Explanations for Homicide

The oldest explanations for homicidal offending are most likely supernatural explanations, such as demonic possession or evil. Even today, we see some inkling of these explanations in popular culture. One only needs to listen to how crime writers, newscasters, and others in various media outlets describe homicides and homicide offenders. For instance, as Katherine Ramsland, a forensic psychologist, once wrote:

> To know evil, you have only to stand on the road in Jasper, Texas, where on June 7, 1998, three white men offered a ride to a 49-year-old black man, James Byrd Jr., who was on his way home from an anniversary party. Instead of taking him where he wanted to go, they beat, kicked, and tortured him merely for the color of his skin, and then spray-painted his face black before chaining him by the ankles to the back of their truck. As they sped down an isolated logging road, dragging him for nearly three miles, he tried keeping his head up, but his skin ripped off, his bones broke, and his elbows were shattered to the bone. When his head hit a culvert, it was ripped off, along with his right arm. What was left of his torso was dumped in front of a church for its black congregation to find. (Quoted in Cross & Purvis, 2008).

(More about this case in Chapter 10). Similarly, *The New York Times* indicated that the prosecution in the Charleston church shooting case depicted the shooter as "the personification of evil, a racist ideologue, radicalized on the internet, who plotted an intensely premeditated assault over more than six months, waiting only until he was 21 and old enough to buy a weapon" (Blinder & Sack, 2017).

There is no doubt that the crimes Ramsland described and those committed by Dylann Roof are horrifically violent and disgusting. Many of us felt sick when we first heard about the Charleston church massacre and other horrific murders. However, many academic criminologists (perhaps in disagreement with some who have worked in law enforcement) do not think that murder can be explained by saying that the offenders were evil. The field of criminology is a science, and it is based on the premise that crime and criminals can be studied scientifically. Granted, scientific studies and theorizing about criminals and crime are varied, with explanations ranging from those based purely on biological influences to those based entirely on environmental causes, with many

today indicating that both nature and nurture contribute to human behavior. In this chapter, we will explore many explanations for crime as they apply to murder.

This chapter can be divided in half. In the first half of the chapter, several biological and psychological theories or explanations for criminal offending are presented. The chapter begins with an outline of early deterministic theories involving biological and physiological explanations that help set the stage for more modern biological and psychological explanations for crime, such as personality disorders and psychopathy. Then, in the second half of the chapter, the focus is on cultural and social explanations for criminal behavior and homicide offending. In addition to the classical school perspective and deterrence theory, there are brief explanations of social disorganization, differential association theory, social control theory, general theory of crime, and neutralization theory. While these theories were developed to explain juvenile delinquency and criminal behavior generally, rather than homicide specifically, here they are applied to homicide offending or particular types of homicide offending. Criminologists have also proposed theories or explanations to account for particular homicide patterns, such as the higher rates of homicide in the southern United States. Only brief reviews of such theories are included in this chapter because they are explained more fully in later chapters. Additional explanations postulated to explain homicide patterns, such as feminist perspectives on violence and masculinity and sociological perspectives on social stratification, will also be included in this chapter. Finally, this chapter explores the role of alcohol and drug use in homicidal behavior. Please note as you read this chapter that what you are reading are overviews of the theories and perspectives included.

POSITIVISM

With scientific discovery taking center stage in the 18th century, positivist explanations for crime came into favor. In direct contrast to classical thinkers, who will be discussed later, positivist theorists postulated that human behavior is influenced, if not caused, by factors that individuals cannot control. In other words, behaviors are determined. Humans do not have freedom of mind to decide whether they will commit crime, but instead something about their makeup determines whether they are criminals.

BIOLOGY, BODIES, AND OFFENDING

Many credit Cesare Lombroso (1825–1909) as the founder of criminal positivism because of his dedication to the scientific study of criminality. In 1876, Lombroso wrote *The Criminal Man*, in which he proposed the idea that some individuals were born criminals. Lombroso, a professor of psychiatry and anthropology, performed many postmortem examinations on convicts. The observations he made when he performed these autopsies and his understanding of physiognomy and phrenology led him to argue that criminals were physically different from non-criminals. Lombroso found that many of the criminals whose bodies he examined had physical deformities, such as asymmetrical faces, flat noses, fleshy lips, unusually sized ears, protruding jaws, and long arms. Influenced by the emphasis on scientific study of his time, he took careful measurements of convicted criminals' physical characteristics to test and record his observations. His data led him to conclude that the physical abnormalities he witnessed in criminals were

indicative of the relationship between biology and crime. Furthermore, likely influenced by Darwin's ideas, he proposed that criminals were biological throwbacks to an earlier evolutionary stage of humans. He believed criminals to be more primitive and less highly evolved than their non-criminal counterparts. Lombroso used the term "atavistic" to describe these less evolved physically degenerate criminals (Fleming, 2000).

Lombroso's work on the biological criminal spawned much scientific work that attempted to test and build on his ideas. Among those who followed in Lombroso's footsteps were his students Raffaele Garofalo (1852–1934) and Enrico Ferri (1856–1928). Ferri introduced his own typology of criminals in which he, too, focused on their physical makeup. Ferri's (1917) classification included the insane, born, occasional, habitual, and passionate criminal. Garofalo (1914) was more psychological in his identification of criminals as murderers, violent criminals, criminals deficient in probity, and lascivious criminals.

Lombroso and his followers, while an important part of the history of criminology, have been greatly criticized because of their biased samples and lack of objectivity. Furthermore, their theories have not stood up to scientific scrutiny. Even as early as 1913, Charles Goring refuted the connection between physicality and criminal offending. In his book *The English Convict*, Goring found no support for atavism when he compared the measurements of 3,000 English inmates and a control group of nonincarcerated individuals. The idea that biology is related to criminality is still alive and well, but the belief that we can recognize criminals by their physical features has mostly died. Nevertheless, sometimes the public is still surprised to find that attractive individuals have committed heinous crimes. In fact, some offenders are believed to have used their attractiveness to ensnare their victims. Both Ted Bundy, who was executed in 1989 for the rape and murder of 28 women, and Jeffrey Dahmer, who killed at least 15 young men and cannibalized many of them, were considered attractive.

WILLIAM SHELDON AND BODY TYPES

Approximately 75 years after Lombroso first argued that there was a link between biology and criminal offending that was expressed in the physical makeup of criminals, Ernst Kretschmer (1888–1964) and then William Sheldon (1898–1977) classified criminals by their body type. Kretschmer studied over 4,000 criminals based on his classification of three body types: (1) *leptosome* or *asthenic* (tall and thin); (2) *athletic* (well developed muscles); and (3) *pyknic* (short and fat). He found that violent criminals (murderers) tended to be athletic, petty criminals were asthenic, and pyknics were most likely to be those who committed crimes involving deception and fraud.

It is likely that you have heard of Sheldon's classification theory as it is still used to describe body types in relation to exercise and bodybuilding (see Figure 4.1). Sheldon argued that there were three basic body builds, or *somatotypes*: (1) endomorph (fat and soft); (2) ectomorph (thin and fragile); and (3) mesomorph (muscular and athletic). Based on studies of juveniles, Sheldon and others found that mesomorphs were more likely to be criminals. Like Lombroso's theories, however, the theory that body type reflects criminality has been largely disproved, challenged for methodological failings, or avoided because of the controversial policy implications that may result from the belief that criminality is purely biological (Barkan, 1997; Glueck & Glueck, 1956; Sheldon, 1949). For more information on this, see Box 4.1 on eugenics.

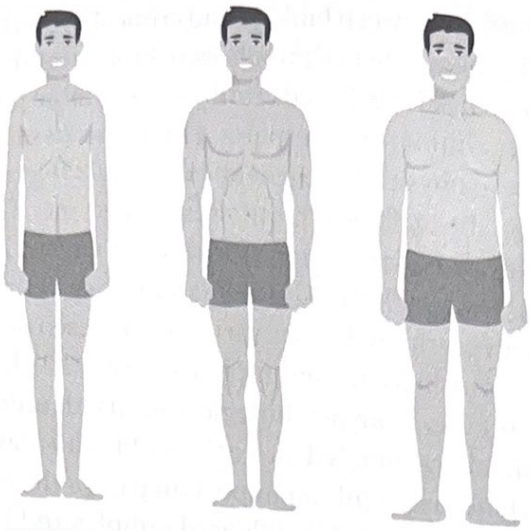

FIGURE 4.1 Sheldon's Classification Theory, Illustrated

HEREDITY AND GENES

Early studies about criminal families convinced some criminologists that the tendency toward crime was inherited, while others found these studies supportive of environmental influences. In his 1877 study, Richard Dugdale found six members of the Juke family imprisoned in a New York county jail. Dugdale traced the Jukes' family tree and found that a great number of the family had been imprisoned over the past 200 years. Despite the fact that Dugdale believed environment was the cause of degeneracy in the Juke family, his study was seen, at the time, as support for the argument that deviance was genetically determined (Barkan, 1997; Hurwitz & Christiansen, 1983).

Similarly, American psychologist Henry Goddard collected data on a family he called the Kallikaks. Seen as an improvement over Dugdale's Juke study, Goddard (1912) was able to compare the descendants of Martin Kallikak, who fathered children, both with his upstanding wife and with his "moronic" mistress. Because the descendants of the extramarital affair were more likely to be criminal and have other problems, such as alcoholism, than the children of the legitimate union, it was believed "feebleminded-ness" and criminality were the result of genetics. Those who attributed the differences in the two lines to genetics overlooked the fact that the "good" Kallikak descendants grew up in a positive environment and had wealth, while the "bad" Kallikaks were impoverished (Barkan, 1997; Fishbein, 1996).

Journalist Fox Butterfield has also written about two families who appear to be passing criminal behavior from one generation to the next. In his book *All God's Children* (1996), Butterfield traces the family history of Willie Bosket, one of New York's most dangerous criminals. From generation to generation, the young Bosket males found themselves in trouble with the police. Similarly, Butterfield wrote a 2018 book about the family of Dale Vincent Bogle of Oregon, the patriarch of what appears to be a family of criminals. At least 60 members of the Bogle family had arrest records in Oregon and beyond. Bogle, who went by the nickname "Rooster" before he died, left a legacy of criminality. Tracey Bogle, Rooster's youngest son, was convicted of many crimes,

BOX 4.1 Eugenics

Sir Francis Galton, Charles Darwin's cousin, introduced the term *eugenics*. Originally introduced to describe the science of studying and improving upon human genetics, eugenics is usually viewed negatively and thought to be immoral. Eugenics focuses on improving future generations of humans by encouraging only the fittest to procreate and limiting or preventing the less fit from having children. It is likely that whoever is in power will believe that they and those like them are the fittest. The German Holocaust is one example of the introduction of eugenic principles in which we see one group, who defined themselves as Aryans, to be the most desirable humans.

The belief that criminality is biological could lead to a eugenic-type approach to ending crime. If a society believes in eugenic principles, then those in power will prevent those they deem criminal from procreating through severe birth control methods or even death (Lagassé & *Columbia* University, 2003). In fact, some believe this is happening in the United States. As recently as 2013, *Time* magazine had an article about California prisons sterilizing 148 inmates through tubal ligations without getting authorizations from the women who were sterilized (Campos, 2013).

including kidnapping and rape, and Tony, another son, was convicted of murder. The family penchant for crime goes beyond Rooster's sons. Rooster's wife, brothers, sisters, and grandchildren all have criminal records. Even Louis Bogle, Rooster's nephew, managed to rack up 25 convictions before a drug gang to whom he owed money paralyzed him in an attack (Butterfield, 2018).

The Bogles and Boskets are not the only families to share a history of crime. A classic longitudinal study, the Cambridge Study in Delinquent Development, which followed 400 males from age 8 to 48, found that having a convicted family member (mother, father, sister, or brother) predicted a boy's conviction (Farrington et al., 1996). The Cambridge Study, along with the case studies by Butterfield, support the stance that criminality is often a family affair. However, whether the Bosket and Bogle families have passed their criminal tendencies on through their genes, their teachings, or some combination of both is a much-debated question.

TWIN STUDIES

Many believe that twin studies are the ultimate test of whether genetics or environmental factors best explain criminality (Hurwitz & Christiansen, 1983). Popular in Germany and Denmark, twin studies compare monozygotic (identical) twins and dizygotic (non-identical or fraternal) twins. Because twins raised together would share practically identical environments, a comparison of monozygotic and dizygotic twins should help determine whether behavior is the result of genetics or environmental factors. Since identical twins share 100% of their genetic makeup and dizygotic twins share as much genetically as any siblings, more similarities among monozygotic twins as opposed to dizygotic twins would suggest that genetics is more powerful than the environment in explaining behavior.

Dating back to the first systematic study of criminality in twins by German physiologist Johannes Lange in 1929, twin studies have measured the concordance rates of monozygotic and dizygotic twins separately to determine heritable components of crime (Hurwitz & Christiansen, 1983; Raine, 1993). A concordance rate is a measure that reflects the proportion (percentage) of twin pairs in which both twins have a particular trait, such as criminal offending, in common. To determine whether the trait is the result

of genetic influences or environmental influences, the concordance rates of the monozygotic and dizygotic twins are compared. Environmental factors explain a trait when the rates of the trait are found to be similarly high among both identical and fraternal twins. However, when concordance rates are higher among the monozygotic twins as compared to the dizygotic twins, then genetic influences likely explain the trait in question (Raine, 1993). In Lange's study of 30 pairs of twins, dizygotic twins had a concordance rate for criminality of only 11.8% while monozygotic twins had a 76.9% concordance rate. In other words, among the 13 pairs of identical male twins, when one twin had been imprisoned, the other had been imprisoned in 77% of the cases. Among the non-identical twins, when one twin had been incarcerated, the other had been imprisoned in only 12% of the cases. Thus, Lange concluded that heredity was an important cause of crime (Hurwitz & Christiansen, 1983; Vold & Bernard, 1986).

Though studies with bigger samples than Lange's 30 have shown less difference in concordance rates between monozygotic and dizygotic twins, the evidence presented in twin studies still suggests that identical twins are more alike in their criminal offending than non-identical twins, and this extends even to same-sex fraternal twins (Farrington, 1998; Hurwitz & Christiansen, 1983). In a meta-analysis (a synthesis of several other studies), for example, Adrian Raine (1993) found that the concordance rate for identical twins was 52% but only 21% for fraternal twins. Nevertheless, there are those who criticize the conclusion that twin studies prove that genetics explains criminal offending, including homicide offending. One criticism is that because identical twins look more alike, they may be treated more alike and thus have a more similar environment than would dizygotic twins (Farrington, 1998). Other critics have noted that less-than-rigorous methods (including twins who appeared identical) have been used to determine whether twins are monozygotic or dizygotic (Hurwitz & Christiansen, 1983).

With rapid advances in genetic science in the 21st century, we seem to be getting closer to an understanding that genetics and the environment work together to impact human behavior. Wertz and her colleagues, for example, studied the association between a genetic risk for low educational attainment and criminal offending among same-sex twins in England and Wales. They found that the crime concordance rate for identical twins was 81%, while it was 61% for fraternal twins in their sample. However, Wertz etal. also estimated genetic and environmental influences on criminal offending and found that 41% of the variance in offending was linked to genetics, an estimated 40% could be explained by shared environment, and the final 19% was nonshared environmental influences (Wertz et al., 2018). Whatever future genetic studies may suggest, it is important to remember that a predisposition is not the same as certainty and that a predisposition may result in criminal offending only under the right (or shall we say wrong) environmental conditions. It seems we are learning that genetics matters, but only under the influence of certain environmental factors.

ADOPTION STUDIES

Adoption studies have also been a popular method to investigate the link between biology and criminal offending. Adoption studies are based on the idea that a child who is raised by someone other than their biological parent(s) will share inherited genetic material with their biological parent, but they will not be influenced environmentally

		Biological Father	
Adoptive Father		Criminal record	No record
	Criminal record	36.2%	11.5%
	No record	22.0%	10.5%

FIGURE 4.2 Hutchings and Mednick's (1977) Adoption Study Results

(or socialized) by their biological parents. Likewise, they will be environmentally influenced, but not genetically influenced, by their adoptive parent(s). Thus, criminological researchers would expect those children to be more similar to their adoptive parents in criminal offending if environment is more important than genetics for determining criminality. Conversely, if genetics is more causally related to criminality, adopted children would be more similar to their biological parent(s), as opposed to their adoptive parents.

The results of adoption studies are similar to twin studies. Adopted children tend to commit criminal or deviant acts at rates more similar to their biological parent(s) and less similar to their adoptive parent(s) (Farrington, 1998; Kendler et al., 2014; Raine, 1993). In one of the most discussed twin studies, Hutchings and Mednick (1977) studied all male adoptees in Copenhagen born between 1927 and 1941. As can be seen in Figure 4.2, they found that if a boy's biological father had a criminal record, the boy was more likely to have a record than if his adoptive father had a record. Additionally, if both the biological and adoptive father had a criminal record, the boy was even more likely to have a criminal record (Vold & Bernard, 1986).

Like twin studies, however, adoption studies have not ended the argument forever. As Farrington (1998) notes, some of the adopted children had interactions with their biological parents before they were adopted and thus may have been environmentally affected by these parents. Additionally, there is the possibility that adopted children were labeled by their adoptive parents or others who knew of their biological parents' criminal behavior, and thus negative labeling could explain their offending behavior.

ADOPTED TWINS STUDIES

Ideally, the best study to determine the influence of genetics and environment on criminality would be an experiment in which we could compare a random sample of identical twins raised together to a random sample of identical twins in which the twins were separated at birth and raised apart. If environment is more important than genetics, we would expect twins raised together to be more similar than those raised apart. Hopefully, you are thinking this would be a good test but an impossible one. We certainly would not want to purposely do an experiment in which we separated twins. Thus, researchers must rely on finding cases where this has happened (rather than making it happen, as is documented in the 2018 film *Three Identical Strangers*). Moreover, perhaps fortunately for many twin siblings, there have not been enough twins reared apart for criminologists to come to any definite conclusions, but the studies that do exist suggest that both genetics

and environment are important in determining both our non-criminal and criminal behaviors.

A study by Grove et al. (1990), for example, suggests that genetics may be important in some behaviors linked to criminality, such as alcohol and drug abuse/use. Grove and his colleagues compared 32 sets of adult identical twins who were separated at birth or very shortly after birth and who were raised apart. They found that heredity could explain 41% of childhood conduct disorder and 28% of adult antisocial personality disorder (Farrington, 1998; Grove et al., 1990). Nonetheless, these percentages are lower than expected based on other twin studies, making us very cautious about the results of other twin studies. Furthermore, as the authors note, their study is based on few cases and on a young sample of individuals who still may develop alcohol or drug abuse problems.

Today, scientists are likely to argue that genes play a role in our behavior but that the environment also influences behavior. Just like height or weight, we may have the genes that should make us tall and wide but our access to good nutrition (our environment) influences whether we meet our full potential (Farrington, 1998). A 2015 study of Finnish violent offenders is a case in point. The researchers in this study found that two genes were associated with violent crime. They found that prisoners known to have committed violent crimes were more likely to have a low-activity monoamine oxidase-A genotype and a Cadherin 13 gene than those in a non-criminal population (Tiihonen et al., 2015). However, the researchers of this study stressed that we should not use these genes to determine who might be a criminal. Instead, Tiihonen argued, "There are many things which can contribute to a person's mental capacity. The only thing that matters is the mental capacity of the individual to understand the consequences of what he or she is doing and whether or not the individual can control his or her own behavior" (Hogenboom, 2014). Likewise, Adrian Raine, a British psychologist known for his research on the biosocial and neurobiological causes of violent behavior, stresses in his book *The Anatomy of Violence* that "social factors are critical both in interacting with biological forces in causing crime, and in directly producing the biological changes that predispose a person to violence" (Raine, 2013, p. 9).

PSYCHOPHYSIOLOGICAL FACTORS

As we make advances in genetic science and individuals like Adrian Raine work to bring disciplines such as criminology, psychology, and biology together, we see greater understanding and acceptance of genetic explanations for crime—with the caveat that environment and genetics work together. The first edition of this text included a discussion about psychophysiological measures of arousal and emotions—such as heart rate, skin conductance, and electroencephalographic (EEG) activity—and their links to delinquent and criminal behavior (Farrington, 1998; Raine, 1993). It was noted that Adrian Raine (1993) argued that psychophysiological factors correlate with antisocial and criminal behavior. He reported that skin conductance tests that use electrodes to measure the body's response to stimulation showed that antisocial individuals (psychopaths) are under-aroused by such tests in comparison to social or "normal" individuals. Similarly, studies measuring heart rates found lower resting heart rates in "antisocials" (Raine, 1993, p. 190). EEG (electroencephalogram) studies also suggested that antisocials are less aroused. EEG is recorded by placing electrodes on specific

locations on the scalp that then measure electrical activity in the brain. While researchers suggested that violent offenders have abnormal brain patterns (electrical activity in the brain), there is still much inconsistency in the findings of this research, making it difficult to reach any definitive conclusions. However, there is now some evidence to suggest that genetics explains some of these findings: Individuals with low levels of the MAOA gene were more likely to display some of these psychophysiological patterns and more likely to display violent behavior (Raine, 2013). Importantly, however, as Raine notes, this was more so for individuals who had been severely abused as children—thus, again, making the point that genes and environment work in concert to produce our behavior.

Raine (1993, 2013) notes, however, that one of the most replicable findings regarding biology and criminality is that antisocial or criminal people tend to have relatively low heart rates. Farrington notes this was true in his study of Cambridge youth, where heart rate was measured at age 18. More than twice as many of the boys with low heart rate (65 beats or fewer per minute) were convicted for violence as compared to those with higher heart rates (Farrington, 1997). Importantly for our focus on homicide, Farrington (1997) also found that lower heart rates were significantly related to self-reported violence and teacher-reported aggression. Raine suggests that low heart rate may be a biomarker for behavioral problems but that environment again would be a factor. If this is something you are interested in, both of Raine's books are worth a read.

HORMONES

Our endocrine glands produce and secrete various hormones that our body uses to regulate different functions such as growth, salt and water balance, and even heart rate. An imbalance in hormonal levels may cause a variety of physical disorders, such as acromegaly, a growth disorder that causes bones in the extremities and jaw to grow larger than normal.

Testosterone

All of us have the hormone testosterone in our bodies. However, most of us know testosterone as the hormone that regulates the growth of male genitalia and male secondary sex characteristics such as muscularity, facial hair, and deep voices. Based on the assumption that males are more aggressive than females, researchers have investigated whether testosterone may have something to do with violence. Dan Olweus's studies (1986; Olweus et al., 1988), which found a connection between testosterone levels and self-reported aggression in adolescent males, are often cited in support for this link. Most of the studies that test the link between testosterone and aggressiveness, or violence, have examined males. However, a study in 1988 found that women prisoners who had committed unprovoked assaults had higher levels of testosterone than those who were violent in response to a physical assault (Dabbs et al., 1988). Examining the relationship between testosterone and homicide specifically, as opposed to the more inclusive category of violence, a study in 2001 found that inmates who had higher levels of testosterone were more likely to have killed an acquaintance and to have planned the action than those who had lower levels of testosterone (Dabbs, Riad, & Chance, 2001).

While there does appear to be evidence that suggests testosterone is linked to aggression, violence, and even particular types of homicide, Raine (1993) has emphasized that this is simply a link. We do not know the direction of the link. It could be that aggression causes testosterone levels to increase, and there is some evidence to suggest that it does (Raine, 1993). Much recent research on testosterone, for example, indicates that partnered men and fathers have lower testosterone (Gettler & Oka, 2016). As with other *biological* explanations discussed in this chapter, testosterone is only one of many factors related to violence, and its relation to other factors is still not clear.

ADRENALINE

Adrenaline, also known as epinephrine, is another hormone linked to violence. Adrenaline usually increases when we are under stress. It causes our cortisol levels to rise, it makes our heart rate increase, it may make us perspire, and it increases our alertness. Unlike the positive relationship between testosterone and violence, the relationship between adrenaline and violence is believed to be a negative one. Scientists hypothesize that violent individuals may need higher levels of stimulation to arouse them (Mitchell, 1997). Thus, those who commit criminal offenses may have lower levels of adrenaline than those who do not partake in criminal behaviors. Olweus (1987) found a negative relationship between adrenaline and aggression. Other studies, however, suggest that both alcohol and testosterone may interact with cortisol, making the relationship complex. The experts agree, and the research suggests repeatedly that there is no one cause for violence or homicidal offending in humans.

PREMENSTRUAL SYNDROME (PMS)

As noted in reference to testosterone, most research exploring the connection between hormones and violence has focused on men. However, some research has explored the relationship between estrogen and progesterone levels in women's offending behavior. Parallel to testosterone, estrogen and progesterone are produced in everyone's bodies, although progesterone and estrogen are most closely linked to women's menstrual cycle and pregnancy. Further, some researchers have theorized that there may be a link between fluctuations in hormones—estrogen and progesterone and other hormones linked to menstruation and pregnancy—and women's offending behavior. Perhaps the most influential study supporting this notion was one conducted by Katherina Dalton (1961), who studied a sample of 156 newly convicted women in England. Dalton found that 46% of these women had committed their crimes either 4 days prior or 4 days after their menstrual cycle (Raine, 1993).

A tremendous amount of criticism has been leveled at connecting women's menstruation and their offending behaviors. First, it is well known that stress can influence menstrual cycles, and thus an increase in stress such as committing a crime or being arrested could affect women's menstrual cycles. Just as with testosterone, the direction of any correlation found is not clear. Second, and particularly important for the study of homicide, the women in Dalton's study, as with most women arrested for crime, were convicted of nonviolent crimes. Third, studies linking women's biology and negative behavior appear to receive more attention when women are making progress toward

BOX 4.2 PMS and Homicide

In the late 1970s, women in many western nations began to make strides toward equality in public life because of women's movements in many countries. Many women were working their way into public life, up the corporate ladder, and into leadership positions. However, in the mid-1980s, with Reagan leading the United States and Thatcher leading the United Kingdom, conservatives began to chip away at the progress women were making (Faludi, 1991). In an intriguing paper, Chrisler and Caplan (2002) argued that it was no surprise then, that biological explanations for women's behavior became popular again in the mid-1980s. Women's biology and the fact that many women can potentially bear children was used in the past as a reason for women not to participate in sports, education, and much of public life. In the 1980s, it was being used as an explanation for women's offending behavior, especially in the United Kingdom.

Two headline-grabbing murder trials in the United Kingdom riveted attention on PMS as an explanation for women's behavior. In the first, Sandie Craddock, a bartender who had previous psychological problems and a history of violence, was arrested for killing a coworker by stabbing her to death during a disagreement. In the second case, a woman used her car to ram her married and abusive lover into a lamppost. The attorneys for both these women argued that they had killed because of their premenstrual hormonal fluctuations, which caused these women to become dangerous criminals (Chrisler & Caplan, 2002). In the first case, Craddock received a sentence of probation and court-ordered progesterone injections. In the second, the court reduced the charge to manslaughter due to exceptional circumstances and she was put on probation with restrictions such as no alcohol and the directive to eat well (Easteal, 1993).

Perhaps because of the publicity of these two cases, late luteal phase dysphoric disorder (LLPPD, the precursor to PMS) was added to the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III*). Interestingly, Paula Caplan reported being interviewed by a reporter who wanted to cover the debates over adding LLPPD to the *DSM-III* and her editor told her he was not interested in the story. However, when it looked as if Kim Campbell would be elected as the head of the Progressive Conservative Party and become Canada's first woman prime minister, the editor decided to cover the story about LLPPD. Chrisler and Caplan (2002) report that this was an attempt to prevent the Progressive Conservative Party from winning the election by introducing the idea that women, including Kimberly Campbell, behave irrationally once a month and thus were not good leaders (Chrisler & Caplan, 2002).

The use of PMS as a defense has occurred periodically in the United States, Australia, and the United Kingdom, but it has failed to catch on as a popular defense in the United States, perhaps because of the lack of medical evidence to support it. Interestingly, in 2018, it was used to acquit a woman who was accused of killing a child in 1981 in India. Noting that three doctors treated Kumari Chandra at different times, the Rajastan High Court was convinced that she was "suffering from a mental disease known as premenstrual stress syndrome, which made her dangerously aggressive some days prior to the beginning of her menstrual cycle" (Ahuja, 2018). Why do you think the Indian Court allowed this argument? Do you think it has anything to do with gains made by women in India, as Chrisler and Caplan might argue?

equality (Chrisler & Caplan, 2002; Faludi, 1991; see box about PMS and homicide). Fourth, women's experiences with menstruation appear to be influenced as much by culture as by hormones. The manifestations of any "symptoms" associated with menstrual cycles are more likely in western societies than in non-western societies, and the symptoms vary by society (Chrisler & Caplan, 2002).

NEUROPSYCHOLOGY AND BRAIN DYSFUNCTION

Neuropsychology is the study of the brain mechanisms that control behavior functions localized in certain areas of the brain. In particular, it is assumed that abstract reasoning, anticipation, planning, and inhibiting inappropriate behavior are located in the frontal lobe. Thus, some experts argue that damage to the frontal lobe or a malformation of the frontal lobe can contribute to offending behavior, including homicidal behavior.

BOX 4.3 Hypofrontality and Murder

In 2004, Reinaldo Rivera, who admitted killing four women in South Carolina and Georgia, was found guilty and sentenced to death for the murder of Sgt. Marni Glista, whom he raped and strangled to death. In his court case, Rivera's attorneys Jacque Hawk and Peter Johnson presented arguments that Rivera had a brain deficiency. Geral Blanchard, who had a master's degree in psychology and worked as a licensed counselor in Wyoming, testified as an expert for the defense. Blanchard testified that after 2 days of interviewing and testing Mr. Rivera, he suspected that Rivera had a brain injury, specifically a prefrontal brain injury, so he requested that Rivera have a hair mineral analysis, a spinal tap, and a PET scan. Dr. Thomas Sachy, a neuropsychiatrist, also testified for the defense that Rivera had antisocial personality disorder. Furthermore, in controversial testimony, Sachy argued that low activity in Rivera's frontal lobe, which he called "hypofrontality," was the cause of Rivera's psychopathy. Low activity in the frontal lobe could explain Rivera's behavior, according to Dr. Sachy, because this is the part of the brain responsible for impulse control. Sachy compared slides of Rivera's PET scans with slides of a "normal" PET scan. Dr. Sachy explained that the scant amount of red in the front of Rivera's brain as compared to a normal brain indicated that Rivera had hypofrontality. Importantly, Danny Craig, the defense attorney, noted that Blanchard did not have a PhD in psychology and much of what he testified about is not in the *DSM-IV*. Further, Dr. David Hess, a neurologist with the Medical College of Georgia, testified that he found Rivera did not have neurological abnormalities, as reported by Dr. Sachy.

There is clear evidence that damage to the brain can change one's personality. The story of Phineas Gage is often included in introductory psychology texts to illustrate this. In September 1884, Gage was working on a railroad building crew. Something went wrong with the rock blasting Gage was doing, and an iron rod approximately 3½ feet long and weighing over 13 pounds penetrated Gage's head under his left cheekbone and exited through his forehead, piercing his frontal lobe. Amazingly, Gage survived. However, his personality changed greatly. Whereas in the past he was reliable and well liked, after the accident his coworkers and friends found him unreliable and mean. His change in personality helped us begin to learn about how different parts of the brain worked and the connection between our brains and our behaviors (Fleischman, 2002).

NUTRITION

You may have heard of a Dan White who killed San Francisco mayor George Moscone and city supervisor Harvey Milk in 1978. White's attorneys successfully argued that he was responsible for manslaughter but not murder because of his poor diet. While the "Twinkie defense" is largely a fiction created by the media (see Box 4.5), the idea that nutrition and deviant behavior is linked continues to circulate. Some research suggests that hypoglycemia (low blood sugar) may be connected to criminal behavior (Jeffery, 1990). For example, Fishbein (1982) found that placing a group of incarcerated youths on a low sugar diet reduced their antisocial behaviors. Some recent studies have found that seafood consumption is negatively associated with homicide rates at a national level. In other words, countries with high seafood consumption have low homicide rates. Testa et al., (2017) examined this relationship and found that the relationship did exist; however, once they controlled for socioeconomic development, the relationship between seafood consumption and homicide rates went away. At this time, there is no clear link between nutrition and homicide, but scientists may continue to explore this possibility.

BOX 4.4 Critical Thinking: Corn Leads to Crime

Mawson and Jacobs (1978) found that countries that have significantly high homicide rates also have significantly high corn consumption. Does this mean corn causes crime? Is there something about corn that causes humans to do crime? Does the chemical makeup of corn interact with the chemicals in the human brain to cause humans to kill? While it is important to take empirical findings seriously, it is also important to be scientifically rigorous. In science, we are careful to follow the scientific method and not to hastily come to conclusions. In fact, it is rare in science that we can conclude that causation exists. However, we follow three basic criteria to determine if we will conclude that causation is likely to exist. First, the cause must come before the effect. Second, the cause and effect must be correlated; they must appear to be related. Third, the relationship between the cause and effect must not be spurious. A relationship is spurious when the relationship can be explained away by a third variable. For example, we know that when ice cream sales increase, homicide also increases. This relationship meets our second criteria of causation. However, we cannot conclude a relationship between ice cream consumption and killing without considering the other two criteria. If the data show that ice cream sales increase first and then the number of homicides increase, the relationship would meet the first criteria of causation. It very well may, but does the third criterion of causation hold up? Can anything else explain away the relationship between ice cream sales and homicide? Yes, in fact, the season or the weather can explain away the relationship. In the summer, when it is hotter in the United States, ice cream sales increase because people like to cool off with a frozen treat. Homicide also increases during warmer months, and this is believed to be because people are around others outside more and some believe it is because we are more irritable in the hot weather. Thus, scientists have not demanded that we put warnings on ice cream packaging telling us that mint chocolate chip ice cream is dangerous to the health of those around us. Instead, they have concluded that the relationship between ice cream sales and homicide is spurious. There is no cause and effect.

So what may explain the relationship between corn consumption and homicide? Is there a cause-and-effect relationship? Using the three criteria for causation, think about whether you think this is a "real" relationship or not.

BOX 4.5 Twinkie Defense

On November 27, 1978, former San Francisco city supervisor Dan White shot to death San Francisco mayor George Moscone and GLBT activist and city supervisor Harvey Milk. Dan White was convicted of the lesser crime of voluntary manslaughter, though many thought that he should have received the death penalty. With time off for good behavior, he served just over 5 years in prison. At his trial, Dan White's attorneys put forth the argument of diminished capacity due to depression. In support of this argument, psychiatrist Martin Blinder testified as one of five therapists for the defense. During Blinder's testimony, he noted that White's diet of junk food was indicative of his depression. Further, the junk food contributed to White's depression. Because of Blinder's testimony and a mention of the possibility that certain foods might affect one's behavior in defense attorney Douglas Smith's closing arguments, the defense's case was known as the "Twinkie defense." Satirist Paul Krassner, who covered the trial for the *San Francisco Bay Guardian*, is credited with introducing the phrase "Twinkie defense." *Newsweek* magazine picked up the phrase, as did politicians and others who thought White should have received a harsher sentence for killing two government officials. In the 40-plus years since trial, many have speculated as to why White received the sentence he did. Some have argued that the jury was particularly conservative and that the fact that Harvey Milk was openly gay may have had something to do with it (Pogash, 2003).

The case made sporadic appearances in the paper as the years went on. After getting out of prison, Dan White committed suicide. Psychiatrist Martin Blinder was stabbed to death in October 2000. Police believed that his ex-wife Dorothy Braco may have been responsible for the stabbing. However, before she could be arrested, a fisherman discovered her dead body washed up on the shore of a beach in Pacifica, California (Pervaiz & Martin, 2000).

LEAD

Most of the biological explanations discussed in this chapter were tested with regard to maladaptive behavior, aggression, violence, delinquency, or criminal behavior. Scientific research that explores the link between different biological factors and homicide, in particular, is sparse. However, there is some evidence to suggest that lead may be related to homicide offending. Interestingly, Stretesky and Lynch (2001) found a relationship between air lead concentrations and the incidence of homicide in U.S. counties. In another remarkable study, Taylor et al. (2016) found a strong relationship between assault rates and lead concentrations over time at suburb, state, and national levels in Australia. Sociological explanations for crime are included later in this chapter. However, it is appropriate to note that there is a link between lead poisoning and poverty. Poor people are more likely to be subject to both airborne lead poisoning and lead paint in deteriorated housing. Thus, importantly, in their study Taylor et al. controlled for (or held constant) median household income and other variables that are often associated with crime, such as education levels and the proportion of the population aged 15–24 years—and they still concluded that there is a link between lead and assault rates. Finally, a study in St. Louis, Missouri, found that blood-lead levels measured at the aggregate level were associated with homicide rates, and this connection held even when the researchers controlled for socioeconomic status measures (Boutwell et al., 2017), suggesting that there is a connection between lead and criminal offending, including homicide offending.

ANTISOCIAL PERSONALITY DISORDER

We cannot clearly label all theories or explanations for criminal behavior or homicidal behavior as either biological or social science theories. Many psychological theories incorporate both biological and sociological explanations for behavior. One of the more popular psychological explanations for homicidal behavior labels the killer a psychopath. Antisocial personality disorder (ASPD), also known as psychopathy or sociopathy, is a persistent disorder or disability of the mind that results in abnormally aggressive or irresponsible behavior that is not the product of psychosis or other illness (Mitchell, 1997). Psychopaths may appear normal—and in fact, they may be quite charming. Some have high intelligence; however, they do not appear to have the capability to be remorseful (Mitchell, 1997).

Robert Hare has developed the industry standard, so to speak, for assessing and diagnosing psychopathy. Hare's checklist is believed to be the most reliable and valid for not only identifying psychopaths but also for predicting violence. Based on intensive reviews of files, hundreds of interviews, years of experience, and feedback from other professionals, Hare developed the Hare Psychopathy Checklist–Revised. This 20-item assessment instrument aids mental health and criminal justice practitioners in determining whether an individual is a psychopath (Egan, 2019; Hare, 2006). A mental health professional scores an individual on each of the 20 items. If the person does not have the trait, they receive a 0. If the individual definitely exhibits the behavior, the score is a 2. As a result, an individual may score from 0 to 40 on Hare's scale. A score of 30 or higher would indicate a possible psychopathy diagnosis (Egan, 2019). Items on the checklist indicate that the following characteristics are common among psychopaths: a lack of guilt or empathy, the manipulation of others, a focus only on oneself and minimization

of other's suffering, shallow affect, grandiose senses of self-worth, lying, low frustration toleration, persistent norm violations, and high levels of impulsivity (Egan, 2019; Hare, 2006; Shipley & Arrigo, 2004).

Whether antisocial personality disorder is a genetic condition, a response to an environmental condition, or a combination of both is unclear. Some scholars focus on the link between brain function and antisocial personality disorder to suggest a biological cause (see Box 4.3). Other scholars focus on childhood abuse to explain the genesis of antisocial personality disorder (Shipley & Arrigo, 2004). Still others consider the relationship between brain function and environment. For example, those who believe that suppressed activity in the frontal lobe is connected to sociopathic behavior in an individual may note that the inactivity in the frontal lobe is the result of a traumatic brain injury suffered in childhood. Research about antisocial personality is likely to continue, especially with regard to serial murder and mass murder. As will be discussed in Chapter 9, many serial killers are thought to be psychopaths. However, not all psychopaths are killers. There are psychopathic individuals who see no need to kill and find success in business or other pursuits (Fox & Levin, 1999). In fact, most murderers are "normal." They are found to be both legally sane and mentally healthy.

SOCIOBIOLOGICAL THEORY AND HOMICIDE

The basic premise of sociobiological theory is evolutionary theory and the idea that genes are selfish. In other words, creatures adapt, evolve, and make choices so that their genes will continue. Thus relative to homicide, we would expect that individuals are more likely to kill strangers than those to whom they are biologically related. Killing those related to them would be maladaptive, as it would decrease the chances that their genes would continue. When Daly and Wilson (1988) tested this hypothesis, they found that "relatives" killed victims less than a third of the time. Furthermore, when individuals were killed by their relatives, it was far less likely that they were killed by consanguine (or blood relatives) than affinity (relatives through marriage) relatives.

If you think about this, it may occur to you that many of us have a greater opportunity to kill or be killed by those to whom we are related. Many of us live with at least one biological parent, often we live with biological siblings when we are young, and then as adults there is a good chance that we will be living with our biological offspring and maybe other biological relatives. As such, it may be just a matter of increased odds that we would kill or be killed by a biological relative. Knowing this, Daly and Wilson (1988) constructed victimization rates that distinguished between non–blood-related and blood-related co-residents. Using 1972 Detroit data, they found that nongenetic coresidents were 10 times more likely to kill those living with them than were genetically related co-residents (Daly & Wilson, 1988; Raine, 1993). (See Box 4.6 for more on Sociobiology.)

CULTURAL AND SOCIAL EXPLANATIONS

While some of the studies already discussed have touched on environmental or social explanations for murder, the remainder of this chapter will focus on social and cultural explanations for crime and homicide. In contrast to biological and psychological explanations for crime, criminologists taking a sociological approach focus on factors beyond

BOX 4.6 Critical Thinking: Uxoricide, Stepchildren, and Sociobiology

Uxoricide is the killing of one's wife. Martin Daly, Karen Wiseman, and Margo Wilson studied the family situations of wives killed by their husbands between 1974 and 1992 in a Canadian city. Based on an examination of all 32 women who were killed by their husbands or male partners who lived with them (sometimes called common-law husbands) and a sample of the population at large, they concluded that having children from a former union increased the risk of homicide by husbands or partners. They found that women in their sample who were mothers were 12.7 times more likely to be killed by their current husbands/partners if children from her previous relationships lived with them than those who had only the couple's children living with them. The authors also found that homicide risk increased for those women attempting to leave their partners. The authors believe that a sociobiological perspective explains their findings.

1. How would a sociobiological perspective explain the findings of this study?
2. What else might explain their findings?
3. Do you think research on 32 women in Canada proves the sociobiology theory? Why or why not?

individuals to explain criminal behavior. They begin with the premise or assumption that one's environment or social milieu influences human action. Sociologists argue that societal structures and cultures differ, leading to varying crime rates over place and time. They also note that there are patterns to criminal offending, with various groups experiencing different rates of criminal offending and victimization. In the remainder of this chapter, we turn our attention to cultural and environmental explanations that may help explain the patterns we see. As with the biological and psychological explanations, we begin with older explanations and move forward to the present.

CLASSICAL SCHOOL PERSPECTIVE

Cesare Beccaria (1738–1794) is considered the founder of the classical perspective on criminology. In setting forth his ideas for reform in the Italian court system during the Enlightenment, Beccaria (1976, 1986) argued that people were rational and hedonistic and that they possessed free will. In other words, he believed that individuals made decisions about how they would act. According to Beccaria, individuals weighed the costs and benefits of potential actions, including criminal actions.

To joke around a bit, let us say you are studying diligently for your psychology midterm. As you are desperately trying to memorize what the hippocampus does, it occurs to you that you see your psychology professor every morning as you drive to school and that if you ran over him, you would not have to take your exam. According to the ideas of Beccaria, you are rational, so you are capable of exercising logic, and thus you consider the consequences of running over your professor. Also according to Beccaria, you are hedonistic. Your desire for pleasure motivates you, and you attempt to avoid pain. Finally, you have free will—you can determine your own actions. There is not something in your genes or in the chemicals in your brain that leads you to act. You determine what you will do. So you decide that you will keep studying because although the psychology exam may be painful, the pain that you will likely experience if you harm or kill your psychology professor will be far greater than the pain of the exam. Furthermore, if you study, you may actually do well and then you will have the pleasure of telling your parents that you earned a good grade on your psychology exam. For you, the costs of not studying, or

even worse, killing your professor, is much greater than the pain you will experience from your parents' disappointment, the "strong arm of the law," and knowing you ended someone's life.

Many in the United States find Beccaria's theory particularly appealing because we value individualism and we often explain behavior in everyday situations at the individual level. It is not surprising then, that criminologists today still find the premise of Beccaria's explanation for human behavior attractive, as seen in *rational choice theory.* Rational choice theory also assumes that people are rational and that they consider the risks involved in their actions before acting. Taking this a step further, however, rational choice theory, which is strongly associated with *deterrence theory,* posits that laws may have a deterrent effect on human behavior (Barkan, 1997). In other words, if the criminal justice system is set up in such a way that a person who violates a law is likely to be caught and punished, people will be less likely to commit crimes. After all, in their rational calculations, they will decide that the punishment for a certain behavior is not worth doing the behavior. We see this logic reflected in some arguments for the death penalty, as discussed in Chapter 14.

SOCIAL DISORGANIZATION

While not totally opposed to the idea of individual choice, social disorganization theorists introduced the idea that crime is more complicated than the choices individuals make. Taking a sociological approach, early social disorganization theorists at the University of Chicago realized that crime was more prevalent in urban areas. Instead of assuming that something about the people who occupied the more crime-prone areas led them to commit crimes, social disorganization theorists looked to structural causes for explaining crime. Studying crime in inner city Chicago, in particular, Shaw and McKay (1942) found that regardless of who lived in what Burgess (1925) called the "zone of transition," this zone had higher delinquency and crime rates (see Figure 4.3). Shaw and McKay studied the city of Chicago over time and were able to see significant change in

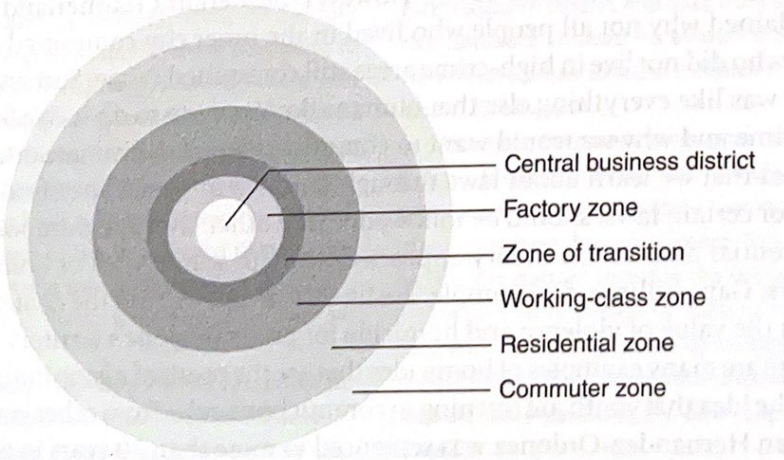

FIGURE 4.3 Concentric Zones Indicating Zone of Transition

the population of the transitional zone. Importantly, they found that regardless of whether those who lived in the zone were of English, German, Irish, or African descent, this zone had the most delinquency. As a result, Shaw and McKay concluded that it was not the people but the structural conditions of the area in which they lived that led to criminal behavior.

Shaw and McKay (1942) noted that the zone of transition had worse housing conditions than other areas. There were also higher rates of poverty and fewer intact families and less of a sense of community in the transitional zone than in other areas. They theorized that the zone was disorganized, leading to unclear norms and a lack of structure that helped keep individuals in line. Shaw and McKay's work was criticized for relying on official data because such data may be biased. If you think about this critique, it is quite logical. Police may look for crime more frequently in inner-city urban areas, and thus the rates will be higher there. Social disorganization theory was also criticized for failing to explain why not everyone who lived in seemingly disorganized areas committed crimes while some who lived in non-disorganized areas also committed crime (Barkan, 1997).

Still, more modern homicide studies support the basic ideas of social disorganization theory. For example, Krivo and Peterson (2000) found that greater economic disadvantage and low home ownership rates were correlated with higher homicide rates in 124 U.S. cities. While they noted that these factors operate somewhat differently for African American and White homicide rates because of the extreme economic disadvantage experienced by many African Americans in the United States, their research still indicates the importance of structural factors for explaining homicide. Moreover, Krivo and Peterson are building on a rich tradition of homicide research, which finds that there are correlations between structural factors and homicide rates (e.g., Blau & Blau, 1982; Sampson, 1987; Shihadeh & Steffensmeier, 1994; Williams, 1984).

DIFFERENTIAL ASSOCIATION THEORY

Like social disorganization theory, Edwin Sutherland's differential association theory stands in sharp contrast to biological and psychological theories of crime. Influenced by social disorganization theory, Sutherland also set out to explain why crime was more common in poor areas (Barkan, 1997). However, Sutherland (Sutherland & Cressey, 2006) explained why not all people who lived in the inner city committed crimes and why some who did not live in high-crime areas still committed crime. Sutherland argued that crime was like everything else that humans do: We learn to do it. We learn how to commit crime and why we would want to commit crime from intimate others. Sutherland argued that we learn about laws through family and peers. Specifically, we learn that laws, or certain laws, should be followed, while other laws are unimportant.

Differential association theory appears to explain some types of homicide better than others. Gang killings, for example, are likely learned. Within the context of a gang, one learns the value of violence and homicide for protecting one's territory or settling a score. There are many examples of homicides that are the result of a gang initiation, which supports the idea that youth are learning to commit homicides from other youth. In 2016, Yerwin Ivan Hernandez-Ordonez was sentenced to more than 30 years in prison for his role in helping two gang recruits carry out a murder in Richmond, Virginia, in 2011 that

would allow the recruits to be admitted into the MS-13 gang (U.S. Department of Justice, 2017). In other words, Hernandez-Ordonez was teaching recruits how to murder with their gang. Also, as discussed in other chapters, studies of children who have killed, men and women who have killed their intimate partners, and even serial killers have found that exposure to violence during their childhood is common. While this does not prove differential association theory, it gives some credence to the idea that we learn violence.

VIOLENTIZATION AND THE VIOLENT SOCIALIZATION PROCESS

Similar to differential association theory, Athens's (2015) violentization theory describes a five-stage socialization process in which an individual becomes a violent person. Athens developed this theory based on his own life and interviews with inmates in the 1970s. The five stages Athens describes are brutalization, defiance, dominance engagements, virulency, and violent predation (Athens, 2015). Essentially, Athens describes violentization as a socialization process in which a person learns to be violent by being a victim of violence, watching the violation of others, and being coached to be violent toward others. Those who grow up to be violent have learned to get what they want through violence. Their violence is reinforced through coaching and through getting their way when they are violent. They learn that violence is how one survives in the world, and often the world they occupy is a violent world.

One can imagine that Athens's violentization theory could explain the behavior of some who murder, such as serial killer Donald "Pee-Wee" Gaskins, who was brutalized by other youth while he was growing up in reform schools. Gaskins most likely learned that he needed to be violent to stand up for himself and that the only way he would

BOX 4.7 Stress or Training? Explaining Murder by Military Men

In the summer of 2002, four military men stationed at Fort Bragg, North Carolina, killed their wives within a 6-week period. The press began to question whether the stress of combat was contributing to what appeared to be a rash of intimate partner homicide by soldiers. Three of the four soldiers had served in Afghanistan. However, according to news reports, officials at Fort Bragg indicated there was no "common thread among the cases" (Starr, 2002). Allegedly, two of the soldiers shot their wives, while another stabbed his wife, and the fourth strangled his wife. The military was considering ways to help those in the military deal with stress, and much of the talk around these cases dealt with the possible stress that soldiers faced as active-duty soldiers (Starr, 2002). Stress is a likely culprit—or at least a contributor.

Similarly, after Esteban Santiago killed five people at the Fort Lauderdale-Hollywood International Airport in early 2017, news reporters noted that Santiago was the eighth veteran of the post-9/11 wars to go on a shooting spree since 2009, and questions about the link between the military and violence surfaced again. *San Diego Union-Tribune* reporter Jeanette Steele, however, indicated that both research studies and data from the U.S. Bureau of Justice Statistics showed no evidence that military veterans were "more prone to lethal violence than the general population" (Steele, 2017).

However, if we were to observe these cases through the lens of differential association theory, we might conclude that something about military training leads some soldiers to solve conflicts through violence. Still, other theories might explain the pattern noted in the domestic violence and intimate partner homicide by military men in the summer of 2002 and in shooting sprees by military veterans from 2009 to 2017. Think about what other theories may explain these possible patterns. Certainly, other explanations could work as well.

survive would to be violent. There is also the possibility that other boys egged him on or "coached" him to be violent in the reform school setting. Later, while imprisoned for attempted murder (he attempted to kill a woman after she insulted him), inmates repeatedly raped Gaskins. This violation continued until Gaskins murdered another inmate. It seems that some people, like Gaskins, learn to be violent through a particularly violent socialization process as described by Athens.

SOCIAL CONTROL THEORIES

Social control theorists make an assumption that is radically different from that of the theorists discussed so far who think that we must explain why people violate norms. Social control theorists assume that people will violate norms if left to their own devices. Social control theorists argue that something must exist to prevent people from doing crime. It may be a little far-fetched—but maybe not—to think that we would all commit homicide if something did not prevent us from doing so. It is likely you have heard someone express the sentiment that they were "mad enough to kill," or perhaps even you have said, "I could kill him" or "her" or "my mother"—you get the picture.

So, what is it, according to social control theorists, that prevent us from committing crime? It is our connection to conventional others. Durkheim (1893/1997) may have been one of the first social control theorists in that his concept of anomie is very relevant here. According to Durkheim's theory of anomie, with industrialization and the increasing complexity and size of society, more deviance would be likely because family and community ties would be weaker and thus individuals would have less to lose if they did not conform. They would be less likely to have what Toby (1957) called a *stake in conformity*. Durkheim and his adherents believed that we would see more crime when people are less connected. In other words, we may be more likely to violate norms if we have nothing to lose. If we are not afraid of losing a job or of losing our standing in society, or disappointing our loved ones, we might more seriously consider stealing or killing.

At a very basic level, this theory seems to make some sense for homicide. Where is homicide highest? Within the United States and other western societies, homicide rates are highest in urban areas. According to Durkheim's ideas about anomie, we would expect there to be more homicide in urban areas where people may be less connected to other people. Historically, in smaller towns and rural areas, we may expect that individuals would be more likely to know their neighbors and live close to relatives. Following Durkheim's ideas, then, it would make sense that there would be less law violation in non-urban areas, and this is what we find: Homicide rates are lower in rural areas.

Travis Hirschi is the criminologist who is most associated with control theory. Hirschi (1969) proposed the social bond theory in his 1969 book *Causes of Delinquency*. According to social bond theory, the more a person is connected to conventional others in society, the less likely that they will commit delinquent acts. Furthermore, individuals form societal bonds through the socialization process—especially socialization by parents and teachers. Hirschi explained that four major bonds connect individuals to society. The first bond, *attachment*, reflects how close individuals are to conventional individuals. *Involvement*, the second bond, refers to how much time one spends doing legitimate activities. *Commitment* is like Toby's idea of stake in conformity. It is a measure of how dedicated one is to accomplishing their goals by following legitimate routes. In other words, are they

willing to work hard in school and at a job? Finally, if one has a strong *belief*, they think that the laws and norms of society make sense and should be upheld.

If any of these bonds are weak, delinquency or crime is likely. When these bonds are strong, violation of laws is less likely. Even though Hirschi (1969) proposed this theory to explain delinquency, social bond theory can be, and is, used to explain all types of norm violation, including crime. Using social bond theory to explain homicide, we would expect that individuals who are not bonded to others would be most likely to commit homicide. This certainly would work to explain some murders. And if you think about it, you have probably seen applications of this theory or ideas related to this theory.

When we know someone has committed murder, we look to their past. Were they abused as a child? Are they a loner? If the answer to either of these questions is yes, we are less surprised than if the answer is no. When a murderer is married and has a good job, we are shocked. We look for something to explain their behavior. In these cases, we are using logic similar to the social bond theory. We expect that people who are doing well in society, who have something to lose by killing another, will be less likely to kill. Sometimes this theory works, and sometimes it does not. Dennis Rader, the BTK (bind, torture, kill) killer, had a job and was connected to his church community, but he still killed. It seems he killed despite what appeared from the outside to be strong bonds. In contrast, Theodore Kaczynski, the Unabomber, had separated himself from others in society and it would appear that he had weak social bonds. Thus his behavior would be more understandable from a social bond perspective.

A GENERAL THEORY OF CRIME

About 20 years after he postulated social bond theory, Travis Hirschi joined forces with Michael Gottfredson (Gottfredson & Hirschi, 1990) to propose the idea that a combination of low self-control and opportunity leads to criminal behavior. Low self-control, according to Gottfredson and Hirschi, was the result of poor or absent parenting. With poor parenting, children do not learn to set goals and work for what they want, and they never learn to control their temper. As a result, they are impulsive and act without much thought as to how their behavior will affect others. In terms of our focus on homicide in this text, Hirschi and Gottfredson's theory could explain spur-of-the-moment manslaughter, but as with most theories, it may not explain all homicide. For example, a general theory of crime could explain a passion murder, in which a man kills his wife when he discovers her in bed with another. Likewise, we could use the general theory of crime to explain an impulsive killing by a young man when a cashier does not hand over the cash during a robbery. However, a very carefully planned homicide in which a woman poisons her husband over time for the insurance money is more difficult to explain with the general theory of crime.

NEUTRALIZATION THEORY

Sykes and Matza (1957) originally proposed neutralization, or drift, theory to explain juvenile delinquency. When interviewing delinquent youths, Sykes and Matza found that the delinquent youths understood and knew the rules. In other words, they were not "all bad," but instead they *drifted* into and out of delinquent behavior. Sykes and Matza

explained that the youths and others who partake in illegal or deviant behavior learned how to explain their situations in such a way that the delinquent or illegal act was rationalized. Sykes and Matza called these rationalizations techniques of neutralizations.

It is important to note that according to Sykes and Matza, the transgressor employs these techniques of neutralization before they violate the rules. Further, there were five original techniques. The techniques are noted in the left column in the following list, and in the right column is a quote that reflects the corresponding technique.

Technique	Corresponding Quote
Denial of responsibility	"It is not my fault."
Denial of injury	"No harm is done."
Denial of a victim	"They deserved it."
Condemnation of the condemners	"They do it too or do worse."
Appeal to higher loyalties	"I had to do it for my family/wife/brothers."

To commit a delinquent act, Sykes and Matza explained that an individual would have to employ only one of the techniques of neutralization.

It may be easy to imagine how this theory may work for committing homicide. For example, using the denial of responsibility technique, a young woman may decide to kill her stepfather because he has abused her and her younger sister. She might think it is not her fault, but his—he has essentially asked for his own death. A serial killer who seeks out sex workers to kill may believe that he is not causing any harm. In fact, he may believe he is making society better. He would be using the denial of injury. Those who commit hate crime murders may employ the denial of victim technique. They may kill others whom they believe deserve to be killed, and thus they do not see the victim as a victim. A terrorist who kills may use the condemnation of condemner technique to show just cause for murder. A terrorist may believe a government has done what they believe to be horrible acts, and thus they kill citizens of that particular country. The terrorists are acting under the belief that those who condemn them (the leaders of the country whose citizens they attack) are no better, and in all likelihood, worse than the terrorists themselves. Finally, appeal to higher loyalty technique may be used to justify killing someone who has hurt a member of his or her family. A gang member who kills to protect the gang's turf may also be using the appeal to higher loyalty technique. Can you think of other examples for each technique?

BOX 4.8 Techniques of Neutralization and Homicide

In 2018, Melvin Harris was arrested for killing Leon Armstrong at a Quick Trip convenience store in Phoenix, Arizona. Harris allegedly punched Armstrong in the face several times after Harris had given Armstrong some spare change. Why? Apparently, Harris's 16-year-old daughter was in a bathroom stall and Armstrong had rattled the door and tried to get into the stall. The Harris family reported this to the gas station security, but Mr. Harris did not think they were handling the situation, so he punched Mr. Armstrong several times causing him to fall. While Armstrong was lying on the ground, Harris allegedly kicked him. When Armstrong died because of the beating, Harris was charged with murder (Evans, 2018). Which of the techniques of neutralization do you think might explain Harris's behavior? Are there other theories that might explain it just as well or better?

MURDER AS RIGHTEOUS SLAUGHTER

In his 1988 book *Seductions of Crime*, Jack Katz proposes an explanation for murder that seems in line with Sykes and Matza's techniques of neutralization. Katz argues that often when the killer and victim know one another, the killer justifies the crime in their own mind. They believe they are preserving what is good. This may explain a case like that of Raymond Tenorio, who beat Kirk Haag to death in 2015 after learning that Haag had molested Tenorio's daughter (Kotowski, 2019). In other situations, such as a husband who kills his wife who is cheating, we may be less apt to agree with the offender's justification. Still, Katz (1988) makes the point that in the spur of the moment, the killer believes he or she is justified in killing another. Using a phenomenological approach, Katz explains that the killer interprets the situation at hand as one in which the victim-to-be is doing something that the killer cannot ignore. Thus, the killer turns their humiliation to rage. Like those offenders who use the neutralization technique that Sykes and Matza call *denial of responsibility*, Katz argues that these killers sees themselves as being pushed by forces greater than themselves (Katz, 1988).

CORRELATES OF HOMICIDE

General theories of crime may or may not be helpful for explaining homicide in the United States. Furthermore, the theories may be better for explaining one type of homicide over another. The next several chapters are dedicated to specific types of homicide. In many of these chapters, theories and correlates relevant to these types of homicide are discussed. In this chapter, however, several factors that may be pertinent to the development or refinement of homicide theories are now discussed.

Homicide researchers know that anyone can be a homicide victim. However, as discussed in Chapter 3, the odds of being a murder victim are higher for some people and lower for others. Factors such as our race, sex, social class, and where we live can affect our chances of being a murder offender or victim. Official statistics in the United States indicate that rates of homicide victimization and offending are highest among males, southerners, African Americans, and those in lower socioeconomic classes. Moreover, people who in live in the United States (relative to those who live in other industrial nations) are more likely to offend and be victims. In the next few sections, explanations for these correlations are addressed. Lastly, the issue of relatively high homicide rates in the United States is discussed.

RACE AND HOMICIDE: THE CULTURE OF VIOLENCE

While there is no sound scientific evidence to suggest a causal link between race or sex and criminological offending, there have been studies that have attempted to explain rates of homicide among certain populations in the United States. Approximately 30 years before Katz wrote about homicide as righteous slaughter, Marvin Wolfgang was a pioneer in the study of homicide. Wolfgang (1958) studied hundreds of cases of homicide in Philadelphia. He found that many of these cases involved young African American men who were involved in confrontations that ended in the death of one of the young men. Thus, writing with Franco Ferracuti in their book *The Subculture of Violence*, Wolfgang proposed a theory to explain the high number of homicides involving African

American men. Wolfgang and Ferracuti postulated that there was a subculture of violence among African Americans. Those who grew up in this subculture learned that violence was an appropriate response in many situations. In fact, violence was required whenever one was challenged. A person, especially a young man, who backed down from a challenge or ignored a slight would be violating the norms of the subculture of violence. Thus, Wolfgang and Ferracuti (1967) explained that the high homicide rate among the young African American men they studied was to be expected. Because violence was a norm, homicide was likely.

Elijah Anderson's *Code of the Street* (2000) contributes support for Wolfgang's theory as well as for disorganization theory. Anderson explains how norms develop in structurally isolated inner-city neighborhoods that call for violence as a way to earn respect among African American youth. Residents, without government infrastructure and lacking in ways to gain and keep respect such as legitimate jobs, develop a culture of violence or "code of the street" that leads to violence among isolated inner-city youth that too often ends in homicide. (See Chapter 5 for critiques of the subculture of violence theory and more on Anderson's *Code of the Street*.)

REGION AND HOMICIDE: SOUTHERN SUBCULTURE OF VIOLENCE

Analogous to the subculture of violence explanation of higher levels of homicide among African Americans, the southern culture of honor was developed to explain higher rates of homicide in the southern United States (Gastil, 1971; Nisbet & Cohen, 1996). According to the southern subculture of violence theory, white men have learned that backing down is weak and unmanly. As a result, a southern white man must answer any affront to his honor. Consequently, as with young men in Philadelphia, men in the southern United States are expected to retaliate if insulted. These retaliations are often violent, as required by the norms of the southern subculture, and thus homicide is more common in the South than in other areas of the United States (See Chapter 5 for more on the history of the Southern Subculture of Violence).

Similarly, but not limited to the South, James Gilligan (2003), who spent many years working with violent male offenders in prisons as a psychologist, indicates that many inmates reported to him that they assaulted or killed because the victim disrespected them or disrespected their family member or girlfriend. Thus, while the idea of acting out in violence to save face is something scholars have studied among African American youth and southern men, it is also quite possible that masculinity has much to do with violence, as discussed in the next section.

MEN AND VIOLENCE: FEMINIST PERSPECTIVES ON MASCULINITY

While feminist criminologists began to address the issue of gender in criminological research in the 1970s, it was not until the 1990s that criminologists really began to explore the connection between masculinity and violence (Brookman, 2000). With regard to homicide, one fact that appears to be constant throughout time and across the world is that males are far more likely than females to commit homicide. This is a