

## Psychopathy and Aggression

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**P** psychopathy is a personality disorder characterized by a major affective deficit accompanied by a disregard for the rights of others and for societal rules in general (e.g., Hare, 1996). As defined by the well-validated Psychopathy Checklist—Revised (PCL-R; Hare, 1991), psychopaths are manipulative, callous, remorseless, impulsive, irresponsible individuals (e.g., Hare, 1996, 1998). In this chapter, we begin by outlining the contribution of psychopathy to the prediction of whether and the degree to which a person will engage in aggressive behavior. Our attention then turns to a much newer focus of research—the characteristics of violent actions by psychopaths. We review studies investigating the nature of their violence, examine the possible link between psychopathy and sadistic behavior, and consider how this work informs our understanding of their criminal motivations.

### THE LINK BETWEEN PSYCHOPATHY AND AGGRESSION

Research has established a strong link between psychopathic traits and aggressive behavior in each of adult offenders, antisocial children and adolescents, and civil psychiatric patients.

### Adult Offenders

A large number of studies have shown that the presence of psychopathic traits is associated with a propensity for violent behavior. In one of the earliest investigations of the relationship between psychopathy and violence, Hare and Jutai (1983) found that adult psychopathic offenders had been charged with violent crimes about twice as often as nonpsychopaths. Virtually all the psychopaths in their sample had perpetrated at least one violent crime compared to about half of the nonpsychopaths. Within a large sample of federal offenders (average age of 43.5 years), Porter, Birt, and Boer (2001) found that psychopaths had been convicted of an average of 7.32 violent crimes compared to 4.52 violent crimes by nonpsychopathic offenders. This pattern of a relatively high level of violence by psychopaths is witnessed throughout their criminal careers (e.g., Harpur & Hare, 1994; Porter, Birt, & Boer, 2001). Thus, it is clear that psychopaths are a highly aggressive group simply from examining the sheer number of violent crimes they have perpetrated.

Knowledge of the psychopathy/aggression link greatly aids in the prediction of future violent behavior in adult offenders (e.g., Harris, Rice, & Quinsey, 1993; Hemphill,

Hare, & Wong, 1998; Rice & Harris, 1997; Salekin, Rogers, & Sewell, 1996). For example, Serin and Amos (1995) found that psychopaths were about five times more likely than nonpsychopaths to engage in violent recidivism within 5 years of their release from prison. Recent meta-analyses indicate that psychopathy as measured by the PCL-R (Hare, 1991) shows an overall effect size of  $r = .27-.37$  in predicting violence (e.g., Hemphill, Templeman, Wong, & Hare, 1998; Salekin et al., 1996).

### Children and Adolescents with Conduct Problems

Although most research on psychopathy has focused on adults, growing evidence suggests that psychopathy is related to aggression much earlier in life. It appears that precursors to psychopathy emerge in early childhood in the form of "callous-unemotional" traits (e.g., Frick, Bodin, & Barry, 2000; Frick & Ellis, 1999; Lynam, 2002; Porter, 1996), which map closely onto adult psychopathic traits (especially Factor 1 features on the PCL-R). Such characteristics are associated with a pattern of serious aggressive behavior, and can signal a pattern of persistent antisocial and violent behavior (e.g., Dodge, 1991; Frick, 1998; Frick, O'Brien, Wooton, & McBurnett, 1994; Lynam, 2002; Waschbusch et al., 2004). During adolescence, psychopathic traits are associated with convictions for violent offenses (e.g., Campbell, Porter, & Santor, 2004; Forth, Hart, & Hare, 1990; Forth & Mailloux, 2000; Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001), a high level of institutional aggression (Edens, Poythress, & Lilienfeld, 1999; Murdock, Hicks, Rogers, & Cashel, 2000; Rogers, Johansen, Chang, & Salekin, 1997), and increased violent recidivism (Brandt, Kennedy, Patrick, & Curtain, 1997; Gretton et al., 2001).

### Psychiatric Patients

While the base rate of psychopathy in civil psychiatric patients is low relative to the rate in federal offenders (e.g., Douglas, Ogloff, Nicholls, & Grant, 1999), the association between psychopathy and aggression extends to this population. For exam-

ple, in a study of 1,136 psychiatric patients from the MacArthur Violence Risk Assessment project, Skeem and Mulvey (2001) found that psychopathy scores predicted future serious violence, despite a psychopathy base rate of only 8%. During a 1-year follow-up period, 50% of psychopaths and 22% of nonpsychopaths committed violence. Furthermore, there was a 73% chance that a patient who became violent had scored higher on psychopathy than a patient who did not become violent (see also Douglas et al., 1999).

Overall, psychopathic features are associated with a high level of aggression in childhood, adolescence, and adulthood. Furthermore, psychopathy is a strong predictor of violent recidivism in both criminal offenders and civil psychiatric patients.

### FLAWED PREDATORS: PSYCHOPATHIC AGGRESSION IN THE CLINICAL TRADITION

It has been long recognized that psychopaths expend much time and energy in exploiting others. With little empathy or remorse, they have few inhibitions against using other people for material gain, drugs, sex, or power. Accordingly, psychopaths are adept con artists, often with a long history of frauds and scams. Some may even become cult leaders, corrupt politicians, or successful corporate leaders. This proficiency as "intra-species predators" (Hare, 1993) is likely to derive from their superficially engaging personality and skilled use of deception through verbal and nonverbal communication. That is, their high level of psychological dangerousness to others is masked by well-planned, ill-intended social artistry. Thus, many nonviolent but pernicious actions of the psychopath involve forethought and are instrumental and skillfully orchestrated. In fact, most antisocial behavior by "white collar" psychopaths may be characterized in this way (e.g., Babiak, 2000).

Clinical and empirical observations suggest that some physically aggressive actions by psychopaths share these characteristics of premeditation and instrumentality. For example, psychopaths often perpetrate well-planned armed robberies or hostage

takings (e.g., Hervé, Mitchell, Cooper, Spidel, & Hare, 2004). Even in adolescence, psychopathic individuals often plan aggressive acts from which they anticipate positive rewards (Pardini, Lochman, & Frick, 2003). However, most psychopaths have difficulty controlling themselves at times. Their actions may be highly spontaneous and foolhardy, facilitating their own arrest and incarceration. In other words, psychopaths sometimes show a violent temper that seems to be at odds with the obvious circumspection required for much of their crime. In this light, psychopaths are "flawed predators," frequently preying on others but unable to reliably control their behavior. One of us (first author) conducted a risk assessment on a psychopath named "Glen," who, according to his family members was a "likeable" child but had "lied to everyone" and was "like Jekyll and Hyde," quickly changing from being friendly to aggressive (see Porter & Porter, in press). Throughout adolescence and into adulthood, he had committed various types of violence, some highly premeditated and others unplanned and impulsive. In this respect, psychopaths might appear to others to have two "personalities." For example, Josef Stalin (who likely was a psychopath) was seen by many as having an engaging and charismatic personality. He maintained great power while continuing to dominate, intimidate, and deceive other people on a massive scale. Therefore, although psychopaths are dangerous individuals, their potential for uninhibited aggression and violence is disguised by charm (albeit, typically superficial), gregariousness, and an outward appearance of normalcy. Ishikawa, Raine, Lencz, Bihrl, and LaCasse (2001) have referred to those psychopathic individuals who manage to retain their veil of normalcy and function successfully (but unethically) in society, as "successful psychopaths" (see also Benning, Patrick, Hicks, Blonigen, & Krueger, 2003).

Research has begun to address more closely the consequences of these apparent paradoxical attributes of careful premeditation and poor behavioral controls for the violent conduct of psychopaths. Accumulating data are painting an interesting picture of how psychopaths perpetrate aggression and

may provide a glimpse into the attitude of psychopaths themselves toward such behavior.

### REACTIVE AND INSTRUMENTAL ASPECTS OF AGGRESSION BY PSYCHOPATHS

A key consideration in understanding violent behavior is whether the motivation of the perpetrator is "defensive" or "offensive." That is, was the perpetrator reacting aggressively to a desperate, emotional situation or, instead, was the aggressive action more volitional and instrumental? One longstanding view holds that aggression is founded in frustration and provocation. Berkowitz (1983) argued that aggression is best conceptualized as a hostile reaction to a perceived threat or dangerous situation. A second major view posits that aggression or violence involves goal-driven behavior with specific intended consequences (e.g., Bandura, 1983). As such, to understand the violent act, it is necessary to consider the external goals of the perpetrator. There appears to be merit in both of these perspectives (e.g., Stanford, Houston, Mathias, Villemarette-Pitman, & Greve, 2003). A consideration of both reactive and instrumental elements of aggression is essential toward understanding the motivations behind violent actions (e.g., Brown, Atkins, Osborne, & Milnamow, 1996; Dodge, 1991) and individual differences in the aggressors (e.g., Stanford, Houston, Villemarette-Pitman, & Greve, 2003). For example, instrumental aggression by children is associated with atypical affective functioning and foreshadows a pattern of long-term antisocial behavior (e.g., Pulkkinen, 1996; Vitaro, Gendreau, Tremblay, & Oligny, 1998). However, sometimes a violent act may contain elements of both reactivity and instrumentality (e.g., Bushman & Anderson, 2001). For example, Barratt, Stanford, Dowdy, Liebman, and Kent (1999) found that only 20–25% of the aggressive acts coded in their sample could be classified as either strictly premeditated or impulsive. Therefore, researchers of aggressive behavior must refine their operational definitions beyond simply "instrumental" or "reactive" in order to capture the complexities of motivations for violence.

### Qualities of Psychopathic Violence in General

Given the concurrent attributes of callous premeditation and poor behavioral controls associated with the actions of psychopaths in general, predicting whether their violence will be primarily reactive or instrumental is not straightforward. However, according to Cleckley's (1976) anecdotal evidence, violence by psychopaths is more instrumental than violence by other offenders, who typically commit reactive violence because of rage or despair. In the first empirical test of this observation, Williamson, Hare, and Wong (1987) examined characteristics of violent offenses that had been committed by 101 Canadian offenders. They found that psychopaths were more likely (45.2% of the time) to have been motivated by an external goal such as material gain than were nonpsychopaths (14.6% of the time). In addition, psychopaths were less likely (2.4% of the time) to have experienced emotional arousal during their crimes than were nonpsychopaths (31.7% of the time). In the next study to examine the relationship between psychopathy and instrumental violence, Cornell and colleagues (1996) investigated the previous violent crimes of 106 male offenders incarcerated in a state prison. Adopting a different approach from Williamson and colleagues, they focused on whether offenders had committed one or more acts of instrumental violence during their criminal history. They found that psychopaths were more likely to have perpetrated an instrumental violent crime than were nonpsychopaths, who usually had committed reactive violence, as Cleckley had predicted. Furthermore, as with the finding by Williamson and colleagues, instrumental violence was associated with a self-reported lack of emotional arousal during the violent act. Chase, O'Leary, and Heyman (2001) found a relationship between psychopathy and the use of instrumental violence by male spousal assaulters. Within a sample of 60 abusive males, no men who were classified as being "reactively aggressive" were psychopathic, compared to 17% of those who were "instrumentally aggressive." Dempster and colleagues (1996) reviewed the files of 75 adult male violent offenders participating in an inpatient treatment program. Although psy-

chopaths were found to have committed more instrumental violence, they also had displayed impulsive behavior in the context of their crimes. Hart and Dempster (1997) concluded that while psychopaths may be more likely to commit instrumental crimes, their behavior is best described as "impulsively instrumental."

From these studies, it became clear that violence by psychopaths was far more likely than violence by others to have an instrumental component. Nonetheless, for many of their documented acts of violence, there was no evidence of an external goal. For example, in the Williamson and colleagues (1987) study, the majority of violent acts by psychopaths in the sample were not instrumental. This supports the idea that poor behavioral controls or impulsivity in psychopaths contributes to their violence (also see Dempster et al., 1996). Overall, these data established that psychopaths engage in both major forms of aggression, whereas violent nonpsychopaths are unlikely to engage in instrumental violence.

### Characteristics of Homicides by Psychopaths

Homicide is a heterogeneous crime, in terms of the characteristics of both the perpetrator and context. In particular, some homicides are highly planned, instrumental acts whereas others involve a lack of premeditation. The latter may occur in the context of an emotional dispute or in response to a situational provocation (a "crime of passion"). The most recent study to address the link between psychopathy and instrumental violence focused for the first time on the act of homicide. Woodworth and Porter (2002) reasoned that if the pattern for general violence held true, psychopathic murderers would perpetrate both types of homicides but would show a greater propensity toward reactive homicides. Nonpsychopaths, on the other hand, were expected to rarely perpetrate instrumental homicides. Porter, Birt, and Boer (2001) had previously reported that psychopaths who had killed showed higher scores on Factor 1 of the PCL-R than did other psychopathic offenders. This suggested that psychopathic murderers might be particularly ruthless individuals who would not be disinclined to commit

instrumental violence. The opposite was true for nonpsychopaths; those who had committed murder showed higher Factor 2 scores than did their counterparts (Porter, Birt, & Boer, 2001), in line with individuals whose behavior could be more explosive or reactive.

The Woodworth and Porter (2002) study focused on 125 male homicide offenders incarcerated in one of two Canadian federal prisons. A "reactive" homicide was conceptualized as being unplanned and immediately preceded by a provocative situation. With this type of offense, the offender perceived that he was in a threatening, emotionally provoking, and perhaps inescapable situation before lashing out violently. On the other hand, it was possible for a homicide to be premeditated and not preceded by powerful affect. If the homicide had these characteristics and the perpetrator had an external incentive (such as material gain, drugs or sex) for committing the violent act, it was classified as "instrumental." To refine how the homicides were described, a Likert-type, 4-point scale (ranging from purely instrumental to purely reactive) was used. Offenses containing elements of both were classified as either instrumental with a reactive component or reactive with an instrumental component. The degree of instrumentality/reactivity of each homicide was rated by coders who were unaware of the offender's psychopathy rating. Results indicated that psychopaths were about twice as likely as nonpsychopathic offenders to have engaged in primarily instrumental homicides. In fact, nearly all (93.3%) of the homicides perpetrated by psychopaths were primarily instrumental, compared to 48.4% of the homicides by nonpsychopathic offenders.

Perhaps most surprising was the finding that psychopaths were unlikely to have perpetrated a reactive homicide, despite earlier findings that they often engage in reactive violence generally (Cornell et al., 1996; Williamson et al., 1987). These data called into question the assumption that the behavior of psychopaths is truly impulsive. Woodworth and Porter (2002) proposed a "selective impulsivity" explanation in which psychopaths' impulsive aggression in other contexts may not be as uncontrollable as it appears. Rather, it may reflect a choice not to inhibit such behavior when the perceived stakes are

lower (see also Arnett, Smith, & Newman, 1997; Newman & Wallace, 1993). When they recognize that the consequences of such a response may be severe (e.g., life imprisonment), they are able to inhibit their behavior and/or delay their revenge (perhaps resulting in an instrumental homicide). Instead of using aggression impulsively, they are more likely to plan and execute an instrumental murder, perhaps with a belief that an arrest for this type of crime is less likely.

Another finding in the Woodworth and Porter (2002) study was that Factor 1 scores, but not Factor 2 scores, contributed to the instrumentality of the homicide. Therefore, it would appear that while Factor 2 behavioral features may have a more direct and obvious relationship with criminal offending and recidivism (e.g., Walters, 2003), the Factor 1 core emotional and interpersonal traits of psychopathy may help to better explain the specific types of violence in which psychopaths choose to engage (also see Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003).

### SELF-GRATIFYING ASPECTS OF AGGRESSION BY PSYCHOPATHS

The foregoing discussion establishes that psychopaths often use aggression for instrumental gain. Their violence can simply be a ruthless means to an end. However, there is recent evidence that psychopaths may derive gratification or enjoyment from their violent behavior. Analyses of their sexual violence, in particular, suggest that both thrill seeking and sadistic interests may play an important role in psychopathic crime.

### Evidence for a Thrill-Seeking Motivation

It has been long recognized that psychopaths are thrill seekers and that this attribute may extend to crime (e.g., Hare, 1993), especially sexual violence. As with other forms of crime, psychopathy is associated with an increased risk for sexual aggression and recidivism (e.g., Kosson, Kelly, & White, 1997; Quinsey, Rice, & Harris, 1995). Recent work indicates that psychopathy is associated with particular types of sexual violence and particular types of target victims. This research suggests that psychopaths are both opportunists and thrill seekers in their sexual

offending. For example, in a study of 456 sexual offenders, Forth and Kroner (1995) found that psychopathic rapists were more opportunistic in their offending than their nonpsychopathic counterparts. In both adolescent and adult offenders, psychopathy is associated with higher levels of violence in the commission of sexual offenses (e.g., Gretton, McBride, Lewis, O'Shaughnessy, & Hare, 1994), consistent with a thrill-seeking motivation (e.g., Porter, Campbell, Woodworth, & Birt, 2001; see also Hare, 1993).

If thrill seeking motivates psychopaths to commit sexual offenses, one might expect them to select a wider range of victims than other offenders who often "specialize" (especially paraphilic offenders). To examine this hypothesis, Porter and colleagues (2000) reviewed both the criminal records and PCL-R scores of a large sample of incarcerated Canadian offenders. They found a remarkably high base rate of psychopathy (64%) among those offenders who had targeted both child and adult victims. The base rate of psychopathy in the mixed group was higher than the prevalence in both rapists (35.9%) and child molesters (fewer than 10%). An unpublished analysis from that dataset indicated that the presence of psychopathy was associated with higher recidivism and poorer conditional release performance for all groups (mixed offenders, rapists, and molesters). Rice and Harris (1997) also found that offenders with multiple victim types showed the fastest rate of violent recidivism. It is likely that, in the absence of empathy or remorse, psychopathic offenders can move to a different victim type when the opportunity presents itself or when they become "bored," as one offender in the Porter and colleagues (2000) study reported (p. 229).

Additional research is needed to more fully examine the degree to which thrill seeking acts as a motivator for psychopathic violence. In particular, little work has addressed thrill seeking as a factor contributing to nonsexual violence or the possible interaction of thrill seeking and instrumental aggression.

### Evidence for a Sadistic Motivation

The term "sadism" has been used to describe a range of cognitions and behaviors associated with the derivation of pleasure through

inflicting physical or emotional pain on another person. Some authors have argued for a link between psychopathy and sadism (e.g., Hart & Hare, 1997). According to Krafft-Ebing's (1898/1965) classic study *Psychopathia Sexualis*, sadistic violence requires both sexual and personality pathology ("lust and cruelty") in the perpetrator. In his view, many individuals who experienced sadistic impulses did not act on them for "moral" reasons. Others who lacked morality acted on such impulses and derived enjoyment from perpetrating their violent acts. This consideration of both sexual and nonsexual elements in understanding sadism continued in the psychiatric literature. Sadism has referred to both a pathological personality structure (sadistic personality disorder in earlier editions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM; American Psychiatric Association, 1994) and pathological sexual functioning (sexual sadism).

Research has addressed the possible link between psychopathy and each of these conditions (Hare, Cooke, & Hart, 1999; Holt, Meloy, & Strack, 1999; Meloy, 2000). Using the Millon Clinical Multiaxial Inventory (MCMI-II; Millon, Davis, & Millon, 1997) and the Personality Disorder Examination items for sadistic personality traits, Holt and colleagues (1999) found that such traits were more common in violent psychopaths than violent nonpsychopaths in a maximum-security prison. Violent and sexually violent offenders did not differ in their level of sadistic personality traits, leading the authors to argue that the traits were not tied specifically to sexual pleasure. On the other hand, some studies have found that higher PCL-R scores are associated with sexual arousal to deviant visual and auditory stimuli. There is a significant but modest correlation (.21-.28) between PCL-R scores and deviant sexual arousal (Barbaree, Seto, Serin, Amos, & Preston, 1994; Quinsey et al., 1995; Serin, Malcolm, Khanna, & Barbaree, 1994).

As with instrumental aggression, an examination of the crime of homicide specifically may shed light on the nature of sadistic violence by psychopaths. A sexual homicide is one that includes sexual activity before, during, or after the commission of the crime. Unlike murderers in general (see, e.g., Porter, Birt, & Boer, 2001), sexual murderers are

more likely than other violent offenders to be psychopathic. For example, Meloy (2000) found that about two-thirds of a sample of adult sexual homicide offenders scored in the moderate-high range on the PCL-R. A similar high base rate of psychopathic traits is seen in adolescent sexual homicide offenders (Myers & Blashfield, 1997).

Research examining offender behaviors exhibited in the context of sexual homicide would provide insight into this apparent link between psychopathy and sexual homicide. Porter, Woodworth, Earle, Drugge, and Boer (2003) examined the relationship between PCL-R scores and the types of aggression evidenced during the crime in a sample of 38 Canadian sexual murderers. The main source of information was the detailed file description of the crime known as the Criminal Profile Report, based on police, forensic/autopsy, and court information. Of major interest was the level of gratuitous and sadistic violence that had been perpetrated on the victim. Gratuitous violence was defined as excessive violence that went beyond the level that would be necessary to complete the homicide. Evidence for gratuitous violence included torture, beating, mutilation, and the use of multiple weapons from the crime scene. Evidence that the offender obtained enjoyment or pleasure from the violent acts was coded as sadistic violence (this was coded from self-report information or evidence from the crime scene). To avoid potential circularity in PCL-R scoring, a subsample of cases was coded by diagnosticians who had not read the descriptions of the violent crimes. Similarly, crime scene descriptions were coded by a coder who was unaware of the PCL-R score and other file information. One finding replicated the work mentioned previously: most offenders (84.7%) scored in the moderate to high range on the PCL-R (significantly higher than those of a group of nonsexual murderers). More important, homicides committed by psychopaths ( $n = 18$ ) showed a significantly higher level of both gratuitous and sadistic violence than homicides by nonpsychopathic offenders ( $n = 20$ ). Most psychopaths (82.4%) had committed sadistic acts on their victims, compared to 52.6% of the nonpsychopaths. In examining the offender files, it became clear that for many other offenders, the homicide was intended

to prevent the victim from reporting a sexual assault and did not serve the same "psychological" function that it seemed to for psychopaths.

Collectively, these findings suggest that psychopaths may be more likely than other offenders to derive pleasure from the suffering of others. The sadistic behavior perpetrated by psychopaths could relate to a thrill-seeking motive or sexual sadism, or both. However, we hypothesize that it reflects a generalized tendency toward callousness and thrill seeking (see Porter, Campbell, et al., 2001). Although there is a lack of research specifically in this area, the combination of these characteristics (and in particular, the thrill-seeking motivation) would suggest that there may be a link between psychopathy and serial homicide—particularly of the predatory sexual variety.

### SELF-DIRECTED AGGRESSION

Does the propensity of psychopaths to perpetrate violence against others extend to self-directed aggression such as suicidal behaviors? Given the superficial affect, self-promoting tendencies, and grandiosity associated with psychopathy, such behavior may seem highly unlikely. As noted by Cleckley (1976), perhaps psychopaths never or rarely become sufficiently distressed to commit suicide. However, he observed that psychopaths frequently make empty threats of self-harm and engage in many bogus attempts characterized by "remarkable cleverness, premeditation, and histrionics" (p. 221). According to this view, self-directed aggression by psychopaths may occur but it is highly instrumental and rarely lethal, unlike the self-directed aggression by others which is associated with "internalizing" problems (e.g., depression). Verona, Patrick, and Joiner (2001) conducted one of the only studies to examine the relationship between psychopathy and self-harm in adult offenders. Using structured interviews and prison file records, they coded for a history of suicide attempts in a sample of 313 inmates. They found that there was a small but significant correlation ( $r = .11$ ) between PCL-R scores and a history of suicidal behaviors. Suicidal behavior was mainly related to Factor 2 scores and to the presence of an antisocial personality disorder



diagnosis but was unrelated to Factor 1 scores. Gretton (1998) found that within a group of male adolescent offenders, more psychopathic individuals (37%) had a history of self-injurious behavior than did nonpsychopaths (21%). Unfortunately, these studies relied heavily on self-report and did not examine the severity of the suicidal behavior. More research is needed to clarify the psychopathy/self-aggression relationship by coding self-harm incidents in terms of severity and motivation. Although the Verona and colleagues (2001) research indicated that suicide is related mainly to PCL-R Factor 2 scores, we think that psychopaths also engage in a substantial amount of insincere self-harm actions that are intended solely to manipulate others (which would be more consistent with higher scores on Factor 1).

#### Violence from the Psychopath's Perspective

Asking a psychopath to provide his or her view on violence is unlikely to elicit an honest response. Psychopaths long have been characterized as having a remarkable disregard for the truth (e.g., Cleckley, 1976; Hare, 1998; Meloy, 1988; Porter, Birt, Yuille, & Hervé, 2001), to the extent that deceit often is regarded as a defining characteristic of the disorder. A small number of empirical studies have also demonstrated a link between psychopathy and deceptive behavior (e.g., Lykken, 1957; Rogers et al., 2002; Seto, Khattar, Lalumiere, & Quinsey, 1997). Because psychopaths are known to lie frequently, recent studies have examined the psychopath's perspective on violence through less direct/more subtle means. One line of research has employed verbal stimuli to examine whether psychopaths view violence in a negative light. A second approach indicates that psychopaths use deception and minimize their role when they describe their violence, even in the context of a confidential research interview.

According to one view, psychopaths are more likely to engage in instrumental acts of aggression because they do not interpret their victims' emotional distress cues or violence as aversive (Blair, 2001; see also Nestor, Kimble, Berman, & Haycock, 2002). In line with this hypothesis, a recent British

study suggests that psychopaths who have committed homicide do not view violence as unpleasant. Gray, Macculloch, Smith, Mossis, and Snowden (2003) measured implicit beliefs about murder in psychopathic and nonpsychopathic murderers, and psychopathic and nonpsychopathic offenders who had committed other offenses. Using a modified Implicit Association Test (IAT), the researchers presented participants with a word which they then had to associate with being either "unpleasant" or "pleasant" and either "peaceful" or "violent." In general, control participants take longer to respond to word stimuli with a right or left button press when words of contrasting valences require responses with the same button. For example, when the same response key is assigned for pleasant and violent words, participants usually find the task to be more difficult. Results indicated that psychopathic murderers did not display the same impairment in response time as nonpsychopaths when incongruent words (pleasant and violent words) called for equivalent responses. That is, they responded as if they did not associate violence and unpleasantness, and showed diminished negative reactions to violence compared with nonpsychopathic murderers.

A second line of work has recently examined the manner in which psychopaths describe their violent crimes. Porter and Woodworth (2005) interviewed 50 incarcerated offenders about their violent crimes. Naïve coders then rated either the offender's version or the official version of the crime in terms of the instrumentality or reactivity of the offense. When the self-reported and official descriptions of the violent offenses were compared, it was found that psychopaths were significantly more likely than nonpsychopaths to "reframe" the offenses in an exculpatory way. That is, although nonpsychopaths also had a tendency to describe their offense as reactive (regardless of the actual nature of the violence), psychopaths were significantly more likely to downplay the level of instrumentality of their violence, describing it as more reactive than the official version of the offense. Furthermore, psychopaths were significantly more likely than nonpsychopaths to omit major details of the homicide offense. The results of this study further replicated Woodworth and Porter's

(2002) finding that instrumental violence was related to the Factor 1 interpersonal and affective features of psychopathy, and not to the Factor 2 social deviance/behavioral features (see also Patrick & Zempolich, 1998). In addition, results revealed that the tendency to exaggerate the reactivity of the homicides was strongly related to the Factor 1 scores but not the Factor 2 scores. Thus, it appears that the interpersonal and affective characteristics of psychopathy account for not only the type of violence used by offenders but also the manner in which they discuss it (for a further examination of how different the difference factors/facets of psychopathy may help to inform our understanding of the disorder, refer to Cooke, Michie, & Hart, Chapter 5, this volume).

Taken together, the evidence suggests that psychopaths may view aggression as a useful tool with which to satisfy a selfish need. They view violence "cognitively" as a means to an end, attach little emotion to such behavior, and see it as little different from other instrumental actions. With little remorse even years after the crime, psychopaths describe their violent actions as being more reactive and less planned than indicated by the official file.

#### Subtypes of Psychopathy

Clearly, there is much variation in the types and amount of aggression committed by different psychopaths. In observing the wide behavioral differences between individual psychopaths, some theorists have suggested the possibility of subtypes of the disorder. Cleckley (1976) himself questioned the validity of psychopathic subtypes, claiming that they potentially could serve to confuse the defining characteristics of psychopathy. However, more recently, some research may support the notion that there are separate subtypes that can be distinguished (and possibly lead to a more refined understanding of the disorder). For example, Millon and Davis (1998) concluded that there are 10 different subtypes of psychopathy. At the core of each of subtype was a marked self-centeredness and a disregard for the rights of others; however, Millon and Davis postulated that there were also unique characteristics that made each of these subtypes different and recognizable. Others have suggested that

psychopathy can be broken down into two main subtypes: primary and secondary psychopathy (e.g., Blackburn, 1998). Primary psychopathy is comprised of constitutional deficits that are not attributable to psychosocial learning; such individuals display the defining personality characteristics of psychopathy (such as grandiosity, lack of guilt or remorse, and callousness) from an early age. These individuals display low levels of anxiety and lack prosocial emotions (such as guilt and love) that would otherwise prevent them from engaging in extremely callous actions. On the other hand, secondary psychopaths do experience social emotions, and their hostile behavior is believed to be more a product of their negative life experiences and environment. Therefore, this behavior can be thought of as an adaptation to harsh environmental contingencies (such as bad parenting) and/or could be best explained in terms of some other pathology or syndrome (such as hysteria). Although research is needed, it is likely that primary psychopathy would be more directly related to the type of instrumental violence observed in studies of homicidal aggression described previously.

Other researchers have also distinguished different subtypes of psychopathy based on separate etiological pathways. For example, Porter (1996) proposed that there were two main types of psychopathy with distinct causal factors. He suggested that primary psychopaths were born with a predisposition to the core interpersonal and affective features of psychopathy and that normal emotional development was not possible. However, Porter argued that secondary psychopaths acquired the affective deficits associated with psychopathy after experiencing long-term neglect or abuse (or other early traumatic experience) in early childhood. Furthermore, he suggested that this emotional detachment was spurred by dissociation and a more gradual blunting (or shutting down) of emotions. Although conducting the appropriate empirical test of this theory is difficult, recent innovative research has shown some support for this theory of secondary psychopathy (see Poythress & Skeem, Chapter 9, this volume).

In summary, any thorough consideration of the causes and types of psychopathic aggression should include a consideration of

psychopathic subtypes as well as the etiological pathways. This is an area that will likely be the focus of much investigation in coming years.

### Cognitive Ability as a Potential Moderator of the Psychopathy–Violence Association

Why is most of the ruthless conduct of some psychopaths nonviolent while others show a persistent pattern of violence? Perhaps some psychopaths view aggressive or violent behavior as being more necessary to achieve their goals than do other psychopaths. As noted earlier, some psychopaths, especially white-collar or corporate psychopaths, seem to rarely use physical aggression.

A potential moderator of the relationship between psychopathy and violence is intelligence. That is, more intelligent psychopaths may be less inclined to use aggression because they can use their cognitive resources to devise nonviolent means (such as conning and manipulation) to get what they want. Less intelligent psychopaths may resort to violence to compensate for their inferior abilities to manipulate others through language. Heilbrun (1982) found that past violent offending in a sample of 168 male inmates was influenced by the interaction of intellectual level and psychopathy. Less intelligent psychopaths were more likely to have a history of impulsive violence than more intelligent psychopaths (and than less intelligent nonpsychopaths). Heilbrun (1985) reported that the most dangerous offenders in a sample of 225 offenders were those with the following characteristics: psychopathic, low IQ, social withdrawal, and history of violence.

While these early studies offered some evidence for intelligence as a moderator of psychopathy and violence, little research has addressed the issue in recent years, largely due to methodological obstacles. Specifically, the most intelligent psychopaths in society may succeed in corporate or political circles and/or use violence less frequently and thus may be less likely to wind up in prison. As such, they would be less likely to be studied by psychological researchers, whereas less intelligent psychopaths are available in disproportionate numbers for research.

Another potential issue in this area is that psychopaths with higher cognitive function-

ing may be as likely to commit violence as other psychopaths but be much less likely to be apprehended for such acts. Ishikawa and colleagues (2001) tested a community sample of 16 “unsuccessful” and 13 “successful” psychopaths (classified based on their PCL-R scores and whether they had received criminal convictions) on measures of autonomic stress reactivity and executive functioning (referring to the capacity for initiation, planning, abstraction, decision making). The two groups had engaged in a substantial and similar amount of self-reported criminal behavior, including violence. The results indicated that the successful psychopaths exhibited greater autonomic reactivity to emotional stressors and stronger executive functioning than unsuccessful psychopaths. This suggested that psychopaths who are less likely to be caught and convicted for their violent acts have the capacity for better planning and decision making than their unsuccessful counterparts. While Ishikawa and colleagues did not address the type of violent acts perpetrated by successful and unsuccessful psychopaths, we hypothesize that successful psychopaths may have been more likely to use premeditated, instrumental violence than their counterparts.

### CONCLUSION

There is a clear relation between psychopathy and aggressive behavior. In fact, psychopaths probably commit more nonsanctioned violence than any other members of society. Therefore, a critical agenda for researchers in forensic psychology should be to gain a better understanding of their violence. We have highlighted the need to examine more closely the quality (in addition to quantity) of their aggressive and violent behaviors. Our conclusion is that violence by psychopaths is multifaceted and very different from that of other offenders. For example, sexual violence by psychopaths in general seems to be motivated by sadistic interests and thrill seeking. Research has demonstrated that psychopaths are much more likely than other murderers to commit gratuitous and sadistic violence on their victims during a sexual homicide. Although some violence by psychopaths is reactive, this type of behavior is typically avoided when the stakes are the

highest. Nearly all homicides by psychopaths tend to be highly premeditated and cold-blooded. We argued that impulsive behavior in psychopaths may have less to do with a lack of control than with a rapid, conscious consideration of the gravity of the consequences. Future research may also reveal that distinct manifestations of psychopathic violence are related to unique subtypes or facets of the disorder.

Perhaps the overriding problem is that psychopathic individuals have a wholly selfish orientation and a profound emotional deficit, as evidenced from studies of language, psychophysiology, neurology, and behavior. This translates into a pattern of ruthless aggressive and criminal actions. A major challenge for researchers in future work is to decipher the etiological factors contributing to the development of psychopathy and individual differences in psychopathic aggression.

### REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorder* (4th ed.). Washington, DC: Author.
- Arnett, P. A., Smith, S. S., & Newman, J. P. (1997). Approach and avoidance motivation in psychopathic criminal offenders during passive avoidance. *Journal of Personality and Social Psychology*, 72, 1413–1428.
- Babiak, P. (2000). Psychopathic manipulation at work. In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: A practitioner's guide* (pp. 287–311). Mahwah, NJ: Erlbaum.
- Bandura, A. (1983). Psychological mechanisms of aggression. In R. G. Green, & E. I. Donnerstein (Eds.), *Aggression: Theoretical and empirical views* (Vol. 1, pp. 1–40). New York: Academic Press.
- Barbaree, H., Seto, M., Serin, R., Amos, N., & Preston, D. (1994). Comparisons between sexual and non-sexual rapist sub-types. *Criminal Justice and Behavior*, 21, 95–114.
- Barratt, E. S., Stanford, M. S., Dowdy, L., Liebman, M. J., & Kent, T. A. (1999). Impulsive and premeditated aggression: A factor analysis of self-reported acts. *Psychiatry Research*, 86, 163–173.
- Benning, S. D., Patrick, C. J., Hicks, B. M., Blonigen, D. M., & Krueger, R. F. (2003). Factor structure of the psychopathic personality inventory: Validity and implications for clinical assessment. *Psychological Assessment*, 15, 340–350.
- Berkowitz, L. (1983). The experience of anger as a parallel process in the display of impulsive, “angry” aggression. In R. G. Green & E. I. Donnerstein (Eds.), *Aggression: Theoretical and empirical views* (pp. 103–134). New York: Academic Press.
- Blackburn, R. (1998). Psychopathy and personality disorder: Implications of interpersonal theory. In D. J. Cooke, A. E. Forth, & R. D. Hare (Eds.) *Psychopathy: Theory, research, and implications for society* (pp. 269–301). Dordrecht, The Netherlands: Kluwer.
- Blair, R. J. R. (2001). Neurocognitive models of aggression, the antisocial personality disorders, and psychopathy. *Journal of Neurology, Neurosurgery, and Psychiatry*, 71, 727–731.
- Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment*, 9, 429–435.
- Brown, K., Atkins, M. S., Osborne, M. L., & Milnamow, M. (1996). A revised teacher rating scale for reactive and proactive aggression. *Journal of Abnormal Child Psychology*, 24, 473–480.
- Bushman, B. J., & Anderson, C. A. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological Review*, 108, 273–279.
- Campbell, M. A., Porter, S., & Santor, D. (2004). Psychopathic traits in adolescent offenders: An evaluation of criminal history, clinical, and psychosocial correlates. *Behavioral Sciences and the Law*, 22, 23–47.
- Chase, K. A., O’Leary, K. D., & Heyman, R. E. (2001). Categorizing partner-violent men within the reactive-proactive typology model. *Journal of Consulting and Clinical Psychology*, 69, 567–572.
- Cleckley, H. (1976). *The mask of sanity* (5th ed.). St. Louis, MO: Mosby.
- Cornell, D. G., Warren, J., Hawk, G., Stafford, E., Oram, G., & Pine, D. (1996). Psychopathy in instrumental and reactive violent offenders. *Journal of Consulting and Clinical Psychology*, 64, 783–790.
- Dempster, R. J., Lyon, D. R., Sullivan, L. E., Hart, S. D., Smiley, W. C., & Mulloy, R. (1996, August). *Psychopathy and instrumental aggression in violent offenders*. Paper presented at the annual meeting of the American Psychological Association, Toronto.
- Dodge, K. A. (1991). The structure and function of reactive and proactive aggression. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 1–18). Hillsdale, NJ: Erlbaum.
- Douglas, K., Ogloff, J., Nicholls, T., & Grant, I. (1999). Assessing risk for violence among psychiatric patients: The HCR-20, Violence Risk Assessment Scheme, and the Psychopathy Checklist: Screening Version. *Journal of Consulting and Clinical Psychology*, 67, 917–930.
- Edens, J. F., Poythress, N. G., & Lilienfeld, S. O. (1999). Identifying inmates at risk for disciplinary infractions: A comparison of two measures of psychopathy. *Behavioral Sciences and the Law*, 17, 435–443.
- Forth, A. E., Hart, S. D., & Hare, R. D. (1990). Assess-

- ment of psychopathy in male young offenders. *Psychological Assessment*, 2, 342-344.
- Forth, A. E., & Kroner, D. (1995). *The factor structure of the Revised Psychopathy Checklist with incarcerated rapists and incest offenders*. Unpublished manuscript.
- Forth, A. E., & Mailloux, D. L. (2000). Psychopathy in youth: What do we know? In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: A practitioner's guide* (pp. 25-54). Mahwah, NJ: Erlbaum.
- Frick, P. J. (1998). *Conduct disorders and severe antisocial behavior*. New York: Plenum Press.
- Frick, P. J., Bodin, S. D., & Barry, C. T. (2000). Psychopathic traits and conduct problems in community and clinic-referred samples of children: Further development of the Psychopathy Screening Device. *Psychological Assessment*, 12, 382-393.
- Frick, P. J., & Ellis, M. (1999). Callous-unemotional traits and subtypes of conduct disorder. *Clinical Child and Family Psychology Review*, 2, 149-168.
- Frick, P. J., O'Brien, B. S., Wootton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology*, 103, 700-707.
- Gray, N. S., Macculloch, M. J., Smith, J., Mossis, M., & Snowden, R. J. (2003). Forensic psychology: Violence viewed by psychopathic murderers. *Nature*, 423, 497-98.
- Gretton, H. M. (1998). *Psychopathy and recidivism in adolescence: A ten-year retrospective follow-up*. Unpublished doctoral dissertation. University of British Columbia, Vancouver.
- Gretton, H. M., McBride, H. L., Hare, R. D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior*, 28, 427-449.
- Gretton, H., McBride, M., Lewis, K., O'Shaughnessy, R., & Hare, R. D. (1994, March). *Patterns of violence and victimization in adolescent sexual psychopaths*. Paper presented at the biennial meeting of the American Psychology and Law Society, Santa Fe, NM.
- Hare, R. D. (1991). *The Hare Psychopathy Checklist—Revised*. Toronto, ON, Canada: Multi-Health Systems.
- Hare, R. D. (1993). *Without conscience: The disturbing world of the psychopaths among us*. New York: Simon & Schuster.
- Hare, R. D. (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*, 23, 25-54.
- Hare, R. D. (1998). Psychopathy and its nature: Implications for mental health and criminal justice systems. In T. Millon, E. Simonsen, M. Birkert-Smith, & R. D. Davis (Eds.), *Psychopathy: Antisocial criminal and violent behavior* (pp. 188-212). New York: Guilford Press.
- Hare, R. D., Cooke, D. J., & Hart, S. D. (1999). Psychopathy and sadistic personality disorder. In T. Millon, P. H. Blanney, & R. D. Davies (Eds.), *Oxford textbook of psychopathology* (pp. 555-584). New York: Oxford University Press.
- Hare, R. D., & Jutai, J. (1983). Criminal history of the male psychopath: Some preliminary data. In K. T. Van Dusen & S. A. Mednick (Eds.), *Prospective studies of crime and delinquency* (pp. 225-236). Boston: Kluwer-Nijhoff.
- Harpur, T. J., & Hare, R. D. (1994). Assessment of psychopathy as a function of age. *Journal of Abnormal Psychology*, 103, 604-609.
- Harris, G., Rice, M., & Quinsey, V. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, 20, 315-335.
- Hart, S., & Dempster, R. (1997). Impulsivity and psychopathy. In C. Webster & M. Jackson (Eds.), *Impulsivity: Theory, assessment and treatment* (pp. 212-232). New York: Guilford Press.
- Hart, S. D., & Hare, R. D. (1997). Psychopathy: Assessment and association with criminal behavior. In D. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of antisocial behavior* (pp. 22-35). New York: Wiley.
- Heilbrun, K. (1982). Cognitive models of criminal violence based on intelligence and psychopathy levels. *Journal of Consulting and Clinical Psychology*, 50, 546-557.
- Heilbrun, M. (1985). Psychopathy and dangerousness: Comparison, integration, and extension of two psychopathic typologies. *British Journal of Clinical Psychology*, 24, 181-195.
- Hemphill, J. F., Hare, R. D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology*, 3, 139-170.
- Hemphill, J., Templeman, R., Wong, S., & Hare, R. D. (1998). Psychopathy and crime: Recidivism and criminal careers. In D. Cooke, A. Forth, & R. D. Hare (Eds.), *Psychopathy: Theory, research, and implications for society* (pp. 374-399). Dordrecht, The Netherlands: Kluwer.
- Hervé, H. M., Mitchell, D., Cooper, B. S., Spidel, A., & Hare, R. D. (2004). Psychopathy and unlawful confinement: An examination of perpetrator and event characteristics. *Canadian Journal of Behavioural Science*, 36, 137-145.
- Holt, S. E., Meloy, J. R., & Strack, S. (1999). Sadism and psychopathy in violent and sexually violent offenders. *Journal of the American Academy of Psychiatry and Law*, 27, 23-32.
- Ishikawa, S. S., Raine, A., Lencz, T., Bihrl, S., & LaCasse, L. (2001). Autonomic stress reactivity and executive functions in successful and unsuccessful criminal psychopaths from the community. *Journal of Abnormal Psychology*, 110, 423-432.
- Kosson, D. S., Kelly, J. C., & White, J. W. (1997). Psychopathy-related traits predict self-reported sexual aggression among college men. *Journal of Interpersonal Violence*, 12, 241-254.
- Krafft-Ebing, R. V. (1965). *Psychopathia sexualis* (H. Wedeck, Trans.). New York: Putnam. (Original work published 1898)
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *Journal of Abnormal and Social Psychology*, 55, 6-10.
- Lynam, D. R. (2002). Fledgling psychopathy: A view from personality theory. *Law and Human Behavior*, 26, 255-259.
- Meloy, J. R. (1988). *The psychopathic mind: Origins, dynamics, and treatments*. Northvale, NJ: Jason Aronson.
- Meloy, J. R. (2000). The nature and dynamics of sexual homicide: An integrative review. *Aggression and Violent Behavior*, 5, 1-22.
- Millon, T., & Davis, R. D. (1998). Ten subtypes of psychopathy. In T. Millon, E. Simonsen, M. Burket-Smith, & R. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior* (pp. 161-170). New York: Guilford Press.
- Millon, T., Davis, R. D., & Millon, C. (1997). *MCMI-III manual* (2nd ed.). Minneapolis, MN: National Computer Systems.
- Murdock Hicks, M., Rogers, R., & Cashel, M. L. (2000). Predictions of violent and total infractions among institutionalized male juvenile offenders. *Journal of the American Academy of Psychiatry and the Law*, 28, 183-190.
- Myers, W. C., & Blashfield, R. (1997). Psychopathology and personality in juvenile sexual homicide offenders. *Journal of the American Academy of Psychology and Law*, 25, 497-508.
- Nestor, G., Kimble, M., Berman, I., & Haycock, J. (2002). Psychosis, psychopathy, and homicide: A preliminary neuropsychological inquiry. *American Journal of Psychiatry*, 159, 138-140.
- Newman, J. P., & Wallace, J. F. (1993). Psychopathy. In P. C. Kendall & K. L. Ronnins (Eds.), *Psychopathology and cognition* (pp. 293-349). New York: Academic Press.
- Pardini, D. A., Lochman, J. E., & Frick, P. J. (2003). Callous/unemotional traits and social-cognitive processes in adjudicated youths. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42, 364-371.
- Patrick, C. J., & Zempolich, K. A. (1998). Emotion and aggression in the psychopathic personality. *Aggression and Violent Behavior*, 3, 303-338.
- Porter, S. (1996). Without conscience or without active conscience? The etiology of psychopathy revisited. *Aggression and Violent Behavior*, 1, 179-189.
- Porter, S., Birt, A. R., & Boer, D. P. (2001). Investigation of the criminal and conditional release histories of Canadian federal offenders as a function of psychopathy and age. *Law and Human Behavior*, 25, 647-661.
- Porter, S., Birt, A. R., Yuille, J. C., & Hervé, H. (2001). Memory for murder: A psychological perspective on dissociative amnesia in forensic contexts. *International Journal of Law and Psychiatry*, 24, 23-42.
- Porter, S., Campbell, M. A., Woodworth, M., & Birt, A. R. (2001). A new psychological conceptualization of the sexual psychopath. In F. Columbus (Ed.), *Advances in psychology research* (Vol. 7, pp. 21-36). New York: Nova Science.
- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A. R., & Boer, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27, 216-233.
- Porter, S., & Porter, S. (in press). Psychopathy and violent crime. In H. Hervé & J. C. Yuille (Eds.), *Psychopathy in the third millennium: Research and practice*. New York: Academic Press.
- Porter, S., & Woodworth, M. (2005). *A comparison of self-reported and file descriptions of violent crimes as a function of psychopathy*. Manuscript under review.
- Porter, S., Woodworth, M., Earle, J., Drugge, J., & Boer, D. P. (2003). Characteristics of violent behavior exhibited during sexual homicides by psychopathic and non-psychopathic murderers. *Law and Human Behavior*, 27, 459-470.
- Pulkkinen, L. (1996). Proactive and reactive aggression in early adolescence as precursors to anti- and prosocial behaviors in young adults. *Aggressive Behavior*, 22, 241-257.
- Quinsey, V. L., Rice, M. E., & Harris, G. T. (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence*, 10, 85-105.
- Rice, M. E., & Harris, G. T. (1997). Cross-validation and extension of the Violence Risk Appraisal Guide for child molesters and rapists. *Law and Human Behavior*, 21, 231-241.
- Rogers, R., Johansen, J., Chang, J. J., & Salekin, R. (1997). Predictors of adolescent psychopathy: Oppositional and conduct-disorders symptoms. *Journal of the American Academy of Psychiatry and Law*, 25, 261-270.
- Rogers, R., Vitacco, M. J., Jackson, R. L., Martin, M., Collins, M., & Sewell, K. W. (2002). Faking psychopathy? An examination of response styles with antisocial youth. *Journal of Personality Assessment*, 78, 31-46.
- Salekin, R. T., Rogers, R., & Sewell, K. W. (1996). A review and meta-analysis of the Psychopathy Checklist—Revised: Predictive validity of dangerousness. *Clinical Psychology Science and Practice*, 3, 203-215.
- Serin, R. C., & Amos, N. L. (1995). The role of psychopathy in the assessment of dangerousness. *International Journal of Law and Psychiatry*, 18, 231-238.
- Serin, R. C., Malcolm, P. B., Khanna, A., & Barbaree, H. E. (1994). Psychopathy and deviant sexual arousal in incarcerated sexual offenders. *Journal of Interpersonal Violence*, 9, 3-11.
- Sero, M. C., Khattar, N. A., Lalumiere, M. L., & Quinsey, V. L. (1997). Deception and sexual strategy in psychopathy. *Personality and Individual Differences*, 22, 301-307.
- Skeem, J. L., & Mulvey, E. P. (2001). Psychopathy and community violence among civil psychiatric patients: Results from the MacArthur violence risk assessment

- study. *Journal of Consulting and Clinical Psychology*, 69, 358-374.
- Skeem, J. L., Poythress, N., Edens, J. F., Lilienfeld, S. O., & Cale, E. M. (2003). Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior*, 8, 513-546.
- Stanford, M. S., Houston, R. J., Mathias, C. W., Villemarette-Pittman, N. R., Helfritz, L. E., & Conklin, S. M. (2003). Characterizing aggressive behavior. *Assessment*, 10, 183-190.
- Stanford, M. S., Houston, R. J., Villemarette-Pittman, N. R., & Greve, K. W. (2003). Premeditated aggression: clinical assessment and cognitive psychophysiology. *Personality and Individual Differences*, 34, 773-781.
- Verona E., Patrick C. J., & Joiner T. E. (2001). Psychopathy, antisocial personality, and suicide risk. *Journal of Abnormal Psychology*, 110, 462-470.
- Vitaro, F., Gendreau, P. L., Tremblay, R. F., & Oligny, P. (1998). Reactive and proactive aggression differentially predict later conduct problems. *Journal of Child Psychology and Psychiatry*, 39, 377-385.
- Walters, G. D. (2003). Predicting institutional adjustment and recidivism with the Psychopathy Checklist factor scores: A meta-analysis. *Law and Human Behavior*, 27, 541-558.
- Waschbusch, D., Porter, S., Carrey, N., Kazmi, O., Roach, K., & D'Amico, D. (2004). A comparison of conduct problems in elementary age children. *Canadian Journal of Behavioural Science*, 36, 97-112.
- Williamson, S. E., Hare, R. D., & Wong, S. (1987). Violence: Criminal psychopaths and their victims. *Canadian Journal of Behavioral Science*, 19, 454-462.
- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111, 436-445.