

THE
PSYCHOPATH
EMOTION AND THE BRAIN

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CHAPTER ONE

WHAT IS PSYCHOPATHY?

Humans have long been concerned by or fascinated with the concept of evil and the people thought to personify evil. Say the word psychopath and most people can easily conjure up an image of someone they believe to embody the word. Some may think of characters from the movies: Hannibal Lecter from *The Silence of the Lambs*, Mr Blonde from *Reservoir Dogs*, Norman Bates from *Psycho*, and Freddy Krueger from *A Nightmare on Elm Street*. Others may gain inspiration from the world of politics and claim that Adolf Hitler, Saddam Hussein, Margaret Thatcher, George W. Bush, or even Bill Clinton is psychopathic. Yet more may consider their current employer or ex-partner to be the ultimate psychopath. However, to help clarify the concept, we will simply describe four cases. These cases are fictionalized; they are amalgamations of individuals with whom we have worked. Only two of these cases presented with psychopathy. However, all four showed high levels of antisocial behavior.

Antisocial children

John

John is an 11-year-old boy from a middle-class family with two professional parents. He began to present with behavioral problems at an early age and was enrolled in a school for children with emotional and behavioral difficulties at the age of 5 years. John began running away from home and school at a young age. Now, he is frequently picked up by the police because he is roaming the streets of the local town late at night. He often spends time with local juvenile delinquents. He recently broke into a construction site and set fire to materials, causing \$15,000 worth of damage. John is often cruel to animals. He once dangled his pet hamster over a hot stove and threatened to drop it if his parents did

not give him money. He is also frequently violent towards his parents, teachers, and peers. On several occasions he has threatened to hurt his mother, and stashed knives are often retrieved from his bedroom. On one occasion he threw a kitchen knife at his mother. John does not have any genuine friends at school. Teachers often express that they have difficulty treating him kindly as they feel that nice behaviors displayed by him are not at all sincere. He is very boastful about his abilities generally, and has an inflated perception of his intelligence. John sometimes tricks people into thinking that he is simply misunderstood.

Bill

Bill is an 11-year-old boy from a troubled working-class background. His mother and father are both in jail, his father for armed robbery and his mother for drug offenses. He is cared for by his older sister. Bill often presents with oppositional behavior at home and at school. He is rude to teachers, often refusing to complete assignments, and frequently truants. He has stolen merchandise from local shops. He often fights with classmates and has on occasion used a weapon (a brick) in these fights. However, he usually apologizes if he is genuinely to blame. He enjoys playing sports with his classmates. He also often expresses love towards his sister and is comforted when she is present. Bill's emotions can be turbulent. He is often self-deprecating.

We have just described the fictionalized lives of two boys with whom we have worked. Should we consider them both in the same way? Do they both have the same difficulties? Do they both present with psychopathy? They certainly are both antisocial. But is their antisocial behavior due to the same underlying pathology?

From the fourth edition of the *Diagnostic and Statistical Manual* developed by the American Psychiatric Association, we would assume that John and Bill present with the same condition: conduct disorder (CD) (American Psychiatric Association, 1994). The diagnostic criteria associated with CD are listed in the following subsection.

Conduct disorder (CD)

According to the DSM:

The essential feature of CD is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules

are violated . . . manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criteria present in the past 6 months:

Aggression to people and animals:

- (1) often bullies, threatens, or intimidates others
- (2) often initiates physical fights
- (3) has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun).
- (4) has been physically cruel to people
- (5) has been physically cruel to animals
- (6) has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
- (7) has forced someone into sexual activity.

Destruction of property

- (8) has deliberately engaged in fire setting with the intention of causing serious damage
- (9) has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

- (10) has broken into someone else's house, building, or car
- (11) often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)
- (12) has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering, forgery)

Serious violations of rules

- (13) often stays out at night despite parental prohibitions, beginning before age 13 years
- (14) has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
- (15) is often truant from school beginning before age 13 years.

(American Psychiatric Association, 1994, p. 85)

In addition, CD should result in "clinically significant impairment in social, academic, or occupational functioning." Interestingly, DSM-IV does acknowledge that individuals who meet criteria for CD are not a homogeneous population. Thus, two forms of CD are specified: childhood- and adolescent-onset types. In childhood-onset type, the onset of at least one criterion characteristic of CD must have occurred prior to 10 years of age. In adolescent-onset type there should not be any criteria characteristic of CD prior to 10 years of age.

So let us consider John and Bill again. Both have engaged in at least three of the diagnostic criteria for CD. John often engages in physical fights, has on occasion used weapons, has been cruel to animals, has engaged in fire setting

and has truanted. Bill also often engages in fights, has on occasion used weapons and has truanted. Their behavioral difficulties have affected their academic functioning. Thus, both present with CD. They even present with the same type of CD, childhood-onset type; both presented with at least one of their behavioral criteria before the age of 10. But do John and Bill really have the same condition? We will argue not. We will argue that while John presents with psychopathic tendencies, Bill does not.

Antisocial adults

What about the diagnostic situation for adults? Perhaps this is better. Again, we will consider some example cases.

Ryan

Ryan is in his mid-30s and is serving a life sentence for murder. He has always had a bad temper, and this time what looked like a typical bar-fight ended up costing someone their life. In person, Ryan gives the impression of being a slightly immature, jocular, but earnest adult. Ryan is well liked by both the other inmates and the staff on the wing and does not have any adjudications recorded against him.

Ryan has approximately half a dozen offences on his record beginning at the age of 17 when he received probation for shoplifting. Although he never had any formal contact with the law before his late teens, his parents report that he started getting into trouble at home and at school at the age of 15. His parents found him difficult to manage. He broke curfew, lied frequently, vandalized property, and ran away from home. At school he frequently engaged in fights.

Ryan dropped out of school at the age of 16 and began working as a manual laborer. Although occasionally fired for failing to get along with his co-workers, Ryan maintained gainful employment. However, Ryan drank heavily, and spent his money recklessly, and so often found that he did not have enough money left over to pay his bills. In order to supplement his income, he began to sell marijuana, and occasionally stole equipment from the construction sites he worked on. These activities resulted in Ryan receiving a probation order at the age of 18.

Ryan eventually found employment and moved in with his girlfriend. Despite frequent fighting over Ryan's irresponsible financial habits, continued drug dealing and over-indulgent alcohol use, the relationship remained stable. Over the

years, Ryan had two affairs, but ended both because he felt guilty and was worried his girlfriend would find out and leave him.

Ryan's drinking grew worse, and one evening he became involved in a fight at a local bar. The owner of the bar broke up the fight and Ryan was asked to leave. Although normally able to leave a fight, this time Ryan returned and hit his opponent with a bottle, which shattered and caused a fatal gash to the individual's throat. The police were called and Ryan immediately told them what had happened. In court, Ryan entered a plea of guilty.

Tyler

Tyler is in his late 30s and is serving a life sentence for murdering his traveling companion in order to steal his money. On the wing, he is a heavy drug user and dealer. He is lively and entertaining to talk to in small doses, but his conversation with staff always ends up being inappropriate and suggestive. He has had various jobs on the wing, but few have lasted more than a few weeks. He is constantly in trouble due to being unreliable and for having violent outbursts when his expectations are not met. Most of the other inmates treat him with a mixture of fear and respect, which he enjoys.

Tyler's arrest record is several pages long. His first recorded offence occurred at the age of 9 when he stole equipment from his school. Later, at age 11, he was apprehended while attempting to drown a classmate who had refused to hand over his pocket money. When asked what happened to the child, Tyler laughed as he related that the kid was bigger than him and, as a consequence, he had every intention of "finishing the job" had a teacher not intervened.

After that, Tyler's life has been spent in and out of special secure settings as a child, adolescent, and adult. His list of offences includes just about every category of crime imaginable, from shoplifting and robbery, to grievous bodily harm and hostage taking. Tyler has never had a job for more than 2 weeks. Instead, he has lived solely off friends or supported himself through crime such as drug dealing, street thefts, and pimping. He has rarely spent more than a few weeks in one place, preferring to move around frequently to settling in one place. He can appear very friendly, and had no trouble meeting people who were willing to put a roof over his head. Frequently, such arrangements ended with a serious and sometimes violent row, and Tyler would start over again.

Tyler has never been married, but has had several living-in partners. In each case, he moved in with them after "sweeping them off their feet," as he puts it. The longest relationship lasted 6 months, but each was marked by violence and instability. He speaks of countless instances where he was seeing other women while living with another. When asked whether he was ever monogamous,

Tyler says that he has always been monogamous. When this apparent inconsistency is pointed out to him, he denies any contradiction: "I've always been monogamous, because it is physically impossible for me to be in two different places at exactly the same time. Understand?"

There was overwhelming evidence that Tyler committed the crime for which he is now imprisoned; however, in court he pleaded not guilty. He still insists that he is innocent, and shows no regard for the murdered victim or his family. Despite the prospect of spending the rest of his life in prison and repeatedly being told that an appeal is futile, he is very upbeat, and speaks as though his release is imminent.

Antisocial personality disorder (ASPD)

So let us consider Ryan and Tyler. Again, do they present with the same syndrome? According to DSM-IV, they do (American Psychiatric Association, 1994). Both present with antisocial personality disorder (ASPD). The essential feature of ASPD is "a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood". The individual must be aged at least 18, show evidence of CD before the age of 15 years, and must not present with antisocial behavior exclusively during the course of schizophrenia or a manic episode. In addition, the individual must present with at least three of the following:

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

So let us consider Ryan and Tyler again. Both show clear indications of a failure to conform to social norms (1), both show indications of impulsivity, aggressiveness and irresponsibility (3, 4, and 6). Thus both would receive diagnoses of ASPD. However, we will again argue that they do not really have the same condition. We will argue that while Tyler presents with psychopathy, Ryan does not.

Psychopathy

The origins of the current description of the syndrome of psychopathy can be traced back to the work of Cleckley. In his book, *The Mask of Sanity*, Cleckley delineated 16 criteria for the diagnosis of psychopathy (Cleckley, 1941). These include superficial charm, lack of anxiety, lack of guilt, undependability, dishonesty, egocentricity, failure to form lasting intimate relationships, failure to learn from punishment, poverty of emotions, lack of insight into the impact of one's behavior on others, and failure to plan ahead. From these characteristics, and his own clinical impressions, Robert Hare developed the original Psychopathy Checklist (PCL) (Hare, 1980), a formalized tool for the assessment of psychopathy in adults. This has since been revised: the Psychopathy Checklist – Revised (PCL-R) (Hare, 1991). Following the development of the adult PCL-R, assessment tools for the assessment of psychopathy in childhood and adolescence have also been developed. These include the Antisocial Process Screening Device (APSD) (Frick and Hare, 2001a) and the Psychopathy Checklist: Youth Version (Forth et al., 2003; Kosson et al., 2002a). In our work, we have concentrated on using the APSD. It will therefore be the criteria from this measure that we will concentrate on below.

Both the PCL-R and the APSD consist of 20 behavioral items. The PCL-R is scored on the basis of an extensive file review and a semi-structured interview. The APSD is scored on the basis of parental/teacher review. For each behavioral item, an individual can score between 0 and 2 points. The individual's total score can therefore vary from 0 to 40 points. Adults scoring 30 or above on the PCL-R are generally considered psychopathic while those scoring less than 20 are considered non-psychopathic. There are less established criteria for considering a child to present with psychopathic tendencies. However, we have typically used a cut-off of 27 as indicating the child is presenting with psychopathic tendencies. All members of our comparison populations score less than 20 on the APSD.

Psychopathy is a disorder that consists of multiple components ranging on the emotional, interpersonal, and behavioral spectrum. Factor analysis is a means of examining how the items of a given construct hang together. For example, while the PCL-R consists of 20 items that are all thought to contribute something unique to the set of criteria, overlap will exist among items. Consequently, items that correlate with each other can be grouped together to form a cluster of traits, or a factor, that refers to a more general facet of the disorder.

In the original factor analysis of the PCL-R, Harpur and his colleagues incorporated data from six samples and hundreds of individuals to determine that the predecessor to the PCL-R, the PCL, was composed of two correlated factors

(Harpur et al., 1988): interpersonal/affective items and impulsive/antisocial lifestyle items. The authors argued that although highly correlated, the two factors measured separable components of the disorder and that both factors were required to yield a comprehensive assessment of psychopathy. Subsequently, the PCL-R was established and the two-factor structure was replicated in eight samples involving over 900 prison inmates and 350 forensic patients (Hare et al., 1990). Moreover, the two-factor description of psychopathy has been replicated in Belgian (Pham, 1998), Scottish (Cooke and Michie, 2001), Spanish (Molto et al., 2000), and English (Hobson and Shine, 1998) inmates. The two factors and their constituent parts are described in table 1.1. The initial factor analysis of the APSD similarly identified a two-factor structure. Moreover, these two factors can be described similarly to those obtained with the PCL-R: the first refers to a cluster of items characterized by impulsivity and conduct problems (I/CP) while the second contains items corresponding to a callous and unemotional interpersonal style (CU).

Recently, the traditional two-factor description of psychopathy has been questioned both in terms of the persuasiveness of the results and on the statistical techniques utilized (Cooke and Michie, 2001). Instead, Cooke and Michie contend that a three-factor solution is more appropriate. In essence, their new description of psychopathy has separated the traditional interpersonal/affective Factor 1 into two components: an interpersonal and an abnormal affect component (see table 1.2). More recent work has similarly suggested that a three-factor solution might also provide a better fit for data obtained with the APSD (Frick and Hare, 2001b). The identified factors and their constituent items are shown in table 1.3. They are a callous/unemotional dimension (similar to the adult abnormal affect component), a narcissism dimension (overlapping with the adult interpersonal component), and an impulsivity dimension (similar to the adult antisocial behavior component).

According to many of the proponents of the concept of psychopathy, its main advantage over the psychiatric diagnoses of CD and Antisocial Personality Disorder (ASPD) is that it not only indexes the individual's behavior but also his/her personality (Cleckley, 1941; Hare, 1991). However, this claim has also been used by its critics, who argue that the personality approach requires too much inference and is likely to have low inter-rater reliability (Moran, 1999). But these critiques are easily refuted. Low inter-rater reliability is certainly not a problem associated with PCL-R assessment (Hare, 1991). Moreover, we would argue that the difference between the DSM-IV diagnoses of CD and Antisocial Personality Disorder (ASPD) and psychopathy as indexed by the APSD or PCL-R is not really that psychopathy extends the DSM-IV diagnoses because it considers personality, but rather that it extends these diagnoses because it considers emotion. A central argument of this book is that there are many routes to antisocial

Table 1.1 Two-factor model of psychopathy

Factor 1: Interpersonal/affective items	Factor 2: Impulsive/antisocial lifestyle items	Items that fail to load on either factor
1 Glib/superficial charm	3 Need for stimulation/proneness to boredom	11 Promiscuous sexual behavior
2 Grandiose sense of self-worth	9 Parasitic lifestyle	17 Many short-term marital affairs
4 Pathological lying	10 Poor behavioral controls	20 Criminal versatility
5 Conning/manipulative	12 Early behavioral problems	
6 Lack of remorse or guilt	13 Lack of realistic, long-term goals	
7 Shallow affect	14 Impulsivity	
8 Callous/lack of empathy	15 Irresponsibility	
16 Failure to accept responsibility for own actions	18 Juvenile delinquency	
	19 Revocation of conditional release	

Source: Harpur et al. (1989)

Table 1.2 Three-factor model of psychopathy

Arrogant and deceitful interpersonal items	Deficient affective experience	Impulsive and irresponsible items	Items not loading on any of the factors
1 Glibness/superficial charm	6 Lack of remorse or guilt	3 Need for stimulation/ prone to boredom	10 Poor behavioral controls
2 Grandiose sense of self-worth	7 Shallow affect	9 Parasitic lifestyle	11 Promiscuous sexual behavior
4 Pathological lying	8 Callous/lacks empathy	13 Lack of realistic, long-term goals	12 Early behavioral problems
5 Conning/manipulative	16 Failure to accept responsibility for own actions	14 Impulsivity	17 Many short-term marital relationships
		15 Irresponsibility	18 Juvenile delinquency
			19 Revocation of conditional release
			20 Criminal versatility

Source: (Cooke and Michie, 2001)

Table 1.3 Three-factor structure of the APSD*

Callous and unemotional items	Narcissism items	Impulsivity items
3 Concerned about schoolwork [†]	5 Emotions seem shallow	1 Blames others for mistakes
7 Keeps promises [†]	8 Brags excessively	4 Acts without thinking
12 Feels bad or guilty [†]	10 Uses or cons others	9 Gets bored easily
18 Concerned about the feelings of others [†]	11 Teases others	13 Engages in risky activities
19 Does not show emotions	14 Can be charming, but seems insincere	17 Does not plan ahead
20 Keeps the same friends [†]	15 Becomes angry when corrected	
	16 Thinks he/she is better than others	

*Note: items 2 (Engages in illegal activities) and 6 (Lies easily and skillfully) did not load on any factor.

[†]Items that are reverse-scored.

behavior. The advantage of the concept of psychopathy is that it identifies a population who share a common etiology, a dysfunction in specific forms of emotional processing. In contrast, the DSM-IV diagnoses identify the broad category of individuals who engage in antisocial behavior. As such, they identify a highly heterogeneous population who do not share a common etiology.

With respect to this issue of a single or a variety of etiologies, it is useful to consider the contrast between reactive and instrumental aggression.

Reactive and instrumental aggression

A distinction between reactive and instrumental aggression has been made for some time (Barratt et al., 1997, 1999; Berkowitz, 1993; Crick and Dodge, 1996; Linnoila et al., 1983; Vitiello and Stoff, 1997). In reactive aggression (also referred to as affective or impulsive aggression), a frustrating or threatening event triggers the aggressive act and frequently also induces anger. Importantly, the aggression is initiated without regard for any potential goal (for example, gaining the victim's possessions or increasing status within the hierarchy). In contrast, instrumental aggression (also referred to as proactive aggression) is purposeful and goal directed. The aggression is used instrumentally to achieve a specific desired goal (Berkowitz, 1993). This is not usually the pain of the victim but rather the victim's possessions or to increase status within a group hierarchy. Bullying is an example of instrumental aggression and, unsurprisingly, individuals who engage in bullying behaviors frequently engage in other forms of instrumental antisocial behavior in other contexts (Roland and Idsoe, 2001).

The distinction between reactive and instrumental aggression has been criticized because of some difficulty in characterizing the nature of specific human aggressive episodes (Bushman and Anderson, 2001). However, the discriminant validity of instrumental and reactive aggression on a factorial level has been demonstrated; while instrumental and reactive aggression are substantially correlated, a two-factor model fits the data better than a one-factor model (Poulin and Boivin, 2000). In addition, longitudinal studies have shown that while instrumental, but not reactive, aggression predicts later delinquency, high levels of reactive aggression actually weaken the relationship between instrumental aggression and later delinquency (Poulin and Boivin, 2000; Vitaro et al., 1998).

Moreover, there is considerable data suggesting that there are two relatively separable populations of aggressive individuals (Barratt et al., 1999; Connor, 2002; Crick and Dodge, 1996; Linnoila et al., 1983). First, there are individuals who present with solely reactive aggression. Such individuals are particularly indifferent to conventional rules and do not modulate their behavior according

to the status of the individuals with whom they are interacting. Individuals with lesions that include orbital frontal cortex may present with elevated levels of reactive aggression (Anderson et al., 1999; Blair and Cipolotti, 2000; Grafman et al., 1996). In addition, individuals with impulsive aggressive disorder can present with elevated levels of reactive aggression (Best et al., 2002; Coccaro, 1998), as can children with bipolar disorder (Leibenluft et al., 2003). The second group of individuals present with elevated levels of both instrumental and reactive aggression. Such individuals are particularly indifferent to moral transgressions and show little indication of guilt or empathy with their victims. Individuals with psychopathy present with highly elevated levels of both instrumental and reactive aggression (Cornell et al., 1996; Williamson et al., 1987). In short, the existence of two relatively separable populations of aggressive individuals (individuals who present with mostly reactive aggression and individuals who present with reactive and instrumental aggression) is strongly supported.

It is important to distinguish between reactive and instrumental aggression because they are mediated by separable neurocognitive systems (Blair, 2001); see chapters 7 and 8. Reactive aggression is the final form of the animal's response to threat. Thus, at low levels of threat, from a distant threat, the animal will freeze. At higher levels, from a closer threat, the animal will attempt to escape the environment. At higher levels still, when the threat is very close and escape is impossible, the animal will display reactive aggression (Blanchard et al., 1977). Individuals may display elevated levels of reactive aggression either because they are, or have recently been, in a situation of considerable threat or frustration, or because of reduced regulation by executive systems of the neural circuitry mediating reactive aggression (see chapter 7).

Instrumental aggression is goal-directed motor activity; the aggression is used to achieve a particular goal such as obtaining another individual's money or increasing status within a group. Indeed, most forms of antisocial behavior (shoplifting, fraud, theft, robbery) are instrumental, goal-directed behaviors. As such, when an individual is engaged in instrumental aggression, he/she is likely to be recruiting the same neurocognitive systems that are required for any other goal-directed motor program. Thus, when considering models of the neurobiology of instrumental aggression, we should be considering whether the model explains why an individual might be particularly predisposed to engage in heightened levels of this form of instrumental behavior. Goal-directed behaviors are performed in expectation of receiving the particular desired reward and if they are not punished. While most individuals are motivated to obtain money, very few attack others to achieve this goal. Moral socialization leads the healthy individual away from antisocial behavior. To explain instrumental aggression seen in individuals with psychopathy, we need an account that explains why socialization is not achieved in this population.

Returning to our examples

So let us return and consider our examples: John, Bill, Ryan, and Tyler. We previously diagnosed John and Bill with CD and Ryan and Tyler with ASPD. However, we also said that whereas John and Tyler present with psychopathic tendencies or psychopathy, Bill and Ryan do not. Let us now consider how we reached this conclusion.

The crucial aspect of psychopathy is not the display of antisocial behavior. Instead, it is the emotional impairment. So when we consider our four examples, we need not only to assess whether they present with antisocial behavior but also whether they present with emotional impairment.

Let us first consider John and Bill. Please take a moment to consider the items on the APSD shown in table 1.3. As can be seen, John shows all the signs of the emotional impairment that is at the center of psychopathy. He does not suffer from guilt or concerns about the feelings of others. He does not keep the same friends and has no real interest in schoolwork. He also shows signs of what Frick and Hare (2001b) have referred to as narcissism. He is very boastful about his abilities and can be insincerely charming. Finally, he also presents with the impulsivity behaviors. He gets bored easily and acts without thinking. In short, John presents with psychopathic tendencies. He would comfortably score over 30 out of 40 on the APSD.

Bill, in contrast, would not. Bill, like John, shows little interest in schoolwork. But he does show guilt and is concerned about the feelings of others, particularly his sister. In short, he does not show the same level of emotional problems that John does. Moreover, with the exception that he can easily become angry, he does not show signs of narcissism. Indeed, Bill is described as self-deprecatory. The closest similarity between Bill and John concerns their impulsivity behaviors: both act without thinking and they do not plan ahead. In short, while Bill does present with serious behavioral problems, he does not present with psychopathy. His score on the APSD would be less than 20 out of 40. We have had many boys like Bill in our studies who have acted as comparison individuals for boys like John. Importantly, boys like Bill do not show the types of neurocognitive impairment that we have found in boys like John.

How about Ryan and Tyler? Taking the two-factor solution of the PCL-R (Harpur et al., 1989), we can see that both would score relatively highly on Factor 2. Both show indications of poor behavioral control, early behavioral problems, impulsivity, and irresponsibility. However, only Tyler shows indications of a need for stimulation and a parasitic lifestyle. But it is in the emotional impairment, Factor 1 behaviors that the difference between Ryan and Tyler immediately becomes apparent. Ryan really does not present with the emotional

difficulties that underlie psychopathy. In contrast, Tyler clearly does. He is charming, grandiose, manipulative, and experiences little guilt, empathy, or deep emotional ties.

SUMMARY

In short, the classification of psychopathy can be considered an extension and one form of refinement of the DSM diagnoses of CD and ASPD. Specifically, psychopathy identifies one form of pathology associated with high levels of antisocial behavior; individuals who present with a particular form of emotional impairment. In contrast, the diagnoses of CD and ASPD lead to the gathering together of individuals who present with a variety of different conditions (some of which, we will argue, are not even pathological; see chapter 3). The main goal of this book will be to understand the nature of the emotional impairment shown by individuals with psychopathy.

The implications of the classification

A classification system is only as good as its usefulness. We will argue throughout the book that psychopathy is a very useful description of a particular pathology that has a specific neurocognitive basis. But does giving someone a psychopathy score provide any other form of useful information? Does it allow a more precise prediction of future behavior? The answer is that it does.

One of the major strengths of the PCL-R has been its utility in risk assessment. This is in rather striking contrast to the diagnosis of ASPD. The correlation between recidivism and psychopathy is significantly higher than that of the DSM diagnosis of ASPD (Hemphill et al., 1998).

There are now a relatively large number of studies indicating that individuals with psychopathy reoffend at higher rates than non-psychopathic individuals. For example, in an early study, the PCL-R was administered to 231 offenders prior to release from prisons (Hart et al., 1988). Within 3 years, 25 percent of non-psychopathic individuals had been re-incarcerated. In sharp contrast, 80 percent of the individuals with psychopathy had breached the terms of their release. In another study Serin and Amos (1995) followed 299 offenders, and within 3 years, 65 percent of individuals with psychopathy versus only 25 percent of the non-psychopathic individuals were convicted of a new offence. Such results have been found in European studies also. Thus, in a Swedish sample of forensic patients, Grann et al. (1999) found that individuals scoring above 25 on

the PCL-R violently reoffended at a rate of 66 percent versus only 18 percent for those with a score less than 26. In Belgium, the reconviction rates of psychopathic, middle scoring, and low scoring individuals were 44 percent, 21 percent, and 11 percent, respectively (Hare et al., 2000).

An international study of 278 offenders is of particular interest. This found that 82 percent of the individuals with psychopathy but only 40 percent of non-psychopathic individuals were reconvicted of an offence (Hare et al., 2000). In the same group, 38 percent of the high psychopathy group committed a violent offence, but only 2.7 percent of those with a low PCL-R score did. Interestingly, both the individuals with psychopathy and the non-psychopathic individuals failed to show attenuated reconviction rates following treatment after controlling for age and criminal history. However, the pattern of results changes when Factor 1 scores are carefully examined. Participants with high Factor 1 scores reoffended at higher rates if they had been treated: 86 percent as opposed to 59 percent! Similarly striking results have been seen when examining participants who engage in educational and vocational training programs. Here offenders with low Factor 1 scores show an improvement in recidivism rate following the course. However, offenders with high Factor 1 scores are reconvicted at higher rates if they take part in these programs rather than if they do not.

In what is perhaps the most comprehensive review and meta-analysis to date, Hemphill and colleagues (1998) examined nine available published and unpublished prospective studies of psychopathy and recidivism. The length of follow-up for the studies reviewed ranged from 1 to 10.5 years. The authors determined that within a year of release, individuals with psychopathy are three times more likely to recidivate, and four times more likely to recidivate violently. In fact, the relative risk for reoffending (the proportion of psychopathic individuals who reoffend divided by the proportion of non-psychopathic offenders who reoffend) ranged from 1.7 to as high as 6.5 across studies. Taken together, at a 1-year follow-up, the general recidivism rate for individuals with psychopathy was three times higher than that of non-psychopathic individuals and the violent recidivism rate was three to five times higher. Psychopathy is associated with both general and violent recidivism at follow-up lengths of as little as a year, or as long as more than 10 years.

Conclusions

In this chapter, we have considered the nature of psychopathy. We have shown that the classification of psychopathy is not synonymous with the DSM diagnoses of conduct disorder and antisocial personality disorder. We will argue

throughout this book that these DSM diagnoses group together a variety of pathologies associated with an increased risk of reactive aggression or antisocial behavior. In contrast, the classification of psychopathy represents a specific pathology where there is not only antisocial behavior but, more importantly, a particular form of emotional dysfunction (see chapters 4 and 8). Crucially, this emotional dysfunction puts the individual at risk for developing heightened levels of goal-directed, instrumental aggression (see chapter 8). In contrast, other pathologies associated with violence put the individual at risk for displaying reactive, frustration/threat-based aggression (see chapter 7).

In short, psychopathy is an emotional disorder, which, if it develops into its full form, puts the individual at risk of repeated displays of extreme antisocial behavior. This antisocial behavior can involve reactive aggression but it is important to note that psychopathy is unique in that it is a disorder that is also associated with elevated levels of instrumental aggression. Psychopathy is a disorder in urgent need of understanding. Without understanding, we will remain unable to efficiently treat it.