, a designation that has been given to a significant minority of adults. Although it is estimated that only 1% of the total adult population would qualify as psychopathic, estimates of the number of imprisoned psychopaths have reached 15% (although some believe these estimates are inflated). Psychopaths are problematic, not only because of their offending patterns but also because of their resistance to change. For this reason, a diagnosis of psychopathy may be the “kiss of death” at capital sentencing. A variety of instruments are offered to measure psychopathy, the most widely known being Robert Hare’s (1991) PCL-R. We noted that gender, race, and ethnicity differences in psychopathy are beginning to merit research attention.

Although there is debate over whether the concept of psychopathy can be applied to juveniles, efforts to develop instruments for measuring this construct are robust and ongoing. At this point, they are used only in research. However, the concept of juvenile psychopathy—if such a construct exists—may have important implications for the prevention of serious delinquency. Nevertheless, as in the adult population, psychopathy is likely to be limited to a very small subset of juvenile offenders.
Adolescent-limited offenders (ALs)
Antisocial personality disorder (ASP)
Attention deficit/hyperactivity disorder (ADHD)
Coercive behaviors
Conduct disorder
Crime (definition of)
Early starters
Emotional intelligence
Executive functions
Factor analysis
Firesetting
Hostile attribution bias
Index crimes
Juvenile delinquent
Life course–persistent offenders (LCPs)
National Incident-Based Reporting System (NIBRS)
Oppositional defiant disorder (ODD)
P-Scan: Research Version
Psychopath
Psychopathy Checklist—Revised (PCL-R)
Psychopathy Checklist (PCL) series
Psychopathy Checklist: Screening Version (PCL:SV)
Psychopathy Checklist: Youth Version (PCL:YV)
Self-regulation
Status offenses
Temperament
Threat assessment

1. Discuss the differences between legal and psychological definitions of delinquency.
2. What are the main sources of youth crime data?
3. Explain how Moffitt’s original dichotomy of juvenile offending has been modified in recent years.
4. What are at least three explanations of ADHD?
5. What are any three alternative explanations for the IQ–delinquency connection?
6. What is intelligence? How has Howard Gardner contributed to psychology’s understanding of this concept?
7. What are five commonly held myths about school shooters?
8. How does threat assessment differ from criminal profiling?
9. List Cleckley’s behavioral features of the psychopath.
10. State the controversy over labeling juveniles as psychopaths.