

# Explaining Delinquency—Biological and Psychological Approaches

## WHAT YOU NEED TO KNOW

- The Classical school of thought believes humans are free-willed and choose their behavior, while the Positivist school sees behavior as dictated by outside causes beyond the control of the individual. Neoclassicism takes a middle ground where choices can be made from limited options.
- Early theories of behavior relied on biological explanations. Lombroso and others relied on physical features to identify criminals.
- Studies of genetics-inheritance and behavior find that there is some degree of heritability in behavior, although it is small and subject to a great deal of external influence.
- Modern biological theories are best considered as biosociology, which refers to the fact that there are both biological and environmental influences on behavior, and it is necessary to consider the interaction of these factors.
- While psychological theories have a long history, they are limited by three common features—they focus largely on early life experiences to the exclusion of other variables, they are highly individualistic, and they are most useful in treatment settings.
- Freudian psychoanalysis seeks the cause of behavior in the unconscious/instinctual parts of humankind, particularly in the battle between the id, ego, and superego.
- Developmental explanations argue that everyone develops through certain stages, with each stage contributing to the knowledge a person needs to be a successful conforming member of society. Deviance results when an individual fails to advance successfully through all the stages.

## KEY TERMS

atavistic  
 biosociology  
 Classicism  
 concordance  
 determinism  
 ego  
 free will  
 hedonistic calculus  
 id  
 Interpersonal Maturity Levels (I-levels)  
 IQ  
 medical model  
 meta-analysis  
 Minnesota Multiphasic Personality Inventory (MMPI)  
 modeling  
 moral development  
 multiple causation  
 nature–nurture controversy  
 Neoclassicism  
 neurotransmitters

**KEY TERMS**

operant conditioning  
 orthomolecular factors  
 Positivism  
 psychoanalysis  
 psychopharmacological perspective  
 reactive hypoglycemia  
 soft determinism  
 somatotypes  
 spiritualistic or demonologic explanations  
 superego  
 theory

- Attempts to identify antisocial personalities have been common but have not succeeded in being able to assess adequately who will and will not be deviant.
- Low IQ has often been used as an argument for why some people break the law; however, a key unknown is the extent to which IQ is inherited or is a result of one's environment.

**INTRODUCTION**

Throughout the history of juvenile justice, criminologists and others interested in deviant behavior have sought to explain why certain individuals act in certain ways at certain times. The number of theories for deviant behavior has grown considerably over the past 100 years as the field of criminology has progressed and the level of research has improved. A **theory** can be described as an attempt to answer the question “Why?” Why does an individual violate the norms of society? Why do certain conditions seem to accompany deviant behavior? Why does deviance occur when it does? These and other “why” questions form the basis for the theories that have been proposed for explaining delinquent behavior.

The types of factors that have been used to explain delinquency take a wide variety of forms. Early **spiritualistic** or **demonologic explanations** reflected the belief that deviant acts were the result of the battle between good and evil—God and the devil. Individuals who committed crimes were possessed by the devil. Consequently, the solution to deviance involved exorcising the devil and delivering the individual back to God. Often times this could only be accomplished through the death of the devil's vessel—the individual. The soul would then be freed to join God.

These nonscientific explanations gave way in the 1700s with the advent of Classicism and the movement into Positivistic approaches in the later 1800s. Classicism and Positivism are “schools of thought” rather than specific theories of behavior. These schools lay out general beliefs about people and the world that shape the form that individual theories will take.

**THEORETICAL SCHOOLS OF THOUGHT**

Every explanation of behavior, whether it be conventional or deviant behavior, rests on a number of implicit assumptions about individuals and the world within which they operate. These beliefs form the core of many

**Table 3.1** Major Elements of Classicism and Positivism

Classicism	Positivism	Neoclassicism
Free will	Determinism	Soft determinism
Hedonism	Multiple causation	Free will with limited choices
Rational offender	Emphasize offender/situation differences	Punishment or treatment
Emphasis on offense	Medical model—Crime as “symptom”	
Legal responses—Clear laws and procedures	Individualized response	
Punishment for prevention and deterrence	Rehabilitation and treatment	

arguments about the causes of crime and how to deal with offenders. For example, differences in opinions about the death penalty often boil down to different beliefs about whether punishment can deter people. Every science has schools of thought that organize its ideas. In criminology the two schools are Classicism and Positivism (see Table 3.1).

### The Classical School

**Classicism** finds its roots in the writings of Cesare Bonesana Marchese de Beccaria (1738–1794) and Jeremy Bentham (1748–1832). Beccaria was an Italian aristocrat who broke with the ruling classes to condemn the methods of dealing with crime and morals in society. In outlining a new set of criminal and penal practices, he set forth a number of beliefs about humankind and the function of society in dealing with deviance.

Under Classicism, humans are viewed as having **free will**. That is, individuals choose to act the way that they do after calculating the pros and cons of an activity. Coupled with the idea of free will is the belief that humans are hedonistic. Under the **hedonistic calculus**, individuals seek to maximize pleasure and minimize pain (Bentham, 1948). Individuals, therefore, choose activities and behaviors based on their calculation of the amount of pleasure and pain that will result. Pleasurable behaviors will be undertaken and repeated, while painful activities will cease. Under Classicism, individuals make a conscious, *rational* decision to commit crime based on the expectation of a pleasurable outcome.

These beliefs about free will and hedonism suggest that the solution to crime requires altering the outcome of the hedonistic calculation. That is, increasing pain and reducing pleasure can reduce, and possibly eliminate, deviant behavior. Beccaria and other Classicists, therefore, focused their efforts on making laws and setting punishments that would alter the choices of

individuals. Beccaria felt that individuals could not make an informed decision to avoid crime unless they were presented with a clear set of laws and punishments. The emphasis must be on the offense and the legal system, not the offender. There must be a set punishment for each crime, and the level of punishment must be sufficient to offset any pleasurable consequence of an individual's behavior.

Classicism seeks to prevent and deter crime by punishing the offender for the offense. Ideally, individuals should be deterred from crime by knowing the pain that would come from being caught and punished. Punishment is not meant to be a form of retribution or retaliation by society. Instead, punishment is solely for the purpose of altering the outcome of the "hedonistic calculus."

Classicism dominated discussions of crime, deviance, and the law in the 1800s. Indeed, changes in laws reflected the general belief in free will and attempts to deter individuals from becoming involved in crime. Classical elements still drive deterrence arguments in modern society. Certainly, the move toward incarceration, treating youths in adult court, and the emphasis on punishment today are based on classicism. The fact that crime did not disappear under classical approaches led to new ideas about behavior in the late 1800s. Much of this movement toward a new "school of thought" grew out of the developing medical sciences.

### The Positivistic School

The basic tenets of **Positivism** are diametrically opposed to those of Classicism. Rather than hold the individual responsible for his or her actions, Positivists claim that behavior is *determined* (caused) by factors beyond the control of the individual. Altering behavior, therefore, cannot be brought about through simply raising the amount of pain a person will receive if caught and punished. Rather, changing behavior can be accomplished only



**FIGURE 3.1** Cesare Beccaria wrote his booklet, *Dei Delitti Delle Pene*, in 1764 as a critique of the administration of justice in Europe in the middle of the eighteenth century. It became a major influence on legal reforms in Europe and America, read by the likes of Thomas Jefferson and John Adams. (CREDIT: en.wikipedia.org)

by identifying and eliminating the factors that are causing the individual to act in a certain way.

Positivism typically recognizes that there are multiple causes of behavior. Deviance may be the result of a single factor, multiple causes, or a series of events or situations occurring over a period of time. The same deviant act committed by different people may be the outcome of totally different causes. The fact that there is no single cause of crime requires examining each individual case for reasons behind that behavior. The approach used by Positivists to identify causes follows a **medical model** or uses a medical analogy.

Using a medical model, the scientist approaches deviance the same way that a doctor approaches a sickness. Just like a doctor considers coughs and fevers as symptoms of other problems, the Positivist views deviant acts, like burglary and rape, as symptoms of other underlying causes or conditions. The Positivist attempts to identify what causes an individual to commit a deviant act and prescribes a tailored response to the person and circumstances. For example, two burglars may have committed their acts for different reasons, thus necessitating totally different interventions. The emphasis in Positivism, therefore, is not on the offense. Rather, the emphasis is on the offender, the unique situation, and the various factors causing the individual to be an offender.

The logical extension of the focus on **determinism** and **multiple causation** is the belief in rehabilitation and treatment. Instead of punishing an individual for his or her actions, Positivism seeks to remove the root causes of the deviant behavior. The proper rehabilitation or treatment strategies may be as diverse as the number of clients. For example, one burglar may need financial assistance for his or her family because the offense served to provide food for the family, while another burglar may need group counseling to address the specific animosity toward the victim that caused the action. Treatment and rehabilitation need to be tailored to the circumstances of the individual.

Positivism emerged from the 1800s as the dominant school of thought. Advances in medicine, psychology, and sociology presaged a more scientific approach to explaining and understanding deviance. The emerging juvenile justice system focused on identifying the causes of delinquency and sought ways to correct the inadequacies that led to delinquency. While the criminal justice system retained vestiges of Classicism and deterrence, the juvenile justice system and the emerging field of criminology embraced the ideas of Positivism.

### **Neoclassicism and a Summary**

In recent years, the juvenile justice system has shifted back to a more Classical viewpoint, with mandatory punishments, deterrence, and the waiver of youths to the adult system. While Positivism has not totally disappeared, the

dominant approach better fits a label of **Neoclassicism**. Neoclassicism takes the position that an individual exercises some degree of free will. The choices, however, are limited by factors both within and outside of the individual. Sometimes referred to as **soft determinism**, an individual can make decisions only based on the available choices. The available options determine the extent to which the person can exercise his or her free will. This compromise gives both the Classicist and Positivist a stake in the criminal and juvenile justice systems.

The balance of this chapter, as well as the entire next chapter, discuss a wide range of theories. The biological and psychological theories appearing in this chapter are primarily Positivistic in orientation. For the most part, they approach deviance as the outcome of forces beyond the control of the individual. The sociological theories appearing in Chapter 4, however, more often incorporate elements of free will in their arguments.

## BIOLOGICAL AND SOCIOBIOLOGICAL THEORIES

Explanations of deviance based on biological factors are among the earliest and the most recent theories in criminology. Medical advances, particularly in the 1800s, led to explanations of behavior that focused on the biological makeup of the individual. The underlying assumption made by the early biological theorists was that if the biological makeup of the individual dictated his or her physical capabilities, these characteristics could also contribute to the type of behavior exhibited by the person.

### Physical Appearance

Early biological explanations focused heavily on observable physical features of offenders. The basic argument was that offenders could be identified by their appearance, which often was described in terms that suggested an ape-like appearance. Cesare Lombroso, who is considered the father of modern criminology, based his ideas on Charles Darwin's theory of the survival of the species and viewed criminals as throwbacks to an earlier state of human existence. These individuals were not as physically or mentally advanced as the rest of society. Lombroso (1876) identified a number of **atavistic**, or ape-like, qualities that generally reflected the physical features of the apes from whom man was a descendant (see Table 3.2). In a study of incarcerated offenders, Lombroso (1876) noted that more than 40 percent of the criminals had five or more atavistic traits. These "born criminals" were a direct result of the lack of evolutionary progression found in the person. The remaining criminals fell into categories of "criminaloids" and "insane" criminals. Criminaloids were individuals who entered criminal activity due to a variety of factors including mental, physical, and social conditions that, when occurring at the same

**Table 3.2** Lombrosian Atavistic Characteristics

Physical Characteristics	Nonphysical Characteristics
Protruding jaw	Sensitivity to temperature changes
High forehead	Agility
Asymmetrical face	Lacking a sense of right or wrong
Bad teeth	Fondness for animals
Deep, close-set eyes	Tolerance of pain
Excessively long arms or legs	
Abnormal nasal features	
Exaggerated sex organs	

**Table 3.3** Sheldon's Physiques and Temperaments

Physique	Temperament
<b>Endomorph:</b> Short, fat, round, soft	<b>Viscerotonic:</b> Soft, easygoing, extrovert
<b>Mesomorph:</b> Muscular, large, barrel-chested, thick, hard	<b>Somotonic:</b> Dynamic, active, athletic, aggressive, talkative
<b>Ectomorph:</b> Bony, thin, skinny, small, delicate	<b>Cerebrotonic:</b> Nervous, complainer, introvert

*Source: Constructed from W.H. Sheldon (1949). Varieties of Delinquent Youth: An Introduction to Correctional Psychiatry. New York: Harper and Brothers.*

time, would trigger deviant behavior (Vold and Bernard, 1986). Insane criminals included idiots and mentally deranged individuals.

Lombroso's work led to a great deal of controversy. His failure to include a control group of noncriminals meant that he was unable to state whether the results would be different if he studied people in the general public. Goring (1913) found only minor differences in the physical makeup of convicts and a control group of noncriminal citizens. Subsequent research by Lombroso, including control groups, revealed great physical similarities between offenders and nonoffenders, leading Lombroso to consider nonphysical atavistic qualities, as well as environmental and social factors for explaining deviance.

Despite the criticisms of Lombroso and his contemporaries, the relation between physical appearance and deviance has appeared in twentieth-century research as **somatotypes**, or body types. Sheldon (1949) identified three basic somatotypes and related temperaments (see Table 3.3). Based on his observations of delinquents in a residential facility, Sheldon (1949) found

that mesomorphic characteristics were most prevalent and ectomorphic features were the least common. He concluded that mesomorphic individuals were more likely to commit delinquent acts than were other youths. Support for the relationship between mesomorphy and delinquency is also found in the studies of Sheldon Glueck and Eleanor Glueck (1956) and Juan Cortes (1972).

Not unexpectedly, somatotype studies share similar methodological problems. First, much of the research is based on subjective determinations of body type, often by simply looking at photographs of the youths. Second, the researchers do not consider changes in body type as the youths grow older. Third, the researchers ignore the possibility that mesomorphic youths are more often recruited into delinquency because of their physical build, rather than having a natural propensity to commit delinquent acts. Fourth, considering delinquents as only incarcerated youths may bias the results if mesomorphic delinquents are institutionalized more often because they are perceived as greater threats than are smaller youths. Finally, the determination that mesomorphs were somotonic (aggressive, active, etc.) rests on the fact that many delinquents are mesomorphs and delinquent behavior is considered aggressive. Based on these problems, physical type theories have fallen out of favor and are rarely addressed in contemporary juvenile justice.

### **Genetic-Inheritance Studies**

Biological explanations often assume a strong genetic contribution to behavior. The fact that physical features are clearly passed on from generation to generation has led some to extend that same propensity to nonphysical factors, such as behavioral tendencies. Two basic methods for inspecting this possibility are comparing the behavior of twins and comparing the behavior of offspring to their biological parents. In both sets of studies, it is not the criminal behavior that is considered to be inherited. Rather, it is factors such as low self-control, sensation-seeking, and temperament that are inherited, which lead to criminality (Eysenck and Gudjonsson, 1989; Mednick and Christiansen, 1977; Rowe, 2002).

#### ***Twin Studies***

Studying twins for the genetic propensity to be deviant requires knowing whether the siblings are monozygotic (MZ) (identical) or dizygotic (DZ) (fraternal) twins. Monozygotic (MZ) twins are the product of a single fertilized egg that separates into two individuals with an identical genetic makeup. Dizygotic (DZ) twins are the result of two separate eggs fertilized by separate sperm. While genetically similar, the two offspring will not be genetically identical and are no more genetically similar than any two siblings born at



different points in time. An examination of the genetic propensity for deviant behavior rests on finding greater **concordance**, or similarity, in behavior for MZ twins than for DZ twins or common siblings.

Several studies of twins claim to find a genetic component to behavior. Newman and associates (1937), for example, reported much higher concordance in behavior for the MZ twins than DZ twins. Similarly, using a registry of 6,000 pairs of twins in Denmark, Christiansen (1974) uncovered three times as much concordance between MZ twins than between DZ twins when criminal records were inspected. More recently, Lyons (1996), in a large-scale analysis of subjects from a registry of Vietnam-era veterans born between 1939 and 1957, reported higher concordance in adult criminality for MZ twins than DZ twins. Each of these studies suggests that genetic factors have an influence on the actions of the individuals.

A number of problems plague the studies. First, none of the studies have undertaken DNA testing to establish MZ or DZ status (Anderson, 2007). Second, most of the observed relationships are small and insignificant (Reiss and Roth, 1993) and this is compounded by the fact that even with large numbers of twins the incidence of crime, especially violent crime, is very rare. This means that the results are highly suspect. Third, most studies lack control over any environmental influences impacting on the individuals (Katz and Chamblis, 1995; Reiss and Roth, 1993). The levels of concordance may be due to similarity in rearing practices, imitation between siblings, or expectations that identical twins will act more similarly.

### ***Adoption Studies***

A second method of investigating the genetic contribution to deviance is through the comparison of the behavior of adopted offspring and their biological parents. Adoption studies assume that any similarity between the adopted offspring and the biological parent must be due to the genetic similarity between the subjects because the child has been raised in a different environment from the parent.

Various adoption studies provide support similar to that found in twins studies. Schulsinger (1972) finds that psychopathic subjects have more psychopathic biological relatives than do nonpsychopaths. The difference, however, is not great (7%) and is based on a total of only 114 observations. Crowe (1972), analyzing females and their offspring, reports only a 13 percent difference in the arrests of offspring of offending and nonoffending mothers. The results, however, reflect a total difference of only six fewer offenders with nonoffending mothers. The results in both of these studies offer a weak genetic argument. Hutchings and Mednick (1977), using a much larger

sample, reported that 49 percent of criminal boys have criminal biological fathers while only 31 percent of noncriminal boys have a criminal biological father. Whether the adoptive father is criminal or not does not eliminate this relationship, although it does temper the results. Brennan and associates (1996) report a genetic component in their adoption study, but it is only true when considering property crimes, a result that is not fully explained.

One important qualifier that must be considered in adoption studies involves the separation of the genetic and environmental influences on the individuals. The assumption throughout the research is that the simple fact of adoption is enough to guarantee that the environment of the biological parents is being controlled. Ellis (1982) points out, however, that one overwhelming consideration in many adoptions is the matching of the adopting environment to that from which the individual is being taken. This would seriously impair a study's ability to distinguish the effects of genetics and environment. In an attempt to clarify the varied findings from twin and adoption studies, Walters (1992) undertook a meta-analysis of 38 projects dating from 1930 to 1989. In a **meta-analysis**, the researcher uses the reported data from past studies and computes a common statistic for all studies, thereby allowing a direct comparison of the different results. Walters (1992) reported that there is a "low-moderate" correlation between heredity and crime. The significance of this finding, however, is problematic because the stronger methodological studies provided less support for the relationship. This was especially true for the adoption studies, which have the best chance of separating genetics from the environment (Walters, 1992).

### Other Genetic Examples

The search for genetic influences on behavior has followed a number of other paths. One example is the investigation of alcohol's impact on criminal activity. The fact that there is a clear relationship between alcohol abuse and genetics (see Bohman, 1996), coupled with the link between substance abuse and crime, points to a genetic link to deviant and antisocial behavior. This does not suggest that all those genetically predisposed to alcoholism will offend, but it does demonstrate a genetic connection to behavior.

A second example deals with **attention deficit/hyperactivity disorder (ADHD)**. Children suffering from this disorder are persistently disruptive, act impulsively, are easily frustrated, experience wide mood swings, and act inappropriately (Ward, 2000). Anderson (2007) notes there is a strong genetic basis for ADHD as demonstrated in a number of studies. To the extent that ADHD is related to deviant and criminal behavior, it can be argued that there is a genetic contribution to the behavior (Anderson, 2007). It is important to note that genetics and ADHD are neither necessary nor sufficient for deviant behavior.

## Genetic Summary

To date, theorists have not provided strong support for their genetic arguments. This is not to say that genetics hold no influence on behavior. Genetic research is still in its infancy, and future advances may reveal contributors to a wide range of behaviors. Nevertheless, the problem of separating the environmental influences from a genetic component will remain a serious concern.



**FIGURE 3.2** Dr. Nancy Segal, center, co-director of the University of Minnesota project on Twins Reared Apart, poses with twins who were separated at birth and reunited after 31 years. The research gives significant weight to the importance of genetics as a key factor in determining physical appearance and attributes, as well as personalities and inherent abilities. (CREDIT: AP Photo)

## Biosocial Factors

The recent trend in seeking biological explanations of behavior involves what is known as biosocial approaches. **Biosociology**, or sociobiology, refers to the idea that the biological makeup of the organism and the surrounding environment are intimately related. The environment plays a part in shaping the organism, and the organism, through its daily activity and interpretation of the world, shapes the environment. In terms of deviant behavior, the old belief that deviance is a direct result of a biological condition is no longer tenable. Instead, biosociology sees deviance occurring when specific biological conditions coincide with appropriate sociological or environmental factors. For example, an individual with a congenital hormonal defect may be overly aggressive in situations that force him or her into a choice between fight and flight. This individual, however, does not seek out such situations or become aggressive without the external stimulus. The more modern biological explanations of behavior, therefore, accommodate both biological and sociological factors.

### ***Hormones and Aggression***

Among the normal functions of the body is the production and secretion of various hormones. These natural chemicals control many of the basic bodily functions, including growth, reproduction, and functioning of the central nervous system. In terms of deviant behavior, most attention has focused on reproductive hormones (Shah and Roth, 1974). Androgen, the male sex hormone present in testosterone, has been found to be related to aggressive behavior, particularly in animal studies. Studies on human subjects have found a relation between higher testosterone levels and aggression and more serious offending (Booth and Osgood, 1993; Dabbs et al., 1995; Ehrnkranz et al., 1974; Kreuz and Rose, 1972; Rada et al., 1976; Soler et al., 2000). While such studies suggest that testosterone leads to greater levels of aggression, the evidence is not totally convincing. Among the problems are the fact that testosterone levels vary over even short time periods; testosterone is affected by diet, stress, exercise, and social factors (Booth and Osgood, 1993; Katz and Chamblis, 1995; Nassi and Abramowitz, 1976; Reiss and Roth, 1993); and aggressive behavior may cause testosterone levels to increase, rather than the other way around (Harris, 1999). While there are other hormones that have been investigated, testosterone has received the most attention.

### ***Orthomolecular Factors***

**Orthomolecular factors** refer to chemicals that are introduced to the body or altered through diet or other influences. One commonly discussed potential problem is the influence of sugar on behavior. Hypoglycemia is the term most often used in these discussions. However, hypoglycemia, a condition of low blood sugar, manifests itself in a lack of energy, lethargy, nervousness, and, in the extreme, a coma. It is difficult to imagine these individuals taking aggressive deviant actions against anyone or anything. The proper term for the relationship between blood sugar levels and criminal activity is **reactive hypoglycemia**, which refers to changes in the blood sugar level, both higher and lower, as a result of dietary intake.

While various researchers claim to have found support for a relationship between hypoglycemia and crime (Bonnett and Pfeiffer, 1978; Geary, 1983; Hippchen, 1978, 1981; Podolsky, 1964; Schauss, 1980), their conclusions rest upon suspect research methodology (Gray and Gray, 1983). Much of the support comes from anecdotal accounts of physicians and psychologists who simply compare a person's diet to his or her behavior without establishing the different bodily needs or processes of the different individuals. What constitutes an overconsumption of sugar by one individual may be minor for another individual. In addition, the commonly used Oral Glucose Tolerance

Test is not a definitive measure of blood sugar (Gray and Gray, 1983). When more accurate measures are used, the studies fail to support reactive hypoglycemia as an explanation for deviance. Most studies also fail to note that nutrition and diet are highly related to social class, which may be the operant factor in the relationship with deviance (Katz and Chamblis, 1995). Given the state of the evidence, reactive hypoglycemia is considered a minor cause of deviance (American Dietetics Association, 1984; Gray and Gray, 1983; National Dairy Council, 1985).

Alcohol and illegal drugs are other substances linked to deviant behavior. That alcohol correlates with delinquency and criminality is indisputable. What is questionable is the mechanism at work (we have already discussed the genetic connection). Many would argue that alcohol is a disinhibitor, making it easier for an individual to commit crime. Reiss and Roth (1993) suggest a more biological connection in which alcohol alters the processing of information and, depending on the dosage, may prompt aggression and irritability, or more passivity and sluggishness. The use of other licit and illicit drugs may also lead to criminal behavior. The mechanism underlying the correlation between drugs and deviance, however, is not clear. From a **psychopharmacological perspective**, drugs have a direct causal impact on crime by inducing the user to act out in a certain way (Goldstein, 1989). At the same time, drug use may be related to deviance as a result of crime and violence related to the need to purchase drugs in uncontrolled settings. Such systemic crime is the result of competition between drug dealers or the need to commit property crimes in order to obtain money for drug purchases (Goldstein, 1989). Whether the drugs–crime relationship is psychopharmacological or systemic may be a function of the type of drug and related factors (its addictive properties, its cost, etc.).

### ***The Central Nervous System***

A wide range of factors related to the brain and central nervous system have received attention in studies of deviant behavior. Recognition that different parts of the brain are related to different behaviors has led some researchers to look at brain abnormalities and functioning and deviance. Various methods are available for such analyses, including magnetic resonance imaging (MRI), positron emission tomography (PET scans), and electronencephalography (EEG). An MRI can show the physical makeup of the brain and reveal any physical problems (Rowe, 2002). A PET scan, however, reveals differing levels of brain activity when faced with varying stimuli (Rowe, 2002). Similarly, an EEG measures a person's electrical brain waves, which can be compared to those of other individuals (Rowe, 2002). Based on these new technologies, Raine et al. (1995) conclude that there is clear evidence relating

brain functioning, especially frontal and temporal lobe problems, to deviant activity. The impact of these factors relative to other variables, such as the environment, however, is not clear.

A related topic deals with whether different **neurotransmitters** (chemicals involved in the transmission of electrical impulses through the nervous system) are capable of altering an individual's behavior. This occurs as a result of changes in the body's ability to process information and communicate in the brain (Anderson, 2007). In turn, this impacts on the individual's behavior. Among the neurotransmitters that have been investigated are serotonin and dopamine. Serotonin is an inhibitor of behavior, particularly aggressive and impulsive behaviors (Anderson, 2007). Low levels of serotonin have been found to be related to aggression (Moffitt et al., 1998). Similarly, Virkkunen et al. (1996) note that serotonin levels influence impulse control, hyperactivity, and other behavior related to deviance. Dopamine acts in the opposite way from serotonin. Specifically, higher dopamine levels result in greater action and pleasure-seeking behaviors. Aggression is similarly enhanced from higher dopamine levels in the body (Anderson, 2007). Research has shown that it is possible to alter various neurotransmitters, both purposefully with drugs and inadvertently through the use of alcohol and other substances. Such changes can alter social behavior (Brunner, 1996). While still in its early stages, this research suggests that there is a relationship between different neurotransmitters and deviance (Anderson, 2007; Brennan et al., 1995; Reiss and Roth, 1993).

Many biosocial arguments suffer from common problems. First, the identification of correlations is often touted as clear evidence of a causal relationship. Second, there may be reversed time order in many of the relationships (Reiss and Roth, 1993). For example, aggressive behavior may lead to physical confrontations that result in the head injuries and altered brain functioning that is used to explain the aggression. Third, the ability to generalize results of studies based on animals to human beings is questionable. Finally, the studies typically fail to consider other spurious factors, such as social status, diet, and the environment, in the consideration of biosocial influences. It is possible that these other factors are influencing both deviance and neurological functioning.

Walsh (2009) outlines five typical objections lodged by mainstream criminologists against biosocial theories (see Table 3.4). These objections reflect two underlying problems. First, most criminologists are trained in the social science tradition. As a result, there is a fundamental lack of understanding and ignorance about biological issues. Second, there is an assumption that biological explanations are being promoted as an alternative to sociological

**Table 3.4** Common Objections to Biologically Based Explanations

Biological Theories are Deterministic and Socially Dangerous

- Ignores fact that those espousing biology recognize the interplay of biology and the environment
- Does not assume single cause

Because Crime is Socially Constructed, There Cannot Be any Genes for Crime

- No claim of a gene for crime but genes do play a role in traits and subsequent behavior

If a Problem is Considered Biological, Therapeutic Nihilism will Ensue

- You can alter and influence biological factors that contribute to behavior
- Biological treatments are not enough in themselves

Crime Cannot Have a Biological Basis Because Crime Rates Change Rapidly While Changes in Genes Require Many Generations

- Of course environment influences change in rate, but individual factors influence when and who will start and stop offending

Biological Theories Tend to be Insensitive to People's Feelings

- If we find results that suggest one group or condition is more predisposed to certain behavior, should we ignore it just to be politically correct?

*Source: compiled by authors from Walsh (2009).*

and psychological theories. Those making this objection are ignoring the fact that what is being promoted is “biosociology” or “sociobiology,” which posit looking at the interaction between biological and traditional social science factors in causing crime and deviance. Indeed, biosocial theorists recognize that the biological factors often play a minor role in behavior, and that the environment is a key factor in understanding crime and delinquency (Walsh, 2009).

### Biological Implications for the Justice System

At the present time there is still relatively little known about the relationships between biological influences and deviant behavior. Despite methodological problems, studies have provided qualified support for biosocial explanations. At the same time, they raise many more questions.

The modern biosocial approaches have engendered interest in biological influences on behavior. Conditions that have a genetic component or behaviors related to hormonal or orthomolecular problems can be altered or modified by changes in diet or drug therapy. Both chemical and surgical castrations have been employed to reduce testosterone levels in convicted sex offenders.

Depo-Provera, for example, is a drug that inhibits the production of testosterone. As biosocial research progresses, additional practical uses for curbing deviance will emerge.

While biological explanations have yet to gain prominence in juvenile justice, there is reason to believe that they will continue to draw increased attention in the future. As Brennan and associates note:

Understanding of the interaction of genetic and environmental factors in the causes of crime may lead to the improvement of treatment and prevention. Partial genetic etiology does not in the least imply pessimism regarding treatment or prevention. Quite the contrary! Several genetically based conditions are treated very successfully by environmental intervention (Brennan, Mednick, and Volavka, 1995:90).

At the same time, caution must be taken when implementing programs based on biosocial research. These activities may also bring about more harm than good. For example, altering a diet to do away with “problem” foods may inadvertently damage an otherwise good diet. The most prudent direction for biosocial advocates to pursue at the present time would be expanded research.

## PSYCHOLOGICAL EXPLANATIONS

A second general area of explanations for delinquency entails psychological theories. As with other types of theories, psychological explanations take a variety of forms and include a wide range of factors. The early base for psychological theories was biological/physical factors. Indeed, psychiatry, which is usually seen as a part of the general psychological field, is distinguished by its strong commitment to finding physiological bases for aberrant behavior. Psychiatrists are medical doctors who have specialized in the general area of mental disorders.

Many psychological explanations, however, do not look for a physical explanation. Instead, the psychological orientation can be seen as having a few distinctive characteristics. First, and foremost, these approaches generally view problems as arising out of early life experiences. Deviance is seen as a result of problems and flaws that were not recognized and corrected during the adolescent years. Second, psychological explanations are highly individualistic. While many individuals may display the same or similar behavior, different explanations or factors (such as incomplete socialization or poor personality development) may be at work for each person. Finally, because of the individualistic orientation, psychological explanations lend themselves to a treatment orientation. Rather than focus on who will become deviant, the emphasis is on working with individuals who are already having problems and assisting them to overcome the problem.



## Psychoanalytic Explanations

Perhaps one of the most widely recognized names in psychology is Sigmund Freud (1856–1939). Freud pioneered the psychoanalytic approach to understanding human behavior. The major premise of **psychoanalysis** is that unconscious, and perhaps instinctual, factors account for much of the behavior displayed by individuals. In particular, deviance is the result of unconscious desires and drives being manifested in behavior. The goal of psychoanalysis is to identify the unconscious, precipitating factors and then develop conscious methods for dealing with them.

Freudian psychoanalysis outlines three distinct parts to the personality that are involved in behavior (see Table 3.5). The **id** reflects the unconscious desires, drives, and instincts within the individual. In simple terms, the id can be seen as the selfish, “I want” part of the individual. The **superego** entails learned values that form the moral character of the individual and help dictate what the person considers acceptable or unacceptable behavior. The superego is a result of early moral training. Where the id looks for satisfaction of desires, the superego responds with either a “can’t have” orientation or a “must do” response. That is, the superego helps orient the individual’s behavior away from simple desires and toward the value system that the person has incorporated. The actions of the superego may be both conscious and unconscious. The final part of the personality, the **ego**, is the social identity that is exhibited through behavior. It is often the manifestation of the conflict between the id and the superego. The ego is the conscious attempt to satisfy the needs of the id while continuing to abide by the mandates of the superego. This aspect is always conscious because it is the solution to the question of whether the individual follows his or her drives or the morally correct line of activity.

Psychoanalysis seeks to uncover the causes of behavior by bringing the unconscious conflict between the id and the superego to consciousness. Often, psychoanalysis is only undertaken when an individual develops criminally deviant behavior. The conflict between the id and the superego, however, will not always appear as deviance. Instead, the internal conflict can be manifested in various ways. Table 3.6 outlines eight possible “defense

**Table 3.5** The Freudian Personality

<b>Id</b>	Unconscious desires, drives, instincts
<b>Superego</b>	Learned values, behaviors; moral character of the individual; outlines the acceptable and unacceptable; may be conscious or unconscious
<b>Ego</b>	Social identity of individual; actual behavior; conscious activity

**Table 3.6** Psychoanalytic Defense Mechanisms

<b>Repression</b>	An active attempt to push desires and thoughts out of one's consciousness or to keep material from reaching consciousness. Example: You forget that you owned a pet that was run over by a car when you were a child.
<b>Displacement</b>	A change in the primary object of a feeling or desire to a secondary one that is less threatening. Example: You are angry at your boss but you yell at your husband or wife instead.
<b>Sublimation</b>	Here the displacement is more long-term and the object chosen is socially acceptable. Example: You want to hit and hurt your father, but you become a professional boxer or football player.
<b>Denial</b>	The truth of certain facts or experiences is denied, rather than forgotten as in repression. Example: Your daughter dies but you act as if she is alive, keeping a bed made up for her.
<b>Reaction Formation</b>	A desire is changed or transformed into the opposite feeling or desire. Example: You hate or deeply resent your father, but you tell everyone how much you love him and act toward him in a loving manner.
<b>Projection</b>	You have an unconscious desire or thought, but you attribute it to someone else instead of acknowledging it in yourself. Example: You no longer love someone, but instead accuse him or her of no longer loving you.
<b>Rationalization</b>	The process of finding an acceptable reason for doing something unacceptable. Example: You punish your child harshly, but say "I'm doing this for your own good."
<b>Regression</b>	You replace your desires or thoughts with those from an earlier stage of your development. Example: You are under stress and get angry at someone who works for you, so you throw a temper tantrum.

Source: P. Van Voorhis, M. Braswell, and D. Lester (2007). *Correctional Counseling and Rehabilitation, 6th ed.* Newark, NJ: LexisNexis Matthew Bender, p. 44.

mechanisms." Deviance may appear in some mechanisms (such as repression, rationalization, or displacement), while other mechanisms may lead to socially acceptable behaviors.

Despite the development of a large body of literature, the psychoanalytic approach is subjected to strong criticism. First, it is very hard to undertake empirical tests of the theory because there is no clear method for measuring the id, ego, or superego. A second major criticism involves the fact that psychoanalysis is totally retrospective. That is, it is useful only for looking at what has already happened. It is geared toward uncovering why something happened and working to correct problems. A third criticism is that psychoanalysis emphasizes early childhood and assumes that little change occurs after adolescence. Adult behavior is viewed only as a result of poor childhood socialization and not from factors appearing in adult life. Finally, psychoanalysis is criticized for ignoring social-structural factors in the determination of behavior. Indeed, with the heavy emphasis on the unconscious, psychoanalysis examines the social setting of the individual only to the extent that it failed to provide the necessary moral atmosphere during early adolescence.

**Table 3.7** Interpersonal Maturity Levels

<b>Level 1:</b>	The individual learns to discriminate between themselves and others.
<b>Level 2:</b>	The individual starts to separate things into persons and objects, partly on the basis of their own needs and what they can control.
<b>Level 3:</b>	At this level the individual begins to learn rules and can start to manipulate the environment for their own benefit.
<b>Level 4:</b>	The individual begins to perceive things from the standpoint of others. He/she sees conflicts between expectations of others and their own needs.
<b>Level 5:</b>	Here the individual becomes aware of patterns of behavior and relationships. There becomes an awareness of distinctions made between events, objects, and roles in society.
<b>Level 6:</b>	The individual is able to distinguish between himself/herself and the roles they play. These are not one and the same and can accommodate one another.
<b>Level 7:</b>	At this level, the individual begins to perceive a variety of methods for dealing with the world and makes choices based on his/her and other's past experiences and for the benefit of everyone.

Source: Compiled from C. Sullivan, M.Q. Grant, and J.D. Grant (1957). "The Development of Interpersonal Maturity: Applications to Delinquency." *Psychiatry* 20:373–385.

## Developmental Approaches

A number of writers identify the source of deviance in interrupted or arrested development. The basic assumption is that individuals develop through a number of stages. Each stage provides an integral part of the knowledge and understanding that a person needs to operate in society. The failure of an individual to complete any one of these stages or steps successfully may lead to some form of socially unacceptable behavior. This basic argument can be seen in Freud's psychoanalytic explanation in which the failure to develop appropriate superego and ego responses to the id takes place in early childhood. The child is born with the id but must learn and internalize the moral dictates of society as he or she grows.

### ***Interpersonal Maturity***

One of the most well-known developmental approaches in delinquency research is the **Interpersonal Maturity Levels (I-levels)**. The I-levels represent a continuum from the most basic stage of development through the most advanced stage (see Table 3.7). The interruption of any stage makes the attainment of later stages difficult, if not impossible.

Most delinquency and deviance occurs in Levels 2, 3, and 4. Level 2 individuals operate primarily on the basis of their own need and use others only as a source of enjoyment or fulfillment. While Level 3 individuals begin to

**Table 3.8** Kohlberg's Moral Development**Level I. Preconventional Level**

Stage 1	Right is obedience to authority and rules, and avoiding punishment. There is clear concern for one's own physical well-being.
Stage 2	Right corresponds to seeing one's own needs, taking responsibility for one's self, and allowing others to do the same. At issue is a fair exchange with others.

**Level II. Conventional Level**

Stage 3	Right is avoiding the disapproval of others, having good intentions and motives, and being concerned for others. Individuals are aware of others and their needs.
Stage 4	Right is doing one's duty to society and others, and upholding the social order. The individual is capable of looking at things from society's viewpoint.

**Level III. Postconventional or Principled Level**

Stage 5	Right is based on upholding the rules and values agreed upon by society. The individual feels obligated to society. There is a recognized social contract between the individual and society that outlines acceptable behavior.
Stage 6	Right is a reflection of universal ethical principles. The individual recognizes the moral rightness of behavior and acts accordingly.

Source: Compiled from L. Kohlberg (1981). *The Philosophy of Moral Development*. San Francisco: Harper and Row.

integrate rules, they are still oriented toward their own needs. As a result, they may realize what they are doing is wrong but cannot justify the rules with their desires. Finally, persons in Level 4 may resort to delinquent behavior as a means of striking out against what they perceive as contradictory demands. The inability to cope with competing demands may result in choosing delinquent activity. Individuals operating at lower maturity levels, however, tend to act in ways counter to societal demands.

### ***Moral Development***

A second well known developmental approach is Kohlberg's (1981) **moral development**. Kohlberg's model notes that individuals progress through six stages of "moral development," which are arranged into three levels (Table 3.8). The Preconventional Level is characteristic of young children, while most adults fall into the Conventional Level. Only a small proportion of adults reach the Postconventional or Principled Level. Deviant individuals typically fail to display the same level of moral development as noncriminals with the same or similar characteristics. As in the I-level classification scheme, Kohlberg views deviance as a result of interrupted or incomplete development. For example, an individual at Stage 2 sees his or her own needs and feels that he or she does not get enough in return for what they do or want. As a result, that person may turn to deviance to "balance" the exchange.

## ***Learning Theories***

Implicit in developmental discussions is the idea that people learn right from wrong, and learning takes place over a long period of time. There is a cumulative nature to learning. In learning theories, the emphasis is on how an individual learns and what factors are effective in promoting learning. The failure of an individual to complete a developmental stage successfully, therefore, may be due to a problem in the learning process.

**Modeling** is perhaps the simplest form of learning. According to Bandura and Walters (1963), children learn by copying the behavior of others. Most modeling follows the behavior of significant others, particularly parents, siblings, peers, and other individuals close to the child. Modeling, however, is not limited to the people around the youth. Children also can learn from characters, both real and fictional. If the child continuously sees deviance, either real or fictional, the child may begin to copy that behavior. The child may not know whether it is right or wrong. He or she only knows that this is how people act. (Further discussion of modeling and identification will be taken up in Chapter 4.)

A more classical psychological learning theory is that of **operant conditioning**. Operant conditioning deals with the reinforcement of behavior through a complex system of rewards. Skinner (1953) and others view subsequent behavior as a consequence of past responses to behavior. Specifically, an individual repeats (or does not repeat) a behavior based on what happened when the behavior in question appeared in the past. For example, a child who does as he or she is told by his or her parents is given a treat for being good. The treat becomes a reinforcer for future good behavior. In operant conditioning the reinforcement comes after the behavior or action of the individual. Actions that result in a pleasurable response (positive reinforcer) or that eliminate painful or unpleasant situations (negative reinforcer) will be repeated. Learning, therefore, becomes an ongoing process, with every choice made by the individual resulting in some form of response. Future actions are based on the reinforcement, or lack thereof, of past behavior.

Bandura and Walters (1963) have combined conditioning and modeling in a general discussion of learning. They note that the degree to which a child models his or her behavior is mitigated by the level of reward or punishment that the model receives. For example, a child observing an act of aggression by another person or a fictional character is more likely to copy that act if the aggressive person is rewarded or not punished. Therefore, the process of learning through operant conditioning can take a vicarious route through observation of the experiences of others. Two key concerns have been raised in relation to psychological learning theories. First, while modeling and operant conditioning make intuitive sense and receive support from anecdotal

and case studies, most of the supportive studies rely on correlational analyses and contain serious methodological flaws. A second problem is that modeling and operant conditioning approaches ignore the potential contribution of the individual to behavior. The basic assumption is that the individual is a product of the environment and has little influence over his or her choice of activity.

### Personality and Delinquency

Various researchers have proposed that deviants display certain personality characteristics that can be used to explain deviant and criminal behavior. Psychologists have developed a wide array of personality classifications and measures for uncovering personality traits. Indeed, the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) of the American Psychiatric Association (known as the DSM-IV) includes the classification of “antisocial personality disorder,” which refers to individuals who show a continuing pattern of behavior harmful to others.



#### WEB ACTIVITY

You can read more about the DSM-IV at <http://www.psych.org/MainMenu/Research/DSMIV.aspx>

One of the early attempts to distinguish delinquents from nondelinquents using personality factors was conducted by Sheldon Glueck and Eleanor Glueck (1956). Comparing 500 delinquents to 500 matched nondelinquents, Glueck and Glueck claimed that

delinquents are more extroverted, vivacious, impulsive, . . . less self-controlled . . . are more hostile, resentful, defiant, suspicious, . . . destructive . . . and are less fearful of failure or defeat than the nondelinquents. They are less concerned about meeting conventional expectations and are more ambivalent toward or far less submissive to authority. They are, as a group, more socially assertive (Glueck and Glueck, 1956:275).

This picture of the delinquent was meant to summarize their overall personality pattern and indicate differences from conventional youths.

While the work of Glueck and Glueck still draws attention today, several concerns have been raised about the findings. First, not all the traits associated with the delinquents are undesirable. For example, being extroverted, assertive, less fearful of failure, and less submissive are traits that many individuals would find valuable. Second, the authors assume that the individuals had these traits before they exhibited delinquent behavior. It could be argued,

however, that the delinquents were hostile, resentful, defiant, and ambivalent to authority due to their contact with the justice system. Finally, the individuals who evaluated the youths were aware of which youths were delinquent and which were not delinquent. Knowing an individual is delinquent and in an institution may prompt an evaluator to expect the subject to be more assertive, more hostile, or have less self-control.

One commonly referenced personality disorder is **Antisocial Personality Disorder (APD)**. The National Center for Biotechnology Information (NCBI, [2010]) defines APD as “a mental health condition in which a person has a long-term pattern of manipulating, exploiting, or violating the rights of others.” This behavior may be criminal or noncriminal. The actual cause of APD is not clear, but a combination of genetic and environmental factors probably contribute to the condition (Mayo Clinic, 2010). Assessing the presence of APD requires psychological testing and identifying criteria listed in the DSM-IV. Treatment is considered very difficult and involves mainly psychotherapy. Unfortunately for juvenile justice, APD typically is not identified until early adulthood and, thus, is most useful in the adult criminal justice system.

A major change in personality research has been to try and develop standardized measures of personality. The **Minnesota Multiphasic Personality Inventory (MMPI)** is one standardized method for uncovering personality traits in individuals. The MMPI is an inventory of over 500 true/false questions that are designed to tap 10 personality dimensions identified in past clinical analyses (Megargee and Bohn, 1979) without the need for extended clinical observation. The MMPI assumes that everyone answers some questions in a deviant manner. Therefore, no single question is associated with deviant behavior. Instead, deviance is considered more likely as the individual answers in a deviant fashion on a number of questions. While the MMPI has been used extensively, it has been challenged on a number of grounds. First, to the extent that the prior clinical evaluations are in error, poorly conceived, or invalid, the MMPI results also are questionable. The results are only as good and useful as the underlying clinical factors. Second, the MMPI is useful primarily in the treatment of offenders, and not for predicting or explaining deviance prior to its occurrence. Finally, because the MMPI has been refined using institutionalized subjects, it is possible that it reflects factors related to institutional life and experiences, rather than a deviant personality. The inventory has been subjected to relatively few tests outside of the institutional setting.

### **Mental Deficiency and Delinquency**

Since the late 1800s, low intelligence has been offered as a prime cause of deviant behavior. The scientific interest in the relation between intelligence and deviance can be traced to the development of IQ testing. IQ, or

intelligence quotient, was developed by Alfred Binet in the early 1900s as a numerical representation of the mental ability of the individual. The formula for IQ is rather simple:

$$\text{IQ} = (\text{mental age} / \text{chronological age}) \times 100$$

The mental age of an individual is determined by performance on a standardized test. The test consists of questions geared toward different aged individuals. Persons age 10 and up are expected to be able to answer a certain level of questioning and all those from the easier levels. More difficult questions are assumed to be beyond the ability of the average 10-year-old. Once an individual's mental age is determined, the researcher simply divides that figure by the respondent's actual age and multiplies by the base of 100.

Since the development of the IQ test, many researchers have attempted to show that delinquency and deviance are related to low intelligence. The assumption that IQ is related to crime is not a surprising one given the knowledge that most incarcerated offenders tend to be less educated and display below-average scores on academic achievement tests. The major source of debate concerning IQ revolves around the question of whether IQ is due to nature or nurture.

The **nature–nurture controversy** refers to the question of whether intelligence is inherited (nature) or whether it is an outcome of environmental influences (nurture). The nature argument views IQ as set at birth and not subject to outside influences, such as the social and physical environment, including education. Conversely, the nurture side of the debate proposes that an individual's IQ is the outcome of complex interactions between the genetic makeup of the person and the environment to which the individual is exposed. This view suggests that IQ can be altered through education and other environmental interventions.

The view that intelligence is genetically determined received a great deal of early support in the United States, where low IQ scores were used as a means of denying immigrants entry to the country. Goddard (1920) argued that most criminals were "feble-minded" (IQ of less than 75) and the government took the position that excluding such individuals was in the best interests of the country. Unfortunately, Goddard (1920) examined only incarcerated "criminals" and had no way of knowing whether they were more or less "intelligent" than anyone else. Wilson and Herrnstein (1985) and Herrnstein and Murray (1994) also have argued that IQ is substantially due to genetics and that IQ is a strong predictor of criminal activity. Hirschi and Hindelang (1977) provide the most widely cited argument in the IQ-delinquency



literature. The authors argue that IQ is at least as important in predicting delinquency as social class or race, and is related to delinquency regardless of the race or social class of the individual. Their opinion is that IQ is an indirect cause of delinquency. Specifically, low IQ, through genetics and/or environment, leads to poor school performance, which prompts a lack of concern for education, a rebellious attitude toward the school and societal demands, and, eventually, a heightened chance of deviant behavior. To the extent that environment has a role, individuals with a low IQ who can be encouraged to stay in school, receive special help, or otherwise enhance their abilities may not experience the problems and frustrations that precipitate deviant activity.

### **Implications for Juvenile Justice**

Before addressing the impact of psychological theories, it is important to point out some of the criticisms leveled at these explanations. As has been noted throughout the above discussions, psychologically oriented explanations are not particularly good for the prediction of behavior. Many are formulated after the fact and seek, primarily, to explain the observed behavior retrospectively. The emphasis is on why something happened and not predicting what will happen in the future. A second concern with psychological studies is the reliance on subjective interpretations. Most psychological endeavors rest on the opinion of individuals who have been trained in the field of psychology. Unfortunately, there is no single orientation or perspective that drives the entire field, or even subfields, of psychology. The subjective nature of psychology, therefore, often leads to conflicting opinions, even when individuals are looking at the exact same information.

Some commentators criticize what they see as the individualistic nature of psychological explanations. Indeed, many psychological endeavors examine individual subjects, and the precise explanation for deviance could vary from subject to subject. This criticism may be shortsighted, however, given the fact that these individualistic approaches form the basis of other, more general theories. For example, operant conditioning is a key component of differential association-reinforcement theory, and hedonism is at the heart of Gottfredson and Hirschi's general theory of crime (see Chapter 4 for discussions of both of these theories).

Psychological explanations have their greatest impact on the correctional end of the juvenile justice system. Psychology's emphasis on identifying the cause of an individual's behavior fits the general treatment orientation of juvenile justice. As a result, juvenile corrections place heavy emphasis on counseling, education, and other rehabilitative methods. Techniques such as I-level classifications and the MMPI are used to gain insight into a juvenile's problems and subsequently design a response to those problems. Additionally,

behavior modification techniques are used to set up token economies in detention centers and training schools. Psychology will more than likely remain primarily a correctional tool in juvenile justice until such time that more precise methods of evaluation are generated or the predictive ability of psychological findings are enhanced.

## SUMMARY

The biological and psychological explanations discussed in this chapter represent theories and perspectives developed over many decades. While some have been discounted because of their lack of rigor and relevance, they have engendered discussions that may lead to more applicable and useful theories. Psychological explanations have found a clear place in the juvenile justice system. This is particularly true in the juvenile court and in the correctional phase of processing. Biological explanations have not fared so well. This is due mainly to the poor quality of the early explanations and the current lack of expertise in the physical sciences held by criminologists and criminal justices. The next chapter turns to a discussion of sociological explanations that hold the dominant position in modern discussions of delinquency and criminality.

## Discussion Questions

1. Compare and contrast the Classical and Positivist schools of thought. What are the basic assumptions each hold about the individual and behavior? What implications do each have for the juvenile justice system?
2. There is a movement to shift the emphasis in the juvenile justice system from the sociological theories and explanations for delinquency to the biosocial perspective. Point out and explain what you see as the more promising biosocial approaches. In addition, project the problems or shortcomings that will result if the emphasis is shifted (that is, what are the problems with the biosocial approach)?
3. Identifying a “criminal or delinquent personality” has proven to be quite difficult. Outline some of the more well-known methods for isolating this personality and what problems exist in these approaches. Which method would you use if you had to pick one and why?
4. Psychological theories are common in correctional practice. Pick specific psychological approaches and illustrate their usefulness and shortcomings for use in correcting juvenile delinquents (i.e., critique the approaches).