

# PSYCHOSOCIAL THEORIES: INDIVIDUAL TRAITS AND CRIMINAL BEHAVIOR

**L**ittle Jimmy Caine, a pug-nosed third-generation Irish American, is an emotionless, guiltless, walking id, all 5' 5" and 130 pounds of him. By the time he was 26, Jimmy had accumulated one of the worst criminal records the police in Toledo, Ohio, had ever seen: burglary, aggravated assault, robbery, rape—name it, Jimmy had probably done it. This little tear-away had been arrested for the brutal rape of a 45-year-old barmaid. Jimmy entered an unlocked bar after closing time to find the lone barmaid attending to some cleaning chores. Putting a knife to the terrified woman's throat, he forced her to strip and proceeded to rape her. Because she was not sexually responsive, Jimmy became angry and placed her head over the kitchen sink and tried to decapitate her. His knife was as dull as his conscience, which only increased his anger, so he picked up a bottle of liquor and smashed it over her head. While the woman lay moaning at his feet, he poured more liquor over her, screaming, "I'm going to burn you up, bitch!" The noisy approach of the bar's owner sent Jimmy scurrying away. He was arrested 45 minutes later while casually eating a hamburger at a fast-food restaurant.

Jimmy didn't fit the demographic profile of individuals who engage in this type of crime. Although he had a slightly below-average IQ, he came from a fairly normal, intact middle-class home. However, Jimmy had been in trouble since his earliest days and had been examined by a variety of psychiatrists and psychologists. Psychiatrists diagnosed him with something called

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*conduct disorder as an 8-year-old and as having antisocial personality disorder at 18. Jimmy's case reminds us that we have to go beyond factors such as age, race, gender, and socioeconomic status to explain why individuals commit criminal acts. In this chapter, we look at many of the traits that psychologists and psychiatrists have examined to explain individual criminality. These explanations do not compete with sociological explanation; rather, they strengthen and complete them.*

Psychological theories of criminal behavior were in vogue before sociology got into the picture and were more interested in individual differences in the propensity to commit crimes than in environmental conditions assumed to facilitate it. These theories looked at how certain personality traits were conducive to criminal behavior, with emphasis placed strongly on intelligence and temperament. The assumption was that low intelligence hampers the ability to properly calculate the pleasures and pains involved in undertaking criminal activity and that certain types of temperament tend to make the person impulsive and difficult to socialize. As with all other individual characteristics, low IQ should be considered a single risk factor among many others and as neither a necessary or sufficient cause of criminal behavior.

One of the earliest works emphasizing low intelligence was Richard Dugdale's *"The Jukes": A Study of Crime, Pauperism, Disease, and Heredity*.<sup>1</sup> Dugdale studied the lineage of a rural upstate New York family known for its criminal activity, to which he gave the fictitious name of "Jukes." He traced the family lineage to a colonial-era character named "Max." Generations of Max's descendants remained in relative isolation and largely propagated themselves through intermarriage. Dugdale eventually traced 1,200 of Max's descendants, among whom he found numerous cases of crime, pauperism, illegitimacy, feeble-mindedness, disease, sexual promiscuity, and prostitution. Dugdale's work was widely interpreted as further evidence of the hereditary nature of criminal behavior, although Dugdale himself was a firm believer that moral education could override biological propensities.

Another early study was conducted by Henry Goddard and published in a book titled *The Kallikak Family: A Study in the Heredity of Feeble-mindedness*.<sup>2</sup> This study traced two family lineages of a Revolutionary War soldier named "Martin Kallikak Sr," who dallied with a feeble-minded tavern girl with whom he fathered an illegitimate, feeble-minded son. From this lineage there issued a variety of individuals of unsavory character. Martin produced another line of descendants with a woman from a good Quaker family, from whose lineage there emerged a number of prominent people and very few of unsavory character. From these two families with a common male ancestor and two female ancestors, one "defective" and the other "respectable," Goddard concluded that "degeneracy" was the result of "bad blood."<sup>3</sup>

### Modern Psychology and Intelligence

The root word of *intelligence* is *intelligo*, which means "to select among." Thus, intelligence is the ability to select from among a variety of elements and analyze, synthesize, and arrange them in ways that provide satisfactory and sometimes novel solutions to problems the elements pose. David Wechsler (who devised many of the IQ tests in use today) defined intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his [or her] environment."<sup>4</sup> Intelligence is arguably the trait that most sharply separates humans from the rest of the animal kingdom and, as such, has to be of tremendous importance in all manner of human affairs.

While not seriously questioning the existence of individual differences in intelligence, some social scientists question our ability to measure it accurately and claim that tests designed to do so are biased in favor of the White middle class. However, no studies designed to detect bias in IQ tests have found evidence of bias against any racial/ethnic group or lower socioeconomic (SES) individuals.<sup>5</sup> This impressive record led the National Academy of Sciences,<sup>6</sup> the overwhelming majority of 1,020 Ph.D.-level experts surveyed by Snyderman and Rothman,<sup>7</sup> and the American Psychological Association's (APA) Task Force on Intelligence<sup>8</sup> to conclude that IQ tests are not biased against any group.

### Intelligence, Genes, and the Environment

While scientists who study intelligence agree that IQ levels are substantially influenced by genes,<sup>9,10</sup> the environment also greatly influences it, as the so-called **Flynn effect**<sup>11</sup> has demonstrated. This effect refers to an upward creep in average IQ scores that has been taking place across the last four generations in all countries examined (the largest IQ gains are concentrated at the lowest IQ levels). These IQ gains must be attributed to environmental factors because the gene pool cannot possibly have changed appreciably over the time period involved. The environmental effects are the result of the increase in the complexity of the modern world and of better nutrition and pre- and postnatal care.<sup>12</sup>

Any genetic advantage may not be overly large, but individuals born with a genetic advantage are likely to enjoy an environmental advantage as well (bright children tend to have bright parents). This double advantage sets a child on a trajectory in which there is constant interplay between his or her innate ability and an environment conducive to its development. Dickens and Flynn<sup>13</sup> call this a *multiplier effect*. Children who show an interest in learning will please their intellectually prone parents, who will encourage and reward such behavior. In the school environment, teachers will also note and encourage the child's intellectual gifts. It is this constant interplay of innate ability and an encouraging environment that magnifies small genetic advantages into large advantages over time. Genes and environments are matched in the opposite direction also. Individuals lacking the initial genetic push toward scholarly endeavors will find themselves in environments indifferent (or even hostile) to intellectual pursuits and on a downward spiral with respect to the development of their intellectual abilities. Thus, a small initial genetic disadvantage may be amplified into a large disadvantage over time.

### The IQ-Crime Connection

A number of studies find an IQ gap between offenders and nonoffenders of between 9 and 14 points, and reviews of the IQ-crime relationship find it to be robust.<sup>14,15</sup> There are methodological problems that tend to give the impression that IQ is less strongly related to crime and delinquency than it actually is. Simple comparisons of average IQ levels of offenders and the average IQ of the general population may underestimate the effects of IQ because the population average includes offenders as well as nonoffenders and individuals with such low IQs that they are largely incapable of committing crimes. Thus, the difference in average IQ between offenders and intellectually normally functioning nonoffenders must be greater than the 8 to 10 points usually reported.<sup>16</sup>

Another problem is that boys who limit their offending to their teenage years and commit only minor delinquent acts are lumped together with boys who will continue to seriously and frequently offend into adulthood. Simple arithmetic tells us that pooling these two groups

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hides the magnitude of IQ differences between nonoffenders and serious offenders if the latter have lower IQs than the former. Casual and less serious offenders differ from nonoffenders by about 1 point, while serious persistent offenders differ from nonoffenders by about 17 points.<sup>17</sup>

### Intellectual Imbalance

**Intellectual imbalance** refers to a significant difference between verbal and performance IQ scores. IQ scores are typically given in terms of a *full-scale* score, obtained by averaging the scores on *verbal* (VIQ) and *performance* (PIQ) IQ subscales. Most people have VIQ and PIQ scores that closely match, with a population average of 100 on each subscale. People who have either VIQ or PIQ subscale scores 12 or more points greater than the other (VIQ > PIQ or PIQ > VIQ) are considered intellectually imbalanced. Offender populations are almost always found to have significantly lower VIQ scores, but not lower PIQ scores, than nonoffenders. As Miller remarks, "This PIQ>VIQ relationship was found across studies, despite variations in age, sex, race, setting, and form of the Wechsler [IQ] scale administered, as well as in differences in criteria for delinquency."<sup>18</sup>

Averaged across a number of studies, VIQ > PIQ boys are underrepresented in delinquent populations by a factor of about 2.6, and PIQ > VIQ boys are overrepresented by a factor of about 2.2.<sup>19</sup> A VIQ > PIQ profile appears to be a major predictor of prosocial behavior, especially among adults, given the finding that only 0.9% of 1,792 prison inmates had a VIQ > PIQ profile compared to 18% of the general male population, a ratio of 20:1.<sup>20</sup> The research on intellectual imbalance provides another example of how the role of IQ in understanding criminal behavior may be underestimated if we rely solely on full-scale IQ.

### Explaining the IQ-Offending Relationship

There are a number of different routes by which IQ may be related to offending. Perhaps high-IQ people are just as likely to break the law as low-IQ people, but only the less intelligent get caught. If this is the case, low IQ is related to criminal offending only insofar as it leads to a greater probability of detection. This argument is known as the **differential detection hypothesis**. A test of this hypothesis, based on a large birth cohort, found no support for it.<sup>21</sup> Subjects were asked to self-report delinquent activity, which was compared with official police records. This provided three distinct groups: (1) self-reported delinquents with a police record, (2) self-reported delinquents with no police record, and (3) nondelinquents, as assessed both by self-reports and police records. Comparing IQ scores among the groups, it was found that the full-scale, verbal, and performance IQ means of Groups 1 and 2 did not significantly differ from one another, meaning that undetected delinquents were no brighter than their less fortunate detected peers. Both groups had significantly lower full-scale and VIQ means, but not lower PIQ means, than nondelinquents.

Another argument is that crime rates fluctuate greatly while IQ averages do not. If crime rises irrespective of IQ changes, something other than IQ must be responsible for the rise. This is true; low IQ is simply a risk factor differentially expressed under different social conditions. A generation or two ago, when most families were intact, when there was a higher level of moral conformity, and when entry into the workforce demanded less academic preparation, people with relatively low IQs were more insulated from crime by social control mechanisms. Social conditions are different today, and low-IQ individuals are less insulated from crime. This is an example of individuals with different risk factors crossing the crime threshold boundary according to shifting social conditions (see Figure 1.3).

Others argue that the link between IQ and criminality simply reflects the links between SES, IQ, and criminality—that is, low SES causes low IQ and crime, and thus the IQ-criminality relationship is simply a consequence of the SES-criminality relationship. SES does affect the relative contributions of genes and environments, but when SES is completely controlled by examining the relationship between IQ and crime *within* families, we find that criminal siblings average 10 IQ points lower than their noncriminal full siblings.<sup>22</sup>

### IQ and School Performance

The most usual explanation is that low IQ leads to antisocial behavior via poor school performance.<sup>23</sup> That is, low IQ sets individuals on a trajectory, beginning with poor school performance, which results in a number of negative interactions with other people in the school environment, leading them to drop out of school and associate with delinquent peers. The notion that IQ influences offending via its influences on school performance has much to commend it. Ellis and Walsh's review<sup>24</sup> of 158 studies linking IQ to criminal and delinquent behavior found that 89% based on official statistics and 77.7% based on self-reports found a significant link. On the other hand, all 46 studies exploring the link between grade point average (GPA) and antisocial behavior did so. Actual performance measures of academic achievement such as GPA are thus probably better predictors of antisocial behavior than IQ. Academic achievement is a measure of intelligence plus many other personal and situational characteristics, such as conscientious study habits and supportive parents.

Finally, it would be a mistake to regard IQ as an indicator of social worth rather than as representing a limited set of cognitive traits. High-IQ miscreants can do much more damage than their low-IQ counterparts due to the greater deviousness made possible by high IQ. The IQs of Nazi war criminals remind us not to confuse IQ with worth. Herman Goring, Franz von Papen, and Albert Speer had IQ scores of 138, 134, and 128, respectively.<sup>25</sup> We have no record of Hitler's IQ, but he has been repeatedly described as an evil genius.<sup>26</sup> Many serial killers such as Ted Bundy (124) and Edward Kemper (136) score high on IQ as well.<sup>27</sup>

#### FOCUS ON . . .

### The Impact of High and Low IQ on Life Outcomes

**I**Q is related to a wide range of life outcomes that are themselves related to criminal and antisocial behavior such as poverty, lack of education, and unemployment. The data presented below come from 12,686 White males and females in the National Longitudinal Study of Youth (NLSY). This study began in 1979, when subjects were 14 to 17 years old; the data were collected in 1989, when the subjects were 24 to 27 years old. The bottom 20% on IQ had scores of 87 and below; the top 20% had scores 113 and above. Note the large ratios between the two groups on all outcomes. For instance, 31 low-IQ subjects were ever interviewed in jail or prison for every 1 high-IQ subject ever interviewed in jail or prison. Low IQ thus affects many areas of life that increase the probability of offending.

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**IQ Level**

<b>Social Behavior</b>	<b>Bottom 20% (%)</b>	<b>Top 20% (%)</b>	<b>Ratio</b>
Dropped out of high school	66	2	33.0:1
Living below poverty level	48	5	9.6:1
Unemployed entire previous year <sup>a</sup>	64	4	16.0:1
Ever interviewed in jail or prison	62	2	31.0:1
Chronic welfare recipient	57	2	28.5:1
Had child out of wedlock <sup>b</sup>	52	3	17.3:1

SOURCE: NLSY data taken from various chapters in Herrnstein, R., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. New York: Free Press.

a. Males only.

b. Females only.

## The Role of Temperament

It is obvious that low intelligence alone cannot explain criminal behavior. Most individuals with a below-average IQ do not commit crimes, and many people with an above-average IQ do. Environmental factors presumably outside the individual's control are extremely important, of course, but we are not concerned with such factors in this chapter. Rather, we want to look at what other personal factors are considered important for understanding criminal behavior by psychologically inclined criminologists.

According to many of the early psychological positivists, criminal behavior is the result of the interaction of low intelligence and a particular kind of temperament: A "feebleminded" person with weak impulses and a quiet temperament may never stoop to crime unless duped by others or forced by necessity to do so, but an excitable and impulsive person of low intelligence "is almost sure to turn in the direction of criminality."<sup>28</sup> As we have seen, IQ and temperament are given prominent roles as factors influencing how a person copes with strain, and thus how insulated he or she is from criminal behavior, in Robert Agnew's general strain theory.<sup>29,30</sup> Temperament and IQ are thus spilling over from psychological theories into theories considered primarily sociological.

**Temperament** is an individual characteristic identifiable as early as infancy that constitutes a habitual mode of emotionally responding to stimuli. Temperamental components include *mood* (happy/sad), *sociability* (introverted/extraverted), *activity level* (high/low), *reactivity* (calm/excitabile), and *affect* (warm/cold), among others. These various components make it easy or difficult for others to like us and to get along with us. Temperamental differences are largely a function of different genetic predispositions in nervous system functioning

governing physiological arousal patterns.<sup>31</sup> The genetic underpinning of temperament ensures that it will be reasonably stable across the life course, although environmental input can strengthen or weaken innate propensities. Different temperamental components emerge at different junctures as arousal systems are fine-tuned by experience.<sup>32</sup>

Temperamental differences in children make them variably responsive to socialization. Some children are easy to socialize; others are difficult. A child's unresponsiveness to socialization is made worse by the fact that the temperaments of parents and children are usually similar; that is, warm, happy, and easygoing children tend to have warm, happy, and easygoing parents, and cold, melancholic, and difficult children tend to have parents who share those same traits. Children with difficult temperaments tend to have parents who are poor disciplinarians, irritable, impatient, and unstable, just the opposite of what is required to adequately socialize difficult children. Temperamentally difficult children are thus typically (but not always) saddled with both a genetic and an environmental liability.<sup>33,34</sup>

Children who throw temper tantrums, react negatively to new situations and people, and who reject warm overtures from others may adversely affect the quality of parent-infant interactions regardless of their parents' temperaments, thus leading to poor parent-child attachment and all the negative consequences that result. Numerous studies have shown that parents, teachers, and peers respond to children with disinhibited and irritable temperaments negatively, and such children find acceptance only in association with others with similar dispositions.<sup>35</sup>

### Personality: In the Beginning Was Freud

**Personality** is the relatively enduring, distinctive, integrated, and functional set of psychological characteristics that result from people's temperaments interacting with their cultural and developmental experiences. There are many different components of personality that psychologists call *traits*, some of which are associated with the probability of committing antisocial acts.

No discussion of personality can proceed without acknowledging the role of the father of psychoanalysis and the grandfather of positivist psychology, Austrian physician Sigmund Freud. Freud offered a broad, sweeping theory of personality, and although he wrote little about crime, his ideas stimulated many criminologists.

Early psychological theories never labored over what mental processes might intervene between the assumed cause and criminal behavior. Just *how does* "feble-mindedness," "atavism," or any other assumed cause influence persons to commit criminal acts? If all people are hedonistic, why do only some commit crimes? If criminals are feble-minded, why don't all low-IQ people commit crimes? The psychological answer to such questions is that individuals possess different personalities, and these different personalities lead them to respond differently to identical situations.

According to Freud, the basic human personality is a composite of three interacting components, each having separate purposes: the *id*, *ego*, and *superego*. The *id* is the biological raw material of our temperament and personality; it represents our drives and instincts for acquiring life-sustaining necessities and life's pleasures. Like a spoiled child, the *id* demands instant gratification of its desires and cares not whether the means used to satisfy them are appropriate or injurious to self or to others. The *id* obeys the *pleasure principle*, but since it lacks the ability to engage in the hedonistic calculus, it is often dangerous to itself. The selfish, immoral, uncaring, antisocial *id* is the only aspect of the personality we are born with, so in a Freudian sense, we might say that we are all Lombroso's "born criminals."

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The *ego* and the *superego* are formed from the raw material of the *id* in the process of socialization. With the correct moral training, energy from the *id* is appropriated to form the *ego*, or the aspect of the personality we think of as “me” or “I.” The *ego* obeys the *reality principle*; it realizes that the desires and demands of the *id*, although necessary, must be satisfied in socially appropriate ways if one is to avoid negative consequences. It is the *ego* that performs the hedonistic calculus; it does not deny the pleasure principle but simply adjusts it to the demands of reality. Freud analogized the interaction of the *ego* and the *id* in terms of a rider and a horse. The horse (the *id*) supplies the raw locomotive power, while the rider (the *ego*) supplies the goals and the direction.<sup>36</sup>

The *superego* strives for the ideal and is thus just as irrational as the *id*. It represents all the moral and social prescriptions and proscriptions (the “dos and don’ts”) internalized by the person during the process of socialization and may be summed up as the human conscience. The *superego* tries to suppress all the normal urges arising from the *id* by generating guilt because many urges have been defined as wrong or sinful. It is the *ego*’s function to sort out the conflict between the antisocial demands of the *id* and the overly conformist demands of the censorious *superego*.

The normal personality is one in which the *ego* is successful in working out compromises between its irrational partners. An abnormal personality results when either the *id* or the *superego* overwhelms the *ego*, resulting in psychic energy being drained from the weaker components to strengthen the stronger component. If the *id* is “in command” of the personality, the result is a conscienceless and impulsive individual who seeks to satisfy personal needs regardless of the expense to others.

### Personality Traits Associated With Criminal Behavior

We will now briefly examine personality traits that have consistently been associated with criminal behavior. Keep in mind that all of these traits are the result of different kinds of temperaments meeting different kinds of developmental experiences and that they are continuous, not dichotomous. That is, people differ only on the strength of these traits; they are not characteristics that some people possess and others do not.

**Impulsiveness** refers to people’s varying tendencies to act on matters without giving much thought to the consequences (not looking before you leap). Impulsiveness varies from person to person according to the circumstances involved, and one can be impulsive without ever crossing the noncrime/crime threshold. Nevertheless, impulsive individuals are found more often among criminal populations than among the population at large. Not surprisingly, impulsive people also have elevated probabilities of being diagnosed with psychopathy.<sup>37</sup> A review of 80 studies examining the relationship between impulsivity and criminal behavior found that 78 of them (97.5%) were positive, and the remaining 2 were nonsignificant.<sup>38</sup> Although impulsiveness is a potent risk factor for criminality in its own right, it becomes more potent if negative emotionality is added to the mix.<sup>39</sup>

**Negative emotionality** (or *negative affect*) is a personality trait that refers to the tendency to experience many situations as aversive and to react to them with irritation and anger more readily than with positive affective states.<sup>40</sup> Caspi and his colleagues<sup>41</sup> contend that criminality is defined (at a minimum) by both low self-control (which they call *low constraint*) and negative emotionality. Constraint is inversely related to negative emotionality; that is, people who are low on constraint tend to be high on negative emotionality. Individuals high on negative emotionality but also high on self-control are able to hold their anger and irritability in check.





▲ **Photo 7.1** Depicted is the couch used by a large number of Freud's patients in Vienna. Freud theorized that early childhood events and traumas in particular caused his patients to exhibit emotional and personality problems as adults. By putting them through the process of psychoanalysis and recovering these early childhood memories, Freud hoped to restore his patients.

In the absence of strong social controls, people high on negative affect and low on self-control usually cannot.

Negative emotionality is strongly related to self-reported and officially recorded criminality "across countries, genders, races, and methods."<sup>42</sup> Caspi and his colleagues state that low levels of a brain chemical called serotonin (more about this chemical in the next chapter) underlie both high levels of negative emotionality and low levels of constraint (high impulsivity). They also claim that low serotonin may represent a constitutional predisposition for a personality characterized by high levels of negative affect and low levels of constraint, and this generates vulnerability to criminal behavior. Although some individuals may be at genetic risk for high negative emotionality and low self-control, both traits are influenced by environmental factors, particularly by family dynamics that include emotional and physical abuse and neglect.<sup>43</sup>

**Sensation seeking** refers to the active desire for novel, varied, and extreme sensations and experiences, often to the point of taking physical and social risks to obtain them.<sup>44</sup> Sensation seekers skydive, bungee jump, race cars, and go on adventure safaris if they are well off; if they are not, their kicks might just be criminal in nature. Sensation seekers with normal

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to above-normal IQs and who are properly socialized will probably want to work as firefighters, police officers, or any other job that provides physical activity, variety, and excitement. Low-IQ and unsocialized individuals do not have those legitimate options available to them. Ellis and Walsh's review<sup>45</sup> found that 58 of 59 (98.4%) studies reported a statistically significant relationship between sensation seeking and various kinds of antisocial behavior.

The more impulsive a person is, the more sensation seeking he or she tends to be. A Canadian study found that measures of impulsivity and sensation seeking in male preschoolers are the best available predictors of delinquency at age 13.<sup>46</sup> A longitudinal study using both physiological and psychological measures of sensation seeking that looked at high and low sensation seekers who were and were not seriously involved in delinquency found some interesting results.<sup>47</sup> High sensation-seeking delinquents were significantly more impulsive, had significantly lower IQs, and were lower in socioeconomic status than high sensation-seeking control subjects. Among the low sensation seekers, only low IQ differentiated delinquents (average IQ = 85.5) from nondelinquents (average IQ = 102.8). However, 33% of the serious delinquents were low sensation seekers—low sensation seekers can be seriously involved in delinquency, too. The fact that 54% of the nondelinquents were high sensation seekers shows that high sensation seeking requires the addition of other factors (high impulsivity, low IQ, and low SES in this study) to result in serious delinquent behavior. Criminal behavior is almost always the result of a constellation of risk factors rather than of any one single factor.

**Conscientiousness** is a primary trait composed of several secondary traits such as well organized, disciplined, scrupulous, responsible, and reliable at one pole and disorganized, careless, unreliable, irresponsible, and unscrupulous at the other. It is easy to see from this list how conscientiousness could be directly related to crime, but it might be a more useful discussion to tie it to Merton's anomie theory. Recall that Merton tells us that all Americans are exhorted to strive for the American Dream, but some of us are denied access to attaining it legitimately. Isn't it just as possible that those who do not pursue the dream legitimately cannot do so because they lack the requisite qualities for occupational success? Vold, Bernard, and Snipes thought so when they wrote, "It is not merely a matter of talented individuals confronted with inferior schools and discriminatory hiring practices. Rather, a good deal of research indicates that many delinquents and criminals are untalented individuals who cannot compete effectively in complex industrial societies."<sup>48</sup>

Conscientiousness is highly associated with upward social mobility, and employers obviously favor high levels of conscientiousness in their employees.<sup>49</sup> In a study that followed subjects from early childhood to retirement, Judge and his colleagues<sup>50</sup> found that conscientiousness predicted occupational success better than any other factor they examined. In other words, it may be that persons with certain kinds of temperament do not develop the personal qualities needed to apply themselves to the long and arduous task of achieving financial success legitimately and, as a consequence, may attempt to obtain it illegitimately through crime. A review of the genetic literature indicated that genes account for an average of about 66% of the difference in conscientiousness among individuals.<sup>51</sup>

**Empathy** is the emotional and cognitive ability to understand the feelings and distress of others as if they were your own—to be able to "walk in another's shoes." The emotional component of empathy allows you to "feel" the other person's pain, and the cognitive component allows you to understand that person's pain and why he or she is feeling it. Individuals differ in their ability to empathize, with some people shouldering the pains of the world at one end

of the continuum and others caring less about even their closest relatives at the other. Most criminals will fall closer to the latter than to the former for obvious reasons—you are less likely to victimize someone if you have a tendency to feel and understand what the consequences may be for them. A number of studies show that offenders are significantly less empathetic than nonoffenders.<sup>52</sup> Baron and Byrne<sup>53</sup> cite evidence that genetic factors account for about one third of the difference among people in empathy.

**Altruism** can be thought of as the action component of empathy; if you feel empathy for someone, you will probably feel motivated to take some sort of action to alleviate that person's distress if you are able. Altruism may thus be defined as an *active* concern for the well-being of others, and in many ways, it is a synonym for prosocial behavior. Thus we have another continuum, with extremely altruistic individuals at one end and extremely selfish people at the other. There are no prizes for guessing on which side of the line most criminals will fall. In fact, the lack of empathy and altruism is considered one of the most salient characteristics of psychopaths, the worst of the worst among criminals.<sup>54</sup> A review of 24 studies of those traits found that 23 of them were statistically significant in the predicted direction; that is, the lower the level of empathy/altruism, the more antisocial the behavior.<sup>55</sup>

**Moral reasoning** is another personal characteristic that psychologists find to be linked to antisocial behavior. Studies have repeatedly shown that a strong relationship exists between moral reasoning and the ability and/or inclination to empathize with and come to the aid of others.<sup>56</sup> Not all immoral behavior is criminal, of course, but they do have certain things in common. Both forms of behavior violate social expectations and ignore the obligations we all have toward one another.

To measure moral reasoning, subjects are read a series of scenarios containing moral dilemmas to which they are asked to verbally respond. Most of these dilemmas involve the ability to put oneself in another's shoes (empathy) and to devise a course of action to help that person (altruism). Ten studies assessing the link between moral reasoning and empathy and altruism revealed that the higher the empathy and altruism, the greater the moral reasoning.<sup>57</sup> The same reviewers also found that 16 of 17 studies found IQ to be positively related to moral reasoning level.<sup>58</sup> Moral reasoning is thus a function of empathy and altruism, as well as knowledge and understanding of, and agreement with, culturally defined standards of right and proper behavior. Consciousness of one's own moral standards and conduct, as well as the feeling of obligation to live up to those standards, is the stuff of conscience.

## Classical Conditioning and Conscience

Ever since human groups first established rules, people have been tempted to violate them. Many of us have been prevented from doing so by fear of punishment and by the bite of our consciences. **Conscience** is a complex mix of emotional and cognitive mechanisms that we acquire by internalizing the moral rules of our social group in the ongoing socialization process. Those of us with strong consciences will feel guilt, shame, stress, and anxiety when we violate, or even contemplate violating, these rules. In other words, we have emotional reactions that vary from person to person based on innate physiological arousal patterns and how they have been molded by experience.

Differences in the emotional component of conscience are observed as early as 18 months, long before children are able to cognitively reflect on their behavior as morally right or wrong. These differences reflect variation in **autonomic nervous system** arousal

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patterns.<sup>59</sup> The autonomic nervous system (ANS) is part of the body's *peripheral nervous system* (as opposed to the central nervous system [CNS], which consists of the brain and spinal column). The ANS carries out the basic housekeeping functions of the body by funneling messages from the environment to the various internal organs so that they may keep the organism in a state of biological balance. Most of these messages elicit only reflexive responses (adjusting pupil size, signaling digestive enzymes, shivering or sweating in response to temperature, etc.) and never reach our conscious awareness. Messages that influence ANS functioning and that do reach our awareness are important for the acquisition of conscience.

To understand why, we have to briefly describe what psychologists call **classical conditioning**. Classical conditioning is a form of learning that is more visceral (felt in the internal organs) than cognitive. If you have taken Psych 101, you will have read about Russian psychologist Ivan Pavlov's experiment in which he conditioned dogs to salivate at the sound of a bell. Salivation is a natural ANS response to the expectation of food; food is an unconditioned stimulus to an unconditioned (innate, hardwired) salivation response. A bell has no intrinsic properties that would make dogs salivate at its sound, and thus the bell is a neutral stimulus with respect to salivation. Because Pavlov consistently paired the sound of the bell with food, the dogs learned (were conditioned) to associate the sound of the bell with food, and the sound itself became enough to make them salivate even when not paired with food. Figure 7.1 illustrates this process.

It is necessary to briefly differentiate classical from operant conditioning. Operant conditioning is active (it depends on the actor's behavior), is cognitive in nature, and forms an association between a person's behavior and its consequences. Classical conditioning is mostly passive (it depends more on the level of ANS arousal than on anything the actor does) and is visceral in nature; it simply forms an association between two paired stimuli.

We have all been conditioned in various ways to respond viscerally to neutral stimuli via their association with unconditional stimuli. As children, how did you feel when the school bell rang for recess or when the bells announced the arrival of the ice cream truck? In both cases, we expect that you responded with some pleasure, not because you love the sound of bells, but because they signaled something that you did love.

It is by way of these kinds of associations that we develop the "gut-level" emotions of shame, guilt, and embarrassment that make up the emotional ("feeling") superstructure of our consciences. These emotions are the *social* or *secondary* emotions that are retrofitted to the same neurophysiological machinery that drives the hardwired *primary* emotions of fear, anger, sadness, and joy that are common to all animals. After the primary emotions are elaborated and refined by cognition during socialization, we fear the pain of punishment and the shame of rejection when we transgress and welcome the joy of acceptance and affection when we behave well.

Children must learn which behaviors are acceptable and which are not (the knowledge part of our conscience). If John is spanked and sent to his room for sticking pins in the cat, he will experience a variety of unpleasant physiological events. The degree to which these emotions affect John will depend on the severity of the reprimand interacting with the responsiveness of his ANS.<sup>60</sup> Assuming John's ANS is adequately responsive to discipline, he will eventually name similar behaviors that generate the same ANS responses as bad or wrong, and he will feel guilt if he even contemplates doing them. If John refrains from such behavior in the future, it is not because he has rationally calculated the cost/benefit ratio involved but

**Figure 7.1** Illustrating Classical Conditioning

<p style="text-align: center;"><b>BEFORE CONDITIONING</b></p> <p style="text-align: center;">Unconditioned Stimulus (food) → Unconditioned Response (salivation)</p> <p>Unconditioned stimulus produces an unconditioned response.</p>	<p style="text-align: center;"><b>BEFORE CONDITIONING</b></p> <p style="text-align: center;">Neutral Stimulus (bell) → No Response</p> <p>Neutral stimulus produces no response.</p>
<p style="text-align: center;"><b>CONDITIONING PROCESS</b></p> <p style="text-align: center;">Unconditioned Stimulus (food) + Neutral Stimulus → Unconditioned Response (salivation) (bell)</p> <p>Unconditioned stimulus paired with neutral stimulus produces an unconditioned response.</p>	<p style="text-align: center;"><b>AFTER CONDITIONING</b></p> <p style="text-align: center;">Conditioned Stimulus (bell) → Conditioned Response (salivation)</p> <p>Neutral stimulus becomes a conditioned stimulus that now produces a conditioned response.</p>

rather because his internal response system (the emotional component of his conscience) strongly discourages it by generating unpleasant feelings.

People differ greatly in the responsiveness of their ANSs. Individuals with a readily aroused ANS are easily socialized—they learn their moral lessons well. They do so because ANS arousal (“butterflies in the stomach”) is subjectively experienced as fear and anxiety. We soon learn that when we behave ourselves, we do not incur the wrath of our socializers, and fear and anxiety do not appear. A hyperresponsive ANS (one that is easily aroused and generates high levels of fear and anxiety) is a protective factor against antisocial behavior. Studies have shown that males with *hyperarousable* ANSs living in environments that put them at high risk for antisocial behavior were less involved with antisocial behavior than males living in low-risk communities with *hypoarousable* (slow to arouse) ANSs.<sup>61</sup> This constitutes yet another example of how personal characteristics interact with environments to mold behavior.

Individuals with relatively unresponsive ANSs are difficult to condition (to socialize) and are relatively fearless. These individuals experience little fear, shame, guilt, or embarrassment when they transgress, even when discovered and punished, and thus have no built-in visceral restraints against further transgressions. Various measures of ANS underarousal (electroencephalographic activity, resting heart rate, and skin conductance) in childhood enable researchers to correctly classify about three quarters of their subjects as “criminals” or “noncriminals” in adulthood.<sup>62</sup> In other words, across a wide variety of subjects and settings, it is consistently found that antisocial individuals evidence relatively unresponsive ANSs, and the reason for this is that hypoarousable ANSs do not allow for adequate conditioning of the social emotions. Having knowledge of what is right or wrong without that knowledge being paired with emotional arousal is rather like knowing the words to a song but not the music.

## Modern Psychosocial Theories

### Arousal Theory

**Arousal theory** (sometimes called *suboptimal arousal theory*) focuses on central nervous system (brain) arousal rather than peripheral system (ANS) arousal. The theory is rooted in the commonsense observation that people vary greatly in their sensitivities and preferences for environmental stimulation and on established psychological findings that different levels of physiological arousal correlate with different personality and behavioral patterns. In identical environmental situations, some people are underaroused and other people are overaroused, and both levels are psychologically uncomfortable. Arousal levels are normally (bell curve shaped) distributed with very few people being extremely under- or overaroused, with most people being optimally aroused under the normal range of environmental conditions (neither too constant nor too varied). What is an optimal level of environmental stimulation for most of us will be stressful for some and boring for others. If you've ever taken your grandpa to a punk rock concert or he has taken you to a chamber music recital, you'll know what we mean.

The regulator of neurological arousal (sleep, wakefulness, attention) is the *reticular activating system* (RAS). The RAS is a little finger-size bundle of brain cells situated at the top of the spinal cord and can be thought of as the brain's filter system determining what incoming stimuli the higher brain centers will pay attention to. Some individuals possess an RAS that is highly sensitive to incoming stimuli (more information is taken in and processed), and others possess an RAS that is unusually insensitive. We call the former *augmenters* and the latter *reducers*. There is no conscious attempt to augment or reduce incoming stimuli; as is the reactivity of the ANS, augmentation or reduction is solely a function of differential physiology. RAS augmenters tend to be the people with hyperactive ANSs, and reducers tend to be people with hypoactive ANSs. Underarousal of the ANS is associated with fearlessness, and underarousal of the RAS is associated with sensation seeking. We can readily appreciate that sensation seeking and fearlessness are correlated since sensation seeking is aided by fearlessness.<sup>63</sup>

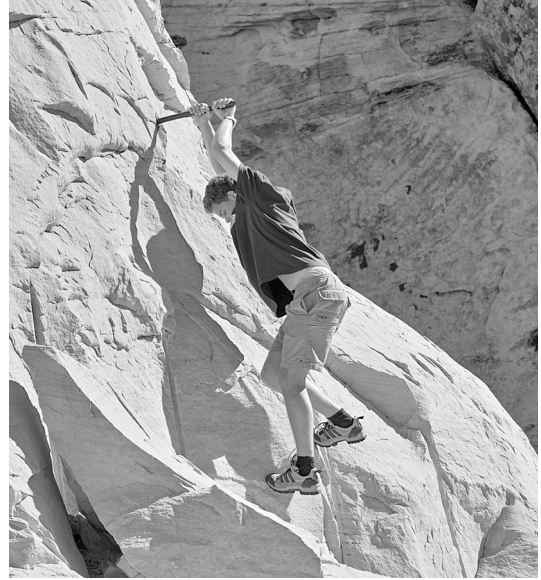
Augmenters prefer more constancy than variety in their world and seek to tone down environmental stimuli that most people find to be "just right." Such people quickly learn to avoid engaging in behavior that raises the intensity of stimuli to levels they find unpleasant and are rarely found in criminal populations. Reducers are easily bored with "just right" levels of stimulation and continually seek to boost stimuli to what are for them more comfortable levels. They also require a high level of punishing stimuli before learning to avoid the behavior that provokes it. According to arousal theory, the latter are the individuals who are unusually prone to criminal behavior. A number of studies have shown that relative to the general population, criminals, especially those with the most serious records, are chronically underaroused, as determined by electroencephalography (EEG) brainwave patterns, resting heart rate, and skin conductance.<sup>64</sup>

EEG brainwaves reflect the electrical "chatter" of billions of our brain cells. Clinicians recognize four bands to classify EEG brainwaves: *alpha*, *beta*, *theta*, and *delta*. Beta waves followed by alpha waves are the most rapid, and they signal when a person is alert and focused. Theta waves are emitted when the person is in a drowsy mental state, and delta waves are the slowest of them all and signal deep sleep. Most studies (about 75%) show that EEG readouts of criminals reveal that their brains are less often in the alert and focused range than are the brains of people in general.<sup>65</sup>

Resting heart rate and skin conductivity are more measures of ANS than RAS arousal. Resting heart rates measured during childhood has emerged as a very good predictor of

delinquent and criminal behavior later in life.<sup>66</sup> A review of 23 studies found that slow resting heart rate is significantly related to delinquent/criminal behavior in all studies.<sup>67</sup>

Skin conductivity is measured by a meter attached to various parts of the body that records electrical responses to sweat. Sweat contains high levels of salt, and salt water is an excellent electrical conductor. In temperature-controlled environments, increased sweating (even though the sweating may not be enough for the person to notice that he or she is sweating) occurs in response emotions. This is the basis of polygraph testing. The polygrapher asks suspects questions that evoke emotions such as guilt, shame, or embarrassment that are detected (or rather skin conductivity is detected) by the monitor. Chronic criminals tend to have lower levels of these emotions as well as lower levels of ANS arousal, so they are least likely to show sweat responses to threatening questions. Thus, low skin conductivity and criminal behavior are expected to be related. Seventeen of 19 studies (89.5%) did find this relationship, with the remaining 2 (both for childhood conduct disorder) not significant.<sup>68</sup>



▲ **Photo 7.2** Arousal theory states that human beings have varying internal “thermostats,” which explains why people differ on the levels of arousal or stimulation they need to feel comfortable. Those already set on “high” may attempt to avoid noise, activity, or crowds. On the other hand, those who crave stimulation might climb mountains, go to loud parties, or watch slasher movies.



◀ **Photo 7.3** The so-called lie detector (or polygraph) is composed of several physiological measures of emotional stress. Here a subject is demonstrating one of the most common stress indicators used in polygraphs—known as the Galvanic skin response (GSR). The GSR monitors sweating of the palms and fingertips, as shown in this photograph. Several studies have shown that offenders exhibit less sweating when under stress than do nonoffenders. This is considered evidence in favor of the theory that criminals tend to be suboptimally aroused.

### Wilson and Herrnstein's Net Advantage Theory

James Q. Wilson and Richard Herrnstein's **net advantage theory**<sup>69</sup> is based on reinforcement and conditioning principles and adds rational choice and individual differences into the theoretical mix. *Net advantage* refers to the fact that any choice we make rests on the cognitive and emotional calculations we make before deciding on a course of action relating to the possible positive and negative consequences that may result from choices such as what to do when we see unlocked cars with keys in the ignition. If our calculations of the costs and benefits of a given behavior point to a net advantage for us, we will make the choice in favor of engaging in that behavior; if our calculations point to a negative outcome, we will not.

Unlike differential association and social learning theories, this theory goes a step beyond to identify individual differences in the likelihood of understanding and appreciating the long-term consequences of a chosen course of behavior. According to Wilson and Herrnstein, there is little difference among people in their ability to appreciate the immediate short-term positive or negative consequences of their behavior, but there is a difference in the ability to appreciate long-term consequences because people differ in the tendency to discount the negative consequences of their behavior to themselves and to others. People who discount negative consequences have a greater probability of antisocial behavior being experienced as reinforcing.

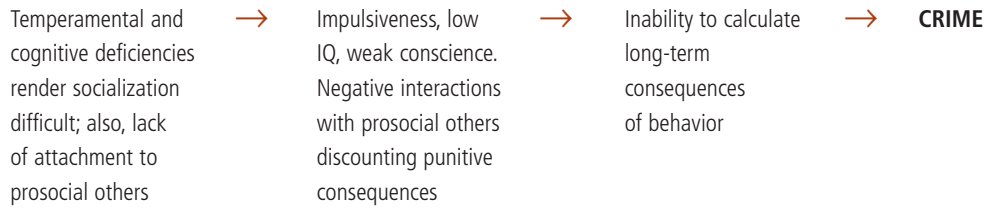
Net advantage theory is anchored in the constrained vision camp in its assumption that crime is inherently rewarding to human beings (because it usually means getting something for little or no cost) and that most of us would commit crime if we were not externally and internally restrained from doing so. External restraints consist of the kinds of social controls present because of the social bonds we enjoy with others, as well as the more formal controls represented by law enforcement. Individuals with a tendency to discount the negative consequences of their behavior do so because their inhibitions are weak, and their inhibitions are weak because they are impulsive, have learning difficulties, are present rather than future oriented, and lack the bite of conscience. Such people are reinforced by the immediate rewards of criminal activity rather than the more distant rewards of a noncriminal lifestyle. They also fail to take into account the punitive consequences of their behavior, and/or they do not fear those consequences.

Net advantage theory adds valuable insights into Akers's theory because it takes into account how the learning process (what is reinforcing and what is not and what serves as discriminative stimuli) is influenced by individual traits and characteristics. Another interesting fact about this theory is that it takes into consideration both classical and operant conditioning, as well as almost every personality trait and characteristic that psychologists have identified as risk factors for criminal behavior. The theory is illustrated diagrammatically in Figure 7.2.

### Glen Walters's Lifestyle Theory

**Lifestyle theory** was formulated by Glen Walters,<sup>70</sup> a senior psychologist at the U.S. Penitentiary at Leavenworth, Kansas, a position that has provided him with a great deal of insight into the criminal mind. The term *lifestyle* implies that Walters believes that criminal behavior is a general criminal pattern of life. Lifestyle criminals are characterized by



**Figure 7.2** Diagrammatic Presentation of Net Advantage Theory

irresponsibility, impulsiveness, self-indulgence, negative interpersonal relationships, and the chronic willingness to violate society's rules. Walters views criminal behavior as a choice conditioned by the interaction of individual traits and environmental circumstances. The main distinguishing features of Walters's theory are (1) it is a theory that concentrates on criminal thinking patterns rather than on how those patterns developed, and (2) it was designed more to guide counselors in their efforts to change criminal thinking rather than to add to the body of criminological knowledge.

Lifestyle theory contains three key concepts: *conditions*, *choice*, and *cognition*. A criminal lifestyle is the result of *choices* criminals make, although Walters acknowledges that these choices are made "within the limits established by our early and current biologic/environmental *conditions*."<sup>71</sup> Thus, various biological and environmental conditions lay the foundation of future choices. In common with the long psychological tradition, Walters stresses impulsiveness and low IQ as the most important choice biasing conditions at the individual level and attachment to significant others as the most important environmental condition.

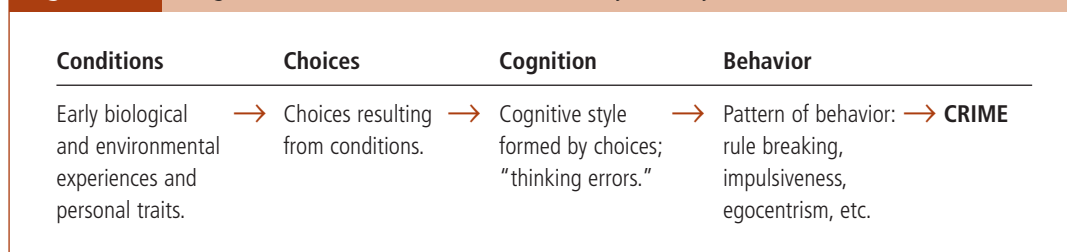
The third concept, *cognition*, refers to cognitive styles that people develop as a consequence of their biological/environmental conditions and the pattern of the choices they have made in response to them. According to this theory, lifestyle criminals display eight major cognitive features or **thinking errors** that make them what they are.<sup>72,73</sup> Examples of criminal thinking errors are *cutoff* (the ability to discount the suffering of their victims), *entitlement* (the world owes them a living), *power orientation* (viewing the world in terms of weakness and strength), *cognitive indolence* (orientation to the present; concrete in thinking), and *discontinuity* (the inability to integrate thinking patterns). According to Walters, little can be done to change criminal behavior until criminals change their pattern of thinking.

These thinking errors lead to four interrelated behavioral patterns or styles that almost guarantee criminality: *rule breaking*, *interpersonal intrusiveness* (intruding into the lives of others when not wanted), *self-indulgence*, and *irresponsibility*. Criminality is thus the result of irrational behavior patterns (all of which are antisocial but not necessarily criminal). These behavioral patterns are the result of faulty thinking patterns, which arise from the consequences (reward and punishment) of choices in early life, which are themselves influenced by biological and early environmental conditions.

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Note the similarity with Sutherland's differential association theory: *Cognition* (how we think) *causes conduct*. The major difference between the two theories is that lifestyle theory stresses that cognitions are caused by individual choices, which are in turn caused by early biological and environmental conditions that are assumed to be detrimental to the individual's moral development. Differential association theory explicitly denies biological variables and considers environmental (cultural) conditions to be simply different rather than deviant. Likewise, Sutherland does not invest his "definitions favorable" with any evaluative or moral connotations, whereas Walters does, calling them "thinking errors." Figure 7.3 illustrates lifestyle theory.

**Figure 7.3** Diagrammatic Presentation of Criminal Lifestyle Theory



## The Antisocial Personalities

Depending on whom you ask, *antisocial personality disorder*, *psychopathy*, and *sociopathy* are terms describing the same constellation of traits or separate concepts with fuzzy boundaries. Psychopathic behavior was once referred to as *manie sans delire* (insanity without delirium), meaning that while psychopaths are "insane," they could function normally, if not morally, in society. Some researchers in this area believe that there is a subset of psychopaths (so-called primary psychopaths) whose behavior is biological in origin, as well as a more numerous group (secondary psychopaths) whose behavior is the result of genetics and adverse environments.<sup>74</sup> Primary psychopaths constitute a small group of individuals whose numbers remain fairly stable across cultures and time periods and may come from any social class, family type, or racial or ethnic group. The number of secondary psychopaths, on the other hand, fluctuates with environmental conditions; they come primarily from the lower social classes, from dysfunctional families, and from disadvantaged groups.<sup>75</sup>

Other researchers view **psychopathy** as a continuous construct rather than as a dichotomy. In other words, psychopathy is not something one is or isn't; rather, it is a name that we have applied to the most serious and chronic criminal offenders. Researchers do have cutoff points on scales measuring psychopathy (discussed below) that put someone in the "primary" psychopath category and others in a "borderline" or "secondary" category, but these cutoff points are rather arbitrary. Other researchers devise all sorts of names for subtypes of psychopaths based on small differences among them, but we will continue to view psychopathy as a continuous variable here.

## Antisocial Personality Disorder (APD)

**Antisocial personality disorder (APD)** is described in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* by the American Psychiatric Association (APA) as “a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood.”<sup>76</sup> APD is an umbrella term applied to the various antisocial types mentioned above. It is a clinical/legal label that psychiatrists apply to someone if he or she consistently shows three or more of the following behavioral patterns since reaching the age of 15:

1. failure to conform to social norms with respect to lawful behaviors indicated by repeatedly performing acts that are grounds for arrest;
2. deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure;
3. impulsivity or failing to plan ahead;
4. irritability and aggressiveness, as indicated by repeated physical fights or assaults;
5. reckless disregard for safety of self or others;
6. consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations;
7. lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.

The individual must also be at least 18 years old, must have been diagnosed with conduct disorder prior to age 15, and his or her antisocial behavior must not occur exclusively during a schizophrenic or manic episode.

Astute readers may have noted that you would have to search a long time to find any criminal that *didn't* consistently evidence three or more of these criteria, although the requirement that the person must have been diagnosed with conduct disorder as a child prevents APD from being synonymous with criminal behavior. Having to be at least 18 years old is also problematic because it leaves out thousands of teenage murderers, rapists, and robbers (the age criterion is more for legal than clinical reasons). Finally, the diagnosis is made purely on the basis of behavior. Criminologists generally want to define individuals according to criteria that are independent of their behavior and then determine in what ways those so defined differ from individuals not so defined.

The most widely used measure of psychopathy is the Psychopathy Checklist—Revised (PCL-R), which was devised by Robert Hare, the leading expert in psychopathy in the world today.<sup>77</sup> With this checklist, clinicians rate patients as either having or not having each of 20 behavior/personality traits such as those listed earlier. The ratings for each trait are made on a 3-point scale, with 0 meaning subjects lack the particular trait, 1 meaning that they have it to some degree, and 2 meaning that they have it to an extreme degree. Persons who receive a total score of 30 or higher are given a diagnosis of psychopathy, and people scoring in the 20s receive a diagnosis of “borderline psychopathy.”<sup>78</sup> It is thus convenient to refer to the former

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as primary psychopaths and the latter as secondary psychopaths while at the same time remembering that we are actually referring to a continuum ranging from 0 to 40.

### What Causes Psychopathy?

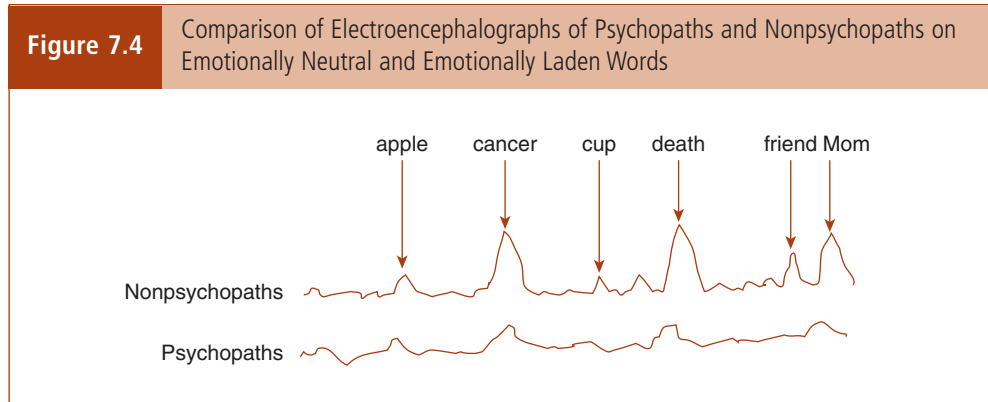
Recall that primary psychopaths are said constitute a relatively stable portion of any population and can be from any social/environmental background. They can be successful entrepreneurs, CEOs, lawyers, cult leaders, or politicians who, while they may exploit and manipulate others, may never commit any violation of the penal code. The stability of the prevalence of psychopathy over time, as well as its existence across class lines, has led to the virtual dismissal of social or developmental causal explanations of primary psychopathy by psychopathy researchers.<sup>79-81</sup> As Robert Hare remarks, “I can find no convincing evidence that psychopathy is the direct result of early social or environmental factors.”<sup>82</sup>

Cesare Lombroso probably had psychopaths in mind with his “morally insane” born criminals (i.e., those “who appear normal in physique and intelligence but cannot distinguish good from evil”).<sup>83</sup> Researchers who believed that primary psychopaths are “born that way” have come full circle to evolutionary explanations, but with the advantage of more than a century’s worth of research behind us, our understanding of evolutionary mechanisms is much more sophisticated than Lombroso’s. We no longer talk of criminals as evolutionary throwbacks whose behavior is “unnatural.” Rather, many scientists view psychopaths as behaving exactly as they were designed by natural selection to behave.<sup>84,85</sup> This does not mean that their behavior is acceptable or that we cannot consider it *morally* pathological and punish it accordingly; the naturalistic fallacy warns us that the fact that something is natural (i.e., designed by nature) does not make it acceptable or morally right.

### Psychopathy and the Social Emotions

If psychopathy is a strategy forged by natural selection, there must be a number of identifiable markers that distinguish psychopaths from the rest of us. One of the most consistent physiological findings about psychopaths is their inability to “tie” the brain’s cognitive and emotional networks together, which translates into the inability (or, at least, the greatly reduced ability) to experience the social emotions of shame, embarrassment, guilt, empathy, and love.<sup>86,87</sup> The social emotions are distinguished from the *primary* emotions such as anger, joy, and happiness, all of which psychopaths experience as strongly as other people. The social emotions have evolved as integral parts of our social lives that serve to provide clues about the kinds of relationships (cooperative vs. uncooperative) that we are likely to have with others.<sup>88</sup> Social emotions focus and modify brain activity in ways that lead us to choose certain responses over others. Feelings of guilt, shame, embarrassment, and empathy prevent us from doing things that might be to our immediate advantage (steal, lie, cheat) but would cost us in reputation and future positive relationships if discovered. Thus, the positive and negative feelings we experience when we survey the possible consequences of our actions keep most of us on the straight and narrow most of the time. The weaker we feel them, the more likely we are to exploit others; the stronger we feel them, the less likely we are to exploit others. This is the emotional component of our consciences coming into play.

Emotional responses are typically studied using EEG data reflecting the brain’s arousal levels in response to the person’s thoughts and emotions. The example presented in Figure 7.4



is adapted from an experiment conducted by Robert Hare and shown in an educational video titled *The Psychopath*. Hare presented psychopaths and nonpsychopaths with a list of emotionally neutral and emotionally laden words while they were hooked up to an EEG. When nonpsychopaths see an emotionally neutral word (e.g., *apple*, *cup*) we see that their waves show a small spike indicating that they have recognized the word and visualized an apple or cup. When presented with emotionally laden words (*cancer*, *death*, *Mom*), there is a much higher spike indicating that they have recognized the word and made associations pairing the cognition with emotions (the reason for the higher spike). When psychopaths are presented with those same emotional words, they tend to process them in ways similar to processing *apple* or *cup*. That is, they chew over the word, recognize it, and pass on to the next word without involving the emotions. This and hundreds of other studies using many different methods have revealed over and over that the defining characteristic of psychopaths is their inability to “tie” the brain’s cognitive and emotional networks together.<sup>89</sup>

Psychopaths can thus pursue cold-blooded selfish interests without being distracted by the emotional signals of conscience. Let us not forget that defining traits of chronic offenders evolved not for the purposes of carjacking, stock market fraud, arson, or any other act we call criminal but for successful mating effort: Cads and crooks are woven from the same evolutionary cloth.

### Environmental Considerations

We have to go beyond individual characteristics, however, to understand the full range of the psychopathy spectrum. Lykken colorfully describes secondary psychopaths (what he calls sociopaths) as “feral creatures, undomesticated predators, stowaways on our communal voyage who have never signed the Social Contract.”<sup>90</sup> According to Mealey, these folks are individuals who employ a “cheating strategy not as clearly tied to genotype (as is that of the primary psychopath).”<sup>91</sup> Lykken holds a similar view, stating that their behavior is “traceable to deviant learning histories interacting, perhaps, with deviant genetic predilections.”<sup>92</sup>

A number of researchers claim that one of the biggest factors contributing to psychopathy is poor parenting, and they see increasing levels of poor parenting as a function of the

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increase in the number of children being born out of wedlock.<sup>93,94</sup> However, the relationship between unwed motherhood and criminal behavior cannot be simply traced to family structure (single parent versus intact home). According to a study of 1,524 sibling pairs from different family structures taken from the National Longitudinal Survey of Youth, Cleveland and his colleagues<sup>95</sup> found that genetic traits associated with antisocial behavior select individuals into different family structures, and these traits are then passed on to offspring. It was found that, on average, unmarried mothers have a tendency to follow an impulsive and risky lifestyle and to have a number of antisocial personality traits, be more promiscuous, and have a below-average IQ. Families headed by single mothers with children fathered by different men were found to be the family type that put offspring most at risk for antisocial behavior. A two-parent family with full siblings placed offspring at lowest risk. It was also found that genetic differences accounted for 94% of the difference on an antisocial subscale between the most at-risk group (single parent, half siblings) and the least at-risk group (two parents, full siblings). Similar findings and conclusions from a large-scale British behavior genetic study have been reported.<sup>95a</sup>

According to David Rowe, the important factor in understanding the relationship between out-of-wedlock birth and criminal behavior is the genetically transmitted traits of fathers. He emphasizes the traits of the “feckless boyfriends” who abandon their pregnant girlfriends rather than the traits of mothers. The traits of these males include “strong hypermasculinity, early sexuality, absence of pair bonding capacity, and . . . other hallmarks of ‘psychopaths’—are all passed on genetically to offspring.”<sup>96</sup> Studies of fathers of illegitimate children have found that they are more than twice as likely to be involved in delinquent and criminal behavior as nonfathers in the same neighborhoods.

Given the many and severe deficits faced by many children born out of wedlock, it is no surprise that Gottfredson and Hirschi concluded that “delaying pregnancy among unmarried girls would probably do more to affect the long-term crime rates than all the criminal justice programs combined.”<sup>97</sup> This view is shared by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), which claims that delaying pregnancy until 20 to 21 years of age would lead to a 30% to 40% reduction in child abuse and neglect and could potentially save \$4 billion in law enforcement and corrections costs because offspring of teenage mothers are 2.7 times more likely than offspring of adult mothers to be incarcerated.

## Evaluation of the Psychosocial Perspective

Psychologists are always happy to point out that whatever social conditions may contribute to criminal behavior, they must influence individuals before they affect crime. Social factors matter and may well “prepare the scene” for crimes, but real flesh-and-blood people commit them. The psychosocial perspective points out that individuals are differentially vulnerable to the criminogenic forces existing in the environment because they differ on the personality traits. We have already quoted Gwynn Nettler’s descriptive phrase “The heat that melts the butter hardens the egg”; what psychologists do is largely take the heat (the environment) for granted and look for how the butter and eggs of our differing constitutions relate to the heat. In other words, psychologists focus on the horizontal line of Figure 1.3, whereas sociologists focus on the vertical line.

By titling this chapter *psychosocial* approaches rather than *psychological*, we reveal our bias against strictly separating social and psychological perspectives. To the extent that a theory specifically addresses both social conditions conducive to crimes and psychological preparedness on the part of individuals to commit them, we can only call the theory sociological or psychological artificially by noting where the primary emphasis is placed. Social process theories such as self-control theory and social learning theory are only labeled sociological because the theories' originators are sociologists. Sociologist Gregg Barak even insists that all social process theories are psychological theories "because of the way in which human nature interacts with desire, translated as appetites, and aversions, motives and emotions."<sup>98</sup>

One of the most pervasive criticisms of psychological theories is that they focus on "defective" or "abnormal" personalities.<sup>99</sup> This may have been true of older psychoanalytic perspectives, but psychologists maintain that our personalities consist of normal variation in traits we all possess and that they are the products of the interaction of our temperaments and our developmental experiences. If, by "abnormal," critics mean *statistical* abnormality (below or above the average on a variety of traits), however, then by definition, all theories of criminality focus on abnormality.

Psychosocial theories do have their problems and limitations, of course, such as paying insufficient attention to the social context of offending. Just as some people are at risk for offending in almost any environment, some environments are such that almost everyone is at risk for offending. In addition, very few psychologists specialize in criminology, so fewer studies are available to enable us to assess the validity of their theories.

As noted already, the relationship between IQ and criminal behavior has always been contentious among sociologically trained criminologists. Adler, Mueller, and Laufer<sup>100</sup> voice the familiar criticism that IQ tests are culturally biased despite the findings of the National Academy of Sciences and the APA's Task Force on Intelligence cited earlier. They also cite the "debate" over whether genetics or the environment "determines" intelligence. This implies that an either/or answer is possible, but since scientists involved in the study of intelligence are unanimous that all traits (human or otherwise) are *necessarily* the result of both genes and environment, it is a monumental nondebate.<sup>101</sup> The multiplier effect outlined by Dickens and Flynn earlier says much about the importance of the environment to intelligence levels.

- ◆ Net advantage theory is essentially an extremely broadened version of social learning and rational choice theories. The very broadness of the theory makes it difficult to test and, therefore, to evaluate. Nevertheless, it has all the strengths and weaknesses of both social learning and rational choice theories.
- ◆ Lifestyle theory is more thoroughly psychological than the other theories outlined in this chapter because it focuses squarely on how criminals think, with only passing reference to why they do so. This constitutes a weakness in terms of criminological theorizing, but the theory's strength lies in its policy implications for treating offenders.

The section on antisocial personalities is about *types* of offenders rather than theories of crime. Both syndromes have been extensively studied, and there appears to be an emerging consensus about the causes of these syndromes, especially of psychopathy. These syndromes clearly exist, and the only weakness we have to contend with at the present time is

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**Table 7.1** Summarizing Psychosocial Theories

Theory	Key Concepts	Strengths	Weaknesses
Arousal	Because of differing ANS and RAS physiology, people differ in arousal levels they consider optimal. Underarousal under normal conditions poses an elevated risk of criminal behavior because it signals fearlessness, boredom, and poor prospects for socialization.	Allows researchers to use “harder” assessment tools such as EEGs to measure traits. Ties behavior to physiology. Explains why individuals in “good” environments commit crimes and why individuals in “bad” ones do not.	May be too individualistic for some criminologists. Puts all the “blame” on the individual’s physiology. Ignores environmental effects.
Net advantage	Crime is inherently rewarding. People make rational choices to commit crimes, but there are individual differences in the ability to calculate the long-term consequences of their behavior because of temperamental and cognitive deficiencies.	Combines many sociological, psychological, and biological concepts into a coherent theory and adds rational choice.	May be too complex because it integrates too many concepts. Focus on internal constraints against crime ignores social inducements and constraints.
Lifestyle	Crime is a patterned way of life (a lifestyle) rather than simply a behavior. Crime is caused by errors in thinking, which results from choices previously made, which are the results of early negative biological and environmental conditions.	Primarily a theory useful for correctional counselors dealing with their clients. Shows how criminals think and how these errors in thinking lead them into criminal behavior.	Concentrates only on thinking errors. Does talk about why they exist but pays scant attention to these reasons.
Antisocial personality	There are a small, stable group of individuals who may be biologically obligated to behave antisocially (psychopaths) and a larger group who behave similarly but whose numbers grow or subside with changing environmental conditions.	Concentrates on the scariest and most persistent criminals in our midst. Uses theories from evolutionary biology and “hard” brain imaging and physiological measures to identify psychopaths.	There is often a confusion of terms, and arguments about the nature of psychopathy abound. Offers no policy recommendations.

technological rather than theoretical—that is, how can we better measure these syndromes? The physiological and neurological measures we have now do differentiate between psychopaths and nonpsychopaths, but the antisocial personality needs a more precise method of diagnosis because the dangers of false-positive definitions (defining someone as a psychopath who is not) and false-negative definitions (defining someone as nonpsychopathic who is) are obvious.



## ✉ Policy and Prevention: Implications of Psychosocial Theories

The best anticrime policies are doubtless environmental since they are aimed at reducing the prevalence of crime in the population. But because such policies have had little, no, or even adverse effects on the crime problem in the past,<sup>102</sup> perhaps it is wise at present to focus our efforts on those who are already committing crimes rather than on conditions external to them. A variety of such programs aimed at rehabilitating offenders operate under the assumption that they are rational beings who are, however, plagued by ignorance of the long-term negative consequences of their offending behavior.<sup>103</sup>

How well do rehabilitative programs work? There is wide disagreement on this issue and even about what the criteria are for success. Reviews of studies with strict criteria for determining success find recidivism rates lowered by between 8% and 10%.<sup>104</sup> A major review of a large number of studies found lowered recidivism rates in the 10% to 20% range.<sup>105</sup> A nationwide evaluation of state and local corrections programs identified what is known about successful and unsuccessful programs. Effective programs use multiple treatment components; are structured and focus on developing social, academic, and employment skills; use directive cognitive-behavioral counseling methods; and provide substantial and meaningful contact between treatment personnel and offenders.<sup>106</sup>

Glen Walters's theory deals with what correctional psychologists call "stinkin' thinkin"; these psychologists see their task as guiding offenders to realize how destructive that thinking has been in their lives. The counselor sees offenders' problems as resulting from illogical and negative thinking about experiences that they reiterate in self-defeating monologs. Empathizing with the offenders' definition of reality (or granting it "appreciative relevance" in postmodernist terms) serves to reinforce faulty thinking and is counterproductive. The counselor's task is to strip away self-damaging ideas (such as techniques of neutralization) and beliefs by attacking them directly and challenging offenders to reinterpret their experiences in a growth-enhancing fashion. The cognitive-behavioral counselor operates from the assumption that no matter how well offenders come to understand the remote origins of their behavior, if they are unable to make the vital link between those origins and current behavioral problems, it is of no avail.

Psychopaths are poor candidates for treatment. Robert Hare states that because they are largely incapable of the empathy, warmth, and sincerity needed to develop an effective treatment relationship, treatment often makes them worse because they learn how to better push other people's buttons.<sup>107</sup> Old age seems to be the only "cure" for the behaviors associated with this syndrome.

### SUMMARY



Psychological criminology focuses largely on intelligence and temperament as the most important correlates of criminal behavior. Low intelligence, as measured by IQ tests, is thought to be linked to crime because people with low IQ are said to lack the ability to correctly calculate the costs and benefits of committing crimes, and temperament is linked to crime largely in terms of impulsiveness. Intelligence is the product of both genes and environment. Genes appear to be more important in explaining IQ differences among people in high-SES environments, and environmental factors appear to be more important in low-SES environments.

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The role of IQ in understanding criminal behavior has been underestimated for at least three reasons. (1) The average population IQ includes offenders and individuals with such low IQs that they are largely incapable of committing crimes, and thus the difference between offenders and nonoffenders on IQ is most likely greater than usually reported. (2) Serious and persistent offenders are lumped together with minor and temporary offenders, and although minor and temporary offenders do not significantly differ from nonoffenders on IQ, there is a large gap between serious and persistent offenders and nonoffenders. (3) Comparisons are almost always made of full-scale IQ averages rather than of the separate VIQ and PIQ subscales. Criminals do not typically differ from noncriminals on PIQ, but they do on VIQ.

Various explanations of why IQ is related to criminal behavior were discussed. Although the differential detection hypothesis has intuitive appeal, studies indicated that detected and undetected delinquents do not differ significantly on IQ. We dismissed the criticism of the role of IQ based on fluctuating crime rates (crime rates change rapidly, but IQs do not) as a theoretical misinterpretation of how individual factors interact with environmental conditions by raising or lowering individual thresholds for crossing the criminal behavior threshold. The criticism that the IQ-crime relationship simply reflects the SES-crime relationship was countered by providing evidence that criminal siblings within the same families (thus completely controlling for SES effects) average about 10 IQ points lower than noncriminal siblings. We concluded that IQ is probably related to crime and delinquency through its effect on poor school performance.

Temperament constitutes a person's habitual way of emotionally responding to stimuli. The kind of temperament we inherit makes us variably responsive to socialization, although patient and caring parents can modify a difficult temperament. Our personalities are formed from the joint raw material of temperament and developmental processes. A number of personality traits are associated with the probability of engaging in antisocial behavior, particularly being high on impulsiveness, negative emotionality, and sensation seeking, as well as being low on conscientiousness, empathy, altruism, and moral reasoning.

Classical conditioning via the autonomic nervous system is the emotional component of conscience and precedes the cognitive component. Behavior can be thought of as the outcome of both classical and operant conditioning, although people will differ greatly in their behavior depending on their innate temperaments, their developmental and other environmental experiences, and their personality traits that emerge from these processes.

Net advantage theory is based on conditioning principles and adds individual differences to account for the outcome of conditioning. People are differentially responsive to rewards and punishment, and they differ in what they find to be rewarding or punishing. People who are impulsive, have learning difficulties, and have not developed an adequate conscience focus on immediate rewards from crime without concern for the hurt they cause others while discounting punishment for themselves.

Lifestyle theory views criminal behavior as a lifestyle rather than just another form of behavior. The lifestyle begins with biological and environmental conditions that lead criminals to make certain choices, which in turn lead to criminal cognitions. The theory focuses on these cognitions, or "thinking errors." Thinking errors lead criminals into behavioral patterns that virtually guarantee criminality. The theory was devised primarily to assist correctional counselors to change criminal thinking patterns.

Psychopaths and sociopaths are at the extreme end of the antisocial personality continuum and appear to constitute a stable proportion of any population. Most researchers regard the psychopathy syndrome as biological in origin, whereas sociopaths are formed both by


genetics and the environment, with the environment playing the larger role. Many hundreds of studies have shown that psychopaths have limited ability to tie the rational and emotional components of thinking together.

Some researchers assert that the primary cause of psychopathy is inept parenting by single-parent mothers. This puts children at a greatly increased risk for growing up in poor neighborhoods and for abuse and neglect. Other theorists point to the fact that children born to such mothers also receive genes advantageous to antisocial behavior from both parents in addition to an environment conducive to its expression.

### On Your Own

Log on to the web-based student study site at <http://www.sagepub.com/criminologystudy> for more information about the vignettes and materials presented in this chapter, suggestions for activities, study aids such as review quizzes, and research recommendations including journal article links and questions related to this chapter.

## EXERCISES AND DISCUSSION QUESTIONS

1. Write a two-page paper applying Dickens and Flynn's multiplier effect to basketball prowess. How did this exercise help you to more fully understand the principle of the gene/environment correlation as it is applied to intellectual prowess?
2. Discuss how the reverse of the multiplier effect may affect children born and raised in poor, disorganized neighborhoods.
3. Since psychologists have long identified different temperaments as something that makes it easy or difficult to socialize children, why do you think Gottfredson and Hirschi ignored it in their self-control theory?
4. Honestly rate yourself from 1 to 10 on the traits positively associated with antisocial behavior (impulsiveness, negative emotionality, and sensation seeking) and then on the traits negatively related with antisocial behavior (conscientiousness, empathy, and altruism). Subtract the latter from the former. If the difference is a positive number greater than 10 or a negative number less than -10, does this little exercise correspond to your actual behavior?
5. Look up *cognitive behavioral therapy* in a book or on the Internet and report how a therapist using this method would approach offenders using Walters's "stinkin' thinkin'."
6. What is the primary difference between psychopaths and sociopaths according to modern researchers?
7. Explain how low arousal of the autonomic nervous system and the reticular activating system plays a role in psychopathy.
8.  Go to [http://www.crimelibrary.com/criminal\\_mind/psychology/robert\\_hare/index.html](http://www.crimelibrary.com/criminal_mind/psychology/robert_hare/index.html), where you will find an excellent profile of Dr. Robert Hare, the world's foremost expert on psychopaths. What does he say about the possibility of change in psychopaths?

## KEY WORDS

Altruism	Differential detection	Net advantage theory
Antisocial personality disorder	hypothesis	Personality
Arousal theory	Empathy	Psychopathy
Autonomic nervous system	Flynn effect	Sensation seeking
Classical conditioning	Impulsiveness	Temperament
Conscience	Intellectual imbalance	Thinking errors
Conscientiousness	Lifestyle theory	
	Negative emotionality	

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