

Understanding the violent personality: antisocial personality disorder, psychopathy, & sociopathy explored

Abstract

It appears that the personality and background factors identified for sexual offenders neatly fit into what I refer to as *The Violent Personality*. The literature strongly supports that those who engage in violent behavior tend to engage in violence in several areas, not just one specific type of violence. For example, domestic abusers often sexually abuse/rape their partners; engage in child abuse, animal cruelty, road rage, and other forms of violent and nonviolent criminal behavior. The personality factors and backgrounds of those who engage in violent behavior are similar. A thorough psychological and risk assessment, criminal background check, as well as interviews with those who know the offender are necessary in order fully understand the scope of the violent offender's criminally violent history. For example, being arrested for domestic violence should spark an investigation to assess other likely forms of violent behavior the abuser engaged in, including raping of his partner, abuse of the children in the home, as well as abuse of animals in the home, all likely having occurred but rarely assessed. Sociopathy and psychopathy should also be assessed for all violent offenders because of the serious implications for treatment interventions as well as risk for violent reoffense. Approximately 3-15% of those with APD likely have psychopathy and another 30% likely have sociopathy. As I examine the *violent personality*, it becomes clearer that those with any of the traits of the *violent personality* are likely sociopaths or psychopaths because the traits of sociopathy/psychopathy are shared with the violent personality. In short, it is important to assess for sociopathy/psychopathy in all who present with violent behaviors, tendencies or thoughts. The term psychopath tends to be used to describe both the sociopath and psychopath and therefore the assessment of the sociopath is the same as for the psychopath, though there are differences between the two. The goal of this article is to discuss what I call the *Violent Personality*. Antisocial Personality Disorder, Sociopathy, and Psychopathy will be discussed to understand how they are all part of the Violent Personality continuum. The available research literature will be discussed.

Keywords: psychopath, sociopath, violent personality, risk assessment, psychopathy, sociopathy

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The Violent personality

I will refer to the *violent personality* as one that involves a variety of factors and background, including the following factors supported by the literature Table 1. Some of the factors mentioned above appear

to be ignored in general violent risk and court ordered assessments of offenders who engage in domestic abuse (any type of relational violence) and sexual offense crimes. Below is a summary to further explain their relevance.

Table 1 violent personality as one that involves a variety of factors and background, including the following factors supported by the literature

1. Childhood victimization	11. Early sexual experiences
2. Attachment deficits	12. Promiscuity
3. Reduced capacity for empathy (emotional callousness)	13. Hostility towards women
4. Witnessing parental violence	14. Traditional views about gender roles
5. Personality characteristics	15. Impulsivity
6. Narcissism	16. Beliefs supporting abuse and rape
7. Antisocial traits	17. Support from others to abuse or rape
8. Disregard for social norms	18. Use/abuse of substances to justify abuse and/or rape
9. Tendency for aggression	19. Raised with permissive style of parenting (indulgent or neglectful)
10. History of animal abuse/animal cruelty	

Men's attitudes about women

There is a direct association between *men's attitudes about women* (e.g., misogyny, use of coercion, misinterpretation of women's behavior) and sexual assault and rape in general.¹ If you held the belief that it was wrong to hurt, coerce, or take sex, then you would not do it. The offender's attitude has to support the offender's behavior. True respect of one's partner or women in general would preclude behaviors involving abuse or sexual violence.

Support from others

Support from others to rape is also an important factor often overlooked. Perpetrators often have family and friends who condone violence towards others including women and/or children and support for rape.² For sex-crimes, it is easy to understand the connection of peer support for criminal activity. It is not surprising that offenders of DWI (Driving under the Influence of any substance that can or does impair one's ability to drive, e.g., alcohol, drugs, marijuana, prescription medications), have friends and family who support their friend/family member driving under the influence. Amazing how many friends of the drunk driver support the offender's decision to drive intoxicated. The same is often true for the sexual offender. The belief of rape supporting attitudes and the sexual molestation of children or sexual abuse of adolescents. In fact, it is common to blame the victim of sexual abuse and rape crimes and to justify the offender's behavior as somehow an acceptable response to the victim's alleged "leading on" behavior.

Raised with a permissive indulgent or permissive neglectful parenting style

The results for most children raised in either of the permissive parenting styles is that the children are rarely if ever held accountable for their behavior, are rarely ever disciplined, are either treated as an adult and allowed to make their own decisions or ignored with minimal parental acknowledgment of the child's existence or behavior. Morality, delayed gratification, a sense of responsibility for one's own behavior, and a sense of power and control over one's behavior may not be learned or instilled in the child as a result of permissive parenting. Attachment capabilities may also be impaired which suggests that the child may have difficulty establishing relationships and the relationships they establish are likely to be problematic and likely to lack intimacy. When raised to believe that they can do what they want, when they want, without fear of consequence, the children and adolescents are more likely to learn an antisocial perspective versus a prosocial perspective of relating to others.³

Children's exposure to domestic abuse

Children's exposure to domestic abuse is also correlated with negative outcomes, including psychosocial impact, which increases the chance for the children to engage in intimate partner violence later in life. Domestic abusers frequently rape their partners; again, along the continuum of violent personality as well as the continuum of abuse, if you abuse your partner physically, you are far more likely to abuse your partner sexually. Imagine being a child raised in a home in which domestic abuse is occurring. The child is powerless to stop the abuse and as a result may build resentment towards the abuser or may come to blame the victim for not protecting themselves. The child's sense of family, attachment, safety, and power are all likely to be negatively impacted. Even if not physically or sexually abused directly, the child is negatively impacted.

Animal cruelty

Engaging in animal cruelty (any abuse or neglect of an animal including family pets, any behavior or action that jeopardizes the wellbeing, safety or health of the animal, including serious injury, abandonment, or death) is also a risk factor for engaging in violence towards humans. In one study, 65% of those arrested for animal cruelty engaged in assault against another person. This is consistent with other researchers. Those who engage in animal cruelty were 3 times more likely to commit other crimes, including murder, rape, robbery, assault, harassment, threats, and drug/substance abuse. In addition, of all 7 school shootings that occurred in the U.S. between 1998 and 2012, 43% of the boys had a history of engaging in animal abuse and of those 90% engaged in a close-up and personal manner which is of more significance in relating to those who also became aggressive to humans. Approximately 21-46% of serial killers appear to abuse animals when young,⁴ and 90% of sadistic serial killers appear to engage in animal cruelty for both hands-on and hands-off abuse.⁵ For more of a review on the connections between pet abuse and violence towards people.^{6,7}

Alcohol and drug use and abuse

Alcohol and drug use and abuse are also correlated with violent and sexual offenses.^{8,9} A *Disinhibition Model* links alcohol and sexual aggression.^{10,11} In that model it is proposed that three factors are present to merge alcohol and rape:

- i. Preexisting beliefs that alcohol serves to disinhibit, relax, etc. The strength of the disinhibition is related to amount of alcohol consumed, degree of social and personal inhibition (e.g., personality, predisposition for aggression and rape;
- ii. Consuming alcohol allows for the perpetrator and others to hold the perpetrator less accountable for his actions due to the alcohol intoxication;
- iii. The larger amounts of alcohol results in pharmacological effects including the inability to process *inhibitory cues* such as the victim's resistance, victim crying, yelling etc. When inhibitory cues are processed, a non-sex offender would cease the sexual behavior.

Therefore, it is not the alcohol that causes a man to sexually assault or rape but rather a confluence of factors and a decision to sexually assault or rape. For a thorough literature review of the role of alcohol in sexual assault and rape.^{9,10}

Violent personality

I will use the term *violent personality* to refer to the sociopath and psychopath, perhaps a more gentle term to use. Violent personality includes at the minimum the factors and behavior outlined in the DSM-5 for Antisocial Personality Disorder (APD). Other common diagnoses for violent personality include Narcissistic Personality Disorder and Borderline Personality Disorder, and Schizoid Personality Disorder. The DSM-5 diagnostic criteria are listed below.

Personality disorders commonly related to psychopathy

Antisocial personality disorder (APD)

Approximately 3% of males and 1% of females present with Antisocial Personality Disorder (APD).^{12,13} It is likely that females

with this disorder are underreported. Approximately 3-30% of those with Antisocial Personality Disorder make up the clinical population. The DSM-5 describes *Antisocial Personality Disorder* as a pervasive pattern of disregard for and violation of the rights of others since age 15. This includes a pervasive pattern of behavior including exploiting, manipulating, or violating the rights of others. It also involves a pattern of internal experience and behavior that is significantly different than what is considered normal in one's culture.¹² *Conduct Disorder* traits should be present by age 15. Because many youth offenders may not be diagnosed with Conduct Disorder, the percentage of Antisocial Personality Disorder may be higher than reported because adult offenders lacked the Conduct Disorder diagnosis or records that they may have in fact met the diagnostic criteria for Conduct Disorder.¹⁴

Narcissistic personality disorder

The DSM-5 describes *Narcissistic Personality Disorder* as a pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy, beginning by early adulthood and present in a variety of contexts.¹²

Borderline personality disorder

The DSM-5 describes *Borderline Personality Disorder* as a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, beginning by early adulthood and present in a variety of contexts.¹²

Schizoid personality disorder

The DSM-5 describes *Schizoid Personality Disorder* as a pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings, beginning by early adulthood and present in a variety of contexts.¹² It is understandable that if a person meets the diagnostic criteria for any one of the above personality disorders that they have a higher likelihood of engaging in violence towards others. Many of the individuals may meet the diagnostic criteria for several personality disorders and it is important to assess for all diagnoses that the offender meets the criteria for, not simply diagnosing one and leaving it at that. It is also important to note that a person who meets any of the above diagnostic criteria may not

engage in violence towards others. There are numerous ways to harm others than with physical or sexual violence. The above personality disorders share factors and symptoms with psychopathy.

Psychopathy and sociopathy

It is important to understand the difference between Antisocial Personality Disorder, Psychopathy, and Sociopathy. Though all share similar characteristics and personality traits, they are different. Psychopaths and Sociopaths are not always physically or sexually violent. They take advantage of others but may do so without violence. Psychopathy and Sociopathy take into account factors that are not assessed in Antisocial Personality Disorder. With Psychopathy and Sociopathy, not only are behaviors considered, but also factors including callousness, unemotional mindset, and remorselessness, that is, affective factors. Psychopathy and sociopathy involve patterns of affective, interpersonal and behavioral characteristics more extreme than with APD. The psychopath and sociopath inherently meet the diagnostic criteria for APD. DSM-5,¹² now considers psychopathic traits under conduct disorder but does not yet includes it for consideration for APD, though a requirement for an APD diagnosis is having Conduct Disorder as a youth, which does now include traits of psychopathy. However, some youth may not have been involved with the criminal justice system or mental health system as youth and therefore may not have been accurately diagnosed. Psychopathy and sociopathy have often been referred to as part of the APD disorder. In fact, both are likely extreme forms of Antisocial Personality Disorder (APD), possessing many shared behaviors and backgrounds. However, psychopathy and sociopathy appear to be distinct diagnoses not represented in DSM-5 as they present with different and more severe trajectories for criminal behavior, harm to others, and a lack of any known effective treatment protocol. Psychopathy is believed to be due to neurological abnormalities and sociopathy due to environmental factors (e.g., severe adverse environments, abuse, inconsistent or lack of parenting). Perhaps those with sociopathy have psychopathic abnormalities or traits at a lower level and the adverse environment feeds the deviant traits or perhaps the adverse environment causes the brain to rewire therefore encouraging the neurological abnormalities or psychopathic traits to emerge, difficult to say. Table 2 provides a differentiation of the psychopath and sociopath.

Table 2 A differentiations of the psychopath and sociopath

Psychopaths	Sociopaths
Genetic or biological abnormality present at birth	Likely the result of environment (e.g., extreme adverse conditions or events, permissive styles of parenting, absence of prosocial father or absence of any father figure)
Approximately 3-15% of APD's	Approximately 30% of APD's
Does not bond with anyone, though through conning and manipulation may give impression they are bonding	Bonds with primary group (e.g., family, gang) but to no other groups
As children, present with impulsivity, insensitivity to the pain or suffering of others, problem externalization frequent antisocial behavior, lacks guilt and remorse. Adversarial home environment may desensitize individual to emotional responsiveness	Adversarial experiences may desensitize the individual to emotional responsiveness and acceptance of aggression
Less impulsive, more likely able to hide effectively within community	More impulsive and erratic and therefore more likely to be arrested
Not likely easily angered, therefore less likely will exhibit angry outbursts	More agitated and easily angered, violent outbursts
Minimal if any sense of remorse or conscience	Experiences some degree of remorse and guilt to group identified with, not with others. Morality limited to group identified with only

Table Continued...

Psychopaths	Sociopaths
May have stable employment or minimal employment history, may have poor employment history	Difficulty maintaining employment
Less impulsive, more planning in acting-out, able to hide deprecating attitudes, easily fools others, easily makes excuses for own behavior when caught to minimize consequences	Excessive boasting, risk-taking, impulsive, antagonistic, deprecating attitude towards the opposite sex, lack of interest in long-term relationships, acts without care or concern of repercussions or of what others think, act-out impulsively without regard for harm caused.
No known effective treatment- appears to become better at deviance through treatment intervention; easily cons treatment staff to give more positive treatment success report but cons and deceives staff throughout treatment intervention	No known effective treatment- likely fails treatment and refuses to cooperate with treatment staff; more likely to be terminated from treatment program

Psychopathy

Psychopathy was conceptualized by Cleckley and refined by Hare. Approximately 3-15% of those with Antisocial Personality Disorder have Psychopathy.¹⁵ Overall approximately 1-3% of individuals in the population likely have psychopathy.^{16,17} Approximately 20 to 30% of the prison population is psychopaths.¹⁸⁻²⁰ *Psychopathy is measured by the Hare Psychopathy Checklist (PCL-R) and this tool have been referred to the gold standard for assessing psychopathy.* Hare's Psychopathy Checklist-Revised^{18,19} consists of twenty items that are strongly supported empirically supported. The PCL-R correlates very high with violent and sexual recidivism. The most significant draw-back: requires specialized training to use accurately and it can be expensive to administer and score. It appears to predict violent recidivism with approximately 80% or higher accuracy.²¹ The Hare PCL-R has been accepted as the most effective tool to measure and identify psychopathy.²² The Diagnostic and Statistical Manual of Mental Disorders (5th ed., DSM-5)¹² has added a category for conduct disorder to assess "limited prosocial emotions" which includes lack of remorse or guilt, callous- lack of empathy, unconcerned about performance, and Shallow or deficient affect- the first, second, and fourth address Factor 1 traits of psychopathy and the third addresses Factor 2 traits of psychopathy. This inclusion in DSM-5 adds validity to the concept of psychopathy. The Hare PCL-R identifies two domains, one focusing on affective and interpersonal factors and the other on behaviors and impulse control. Factor 1 (affective/interpersonal features) involves the callous and remorseless use of others. Factor 2 (socially deviant behavior) involves a chronically unstable and antisocial lifestyle. The definitions for each of the areas assessed are clearly defined in the PCL-manual Hare.¹⁸ Some psychopaths "burn-out" around age 40, but this does not appear true for violent behaviors.^{23,24} Psychopathy is associated with chronic violent offending and low levels of non-violent offending.^{25,26} Psychopathy is the single best predictor of violent behavior.^{27,28} Individuals with traits of psychopathy and/or with psychopathy are disproportionately involved in violence.²⁹⁻³¹ Psychopathy is believed to be genetic and biologic in nature. Psychopathy can be manifested in childhood as impulsivity, insensitivity to the pain and suffering of others, and problem externalization.^{32,33} Though these symptoms can also be part of normative child development they often appear in extreme forms. Taken all three together, the symptoms present a difficult diagnosis for a parent to hear as well as for a clinician to assign. Psychopathy also includes persistent, frequent and varied asocial and antisocial behavior starting at an early age.³⁴ In addition, the child likely presents with shallow affect, cunningness, a lack of guilt and empathy, and extremely impulsivity and poor emotional control.³⁵ Sexual offenders need a score of 25 or higher. In general,

a cut-off score of 30 is required for nonsexual psychopaths. Genetic factors appear to explain approximately 50% of psychopathic traits in boys.^{36,37} Some research suggests that more Caucasians than African Americans are likely to demonstrate cognitive-affective dimensions of psychopathy,³⁸⁻⁴⁰ caveat- this may be due to a smaller sample of Caucasians in their studies. This may also be due to validity issues in ethnically diverse samples.⁴¹

The role of the family environment & parenting

Family environment factors appear highly relevant to the onset of antisocial behavior (e.g., APD) however family environment alone is not as relevant for the development of psychopathy.^{42,43} On the other hand, retrospective studies suggest that adults have indicated that adverse childhood experiences (e.g., ineffective parenting, physical abuse) are associated with higher levels of psychopathy as well as to early behavioral problems, earlier onset of a pervasive criminal lifestyle, and multiple criminal arrests/convictions.⁴⁴⁻⁵⁰ Specifically, for adolescents, adverse environmental issues appear to correlate with psychopathic traits.⁵¹⁻⁵³ Adolescents with Factor 1 traits appear more negatively impacted by parental harshness than adolescents without such traits, and adolescents without psychopathic traits appear to demonstrate more deviant antisocial behaviors without Factor 1 impairments.^{53,54} Children who are abused may become hypervigilant to emotional cues.⁴⁵ The family environment appears to play a role for *sociopathy*.⁵⁴ They describe harsh and inconsistent parenting for youth *who may already demonstrate affective defects* related to psychopathy as being impacted by their environment or perhaps the youth presented with callous-unemotional traits or similar traits related to psychopathy and the environment supported the symptoms emerging more fully. If the child was already demonstrating psychopathic traits (e.g., callous-unemotional affect, lack of empathy, impulsivity) then even effective parenting is likely to fail.⁵⁵ This become a chicken-and-egg dilemma, which comes first? Three possibilities:

- The child is born with and therefore presenting with psychopathic traits which would significantly tax and strain even an effective parent; or
- The environment stresses the child's neurological development to re-wire the brain towards sociopathic/psychopathic functioning, or
- The child may have minor levels of psychopathic traits but the environment enriched the psychopathic traits to become fully functioning.

It is believed that the 2nd option describes sociopathy which is considered an environmentally created psychopathy, regardless

of whether the individual had no or low level psychopathic traits to begin with (which is impossible to prove one way or the other). Exposure to *violence within the home* was found to be related to Factor 2 traits (antisocial and behavioral) whereas *violence in the community* appeared specifically related to the development of both Factor 1 traits (affective, interpersonal) and Factor 2 traits (antisocial and behavioral).⁵³ Others have found that exposure to violence is associated with the development of behavioral problems related to psychopathy including early behavior al problems, aggression, substance abuse, and conduct disorder.⁵⁶⁻⁵⁸

The role of community violence in psychopathy

There is evidence to suggest that exposure to violence in the community (separate from violence within the home) is correlated to psychopathy, or at least callous-unemotional trait.⁵⁹ Greater victimization and witnessing violence in the community related to higher scores on psychopathy but not higher scores in Factor 1 scores.⁵³ Maltreated youth may be more sensitive to emotional stimulation such as violence in the community that may help in the development of sociopathy.⁴⁵ Higher levels of exposure to violence within the home and within the community were associated with higher levels of psychopathic traits.⁵³ This is also true for adolescents, though exposure to community violence in and of itself may contribute to the development of psychopathic traits. Again, violence within the home tends to result in more Factor 2 behavior for those adolescents who do not demonstrate traits of psychopathy and adolescents exposed to violence within the community appear to demonstrate more Factor 1 traits. Psychopathy presents with differences in cognitive and affective processes than those with APD.^{18,19,60-63} as well as startle potential for aversive stimuli.⁶⁴ Psychopaths demonstrated higher degrees of stress tolerance versus those with APD.⁶⁵ Problems in left hemisphere activation was found in the psychopath but not in those only with APD.⁶⁶ Other neurocognitive differences have been identified between those with APD and those with psychopathy but will not be addressed here.

Psychopathy explored

Some have proffered that Antisocial Personality Disorder (APD) and psychopathy are one and the same, with psychopathy representing a more serious form of APD. However, research has demonstrated that there are measurable differences between those diagnosed as having APD without psychopathy and those with APD and psychopathy. Those having both APD and psychopathy demonstrated (referred now as the psychopath) more severe criminal behavior and impaired emotional response than those with only APD.^{66,67} Those with psychopathy demonstrated greater criminal activity and more criminal versatility than those with only APD.^{66,67} Those with psychopathy demonstrated more severe criminal and aggressive behavior than those with only APD.^{66,68} Psychopaths appear to have less of the trait of Harm Avoidance- an inherited trait to cease behaviors that may result in punishment or some aversive outcome. The psychopath experiences minimal if any anticipatory worry or fear of consequences for their actions. This implies an absence of fear responses, anxiety, or concern about punishment for their actions.^{16,69-71} Psychopathic and non-psychopathic murderers appear to show differences in temperament traits, demonstrating different levels of each trait, which may suggest an immature personality which in turn can lead to adopting an incompatible conduct of social norms.⁷⁰ Novelty seeking was the only trait identified that both psychopathic and non-psychopathic murderers shared to similar degrees. In regard

to victim offender relationship, psychopathic murderers tended to have non-related victims versus non-psychopathic murderers having mostly known victims (*more emotionally motivated*). Some have described psychopathy as disinhibition, meanness and boldness.^{72,73} *Disinhibition* refers to general proneness toward impulse control problems, including deficient behavioral monitoring and restraint, impatient urgency, a failure to plan for the future, low frustration tolerance, angry/reactive aggression, poor regulation of affect and susceptibility to substance use problems. *Meanness* encompasses tendencies toward callousness and lack of empathy for others, shallow emotional attachment, exploitativeness, instrumental or predatory forms of aggression, destructiveness and deliberate cruelty. *Boldness* entails social dominance and efficacy, self-assurance, resilience to stressful life events, enjoyment of activities involving uncertainty or risk, and the ability to remain calm and poised in the face of threat or pressure. These terms and definitions appear in-line with Hare and the PCL-R. Psychopaths tend to experience minimal if any sense of guilt or remorse, which can make them more dangerous, especially when considering they present with less impulsivity than sociopaths. Psychopaths are thought to be born with abnormal brain development. Abuse and neglect may help to desensitize the individual to emotional responsiveness as well as to the development of aggressive dispositions.⁷⁴ Psychopathy has a genetic component and the failure to bond could be because the parent himself or herself is a psychopath as well. On the other hand, a non-psychopathic parent may not be able to bond normally with a psychopathic child.⁴² Psychopaths tend to dissociate from responsibility for their behavior and experience significantly less guilt for their behavior, which can make them more dangerous than sociopaths.⁷⁵ Psychopaths have the ability to act well and fooling others with ease. They come off as charming and caring and can con and manipulate others with ease. When they commit crimes, they tend to carefully plan every detail and calmly engage in the crime (cool, calm, and meticulous). Psychopathic traits of *criminal versatility* and *pathological lying* may make other psychopathic symptoms and traits worse.⁷⁶ *Corporate professionals* tend to have a higher percentage of psychopaths than in other community samples. Approximately 4.5% of corporate professionals had a score on the PCL-R indicating psychopathy.⁷⁷ The psychopath's ability to demonstrate good impression management, to con and manipulate, often led to corporate success, despite their failure to demonstrate good job performance or good relationships with others and being a poor team player.⁷⁷ They succeed in part because of their perceived charisma and ability to manipulate, con, and persuade others.

The neurophysiology of psychopathy

Frontal lobe dysfunction and the resulting executive dysfunction occur.⁷⁸ Specifically, significant impairment on the orbital frontal cortex. This area is involved in cognitive processes including decision-making. Symptoms of damage to this area include impulsivity, impaired behavioral inhibition, loss of guilt and shame, sexual promiscuity, and antisocial tendencies.⁷⁹ The frontal lobe is also responsible for abstract reasoning, attentional control, working memory, integration across space and time, anticipation, and planning.⁸⁰ The amygdala stimulates instinctual behaviors (e.g., hunger, sex, aggression, and other strong emotions) and the orbital cortex inhibits these behaviors. Neurophysiological studies have shown tendencies for dysfunctions in the *amygdala and prefrontal cortex*,^{34,81} as well as other dysfunctions in the brain including maldevelopment of the limbic system and septal structures,⁸² and an imbalance of serotonin.⁸³ Reduced size and functioning of the Amygdala result in poor fear conditioning and impaired emotion recognition.⁸⁴ *Psychopaths have a hyperactivity of*

the left hemisphere and hypoactivity in the right hemisphere. The right hemisphere regulates pro-social tendencies (e.g., fear, guilt) and the left hemisphere regulates impulsivity, aggression, sensation-seeking, and risk-taking- behaviors that are then uncontrolled when the right hemisphere is not working properly. In addition, the corpus callosum in psychopaths has been shown to be slower in the communication and interaction of the left and right hemisphere.³⁴ In short, the left hemisphere deals with impulsivity and the right hemisphere tempers urges and impulse behaviors. The left hemisphere executes approach behaviors while the right hemisphere mediates with avoidance behaviors. Low cortisol levels were also found with psychopaths, which are primarily controlled by the right hemisphere.⁸⁵ High cortisol levels are associated with fear and cause the fight-or-flight response. Testosterone is correlated with psychopathy and antisocial behavior, risk taking, aggression, and impulsiveness.³⁴ High testosterone levels are related to aggression and lead to fight behavior.⁸⁶ There is also evidence that even if young psychopaths cannot be cured, the environment in which they grow up is highly correlated to whether they will become criminal psychopaths or the kind of psychopaths who avoid crime and manage to function among us (also referred to as *functional psychopaths*, who tend to be less violent).⁴²

The dark triad

The *Dark Triad* of narcissism, Machiavellianism, and psychopathy have been associated with negative interaction styles and negative behavior, though not always criminal in nature. The Dark Triad involve callous and manipulative behaviors. Those who present with higher levels of the three traits in the Dark Triad demonstrated more negative attitudes towards people and animals and reported engaging in more acts of animal cruelty.⁸⁷ Callousness has been found to be at the core of the Dark Triad.^{87,88} The younger the age and having higher levels of the Dark Triad traits correlate with more negative views of animals and is predictive of an anti-social or violent trajectory. Early onset of animal cruelty is predictive of engaging in multiple acts of animal cruelty among men incarcerated for murder or attempted murder.^{89,90} *The Dark Triad* significantly relates to psychopathy. The correlation of animal cruelty as well as the onset and probable influences to engage in animal cruelty can be understood by reviewing Ascione et al.,⁶ and Johnson.⁷ Animal cruelty is a hallmark of psychopathy.^{4,91}

Sociopathy

Sociopaths likely make-up approximately 30% of those with APD though it is difficult to find research to support that claim. Sociopath's make-up approximately 4% of the population. Sociopaths are nearly similar to psychopaths. One major difference is that sociopaths are thought to be born with relatively normal brain development. However, some researchers have found that children in environments in which harsh and inconsistent parenting occurs and the youths have demonstrated affective defects related to psychopathy to be impacted by their environment.⁵⁴ It is thought that children who may be temperamentally predisposed toward low behavioral inhibition may be prone to have callous-unemotional traits which in turn may make them less responsive to parenting practices.⁵⁵ In addition, studies have suggested that environmentally influenced pathways impacting the development of unemotional-callous traits may produce sociopathy.^{59,92-94} Childhood traumatization including physical and emotional abuse, may lead to the development of psychopathic traits in boys, not girls.⁵² For girls, early physical abuse, emotional traumatic experiences, non-parental living arrangements (e.g., foster care) appeared relevant for the development of psychopathy. Girls reported

significantly more often to have experienced physical, emotional, and sexual abuse than boys.^{52,95} For girls, being physically abused was only found to be a factor for the development of psychopathic traits if there was parental criminality and emotional neglect.⁵² Out of home placements also played a significant role. Children who experienced childhood neglect and/or abuse appear to have higher scores of psychopathy as well as higher rates of violent offending.^{74,96} An increase in hypervigilance appears to be the resulting affective problem that makes abused and/or neglected children prone to develop sociopathy/psychopathy traits. Another study,⁹⁷ found that in a substance abusing population that were subject to physical abuse and neglect were found to be related to psychopathy, sadism, and APD. Physical abuse and a history of out-of-home living arrangements (e.g., foster care) resulted in higher scores of psychopathy.⁹⁸ Harsh and inconsistent parental discipline appears highly correlated with conduct problems in juveniles who do not evidence callous-unemotional and other traits related to psychopathy.^{43,54,99} Temperamental characteristics such as low fear, low sensitivity to punishment cues, and high reward seeking may make effective parenting difficult if not impossible.^{54,55} Those juveniles who engage in antisocial conduct and present with psychopathic traits tend to blame their parents for the harsh and inconsistent parenting practices rather than hold themselves accountable for their own behavior to which their parents may have been responding to. Exposure to violence within the home appeared to relate to Factor 2 (*behavioral*) aspects of psychopathy while exposure to violence within the community appeared related more to Factor 1 (*affective/interpersonal*) aspects.⁵³ They develop sociopathy as a result of environmental factors, such as early adverse events (e.g., abuse, neglect), parenting styles (e.g., permissive indulgent or permissive neglectful), absence of a prosocial father figure or absence of any father figure, and lack of socialization.⁹² Sociopathy is believed to be an extreme form of under-socialization. Abuse and neglect may help to desensitize the individual to emotional responsiveness as well as to the development of aggressive dispositions.⁷⁴ Sociopaths tend to be more impulsive and erratic than psychopaths and are more likely to be involved in the criminal justice system as a result. They are also more likely to act on impulse and may become easily agitated and angered, displaying violent outbursts. *Unlike psychopaths, sociopaths may develop relationships with people who share their way of thinking.* However, their relationships with others tend to be openly problematic. Sociopaths may experience some degree of remorse and guilt within the context of some group (e.g., gang, family) but display little empathy or guilt involving others outside their selected group. This presents with difficulty maintaining stable employment.⁷⁵ Sociopaths have some degree of conscience, again, limited to the morality of the group they associate and identify with. Sociopathic traits include conscience defect, egocentricity, callousness, impulsivity, excessive boasting, risk-taking, antagonism and aggressive acting-out, inability to resist temptation, deprecating attitude towards the opposite sex, and lack of interest in enduring, long-lasting relationships or bonding with a mate. They have a difficult time getting along with others outside of their primary accepted person or group. They likely will express their negative and aggressive and callous unemotional views without much care of what others think. They tend to act impulsively without regard for the consequences or harm caused. As a result of environmental factors (low socioeconomic factors), it is likely that those diagnosed with Antisocial Personality Disorder are more likely to be sociopaths than psychopaths.¹⁷ Negative environment could also include abuse, permissive parenting styles, and parental psychopathy and/or criminality. Early childhood experiences are also strongly linked, especially attachment deficits.^{96,100,101} Psychopaths also demonstrate

high impulsivity, risk taking, and fearlessness.¹⁸ Psychopaths do not experience remorse. Key characteristic according to Lykken,⁹² include strong need for stimulation, complete lack of remorse or guilt, conning and manipulateness, and a parasitic lifestyle. The psychopath has a need to hurt others and to stalk. Also, an abnormal lack of conscience and compassion and they take what they want in a cold-blooded manner.¹⁰² Both psychopaths and sociopaths meet the criteria for Antisocial Personality Disorder, but their symptoms are much more serious. People with Antisocial Personality Disorder, Sociopathy, and Psychopathy, are not always violent. They may hurt people through embezzlement, theft, and other nonviolent means.

Psychopathy among sex offenders

Sociopaths would likely not complete treatment, would be more openly resistive to treatment interventions, and more likely to be terminated from treatment than psychopaths. Psychopaths, on the other hand, may get terminated from a treatment program because they believe that they (the psychopathic offender) know more about treating than the professionals (narcissism). Other psychopaths may complete treatment programs with the cunning and conning skills to be perceived as one of the best clients in the treatment group. However, psychopaths simply become better at their craft with any intervention without ceasing their problematic or criminal behavior—they simply perfect the behavior to lessen the likelihood of getting caught once again. Child molesters include those who sexually molest, abuse, rape children under the age of 12 or 13 (prepubescent) but *who do not have a sexual preference or sexual attraction to children*. Pedophiles are those who sexually molest, abuse, rape children under the age of 12 or 13 (prepubescent) and *they have a primary attraction to children*. These are two distinct types of sexual offenders. The literature has had mixed results when identifying whether child molesters or pedophiles are more likely to be psychopathic. Research methodology, limited sample sizes, and definitional problems (e.g., separating child molesters from pedophiles) create a problem with previous research. For example, Schimmenti et al.,¹⁰³ found that child sexual abusers scored higher on the PCL-R than non-violent sex offenders but did not differentiate between child molesters and pedophiles. Another recent study found that violent offenders had higher degrees of psychopathy than child molesters,¹⁰⁴ however the general comparison of “child molesters” to violent non-sex offenders appears less relevant. The authors admit that they included any sex offender who sexually molested a child as “child molesters” and did not differentiate pedophiles from child molesters, including all sex offenders with child victims as child molesters (*personal communication with Garofalo, 12/31/2018*). Of the many previous studies not listed, there was often no clarification of the difference between pedophiles and child molesters, two very distinct groups of sex offenders who sexually molest children. Not criticizing any of the previous research, just clarifying the limitations of the study results often due to a lack of definitional clarity. The research that did differentiate child molesters from pedophiles shows compelling information that child molesters are more likely to be psychopathic than pedophiles.¹⁰⁵ Pedophiles tend to have more victims, are more likely to reoffend, and less likely to do well in treatment than child molesters (non-pedophiles).^{106,107} Another study found that child sexual abusers had a low prevalence of psychopathy versus mixed sex offenders (those who were both child sexual abusers and adult rapists) and had significantly higher rates of psychopathy.¹⁰⁸ However, the authors failed to differentiate the category of *child sexual abusers* as to how many were pedophile and how many were child molesters without

a sexual attraction to children, which may have artificially lowered the number of those in their category of *child sexual abusers* as having psychopathy (e.g., based on the previously mentioned studies, child molesters (those without a sexual attraction to children) have higher rates of psychopathy than pedophiles). Another study found that *child sexual abusers* (again not differentiating between pedophiles and child molesters who do not have a sexual attraction to children) had higher scores of psychopathy than other non-sexually violent offenders including higher scores on Factor 1 of the PCL-R, including Machiavellian (e.g., manipulative), callous-unemotional traits, narcissism, and devaluation of intimate relationships.¹⁰³ The authors further concluded that child sexual abusers demonstrate more severe psychopathic traits than other violent offenders, possibly as a result of deficits in attachment, affective limitations, and possibly as a result of having been sexually victimized as children. Both pedophiles and child molesters who have psychopathy are more likely to reoffend.¹⁰⁷ However, child molesters are more likely than pedophiles to have psychopathy.¹⁰⁵ This may help explain why the child molester, with no sexual interest or preference for children, would sexually molest a child. The factors of psychopathy (e.g., impulsive, manipulative, remorseless use of others, lack of conscience, unconcerned about the impact on the victim) appear to play a role, with children simply being another victim among the many of the psychopath. Many have correlated factors of psychopathy to sex offenders, specifically the factors specifically of deceitfulness, manipulation, lack of empathy, antisocial lifestyles, etc.^{109–113} Psychopathy has been shown to be related to serious and violent offending trajectories in youth.^{114,115} Psychopathy has been related to sex offending including rape, sexual coercion, sexual homicide, child molestation, and sadism.^{116–122}

Psychopathy among the general population of incarcerated juvenile youth who are primarily violent and persistent offenders (including sex offenders and violent non-sexual offenders) ranges from 25% and higher.^{123,124} Juvenile sex offenders who scored high on psychopathy had more severe histories of antisocial behavior and predicted both sexual and nonsexual recidivism.^{125,126} Others found that high psychopathy scores for juveniles predicted nonsexual but not sexual reoffense.¹²⁶ Juvenile sex offenders were found to have two-to-three times higher scores for psychopathy than juvenile non-sex offenders.¹²⁷ The authors also found that approximately 75% of the juvenile sex offenders in their study had higher rates of prior violent convictions. These juvenile sex offenders differed from their juvenile non-sex offender counterparts primarily on Factor 1 (interpersonal and emotional factors) than one Factor 2. They also found that both the juvenile sex offenders and juvenile non-sex offenders demonstrated long term offending patterns and that the juvenile sex offenders who scored high on psychopathy demonstrated more serious psychopathy than the most serious juvenile non-sex offender group. These findings are in line with what other researchers have found.^{128,129} The callous-unemotional traits are related to more serious sex offense behaviors. Both juvenile sex offender and juvenile non-sex offenders who demonstrate callous-unemotional traits demonstrate more severe and aggressive antisocial behavior patterns than those who do not score high on this factor.^{127,130}

Assessment of violence

Many have stated that any explanation of violence or violence risk assessment that did not include an assessment of psychopathy were incomplete.¹³¹ The most widely used tools for assessing risk for violence incorporate factors from the PLC-R, Manual for the *Structured Assessment for Violence Risk in Youth (SAVRY)*,¹³² HCR-

20;¹³³ and VRAG.¹¹³ The fact that traits of psychopathy are now included in the DSM-5 (now includes a category for conduct disorder to assess “*limited prosocial emotions*” which includes lack of remorse or guilt; callous- lack of empathy; unconcerned about performance; and Shallow or deficient affect; the first, second, and fourth address Factor 1 traits and the third addresses Factor 2 traits of psychopathy. This inclusion in DSM-5 adds validity to the concept of *psychopathy* as well as suggests the importance of assessing for psychopathic traits even at young ages.¹³⁴ Early intervention may decrease the costs associated with antisocial behavior related to callous-unemotional youth.¹³⁵ However, it is not clear to what degree any intervention has on addressing psychopathic traits or psychopathy.

Treatment of the psychopath

Treatment not only seems not to work for the psychopath but there is evidence that some kinds of treatment make matters worse.^{21,136} Research has demonstrated that those with APD alone and those with APD and psychopathy are likely to fail treatment interventions and recidivate at higher rates than those without either APD or psychopathy, though those with psychopathy failed treatment and reoffended at higher rates.^{21,137–143} Some recommend that the only effective treatment is placing the psychopath in an institution.²² When evaluating therapeutic communities as a treatment modality, it was found that over a 10- year follow-up period that both untreated and treated psychopaths recidivated nearly equally for *general offenses* but treated psychopaths were *more likely to recidivate with violent offenses* (untreated psychopaths recidivated at 55% versus treated psychopaths recidivated at 77%).^{21,24,144} Perhaps the modality of a therapeutic community was not the appropriate choice or perhaps the setting is irrelevant, difficult to ascertain. Psychopaths with higher Factor 1 scores were associated with higher rates of recidivism.¹³⁸ The authors concluded that even those with only APD but high on Factor 1 traits may be better able to exploit others in treatment. Seto et al.,¹⁰ found that offenders that scored *high* on psychopathy and *better* in treatment behavior were more than 5 times more likely to seriously reoffend. The environment in which the APD offender returns to is strongly correlated with their reoffending: psychopathic offenders have a high risk for reoffense regardless of the environment their return to¹³⁹ some argue that we have simply not found the right type of treatment modality to treat psychopaths and therefore it is erroneous to assume that psychopaths are untreatable.^{145–147} However, some limitations of the above support for treatment include poorly defined definitions of psychopathy as well as a lack of follow-up over 20 years. Skeem et al.,⁴⁸ found that both psychopaths and non-psychopaths appeared to benefit from adequate doses of treatment in term of violence reduction. However, their study has yet to be replicated. Another concern for Skeem et al.’s findings is that their follow-up period was relatively very short (10-weeks) and therefore their results must be viewed with caution. Skeem et al., have suggested that some juvenile psychopaths may benefit from treatment (though again no specific type of treatment recommended or tested) and this requires more research to support. Another study found that with a 45-week, highly structured behavioral program for juvenile offenders, that those juveniles with features of psychopathy demonstrated a significant response to treatment.¹³⁵ In a 4-year follow-up, 27% of the juveniles reoffended with a violent offense. That appears to be an impressive result. The authors admit that they did not erase or eliminate the psychopathic traits but changed the juvenile’s behavior. The results need to be taken with some caution, however. The follow-up period of 4 years needs to be extended to 20 or more years. In addition, perhaps the juveniles who did not reoffend were sociopathic versus psychopathic, which

needs to be differentiated. Perhaps the youth with more negative environmental impact (sociopathy) that lead to the development of psychopathic traits versus biological impact may do better with effective, long-term treatment intervention, and if so, this may well be a significant treatment program for those with environmentally caused sociopathy. Perhaps removing children from a high-risk home may help alleviate the antisocial and psychopathic tendencies, which in some cases may mean finding adoptive families that are stable and can provide effective parenting strategies as well as a non-abusive environment. Children and adolescents deserve to be protected from adverse environments (home and community). Currently however, there is no known effective treatment for psychopathy or sociopathy.

Interacting with the sociopath or psychopath

From anecdotal experience these suggestions are made when dealing with a sociopath or psychopath. *Psychopaths* often present as smooth,¹⁴⁸ charming, and conning. They often present with explanations of any wrong-doing with plausible explanation. They are likely to be overly cooperative with investigations and in treatment. On the other hand, they may fail treatment because of narcissistic or arrogant traits.¹⁴⁹ The psychopath learns to superficially comply with treatment and supervision requirements yet maintain their deviant and antisocial thinking.¹⁵⁰ They are adept at modifying their violent and offense behavior to avoid making the same mistake again or because they are bored and need to find new ways to meet their needs. They may convince the victim that the offense/violent act were the victim’s fault.¹⁵¹ They may accept responsibility for their antisocial behavior but not believe it.¹⁵² They may also produce many children, whom they rarely if ever take care of and are highly promiscuous. Some maintain professional employment while others con and manipulate others so that they can live off others (parasitic lifestyle).¹⁵³ *Sociopaths*, on the other hand, are more likely to present as angry, defiant, resistive, and provocative. They resent any accusation openly aggressively.¹⁵⁴ They are likely to be terminated from treatment either because they simply refuse to cooperate or are terminated due to inappropriate behavior, risk behavior related to their offense, or because they reoffend.¹⁵⁵ They are likely to be angry and always blaming others, even their victims, for causing them to behave the way they did. They likely have a sporadic employment and relationships are problematic.¹⁵⁶

Summary

One difficulty in reviewing the literature on sociopath and psychopathy lies in the definitions used. If we use *psychopathy* to refer to preexisting psychopathic traits that are biologically and/or neurologically based and *sociopathy* to refer to those individuals that have no presence of psychopathic traits or low levels of psychopathic traits that are impacted by an adverse home and/or community environment the research may make more sense. Regardless, if all of the information presented in this literature review related to either sociopathy and/or psychopathy is taken into account, then the task at hand is to be able to more effectively identify psychopathic traits in both youth and adult populations. Whether inborn or environmentally created, psychopathic/sociopathic traits pose a problem for the effective management and treatment of these individuals. It is impossible to determine if those that are most impact by environmental factors had preexisting traits of psychopathy or if the environment helped to rewire the brain thereby producing psychopathic traits. The term psychopath is most frequently used to include sociopaths and therefore the research continues not to differentiate the two. When conducting forensic assessments (*any assessment for the*

courts) as well as for psychological evaluations that are meant to make recommendations for treatment, the research is consistent in recommending that individuals be assessed for psychopathic traits. At this time, there appears to be no effective treatment for addressing sociopaths or psychopaths. Part of the problem in the research that demonstrated treatment gains for psychopaths lies in both how the treatment program is defined and explained as well as the apparently short time interval for assessing recidivism. Offenders, tend to offend at higher rates than their arrest or conviction rates show. For example, someone who speeds is likely going to get a ticket only a small fraction of the time that they are speeding. Violent and nonviolent offenders tend to have lengthy criminal histories that only become apparent after arrest and conviction. Sex offenders and batterers tend to have multiple victims for every victim they are adjudicated for. When in treatment the offenders often disclose the true number of victims they have and the many undocumented offenses they have committed. Child pornography offenders tend to report multiple contact victims that were previously unknown to law enforcement once in treatment. The same is true for sex offenders, batterers, and other violent offenders in general. My point is that when recidivism studies are done, they should look-out to 20 or more years. Many offenders are only caught a fraction of the time they offend. Therefore, indicating that treatment was effective for an offender with psychopathic traits using only a short-term follow-up (e.g., 10 weeks or three years) does not prove that the offender has not recidivated, only that they were not yet caught. Psychopaths tend to become wiser with treatment, learning how to avoid the same mistake as well as using Factor 1 traits to fool others. Understanding the psychopaths'/sociopaths' history of traumatization and adverse environmental situations may help to intervene more effectively when the offender is young. The parental behavior and parenting style (e.g., permissive), presence of a criminal mother/father figure, and abuse and neglect are all factors that impact the development of antisocial and psychopathic thinking and behavior and are also factors that may offer early intervention. If juvenile violent offenders were to be evaluated for psychopathy, perhaps the true nature and scope of their offense history would be known, and perhaps more effective, long-term treatment could be provided. Juvenile offenders may have more success at treatment than adults who are more ingrained in their deviant lifestyle. It is not likely that sociopathic/psychopathic traits will ever be eliminated. However, the offender may be able to think more before they act, or perhaps there really is no effective treatment for the sociopath or psychopath. It is important to pay attention to the literature. Assessing for any type of maltreatment (emotional, physical, sexual, unsafe environment, pet abuse, parental criminality) is imperative to help understand and perhaps make a more meaningful and effective intervention, especially with youth offenders. The goal of this article was to discuss the *Violent Personality*. The literature support that Sociopathy and Psychopathy are likely an extreme form of Antisocial Personality Disorder. It is important to understand all of the factors taken into consideration for Antisocial Personality Disorder that are often overlooked, such as cruelty to animals, witnessing parental violence, and negative attitudes towards women. Sociopathy and Psychopathy are important to assess as they represent more severe aspects of ASPD and individuals with these diagnosis are far more likely to engage in violent behavior and are not treatable.

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Conflicts of interest

The author declares that there are no conflicts of interest.

References

1. Malamuth N. The confluence model as an organizing framework for research on sexually aggressive men: Risk moderators, imagined aggression and pornography consumption. *Human Aggression: Theoretical and empirical reviews*. 1998;229–245.
2. Johnson SA. Societal Acceptance of Crime & Rape: Blaming Victims and excusing the behavior of the Offender. *Journal of Forensic Sciences & Criminal Investigation*. 2017a;1(3):1–5.
3. Johnson SA. Parenting Styles and Raising Delinquent Children: Responsibility of Parents in Encouraging Violent Behavior. *Forensic Research & Criminology International Journal*. 2016;3(1):00081.
4. Overton JC, Hensley C, Tallichet SE. Examining the relationship between childhood animal cruelty motives and recurrent adult violent crimes toward humans. *Journal of Interpersonal Violence*. 2012;27(5):899–915.
5. Levin J, Arluke A. *Reducing the Link's false positive problem*. In: Linzey A, editor. *The link between animal abuse and human violence*. 2009;163–171.
6. Ascione FR, McDonald SE, Tedeschi P, et al. The relations among animal abuse, psychological disorders, and crime: Implications for forensic assessment. *Behavioral Sciences & the Law*. 2018;36(6):717–729.
7. Johnson SA. Animal cruelty, pet abuse & violence: The missed dangerous connection. *Forensic Research & Criminology International Journal*. 2018;6(6):403–415.
8. Johnson SA. Understanding the Role of Alcohol during Rape: The Perfect Storm of Attention, Emotion, & Expectancies. *International Journal of Emergency Mental Health & Human Resilience*. 2014;16(1):30–39.
9. Johnson SA. Intoxicated Perpetrators of Sexual Assault & Rape Know What They are doing despite Intoxication: What the Literature Has to Say. *Journal of Forensic Sciences & Criminal Investigation*. 2017;1(4):555–570.
10. Seto M, Barbaree H. Psychopathy, treatment behavior, and sex offender recidivism. *Journal of Interpersonal Violence*. 1999;14(12):1235–1248.
11. Taylor SP, Chermack ST. Alcohol, drugs and human physical aggression. *Journal of Studies on Alcohol*. 1993;11:78–88.
12. American Psychiatric Association (APA). *Diagnostic and statistical manual of mental disorder, 5th edn*. 2013.
13. Martens WHJ. Antisocial and Psychopathic Personality Disorders: causes, course, and remission—A review article. *International Journal of Offender Therapy and Comparative Criminology*. 2000;44(4):406–430.
14. Shipley S, Arrigo B. The confusion over psychopathy (II): Implications for forensic (correctional) practice. *International Journal of Offender Therapy and Comparative Criminology*. 2001;45(4):407–420.
15. Ogloff JR. Psychopathy/antisocial personality disorder conundrum. *Aust N Z J Psychiatry*. 2006;40(6–7):519–28.
16. Hare RD, Neumann CS. Psychopathy as a clinical and empirical construct. *Annual Review of Clinical Psychology*. 2008;4:217–246.
17. Pitchford I. The origins of violence: Is psychopathy an adaptation? *Human Nature Review*. 2001;1:28–38.
18. Hare RD. *The psychopathy checklist revised 2nd Edition*. 2003.
19. Williamson S, Harpur TJ, Hare RD. Abnormal processing of affective words by psychopaths. *Psychophysiology*. 1991;28(3):260–273.
20. Weibe R. Psychopathy and sexual coercion: A Darwinian analysis. *Counseling and Clinical Psychology Journal*. 2004;1:23–41.

21. Harris GT, Rice M, Cormier CA. Psychopathy and Violent Recidivism. *Law & Hum Behavior*. 1991;15(6):625–637.
22. Gacono C, Nieberding R, Owen A, et al. *Treating conduct disorder, antisocial, and psychopathic personalities*. In: Ashford J, et al. (editors). *Treating adult and juvenile offenders with special needs*. American Psychological Association. 1997;99–129.
23. Farrington DP. *Age and crime*. In: Tonry M, et al. (editors). *Crime and justice: An annual review of research*. 1986;25(1).
24. Rice M, Harris G, Cormier C. An evaluation of a maximum security therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*. 1992;16(4):399–412.
25. Corrado RR, McCuish EC, Hart SD, et al. The role of psychopathic traits and developmental risk factors on offending trajectories from early adolescence to adulthood: A prospective study of incarcerated youth. *Journal of Criminal Justice*. 2015;43(4):357–368.
26. McCuish EM, Corrado RR, Hart SD, et al. The role of symptoms of psychopathy in persistent violence over the criminal career into full adulthood. *Journal of Criminal Justice*. 2015;43(4):345–356.
27. Douglas KS, Vincent GM, Edens JF. *Risk for criminal recidivism: The role of psychopathy*. In: Patrick CJ, Editors. *The Handbook of Psychopathy*. 2006;533–554.
28. Harris GT, Rice ME, Lalumiere M. Criminal violence: The roles of psychopathy, neurodevelopmental insults, and antisocial parenting. *Criminal Justice and Behavior*. 2001;28(4):402–426.
29. Neumann CS, Hare RD. Psychopathic traits in a large community sample: Links to violence, alcohol use, and intelligence. *Journal of Consulting and Clinical Psychology*. 2008;76(5):893–899.
30. Hart SD, Hare RD. Psychopathy: *Assessment and association with criminal conduct*. In: Stoff DM, et al. Editors. *Handbook of Antisocial Behavior*. 1997;22–35.
31. Ribeiro da Silva D, Rijo D, Salekin RT. Child and adolescent psychopathy: A state-of-the-art reflection on the construct and etiological theories. *Journal of Criminal Justice*. 2012;40(4):269–277.
32. Lynam DR. Early identification of the fledgling psychopath: Locating the psychopathic child in the current nomenclature. *J Abnorm Psychol*. 1998;107(4):566–575.
33. Frick PJ, O'Brien BS, Wooten JM, et al. Psychopathy and conduct problems in children. *Journal of Abnormal Psychology*. 1994;102(4):700–707.
34. Hecht D. An inter-hemispheric imbalance in the psychopath's brain. *Personality and Individual Differences*. 2011;51:3–10.
35. Viding E. Annotation: Understanding the development of psychopathy. *Journal of Child Psychology and Psychiatry*. 2004;45(8):1329–1337.
36. Viding E, Frick PJ, Plomin R. Aetiology of the relationship between callous-unemotional traits and conduct problems in childhood. *British Journal of Psychiatry*. 2007;49:33–38.
37. Young SE, Stallings MC, Corely R, et al. Genetic and environmental influences on behavioral disinhibition. *American Journal of Medical Genetics*. 2000;96(5):684–695.
38. Kosson DS, Smith SS, Newman JP. Evaluation of the construct validity of psychopathic traits and black and white male inmates: Three preliminary studies. *Journal of Abnormal Psychology*. 1990;99(3):250–259.
39. Lorenz AR, Newman JP. Do emotion and information processing deficiencies found in Caucasian Psychopaths generalize to African American psychopaths? *Personality and Individual Differences*. 2002c;32(6):1077–1086.
40. Lorenz AR, Newman JP. Utilization of emotion cues in male and female offenders with antisocial personality disorder: Results from a lexical decision task. *Journal of Abnormal Psychology*. 2002d;111(3):513–516.
41. Skeem JL, Edens JF, Camp J, et al. Are there ethnic differences in levels of psychopathy? A meta-analysis. *Law and Human Behavior*. 2004;28(5):505–527.
42. DeVita E, Forth AE, Hare RD. Psychopathy, Family Background, and Early Criminality. *Canadian Psychological Association*. 1990;19:174.
43. Wootton JM, Fric PJ, Shelton KK, et al. Ineffective parenting and childhood conduct problems: The moderating role of callous unemotional traits. *Journal of Consulting and Clinical Psychology*. 1997;65(2):301–308.
44. Blackburn R, Coid JW. Psychopathy and the dimensions of personality disorder in violent offenders. *Personality and Individual Differences*. 1998;25(1):129–145.
45. Dodge KA, Pettit GS. A biopsychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology*. 2003;39(2):349–371.
46. Laurell JM, Daderman AM. Recidivism is related to psychopathy (PCL-R) in a group of men convicted of homicide. *International Journal of Law and Psychiatry*. 2005;28(3):255–268.
47. Poythress NG, Skeem JL, Lilienfeld SO. Associations among early abuse, dissociation, and psychopathy in an offender sample. *Journal of Abnormal Psychology*. 2006;115(2):288–297.
48. Skeem JL, Monahan J, Mulvey EP. Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients. *Law and Human Behavior*. 2002;26(6):577–603.
49. Raine A. Biosocial studies of antisocial and violent behavior in children and adults: A review. *Journal of Abnormal Child Psychology*. 2002;30(4):311–326.
50. Ullrich S, Marneros A, Wittenberg H. Underlying dimensions of ICD-10 personality disorders: Risk factors, childhood antecedents, and adverse outcomes in adulthood. *Journal of Forensic Psychiatry & Psychology*. 2007;18(1):44–58.
51. Beaver KM, Vaughn MG, DeLisi M, et al. The neuropsychological underpinnings to psychopathic personality traits in a nationally representative and longitudinal sample. *Psychiatric Quarterly*. 2012;83(2):145–159.
52. Krischer MK, Sevecke K. Early traumatization and psychopathy in female and male juvenile offenders. *International Journal of Law and Psychiatry*. 2008;31(3):253–262.
53. Schraft CV, Kosson DS, McBride CK. Exposure to violence within home and community environments and psychopathic tendencies in detained adolescents. *Criminal Justice and Behavior*. 2013;40(9):1027–1043.
54. Edens JF, Skopp NA, Cahill MA. Psychopathic features moderate the relationship between harsh and inconsistent parental discipline and adolescent antisocial behavior. *Journal of Clinical Child & Adolescent Psychology*. 2008;37(2):472–476.
55. Frick P, Marsee M. Psychopathy and developmental pathways to antisocial behavior in youth. In: Patrick C, Editor. *Handbook of psychopathy*. 2006;353–374.
56. Hedtke KA, Ruggiero KJ, Fitzgerald MM, et al. A longitudinal investigation of interpersonal violence in relation to mental health and substance use. *Journal of Consulting and Clinical Psychology*. 2008;76(4):633–647.
57. Spidel A, Lecomte T, Greaves C, et al. Early psychosis and aggression: Predictors and prevalence of violent behaviour amongst individuals with early onset psychosis. *International Journal of Law and Psychiatry*. 2010;33(3):171–176.
58. Spilsbury JC, Kahana S, Drotar D, et al. Profiles of behavioral problems in children who witness domestic violence. *Violence and Victims*. 2008;23(1):3–17.

59. Kimonis ER, Frick PJ, Munoz LC, et al. Callous–unemotional traits and the emotional processing of distress cues in detained boys: Testing the moderating role of aggression, exposure to community violence, and histories of abuse. *Development & Psychopathology*. 2008;20:569–589.
60. Lorenz AR, Newman JP. Utilization of emotion cues in male and female offenders with antisocial personality disorder: Results from a lexical decision task. *Journal of Abnormal Psychology*. 2002a;111(3):513–516.
61. Lorenz AR, Newman JP. Deficient response modulation and emotion processing in low–anxious Caucasian psychopathic offenders: Results from a lexical decision task. *Emotion*. 2002b;2(2):91–104.
62. Patrick CJ, Cuthbert BN, Lang PJ. Emotion in the criminal psychopath: Fear imagery processing. *Journal of Abnormal Psychology*. 1994;103(3):523–534.
63. Williamson S, Hare RD, Wong S. Violence: Criminal psychopaths and their victims. *Canadian Journal of Behavioral Science*. 1987;19(4):454–462.
64. Vaidyanathan U, Hall JR, Patrick CJ, et al. Clarifying the role of defensive reactivity deficits in psychopathy and antisocial personality using startle reflex methodology. *Journal of Abnormal Psychology*. 2011;120(1):253–258.
65. Sargeant MN, Daughters SB, Curtin JJ, et al. Unique roles of antisocial personality disorder and psychopathic traits in distress tolerance. *Journal of Abnormal Psychology*. 2011;120(4):987–992.
66. Riser RE, Kossom DS. Criminal behavior and cognitive processing in male offenders with antisocial personality disorder with and without comorbid psychopathy. *Personality Disorder: Theory, Research, and Treatment*. 2013;4(4):332–340.
67. Kossom DS, Loren AR, Newman JP. Effects of comorbid psychopathy on criminal offending and emotion processing in male offenders with antisocial personality disorder. *Journal of Abnormal Psychology*. 2006;115(4):798–806.
68. Driessen JMA, Fanti KA, Glennon JC, et al. A comparison of latent profiles in antisocial male offenders. *Journal of Criminal Justice*. 2018;57:47–55.
69. Tikkanen R, Holi M, Lindberg N, et al. Tridimensional personality questionnaire data on alcoholic violent offenders: specific connections to severe impulsive cluster B personality disorders and violent criminality. *BioMed Central Psychiatry*. 2007;30:7–36.
70. Serafim AP, Barros DM, Valim A, et al. Cardiac response and anxiety level in psychopathic murderers. *Braz J Psychiatry*. 2009;31(3):214–218.
71. Mitchel II, Beech AR. Towards a neurobiological model of offending. *Clinical Psychology Review*. 2011;31(5):872–882.
72. Patrick CJ, Fowles DC, Krueger RF. Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology*. 2009;21(3):913–938.
73. Skeem JL, Polaschek DLL, Patrick CJ, et al. Psychopathic Personality: Bridging the Gap between Scientific Evidence and Public Policy. *Psychological Science in the Public Interest*. 2011;12(3):95–162.
74. Weiler BL, Widom CS. Psychopathy and violent behaviour in abused and neglected young adults. *Criminal Behaviour and Mental Health*. 1996;6(3):253–271.
75. Grohol JM. Differences between a psychopath vs sociopath. *Psych Central*. 2018.
76. Walsh Z, Kossom DS. Psychopathy and Violence: The Importance of Factor Level Interactions. *Psychological Assessment*. 2008;20(2):114–120.
77. Babiak P, Neumann CS, Hare RD. Corporate psychopathy: Talking the walk. *Behavioral Sciences and the Law*. 2010;28(2):174–193.
78. Blair KS, Newman C, Mitchess DGV, et al. Differentiating among prefrontal substrates in psychopathy: Neuropsychological test findings. *Neuropsychology*. 2006;20(2):153–165.
79. Roussy S, Toupin J. Behavioral inhibition deficits in juvenile psychopaths. *Aggressive Behavior*. 2000;26(6):413–424.
80. Luria AR, Pribram KH, Luria LA. *Psychophysiology of the frontal lobes*. 1973;3–26.
81. Blair RJ. The amygdala and ventromedial prefrontal cortex: Functional contributions and dysfunction in psychopathy. *Philosophical Transactions of the Royal Society of London B, Biological Sciences*. 2008;363(1503):2557–2565.
82. Raine A, Lee L, Yang Y, et al. Neurodevelopmental marker for limbic maldevelopment in antisocial personality disorder and psychopathy. *British Journal of Psychiatry*. 2010;197(3):186–192.
83. Glenn AL. The other allele: Exploring the long allele of the serotonin transporter gene as a potential risk factor for psychopathy: A review of the parallels in findings. *Neuroscience and Biobehavioral Reviews*. 2011;35(3):612–620.
84. Yang Y, Raine A, Narr KL, et al. Localization of Deformations within the Amygdala in Individuals with Psychopathy. *Archives of General Psychiatry*. 2009;66(9):986–994.
85. Cima M, Smeets T, Jelicic M. Self-reported trauma, cortisol levels, and aggression in psychopathic and non-psychopathic prison inmates. *Biological Psychology*. 2008;78(1):75–86.
86. Terburg D, Morgan B, van Honk J. The testosterone–cortisol ratio: A hormonal marker for proneness to social aggression. *International Journal of Law and Psychiatry*. 2009;32(4):216–223.
87. Kavanagh PS, Signal TD, Taylor N. The dark triad and animal cruelty: Dark personalities, dark attitudes, and dark behaviors. *Personality and Individual Differences*. 2013;55(6):666–670.
88. Jones DN, Figueredo AJ. The core darkness: Uncovering the heart of the Dark Triad. *European Journal of Personality*. 2012;27(6):521–531.
89. O’Grady KE, Kinlock TW, Hanlon TE. Prediction of violence history in substance–abusing inmates. *The Prison Journal*. 2007;87(4):416–433.
90. Tallichet SE, Hensley C. Rural and urban differences in the commission of animal cruelty. *International Journal of Offender Therapy and Comparative Criminology*. 2005;49(6):711–726.
91. Newberry M. Pets in danger: Exploring the link between domestic violence and animal abuse. *Aggression and Violent Behavior*. 2017;34:273–281.
92. Lykken DT. *The antisocial personalities*. Hillsdale NJ. US: Lawrence Erlbaum Associates. 1995.
93. Frick PJ, Morris AS. Temperament and developmental pathways to conduct problems. *Journal of Clinical Child and Adolescent Psychology*. 2004;33(1):54–68.
94. Cooley–Quille M, Boyd RC, Frantz E, et al. Emotional and behavioral impact of exposure to community violence in inner–city adolescents. *Journal of Clinical Child Psychology*. 2001;30(2):199–206.
95. Dixon A, Howie P, Starling J. Psychopathology in female juvenile offenders. *Journal of Child Psychology and Psychiatry*. 2004;45(6):1150–1158.
96. Lang S, Kliteberg B, Alm PO. Adult psychopathy and violent behavior in males with early neglect and abuse. *Acta Psychiatrica Scandinavica*. 2002;412:93–100.
97. Bernstein DP, Stein JA, Handelsman L. Predicting personality pathology among adult patients with substance use disorders: Effects of childhood maltreatment. *Addictive Behavior*. 1998;23(6):855–868.

98. Forth A, Kosson D, Hare R. *The Hare Psychopathy Checklist: Youth Version*. 2013;226–290.
99. Oxford M, Cavell T, Hughes J. Callous–unemotional traits moderate the relation between ineffective parenting and child externalizing problems. *Journal of Clinical Child and Adolescent Psychology*. 2003;32(4):577–585.
100. Arrigo BA, Griffin A. Serial murder and the case of Aileen Wuornos: Attachment theory, psychopathy, and predatory aggression. *Behavioral Sciences & the Law*. 2004;22(3):375–393.
101. Bowlby J. *Attachment: Attachment and loss*. 1969;1.
102. Hare RD. Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*. 1996;23(1):25–54.
103. Schimmenti A, Passanisi A, Caretti V. Interpersonal and affective traits of psychopathy in child sexual abusers: Evidence from a pilot study sample of Italian offenders. *Journal of Child Sexual Abuse*. 2014;23(7):853–860.
104. Garofalo C, Bogaerts S, Denissen JJA. Personality functioning and psychopathic traits in child molesters and violent offenders. *Journal of Criminal Justice*. 2018;55:80–87.
105. Strassberg DA, Eastvold A, Kenny JW, et al. Psychopathy among pedophilic and nonpedophilic child molesters. *Child Abuse & Neglect*. 2012;36(4):379–382.
106. Hanson RK, Bussiere MT. Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*. 1998;66(2):348–362.
107. Seto MC. Pedophilia and sexual offending against children: Theory, assessment, and intervention. *American Psychological Association*. 2008.
108. Porter S, Fairweather D, Drugge J, et al. Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*. 2000;27(2):216–233.
109. Cale J, Lussier P. Toward a developmental taxonomy of adult sexual aggressors of women: Antisocial trajectories in youth, mating effort, and sexual criminal activity in adulthood. *Violence & Victims*. 2011;26(1):16–32.
110. Cale J, Leclerc B, Smallbone S. The sexual lives of offenders: The link between childhood sexual victimization and non-criminal sexual lifestyles between types of offenders. *Psychology, Crime, and the Law*. 2014;20(1):37–60.
111. Malamuth NM, Linz D, Heavey CL, et al. Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*. 1995;69(2):353–369.
112. Prentky RA, Knight RA, Lee AFS, et al. Predictive validity of lifestyle impulsivity of rapists. *Criminal Justice and Behavior*. 1995;22(2):106–128.
113. Quinsey VL, Harris GT, Rice ME, et al. Violent offenders: Appraising and managing risk. *American Psychological Association*. 1998;356.
114. McCuish E, Corrado RR, Lussier P, et al. Psychopathic traits and offending trajectories from early adolescence to adulthood. *Journal of Criminal Justice*. 2014;42(1):66–76.
115. McCuish EM, Lussier PL, Corrado RR. Examining antisocial behavioral antecedents of juvenile sexual offenders and non-sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*. 2014;27(4):414–448.
116. Harris GT, Rice ME, Quinsey VL. Psychopathy as a taxon: Evidence that psychopaths are a discrete class. *Journal of Consulting and Clinical Psychology*. 1994;62(2):387–397.
117. Knight RA, Guay J. *The role of psychopathy in sexual coercion against women*. In: Patrick CJ, Editors. *Handbook of psychopathy*. 2006;512–532.
118. Knight RA, Sims-Knight JE. Developmental antecedents of sexual coercion against women: testing of alternative hypotheses with structural equation modeling. *Ann N Y Acad Sci*. 2003;989:72–85.
119. Porter S, Woodworth M, Earle J, et al. Characteristics of sexual homicides committed by psychopathic and nonpsychopathic offenders. *Law and Human Behavior*. 2003;27(5):459–470.
120. Dorr D. *Psychopathy in the pedophile*. In: Milton T, et al, Editors. *Psychopathy: Antisocial, criminal and violent behavior*. 1998;1:304–320.
121. Malamuth NM. Criminal and non-criminal sexual aggressors: Integrating psychopathy in a hierarchical-mediational confluence model. *Ann N Y Acad Sci*. 2003;989:33–58.
122. Mokros A, Osterheider M, Hucker SJ, et al. Psychopathy and sexual sadism. *Law and Human Behavior*. 2011;35(3):188–199.
123. Caldwell M, Skeem J, Salekin R, et al. Treatment response of adolescent offenders with psychopathic features: A 2-year follow-up. *Criminal Justice and Behavior*. 2006;33(5):571–596.
124. Daderman AM, Kristiansson M. Degree of psychopathy: Implications for treatment in male juvenile delinquents. *International Journal of Law and Psychiatry*. 2003;26(3):301–315.
125. Parks GA, Bard DE. Risk factors for adolescent sex offender recidivism: Evaluation of predictive factors and comparison of three groups based upon victim type. *Sexual Abuse: A Journal of Research and Treatment*. 2006;18(4):319–342.
126. Langstrom N, Grann M. Risk for criminal recidivism among young sex offenders. *Journal of Interpersonal Violence*. 2000;15(8):855–871.
127. Cale J, Lussier P, McCuish E, et al. The prevalence of psychopathic personality disturbances among incarcerated youth: Comparing serious, chronic, violent and sex offenders. *Journal of Criminal Justice*. 2015;43(4):337–344.
128. Caputo AA, Frick PJ, Brodsky SL. Family violence and juvenile sex offending: The potential mediating role of psychopathic traits and negative attitudes toward women. *Criminal Justice and Behavior*. 1999;26(3):338–356.
129. Lawing k, Frick PJ, Cruise KR. Differences in offender patterns between adolescent sex offenders high or low on callous–unemotional traits. *Psychological Assessment*. 2010;22(2):298–305.
130. Christian R, Frick PJ, Hill N, et al. Psychopathy and conduct problems in children: Subtyping children with conduct problems based on their interpersonal and affective style. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1997;36:233–241.
131. Hart SD. The role of psychopathy for assessing risk for violence: Conceptual and methodological issues. *Legal and Criminological Psychology*. 1998;3(1):121–137.
132. Borum R, Bartel P, Forth A. *Manual for the Structured Assessment for Violence Risk in Youth (SAVRY): Consultation version*. Tampa: University of South Florida: Florida Mental Health Institute. 2002.
133. Webster CD, Douglas KS, Eaves D, et al. The HCR–20 scheme: Assessing risk for violence. *Simon Fraser University*. 1997.
134. Kahn RE, Frick PJ, Youngstrom E, et al. The effects of including a callous–unemotional specifier for the diagnosis of conduct disorder. *Journal of Child Psychology and Psychiatry*. 2012;53(3):271–282.
135. Caldwell MF, McCormick DJ, Umstead D, et al. Evidence of treatment progress and therapeutic outcomes among adolescents with psychopathic features. *Criminal Justice and Behavior*. 2007;34(5):573–587.
136. Hare R. *Without conscience: The disturbing world of the psychopaths among us*. 1993.
137. Cacciola JS, Alterman AI, Rutherford MJ, et al. Treatment response of antisocial substance abusers. *Journal of Nervous and Mental Disease*. 1995;183(3):166–171.

138. Hare RD, Clark D, Grann M, et al. Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law*. 2000;18(5):623–645.
139. Hemphill JF, Hare RD, Wong S. Psychopathy and recidivism: A review. *Legal and Criminological Psychology*. 1998;3(1):139–170.
140. Hobson J, Shine J, Roberts R. How do psychopaths behave in a prison therapeutic community? *Psychology, Crime, & Law*. 2000;6(2):139–154.
141. Kernberg O. *The psychotherapeutic management of psychopathic, narcissistic, and paranoid transferences*. In: Millon T, et al. Editors. *Psychopathy: Antisocial, criminal, and violent behavior*. 1998;372–382.
142. Kranzler HR, Del Boca FK, Rounsaville BJ. Comorbid psychiatric diagnosis predicts three-year outcomes in alcoholics: A posttreatment natural history study. *Journal of Studies on Alcohol*. 1996;57(6):619–626.
143. Reiss D, Grubin D, Meux C. Institutional performance of male psychopaths in a high-security hospital. *Journal of Forensic Psychiatry*. 1999;10(2):290–299.
144. Harris G, Rice M, Cormier C. Psychopaths: Is a therapeutic community therapeutic? *Therapeutic Communities*. 1994;15(4):283–299.
145. Blackburn R. Treatment or incapacitation? Implications of research on personality disorders for the management of dangerous offenders. *Legal and Criminological Psychology*. 2000;5(1):1–21.
146. Garrido V, Esteban C, Molero C. The effectiveness in the treatment of psychopathy: A meta-analysis. *Issues in Criminological and Legal Psychology*. 1995;24:57–59.
147. Salekin R. Psychopathy and therapeutic pessimism: Clinical lore or clinical reality? *Clinical Psychology Review*. 2002;22(1):79–112.
148. Ahlmeyer S, Heil P, McKee B, et al. The impact of polygraphy on admissions of victims in adult sex offenders. *Sexual Abuse: A Journal of Research and Treatment*. 2000;12(2):123–138.
149. English K, Jones L, Pasini-Hill D, et al. The value of polygraph testing in sex offender management. *National Institute of Justice*. 2000.
150. Hare RD. Hare Psychopathy Checklist-Revised (PCL-R). *Advances in psychological assessments*. 1992;8:103–130.
151. Hare RD, Hart SD, Harpur TJ. Psychopathy and the DSM-IV criteria for antisocial personality disorder. *Journal of Abnormal Psychology*. 1991;100(3):391–398.
152. Knight RA, Sims-Knight JE. Testing an etiological model for male juvenile sex offending against females. *Journal of Child Sexual Abuse*. 2005;13(3–4):33–55.
153. Langstrom N, Grann M, Lindblad F. A preliminary typology of young sex offenders. *Journal of Adolescence*. 2000;23(3):319–329.
154. Perez PR. The etiology of psychopathy: A neuropsychological perspective. *Aggression and Violent Behavior*. 2012;17(6):519–522.
155. Paulhaus DL, Williams KM. The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*. 2002;36(6):556–563.
156. Seto MC, Hanson RK, Babchishin KM. Contact Sexual Offending by Men with Online Sexual Offenses. *Sexual Abuse: A Journal of Research and Treatment*. 2011;23(1):124–145.