WHAT EVERY FORENSIC PSYCHOLOGIST SHOULD KNOW ABOUT PSYCHOPATHIC PERSONALITY

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Although psychopathic personality (psychopathy) is one of the most extensively researched conditions in all of psychopathology, its etiology, prognosis, and treatment remain controversial and poorly understood (Lykken, 1995; Millon, Simonsen, & Birket-Smith, 1998). Found most frequently in prison and forensic populations (Hare, 1991, 1996), this condition comprises a subset of criminals with unique personality features (Cunningham & Reidy, 1998; Hare, 1998). In addition, psychopathy is primarily a disorder of men (Lykken, 1995), although the reasons for this sex difference are largely or entirely unknown.

Over the past several decades, psychopathy researchers have produced a large body of research that bears important implications for forensic psychology. Nevertheless, many psychologists, including those who work in forensic settings, are largely unaware of this increasingly consistent and clinically relevant body of literature. In this chapter we summarize this literature and outline a number of crucial findings concerning psychopathy that should be understood by all forensic psychologists. In addition, we discuss unresolved issues in the psychopathy literature that may point to important avenues for research on this still enigmatic condition.

CONCEPTUALIZATIONS OF PSYCHOPATHY

In the early nineteenth century, the French psychiatrist Phillipe Pinel described the psychopathic personality (which he termed manie sans delire, that is, insanity without delirium) as exhibiting irrational and antisocial behavior in the absence of psychosis. Benjamin Karpman (1941) distinguished between two "types" of psychopathy, which, although often confused, stem from markedly different etiologies. Primary ("idiopathic") psychopaths are callous and nonanxious criminal personalities, whereas secondary ("symptomatic") psychopaths are neurotic or psychotic individuals whose antisocial behaviors spring from preexisting psychopathology. In the mid-twentieth century, Hervey Cleckley provided the most comprehensive description of psychopathy (Gacono & Hutton, 1994) in his highly influential book The Mask of Sanity (1941/1988). In this work, Cleckley delineated 16 criteria for psychopathy, including superficial charm, lack of anxiety, unreliability, deceitfulness, lack of remorse, inadequately motivated antisocial behavior, failure to learn from punishment, egocentricity, lack of emotional bonds, absence of insight, and failure to plan ahead. The "Cleckley criteria" have formed the basis for a large number of subsequent efforts (e.g., Hare, 1991) to assess psychopathy systematically. The term sociopathy has also been used, particularly during the early twentieth century (Stevens, 1993), to refer to psychopathic individuals, although this term has more recently fallen out of favor.

The first *Diagnostic and Statistical Manual of Mental Disorders (DSM-I)* of the American Psychiatric Association (APA, 1952) contained the diagnosis of "sociopathic personality, antisocial reaction," which bore important similarities to Cleckley's conceptualization of psychopathy (Gacono & Hutton, 1994). *DSM-II* (APA, 1968) retained this conceptualization in its diagnosis of "antisocial personality," whose criteria included guiltlessness, lack of loyalty, irresponsibility, impulsivity, and failure to learn from punishment (Alterman, Rutherford, Cacciola, McKay, & Boardman, 1998).

Because the global descriptions of *DSM-II* and *DSM-III* were deemed by many to be subjective and largely unreliable, *DSM-III* (APA, 1980) and *DSM-III-R* (APA, 1987) provided explicit criterion lists for the diagnosis of Antisocial Personality Disorder (ASPD) in an effort to improve diagnostic reliability (Hare, 1996). The *DSM-III* and *DSM-III-R* criterion sets for ASPD greatly deemphasized the personality features outlined by Cleckley and others and replaced these features with relatively clear-cut behavioral criteria, such as a longstanding history of physical aggression, stealing, vandalism, arson, and irresponsible parenting (Hare, 1996, 1998; Lilienfeld, 1994). Although *DSM-IV* (APA, 1994) attempted to reincorporate at least some of the Cleckley features of psychopathy into its diagnostic criteria (Hare, Hart, & Harpur, 1991; Widiger et al., 1996), the current criteria for ASPD continue to identify individuals primarily by chronic antisocial and criminal behaviors and to neglect many of the core personality features of psychopathy, such as lack of empathy, grandiosity, and incapacity to form intimate attachments with others (Hare, 1996, 1998).

Some authors have distinguished between two major approaches to operationalizing psychopathy (Alterman et al., 1998; Lilienfeld, 1994, 1998). Cleckley's criteria emphasize personality traits as the core features of psychopathy, as did the *DSM-II* diagnosis of antisocial personality. Consequently, these conceptualizations are *personality-based* because they focus on a constellation of personality traits (e.g., manipulativeness, lack of remorse, egocentricity). Alternatively, the *DSM-III*, *DSM-III-R*, and *DSM-IV* diagnoses of ASPD are primarily *behavior-based* because they emphasize enduring antisocial and criminal behaviors as the core features of this condition (Lilienfeld, 1994, 1998). Although measures of the personality-based and behavior-based conceptualizations correlate moderately, they differ substantially in their correlates and assessment implications (Harpur, Hare, & Hakstian, 1989).

In this chapter we focus primarily on the clinical features and correlates of psychopathy, with particular emphasis on those characteristics relevant to forensic settings. In particular, we have chosen to focus on the more traditional personality-based operationalization of psychopathy delineated by Cleckley and others (e.g., Karpman, 1941). For reasons to become evident shortly, we will not focus on the current *DSM* diagnosis of ASPD because this diagnosis offers considerably less promise than the classical construct of Cleckley psychopathy for differentiating among criminal offenders with markedly differing personality traits and motivations. We will argue that a personality-based approach to psychopathy bears several important implications for the assessment, classification, prognosis, and treatment of criminal offenders.

PSYCHOPATHY'S RELATIONS TO ASPD AND CRIME

Although psychopathic traits predispose individuals to criminal behavior (Cleckley, 1941/1988; Hare, 1998), the highly restrictive behavioral criteria of the recent *DSMs* may be *underinclusive* in failing to identify psychopathic individuals who do not consistently manifest antisocial or criminal behavior (Lilienfeld, 1994, 1998; Stevens, 1993). Such "subclinical" or "successful" psychopaths (Widom, 1977) would be missed by the current behavioral criteria for ASPD. Conversely, behavior-based criteria for psychopathy may also be *overinclusive*, because they may comprise a heterogeneous group of antisocial conditions in addition to Cleckley psychopathy, such as neurotic psychopathy (i.e., antisocial behavior that presumably stems largely from anxiety, chronic overcontrol of anger, and related problems [see Lykken, 1995; Megargee, Cook, & Mendelsohn, 1967]) and dyssocial psychopathy (i.e., antisocial behavior that is posited to result from allegiance to a culturally deviant subgroup [McNeil, 1970]) (Lilienfeld, 1994, 1998). Thus, compared with psychopathy, ASPD almost certainly encompasses a more

¹Our use of the term *psychopathy* focuses exclusively on Cleckley (1941/1988), or "primary" psychopathy (see Karpman, 1941).

psychologically heterogeneous group of criminals (Cunningham & Reidy, 1998; Hare et al., 1991; Lykken, 1995), who may differ markedly in their motivations for antisocial behavior and in their interpersonal, affective, and personality characteristics (Hare et al., 1991). For these reasons, the *DSM* diagnosis of ASPD appears to possess weaker construct validity than the Cleckley concept of psychopathy (Hare et al., 1991; Lilienfeld, 1994).

The research literature further supports the contention that psychopathy and ASPD are not interchangeable concepts (Hare, 1998; Hare et al., 1991). In forensic settings, Hart and Hare (1989) and Hart, Forth, and Hare (1991) found some overlap between diagnoses of psychopathy and ASPD, but considerably fewer diagnoses of psychopathy than ASPD. Hart and Hare also found that diagnoses of psychopathy were significantly predictive of ASPD diagnoses, but not vice versa. Overall, research indicates that in prison and forensic populations the base rate of psychopathy (15–25%) (Hare, 1991, 1996, 1998; see also Rice & Harris, 1995) is considerably lower than the base rate of ASPD (50–75%) (Hare, 1996; Widiger & Corbitt, 1995).² Although most psychopathic prisoners meet criteria for ASPD, a smaller proportion of ASPD prisoners meet criteria for psychopathy (Hare, 1996; Hart et al., 1991).

PSYCHOPATHY IN VARIOUS FORENSIC POPULATIONS

Studies of psychopathy have been based predominantly on studies of North American white male criminals (Hare, 1991; Lilienfeld, 1998). As a consequence, relatively little is known regarding the manifestation of psychopathy in females, nonwhite ethnic groups, cultural groups outside of North America, children, or adolescents. There have recently been promising advances in studying psychopathy among these groups (Lilienfeld, 1998), but many findings are equivocal and have not yet been replicated.

Relatively little is known about psychopathy in females (Cale & Lilienfeld, 2002; Salekin, Rogers, & Sewell, 1997; Salekin, Rogers, Ustad, & Sewell, 1998). Salekin and colleagues, however, have examined this condition in female inmate samples and have reported female psychopathy prevalence rates to be lower than those previously reported for male inmates (Salekin et al., 1997; Salekin et al., 1998). Some studies of female forensic samples suggest that psychopathy may be more related to Somatization Disorder (Cloninger & Guze, 1970b), and Histrionic Personality Disorder (Cloninger & Guze, 1970b; Salekin et al., 1997) in females than in males, although most of these findings are preliminary and warrant replication. Among studies that have examined psychopathy in forensic settings, none has compared the correlates of psychopathy across sex, and many

²Although we use the term *base rate* for the sake of convenience, this term should technically be reserved for conditions that are known to be taxonic (see the section "Psychopathy: Assessment issues" for a discussion of taxonicity).

are limited by small samples (e.g., Barack & Widom, 1978; Cloninger & Guze, 1970a, 1970b). Some reviewers (e.g., Carlen, 1985; Heidensohn, 1968; Widom, 1984) have suggested that because males and females differ in criminal behavior patterns (with males tending to exhibit higher rates of overt aggression than females), operationalizations of psychopathy should be sex specific (see Steffensmeier & Allan, 1996). To date, however, there is no compelling evidence to support this claim, which implies the existence of sex bias in current measures of psychopathy (see Widiger & Spitzer, 1991, for a discussion). There is a paucity of evidence regarding sex differences in psychopathy in forensic settings, and a better understanding of such differences is of considerable importance to forensic psychologists who work with female offenders.

Some researchers have recently begun to examine ethnic differences in psychopathy. Kosson, Smith, and Newman (1990) reported that the personality and psychopathological correlates of interviewer-assessed psychopathy were fairly similar in black and white inmates, although there was some indication that the chronic antisocial and criminal behaviors sometimes associated with psychopathy were less related to measures of impulsivity in blacks than in whites. In addition, Kosson and colleagues found some evidence for higher psychopathy scores among blacks than whites (see also Brandt, Kennedy, Patrick, & Curtin, 1997). These lattermost findings may reflect genuine ethnic differences, selection biases, interviewer bias (the interviewers in the Kosson et al. samples were all white), or some combination thereof (Lilienfeld, 1998). Kosson and colleagues' findings are preliminary and warrant replication, and the limited evidence regarding race differences in the correlates and mean levels of psychopathy calls for further investigation (Gacono & Hutton, 1994). Investigators have not examined differences in psychopathy among Hispanics or Asians (Cunningham & Reidy, 1998).

Compared with the limited literature on ethnic differences, even less is known about cultural differences in psychopathy (Lilienfeld, 1998). Some studies suggest that psychopathy is a valid diagnosis across cultures, but few have compared its prevalence rates in different countries. Cooke (1996) reported that Scottish prisoners had lower rates of psychopathy than their North American counterparts. This finding provides provisional evidence for cultural differences in psychopathy, although the possibility of selection bias is difficult to exclude (e.g., the criteria for incarceration in North America and Scotland may differ) (Cooke, 1995). Nevertheless, there is little evidence for cultural bias in psychopathy measures (Cooke, 1995, 1996; Hare, 1998; Lilienfeld, 1998). There are no systematic studies of psychopathy outside of North America and Europe (Cooke, 1995; Lilienfeld, 1998).

Several researchers have suggested that psychopathy, as measured by modifications of adult psychopathy instruments, can be meaningfully assessed in children and adolescents (Lilienfeld, 1998). Forth, Hart, and Hare (1990) examined psychopathy in adolescent offenders and found the personality and psychopathological correlates of psychopathic symptoms to be similar to those found in adult inmates. Subsequent studies have corroborated these findings (see Brandt

et al., 1997; Forth, 1995; Toupin, Mercier, Déry, Côte, & Hodgins, 1995), although they are few in number. Research on psychopathy in children and adolescents supports the claim that psychopathy and ASPD (or Conduct Disorder in children) are not equivalent (Frick, O'Brien, Wootton, & McBurnett, 1994; Lynam, 1997). The extant evidence further suggests that psychopathy can be reliably assessed in childhood and that childhood psychopathy measures possess incremental validity above and beyond conduct disorder in predicting serious, consistent antisocial behavior (Frick et al., 1994; Lynam, 1997).

PSYCHOPATHY: ASSESSMENT ISSUES

For many decades, the state of the psychopathy assessment literature was in disarray. Many widely used measures of psychopathy were poorly validated, and these measures tended to exhibit low intercorrelations, suggesting that they were assessing only slightly overlapping aspects of the same construct (see Lilienfeld, 1994, for a review). Nevertheless, the past 15 years have witnessed significant methodological advances in the assessment of psychopathy.

The Psychopathy Checklist and Its Progeny

Since the 1960s, Robert Hare and colleagues have been engaged in a large-scale research program to investigate psychopathy's conceptualization and assessment. The major methodological achievements of this research are the Psychopathy Checklist (PCL) (Hare, 1985b), the Psychopathy Checklist-Revised (PCL-R) (Hare, 1991), and the PCL Screening Version (PCL:SV) (Hart, Cox, & Hare, 1995). The PCL and its progeny incorporate both personality and behavioral characteristics in their operationalizations of psychopathy (Hare, 1993, 1996; Salekin, Rogers, & Sewell, 1996). These three measures include many features of Cleckley's criteria for psychopathy, including superficial charm, callousness, manipulativeness, promiscuity, irresponsibility, and lack of remorse, while also assessing aspects of the *DSM* ASPD criteria, such as chronic antisocial behavior, early history of crime, and impulsivity.

Findings indicate that the PCL, the PCL-R, and perhaps the PCL:SV measure two moderately correlated (i.e., correlations are approximately r=.50 across most studies) factors, whereby Factor 1 assesses the core affective and personality features of psychopathy (e.g., lack of guilt, callousness, grandiosity) and Factor 2 assesses such qualities as poor behavioral controls and chronic social deviance (Hare et al., 1990; Harpur, Hakstian, & Hare, 1988). A number of researchers have contended that both Factor 1 and Factor 2 are critical in the assessment of psychopathy (Harpur et al., 1989) and that these two factors correspond to the personality-based and behavior-based approaches, respectively (Lilienfeld, 1994, 1998). Moreover, these two factors have been found to differ substantially in their personality, cognitive, and demographic correlates. For

example, whereas Factor 1 tends to negatively correlated with trait anxiety measures, Factor 2 tends to be positively correlated with such measures. In addition, Factor 2 is negatively correlated with educational level and verbal intelligence, whereas Factor 1 is negligibly associated with these variables (Harpur et al., 1989).

Cooke and Michie (2001) recently proposed an alternative three-factor model of psychopathy that subdivides Factor 1 into separable affective and interpersonal facets. Nevertheless, because the research support for this still controversial model is provisional, we will not discuss it further here.

The PCL-R, which is very similar in both its content and psychometric properties to the earlier PCL (Hare et al., 1990), is the most extensively construct validated of all psychopathy measures. PCL-R scores are derived from an intensive semistructured interview in conjunction with a detailed review of institutional file information. For research purposes, at least two hours are typically required to complete the PCL-R (Grann, Långström, Tengström, & Stålenheim, 1998), although well-trained clinicians can often administer this measure in less time (Gacono & Hutton, 1994). Although the PCL:SV, a shorter version of the PCL-R, appears to possess similar psychometric properties (e.g., interrater reliability, construct validity) to the PCL-R (see Hart, Hare, & Forth, 1994), the PCL-R is recommended for use in criminal populations, whereas the PCL:SV should be reserved for research purposes or as a possible screening device for psychopathy (Hare, 1998; Hart et al., 1994).

The PCL-R is a reliable and construct valid measure of psychopathy. Its interrater reliabilities for total scores typically exceed .80 among inmates and forensic patients (Hare, 1998). The PCL-R was validated in samples of inmates and forensic psychiatric patients and was developed primarily for use in these individuals (Cunningham & Reidy, 1998; Serin, 1993). In addition, the PCL-R provides a more complete assessment of psychopathic personality traits than does the DSM-IV diagnosis of ASPD, which, as noted earlier, greatly deemphasizes such traits (Cunningham & Reidy, 1998; Hare et al., 1991). Hart and Hare (1989) found that PCL total scores correlated positively and significantly with antisocial, histrionic, and narcissistic personality disorder traits and nonalcohol substance abuse, negatively and significantly with avoidant personality disorder traits, and negligibly and nonsignificantly with schizophrenia. Hart and Hare reported similar associations for PCL Factor 1 scores, although PCL Factor 2 scores correlated only with ASPD. PCL and PCL-R scores are also positively correlated with laboratory measures of passive avoidance learning (i.e., the capacity to withhold responses that lead to punishment), which is traditionally believed to be a central deficit in psychopathy (Newman & Kosson, 1986). Moreover, as will be discussed later, PCL-R-defined psychopaths tend to commit more serious and more varied crimes, offend earlier and at higher rates, exhibit more disruptive prison behavior, and have poorer treatment response than nonpsychopaths (Hare, 1998).

Before administering the PCL-R in prison and forensic settings, a licensed clinician should possess an advanced degree in the social or behavioral sciences, have experience with criminal assessment, and receive formal training in PCL-R

administration (Gacono & Hutton, 1994; Hare, 1998; Serin, 1992). The PCL-R should not be scored after administering only the interview (Gacono & Hutton, 1994; Hare, 1998), and assessments based solely on file review should be used for research purposes only (see Grann et al., 1998; Serin, 1993). In clinical reports, the information from the PCL-R can be used to supplement the *DSM* criteria for ASPD (Gacono & Hutton, 1994).

One should exercise caution in PCL-R interpretation and use in forensic testimony (Hare, 1998). Administrators and expert witnesses should not make judgments on the basis of PCL-R scores unless they are thoroughly familiar with the large and complex literature concerning this measure's reliability and construct validity (Hart et al., 1994). As highlighted earlier in this chapter, the research literature on psychopathy, as measured by the PCL-R, may be limited in its generalizability to nonincarcerated populations (Cunningham & Reidy, 1998; Salekin et al., 1996; Widom, 1977). There is also mixed evidence regarding the most appropriate PCL-R cutoff score for psychopathy (Hare, 1998; Hare et al., 1991; Salekin et al., 1996).

Perhaps more important, it is unclear whether psychopathy is underpinned by a taxon (i.e., a nonarbitrary class that exists in nature) or a dimension (see Harris, Rice, & Quinsey, 1994; Lilienfeld, 1998). If the latter, the use of a categorical cutoff score to diagnose psychopathy may be largely or entirely arbitrary from a scientific standpoint. Using taxometric methods developed by Meehl and his colleagues (e.g., Meehl & Golden, 1982), Harris and colleagues reported evidence consistent with the claim that a latent taxon underlies scores on the PCL-R. Nevertheless, their analyses yielded evidence of taxonicity only for PCL-R Factor 2 and only for childhood antisocial behaviors, suggesting that the core affective and interpersonal features of psychopathy may be underpinned by a latent dimension.

Self-Report Measures of Psychopathy

Many researchers have examined the use of self-report inventories for assessing psychopathy. Because the PCL-R and cognate measures are time and labor intensive, such inventories represent appealing alternatives to interview-based indices. Nevertheless, because psychopaths tend to be deceitful and to lack insight into the nature and extent of their difficulties (Cleckley, 1941/1988), and because self-report measures are potentially susceptible to impression management, malingering, and other response styles, some researchers have questioned whether psychopathy can be validly assessed by means of self-report (Hart et al., 1991; Hart et al., 1994). Unlike most or all interviews, however, self-report measures can assess these response biases systematically (Widiger & Frances, 1987).

It is clear, however, that until quite recently the self-report assessment of psychopathy was plagued by numerous methodological difficulties. Most self-report measures of psychopathy tend to correlate weakly or at best moderately with clinical ratings and PCL-R diagnoses of psychopathy (Hart et al., 1991). In addition,

the correlations among commonly used self-report psychopathy measures tend to be lower than the correlations among interview measures (Hare, 1985a). Most self-report psychopathy measures correlate more strongly with measures of chronic antisocial behavior (i.e., PCL-R Factor 2) than with measures of the interpersonal and affective features of psychopathy (i.e., PCL-R Factor 1) (Harpur et al., 1989; Hart et al., 1991; Hart et al., 1994), suggesting that these self-report measures assess generalized behavioral deviance rather than the core personality traits that distinguish psychopathic offenders from other offenders. Here, we review several self-report measures of psychopathy and discuss their strengths and limitations as well as the implications of their use in forensic settings.

The Minnesota Multiphasic Personality Inventory (MMPI) and its revision, the MMPI-2, which are empirically constructed measures of psychopathology (see Graham, 1993), are commonly used to assess psychopathic features among forensic patients (Kennedy, 1986). The MMPI Psychopathic Deviate (Pd) Scale, often in conjunction with the Hypomania (Ma) Scale (McKinley & Hathaway, 1944), is sometimes used to diagnose psychopathy (Hare, 1985a) and to aid in treatment planning (Kennedy, 1986). However, the use of the MMPI in the assessment of psychopathy is problematic in several respects. Individuals' MMPI scores sometimes change over time, and responses may be influenced by state factors (e.g., imprisonment, impending trials) and incentives to malinger (Cunningham & Reidy, 1998). More important, because the MMPI Pd scale is highly heterogeneous and multifactorial (Graham, 1993), moderately high Pd scores are ambiguous in meaning and can reflect familial conflict, authority problems, alienation, interpersonal poise, or a complex admixture of several of these attributes (Lilienfeld, 1999). Research evidence suggests that the MMPI Pd scale, like most other self-report psychopathy measures, correlates moderately with PCL-R Factor 2 but negligibly with Factor 1 (Harpur et al., 1989). As a consequence, the Pd scale does not adequately assess many of the core affective and interpersonal features of psychopathy and therefore lacks utility in differentiating psychopaths from both other forensic subjects (Cunningham & Reidy, 1998) and nonpsychopaths in psychiatric settings (Hawk & Peterson, 1974). All of these findings underscore the point that clinicians should not rely on MMPI Pd scores alone in assessing psychopathy (Lilienfeld, 1999).

There is some evidence that the MMPI-2 Antisocial Practices (ASP) content scale (Butcher, Graham, Williams, & Ben-Porath, 1990) possesses incremental validity above and beyond the MMPI Pd scale in assessing certain psychopathic personality features, including manipulativeness (Lilienfeld, 1996). In addition, certain Harris-Lingoes (1955) Pd subscales, particularly Pd2 (Authority Problems), appear to be more associated with Cleckley psychopathy than others. Moreover, certain other Pd subscales, such as Pd3 (Social Imperturbability) may be only weakly related to Cleckley psychopathy (Lilienfeld, 1999). Because of the differential correlates of the MMPI Pd Harris-Lingoes subscales, reliance on Pd total scores alone can often result in misleading interpretations, particularly when Pd score elevations are moderate in magnitude.

In the hopes of delineating a comprehensive criminal classification system to facilitate treatment decisions (Kennedy, 1986; Wrobel, Wrobel, & McIntosh, 1988), Megargee and Bohn (1979) outlined a typology for classifying youthful adult offenders. Determined by various MMPI configurations, the 10-cluster, analytically derived "Megargee types" are distinguished by different social and demographic variables, personality traits, attitudes, and behaviors. Some of the Megargee types appear to be related to psychopathy. For example, the type "Able," which is identified by elevations in MMPI Pd and Ma scales and is described by Megargee and Bohn as superficial, charming, and manipulative, appears to embody a number of the Cleckley criteria for psychopathy. The results of several studies indicate that the Megargee typology is reliable across various correctional settings (see Edinger, 1979; Walters, 1986), although these findings warrant replication. Moreover, some researchers have found that the Megargee classifications do not adequately predict violent behavior (see Baum, Hosford, & Moss, 1984; Louscher, Hosford, Moss, 1983; Moss, Johnson, & Hosford, 1984). Overall, crossvalidation of the Megargee types in criminal samples has yielded mixed results, and this typology's use in predicting violence, recidivism, and treatment response necessitates further investigation (Kennedy, 1986). The Megargee typology may be promising in differentiating various criminal types, but little is known about its construct validity in assessing psychopathy.

The California Psychological Inventory (CPI) Socialization (So) Scale (Gough, 1969) is a measure of socialization (i.e., the extent to which societal values are internalized) that is sometimes scored in reverse as a measure of psychopathy (Megargee, 1972). The So scale was developed to assess the role-taking deficits of psychopathy (see Gough, 1948) and was constructed by contrasting the responses of delinquents and nondelinquents. Subsequent research suggests, however, that this scale assesses a broader dimension reflecting individual differences in the internalization of societal norms, and rank-orders a variety of criterion groups along a hypothesized continuum of socialization (Gough, 1994). So scale scores exhibit high test-retest reliability (Megargee, 1972), and low So individuals are deceitful, defensive, irresponsible, mischievous, outspoken, and quarrelsome (Megargee, 1972). In addition, antisocial and criminal individuals typically receive low So scores (Kosson, Steuerwald, Newman, & Widom, 1994). Because it correlates more strongly with PCL-R Factor 2 scores than Factor 1 scores (Harpur et al., 1989), however, the So scale appears to be more a behavior-based than a personality-based measure of psychopathy. As a consequence, it is probably more useful as a general marker of behavioral deviance than as a specific indicator of the core personality traits of psychopathy. In addition, although many researchers have examined the correlates of So scores, they have generally compared forensic samples with normal samples and have not examined the So scale's ability to distinguish psychopaths from nonpsychopaths within criminal samples (Kosson et al., 1994).

Two newer psychopathy self-report measures are subscales of the Millon Clinical Multiaxial Inventory–II (MCMI-II) (Millon, 1987) and the Personality

Assessment Inventory (PAI) (Morey, 1991). The MCMI-II was designed to assess both acute clinical disorders and personality disorders according to DSM-III-R criteria. The second revision of this measure, the MCMI-III, has recently been published (Millon, 1997), although its construct validity among criminal offenders is less clear. Hart and colleagues (1991) found that several MCMI-II scales (i.e., Antisocial, Narcissistic, Aggressive/Sadistic) correlated significantly with measures of psychopathy and ASPD. Like most other self-report measures, however, these scales correlated more highly with the behavioral (i.e., PCL-R Factor 2) than interpersonal (i.e., PCL-R Factor 1) component of psychopathy. There is little research on the MCMI-II's use in forensic settings, and the existing findings warrant replication. The PAI antisocial scale (ANT) is based partly on the work of Cleckley (Salekin et al., 1998). The PAI-ANT egocentricity and stimulus seeking (ANT-E and ANT-S, respectively) subscales assess personality features of psychopathy, whereas the antisocial behaviors (ANT-A) subscale primarily assesses the behavioral features of DSM ASPD. Preliminary evidence suggests that the PAI-ANT scale correlates moderately with the MMPI Pd scale (Morey, 1991). There is little research, however, supporting the use of the PAI in forensic settings (Cunningham & Reidy, 1998) or its construct validity as a measure of psychopathy.

It therefore appears that most self-report measures of psychopathy correlate more strongly with PCL-R Factor 2 than Factor 1. This finding is problematic because many of these measures (e.g., the MMPI Pd scale) are commonly used by forensic psychologists to assess psychopathy even though they correlate weakly or negligibly with the core personality features of this syndrome. A few recently developed self-report measures, however, show promise in assessing Factor 1 traits. The Psychopathic Personality Inventory (PPI) (Lilienfeld & Andrews, 1996) was originally designed to assess psychopathic personality traits in noncriminal samples, although it has recently been extended to incarcerated samples. It differs from other self-report psychopathy measures in that it (1) focuses exclusively on psychopathic personality traits; (2) excludes items explicitly assessing antisocial and criminal behaviors; (3) yields both a total score and scores on eight analytically derived subscales (e.g., Machiavellian Egocentricity, Fearlessness, Blame Externalization) intended to assess various facets of psychopathy; and (4) contains three validity scales designed to assess malingering, inconsistent responding, positive impression management, and other response styles that are potentially problematic among psychopaths (Lilienfeld, 1998; Poythress, Edens, & Lilienfeld, 1998). The PPI total score correlates significantly and moderately to highly with other self-report measures of psychopathy, including those that seem to primarily assess behavioral aspects of psychopathy (e.g., MMPI Pd scale, CPI So scale) (Lilienfeld & Andrews, 1996). In addition, there is preliminary evidence that the PPI possesses construct validity in criminal samples. For example, Poythress and colleagues (1998) found that PPI total scores correlated significantly with PCL-R total, Factor 1, and Factor 2 scores in a prison sample. Unlike other psychopathy self-report measures, however, the PPI correlated more highly with PCL-R

Factor 1 scores (r = .54) than with Factor 2 scores (r = .40), although this difference fell short of significance. Although the PPI appears to be a promising measure of psychopathic traits in criminals, further investigation is needed to evaluate whether it possesses incremental validity over and above other self-report measures in the assessment of psychopathic characteristics (Lilienfeld & Andrews, 1996; Poythress et al., 1998). It is worth noting, however, that the PPI exhibited incremental validity above and beyond self-report measures in assessing observer-rated Cleckley psychopathy among undergraduates (Lilienfeld & Andrews, 1996).

Levenson, Kiehl, and Fitzpatrick (1995) rationally constructed primary and secondary psychopathy scales to assess the two conceptualizations of psychopathy delineated by Karpman (1941). According to Karpman, primary and secondary psychopaths are characterized by low and high trait anxiety, respectively. Levenson and colleagues' primary psychopathy scale assesses narcissistic qualities as well as a callous disregard for others' welfare, whereas the secondary psychopathy scale assesses impulsivity and socially deviant behaviors (Wilson, Frick, & Clements, 1999). These scales are posited to be roughly analogous to PCL-R Factor 1 and Factor 2, respectively. Nevertheless, several correlates of the Levenson and colleagues' scales raise questions concerning these scales' construct validity. For example, contrary to prediction, Levenson and colleagues (1995) found that the primary psychopathy scale was weakly but significantly *positively* correlated with trait anxiety. Further research is needed to clarify the construct validity of Levenson and colleagues' scales (Lilienfeld, 1998) and to ascertain their construct validity in criminal samples.

Observer Rating Measures

It is surprising that more research has not been conducted on the use of observer rating measures of psychopathy. Such measures may help to circumvent the "blind spots" that presumably characterize psychopaths, many of whom lack insight into the nature and severity of their symptoms (Grove & Tellegen, 1991; Lilienfeld, 1994). Shedler and Westen (1998) have conducted initial studies on a Q-sort rating method for assessing personality disorders and have reported promising results for this technique in clinical samples. Nevertheless, the construct validity of this method for assessing psychopathy remains to be determined.

Reise and Oliver (1994) have developed a Q-sort method specifically designed to assess psychopathy. This observer-based method, the Psychopathy Q-Sort (PQS), requires observers to describe each subject by sorting 100 cards, each bearing an adjectival statement regarding a personality characteristic, into a forced quasinormal distribution. PQS scores reflect the correlation between a subject's rating profile and an empirically derived psychopathy prototype profile (Reise & Oliver, 1994). There is preliminary support for the convergent and discriminant validity of the PQS in nonclinical populations. Reise and Wink (1995) reported that the PQS tended to correlate positively with measures of Antisocial, Borderline, Histrionic, and Narcissistic Personality Disorders, but negatively or

negligibly with measures of other personality disorders. They also reported that the PQS correlated negatively with the CPI So scale among both males and females.³ Additional research is needed to determine whether the PQS or other psychopathy rating measures (see Lilienfeld & Andrews, 1996, for an alternative rating measure of psychopathy) possess incremental validity over and above interviews or self-report inventories in the assessment of psychopathy (Lilienfeld, 1998). Moreover, to our knowledge there is virtually no research on the use of observer rating measures in the assessment of psychopathy in prison samples (cf., Craddick, 1962).

Projective Measures

A number of researchers have contended that the Rorschach Inkblot Test (Exner, 1993) can be used to assess psychopathy. Gacono and Meloy (1994) argued, for example, that the Rorschach is "ideally suited" for assessing psychopathy. They went on to assert that "we have validated the use of the Rorschach as a sensitive instrument to discriminate between psychopathic and nonpsychopathic subjects" (see also Gacono, 1995, 1998). Gacono and Hutton (1994) reviewed evidence suggesting that the Rorschach responses of PCL-R psychopaths reflect more borderline organization, more narcissism, less anxiety, and less attachment than the responses of nonpsychopaths. For example, a number of researchers have claimed that psychopaths consistently show fewer Texture responses on the Rorschach than nonpsychopaths (Gacono, Meloy, & Berg, 1992; Gacono, Meloy, & Heaven, 1990), presumably indicative of a lesser need for interpersonal intimacy among the former individuals.

Despite these strong claims, careful scrutiny of the extant literature does not lend support to the construct validity of the Rorschach in the assessment of psychopathy (Cunningham & Reidy, 1998). Meloy, Gacono, and their colleagues conducted a large number of correlational analyses in their studies, thereby increasing the probability of Type I error (Wood, Lilienfeld, Garb, & Nezworski, 2000). More important, several attempts by independent investigators (e.g., Murphy-Peaslee, 1995/1993) to replicate their original findings (including the finding of fewer Texture responses among psychopaths) have failed (Wood et al., 2000). It is also worth noting that the Rorschach, like self-report measures, is not immune from the problem of response distortion (Cunningham & Reidy, 1998).

It remains to be seen whether the Rorschach proves to be worth its time and effort in administration given the absence of replicated construct validity for any of its indices in the assessment of psychopathy. Moreover, to our knowledge there are no data indicating that the Rorschach possesses incremental validity for measuring psychopathy above and beyond more easily administered (e.g., self-report)

³Because low scores on the CPI So scale imply a lack of socialization and are indicative of deceitfulness, irresponsibility, and other psychopathy characteristics, this negative correlation with the So scale is in the predicted direction.

measures. At this point, we cannot recommend the Rorschach for clinical applications in the assessment of psychopathy, although further research is warranted to resolve the discrepancies in findings across different investigative teams. We are not aware of any convincing evidence that other projective techniques (e.g., the Thematic Apperception Test; Morgan & Murray, 1935) are of utility in the assessment of psychopathy (see Lilienfeld, Hess, & Rowland, 1996).

PSYCHOPATHY AND DISSIMULATION

Although psychopaths are notorious for their propensities toward dishonesty (Cleckley, 1941/1988), the relation between psychopathy and dissimulation has received surprisingly little research attention. We examine the association between psychopathy and both malingering and positive impression management ("faking good"), and address the question of psychopaths' ability and willingness to dissimulate in these domains

Psychopathy and Malingering

The DSM-IV describes malingering as a nonpsychopathological condition in which an individual, motivated by an external incentive such as evading criminal prosecution, intentionally produces false or exaggerated physical or psychological symptoms (APA, 1994). The DSM-IV contends that malingering should be suspected if an individual is diagnosed with ASPD but provides no information regarding psychopaths' propensity towards malingering. Although acknowledging that psychopaths often malinger to escape punishment after being caught for committing antisocial acts, Cleckley (1941/1988) maintained that there was no unequivocal relationship between psychopathy and malingering. Cleckley also argued that whereas malingerers tend to persist in malingering, psychopaths do not typically malinger across situations. Nevertheless, the association between psychopathy and malingering has been clouded by numerous methodological problems (Clark, 1988). Edens, Buffington, Tomicic, and Parker (1999) observed that although research has not shown a consistent association between psychopathy and malingering, many studies have suffered from a lack of random sampling, inadequate control groups, and the use of inmates as proxies for psychopaths.

Gacono, Meloy, Sheppard, Speth, and Roske (1995) examined the clinical characteristics and institutional behaviors of 18 malingerers and 18 hospitalized insanity acquittees, and found that malingerers had significantly higher PCL-R total, Factor 1, and Factor 2 scores than insanity patients. In addition, all of the malingers in this study were diagnosed with psychopathy. It is unclear, however, whether psychopathy itself was predictive of malingering or whether the malingering group was incidentally composed entirely of psychopaths. In addition, the use of insanity acquittees as a comparison sample is potentially problematic,

because psychotic individuals may have unusually low rates of psychopathy (Cleckley, 1941/1988).

Edens and colleagues (1999) examined the relation between psychopathy, as assessed by the PPI, and malingering of psychosis among undergraduates, and found that PPI total scores were not significantly correlated with either successful malingering or perceptions of success at recent malingering attempts. Nevertheless, psychopathy was significantly correlated with an increased willingness to malinger in the future and an increased perception of success at malingering. Although these results bear interesting implications for forensic psychology, they require replication with criminal samples.

Although the findings of Edens and colleagues suggest that psychopathic individuals may be more willing than other individuals to malinger, malingering in forensic contexts may often be related more to contextual incentives than to personality traits (Clark, 1988). Because convicted individuals may be inclined to feign illness to escape punishment, the association between psychopathy and malingering could result from the tendency of psychopaths to be incarcerated more often than nonpsychopaths (Edens et al., 1999). In addition, incarcerated psychopaths are not typically self-referred for psychological evaluations, and the probability of their malingering increases as the criminal justice system forces them to undergo evaluations that may affect impending treatment and punishment (Clark, 1988). Such considerations suggest that the use of the PCL-R and other psychopathy measures to assess malingering in criminal samples is questionable (cf., Gacono & Hutton, 1994). Additional research is needed to examine the utility of psychopathy measures in forensic malingering referrals.

Psychopathy and Positive Impression Management

There is surprisingly little research on the propensity or ability of psychopaths to fake good on psychological tests. Interestingly, there is some evidence that psychopaths tend to receive low scores on self-report measures of faking good (Lilienfeld, 1994), which implies that psychopaths are often willing to acknowledge at least some negative personality characteristics. In a study of prisoners and undergraduates, O'Mahony and Murphy (1991) found that "honest" CPI So scores were not significantly associated with gains made in So scores in a "fake good" condition. The researchers instead found that variations in prisoners' intelligence scores accounted for more variation in So "fake good" score gains than "honest" So scores (see also Alliger, Lilienfeld, & Mitchell, 1996, for evidence indicating that intelligence measures are positively associated with the ability to fake good on self-report "honesty" indices). As noted earlier, however, the So scale correlates only weakly with the core personality features of psychopathy, rendering the relevance of these findings to psychopathy per se unclear. In addition, because O'Mahony and Murphy asked participants to fake good in a context in which there were no clear incentives for success, these findings may not be applicable to real-life forensic situations (Lanyon, 1997).

Some researchers have postulated that psychopaths are better at "beating" the polygraph ("lie detector") test than nonpsychopaths. In examining this issue, it is imperative that one bear in mind the relatively weak validity of the polygraph test for assessing lying (Clark, 1988; Lanyon, 1997; Lykken, 1998), which in turn may constrain the interpretations of studies on the polygraph test. This problem notwithstanding, there is no convincing evidence that psychopaths are more adept at "beating" polygraphs than nonpsychopaths (see Patrick & Iacono, 1986; but see Waid & Orne, 1982).

PSYCHOPATHY: CONCURRENT AND PREDICTIVE RELATIONS WITH CRIMINAL BEHAVIOR

Numerous researchers have examined the association between psychopathy and crime. The literature strongly suggests that across all demographic groups psychopaths are more criminally active than nonpsychopaths (Hart & Hare, 1997). Regardless of race or psychiatric diagnosis, psychopaths possess strong and stable propensities toward a variety of crimes, including violent offenses (Hare et al., 1991). Moreover, psychopathic criminals commit more crimes involving weapons, robbery, assault, kidnapping, vandalism, and fighting than nonpsychopathic criminals (Hare & McPherson, 1984). The development of violent offender and sexual offender taxonomies that assimilate psychopathic traits in their categories (Serin, 1992) further attests to the links between psychopathy and criminal behavior. Here we briefly review the literature on psychopathy's concurrent and predictive associations with various crimes. We focus on psychopathy's relations with violence, sexual crimes, behaviors in forensic institutions, and criminal recidivism.

Violent Crimes

Although there is disagreement among researchers regarding how to operationalize violence (e.g., categorically or dimensionally) and measure violence (e.g., by means of self-report or interview measures) and regarding whether sexual and property crimes should be included in assessing violence (Hart, 1998), the relation between psychopathy and violence has been consistent across studies. This association has been confirmed by studies that have retrospectively examined the criminal behaviors of psychopaths and nonpsychopaths (see Hart, 1995, 1998; Simourd & Hoge, 2000; Valliant, Gristey, Pottier, & Kosmyna, 1999). In a sample of 87 inmates, Serin (1991) found that 100 percent of criminal psychopaths had a prior violence conviction, compared with 68 percent of criminal nonpsychopaths. In a sample of 663 male inmates, Hare and McPherson (1984) found that PCL-defined psychopaths were more likely than nonpsychopaths to have engaged in violent crimes prior to incarceration. In addition, the authors found that criminal psychopaths committed three and a half times more violent crimes than criminal nonpsychopaths.

Psychopaths also tend to engage in a greater variety of violent crimes than nonpsychopaths (Hart & Hare, 1997) and are more likely to engage in instrumental (i.e., purposeful and goal directed) than reactive (i.e., emotional) aggression (Cornell et al., 1996; Williamson, Hare, & Wong, 1987). Using the PCL-R and the PCL:SV to assess psychopathy, Cornell and colleagues (1996) found that instrumental violent offenders were more psychopathic than both reactive violent offenders and nonviolent offenders. Other researchers have replicated Cornell and colleagues' findings and reported that the association between psychopathy and instrumental violence held for Factor 1 but not Factor 2 scores (Hart & Hare, 1997). In general, however, both PCL Factor 1 and Factor 2 scores have been found to correlate with most forms of violent behavior (Hart et al., 1994). Finally, Williamson and colleagues (1987) reported that psychopaths were more likely to have murdered strangers, whereas nonpsychopaths were more likely to have murdered during a domestic dispute, when they were extremely emotional, or both. These findings are consistent with the clinical portrait of the psychopath as cold, unemotional, and predatory (Cleckley, 1941/1988).

Sexual Crimes

There is also evidence for an association between psychopathy and sexual crimes, including rape and other sexual offenses (Kosson, Kelly, & White, 1997; Porter, Campbell, Woodworth, & Birt, 2001). In a meta-analysis of the literature on psychopathy and violence, Salekin and colleagues (1996) reviewed three studies of psychopathy and sexual crimes, and found that the PCL and PCL-R significantly predicted sexual sadism and deviant sexual arousal. Several findings also indicate that psychopaths are more likely than nonpsychopaths to use violence in committing sexual offenses and are more likely to be sexually aroused by violent stimuli (Hart & Hare, 1997). Nevertheless, most of the positive findings regarding psychopathy and sexual crimes are provisional and based on few studies. In addition, forensic psychologists should cautiously apply these findings to non-whites, females, and adolescents (Salekin et al., 1996).

PCL-R scores have been found to differentiate among various types of sexual offenders. Rapists tend to be more psychopathic than incest offenders and pedophiles (Hart & Hare, 1997; Porter et al., 2001). Although rape is characterized by both sexual and aggressive components, the relationships among psychopathy, aggression, and sexual arousal are poorly understood (Barbaree, Seto, Serin, Amos, & Preston, 1994). Barbaree and colleagues examined differences in psychopathy among specific categories of rapists and did not find significant differences in PCL-R scores between sexual rapists (i.e., those for whom sex is the principal motivation for their offending) and nonsexual rapists (i.e., those for whom aggressiveness, hostility, and/or a callous disregard for the victim are the principal motivators for their offending). In the nonsexual rapist group, the researchers did not find significant differences in PCL-R scores between vindictive and opportunistic rapists. They did find, however, that sexual sadistic rapists

scored higher than sexual nonsadistic rapists on PCL-R Factor 2 scores, but that there were no differences between the groups in PCL-R total or Factor 1 scores. Barbaree and colleagues noted that sadistic rapists exhibit a greater history of impulsive antisocial behaviors than nonsadistic rapists, which may explain the difference between PCL-R Factor 2 correlates of sadistic rapist subtypes. In reviewing Barbaree and colleagues' study, Salekin and colleagues (1996) found that the average effect size (.73) for PCL-R Factor 2 scores in predicting sexual sadism was larger than the average effect size (.42) for Factor 1 scores. Firestone, Bradford, Greenberg, and Larose (1998) found that sexual homicide offenders had higher PCL-R total, Factor 1, and Factor 2 scores than incest offenders.

Kosson and colleagues (1997) examined the relations between PCL ratings and CPI So scores and sexual aggression in college males. After controlling for So scores, PCL Factor 1 ratings predicted individuals' reported use of force and threats in sexual acts. In addition, Kosson and colleagues reported significant correlations between PCL Factor 2 ratings and the reported use of force in sexual acts and between So scores and various forms of sexual aggression, such as use of sexual force. As noted previously, however, the So scale does not appear to adequately assess many of the core personality characteristics of psychopathy and may thus be limited in its capacity to discriminate among certain types of sexual offenders. Although it seems plausible that PCL Factor 1 characteristics (e.g., narcissism, dominance) contribute to sexual aggression (Kosson et al., 1997), the link between core psychopathic traits and sexual aggression has not been clarified empirically (see also Firestone et al., 2000; Serin, Mailloux, & Malcolm, 2001).

Institutional Misbehavior

The results of several retrospective and predictive studies suggest that psychopaths have high rates of disciplinary infractions in correctional institutions and forensic hospitals (Gacono, 1998; Hart, 1995, 1998; Heilbrun et al., 1998; Hill, Rogers, & Bickford, 1996; Rogers, Johansen, Change, & Salekin, 1997), although this association has not been entirely consistent across studies. Some researchers have reported that while in prison incarcerated psychopaths display more aggressive behaviors than nonpsychopaths and are frequently segregated for treatment (Ogloff et al., 1990). Psychopaths have also been found in some studies to be more likely than nonpsychopaths to engage in fights and aggressive homosexuality in prison (Hart & Hare, 1997). Gacono and colleagues (1995) reported that their sample of malingerers, all of whom were diagnosed with PCL-R psychopathy, were more likely than insanity acquittees to (1) be verbally or physically assaultive, (2) require specialized treatment plans for their aggressive behavior, (3) have sexual relations with female staff, (4) deal drugs, and (5) be considered at risk for escape. Moreover, psychopaths tend to exhibit aggressive behaviors relatively soon after admission (i.e., within two months) to correctional facilities and forensic hospitals (Hart & Hare, 1997; Heilbrun et al., 1998). Overall, the correlations between PCL-R scores and poor institutional behavior

are generally weak to moderate, although PCL-R scores tend to be better predictors of institutional misbehavior than demographic variables and criminal histories (Hart, 1995).

These positive findings concerning the relation between psychopathy and institutional misbehavior have not, however, been uniformly replicated (Cunningham & Reidy, 1998; Serin, 1991). Moreover, many of these studies suffer from methodological flaws. For example, in several studies institutional infractions have been considered in making PCL-R Factor 2 ratings, resulting in criterion contamination (Cunningham & Reidy, 1998).

Furthermore, although the PCL-R has been found in several studies to be useful in predicting or postdicting institutional misbehavior, it may not be superior to other psychopathy measures in this regard (Edens, Poythress, & Lilienfeld, 1999). In their study of ethnically diverse youthful criminals, Edens and colleagues found that PCL-R total, Factor 1, and Factor 2 scores and PPI total scores correlated with the combined number of disciplinary reports of physical aggression (e.g., using a weapon, fighting) and verbal aggression/defiance (e.g., threats, disrespect to officials, disobeying officials) during the first year of incarceration, with significant correlations ranging from .24 to .30. None of the correlations between the psychopathy indices and occurrences of nonaggressive, physical aggression, or verbal aggression/defiance disciplinary reports was significant, however, except for those between PCL-R Factor 2 scores and physical aggression reports (r = .24) and PPI scores and verbal aggression/defiance reports (r = .23). Neither the PCL-R nor the PPI showed incremental validity above and beyond the other measure in predicting institutional disciplinary problems.

In general, there is limited research on the relation between psychopathy and correctional facility offending, although there is some evidence that psychopathy measures correlate weakly to moderately with disciplinary infractions. Until there is more consistent evidence on this issue, forensic psychologists should exercise caution when using the PCL-R or other psychopathy measures to predict institutional misbehavior (Cunningham & Reidy, 1998).

Recidivism

The relation between psychopathy and criminal recidivism is one of the best established findings in forensic psychology (Hare, 1996). PCL- and PCL-R-defined psychopathic criminals have consistently been found to be more prone to recidivism than nonpsychopathic criminals (Cornell et al., 1996). For example, Hart, Kropp, and Hare (1988) found that 80 percent of released inmates with high PCL scores, compared with 25 percent of inmates with low PCL scores, were imprisoned again within three years. High-PCL inmates were four times more likely to commit a violent crime after release than low-PCL inmates. Hart and colleagues' study was the first predictive study of psychopathy and violent recidivism, and corroborating evidence has been reported in many studies of the PCL and the PCL-R (Cornell et al., 1996; Cunningham & Reidy, 1998; Douglas, Ogloff,

Nicholls, & Grant, 1999; Glover, Nicholson, Hemmati, Bernfield, & Quinsey, 2002; Hart, 1998; Hart & Hare, 1997; Hemphill et al., 1998; Kroner & Loza, 2001; Rice & Harris, 1995; Salekin et al., 1996; Skilling, Harris, Rice, & Quinsey, 2002). In their review, Hemphill, Hare, and Wong (1998) reported that at one year after release, PCL-R-defined psychopaths were three times more likely to recidivate and four times more likely to recidivate violently than nonpsychopaths. Wong (1995) conducted the first large-scale (i.e., approximately 10-year) longitudinal study of the association between PCL ratings and recidivism and found that PCL scores significantly predicted violent and nonviolent recidivism. Although the prevalence of psychopathy is lower in forensic psychiatric samples than in correctional institutions, psychopathy has also been found to be significantly associated with recidivism in forensic patients (Hare, 1996).

Among sexual offenders, psychopathy is associated with both violent and sexual recidivism (Rice & Harris, 1995). In their reviews of PCL and PCL-R studies, Hemphill and colleagues (1998) and Salekin and colleagues (1996) reported that the PCL and PCL-R are consistent predictors of general, violent, and sexual recidivism. Furr (1993) reviewed studies of recidivism in released sex offenders and argued that it may be possible to obtain reasonably accurate predictions of sexual or violent recidivism among released violent sex offenders by using the PCL-R in conjunction with an actuarial measure of recidivism. Nevertheless, the relatively small corpus of research in this area suggests that further research examining the relation between psychopathy and sexual recidivism is necessary (Serin, 1992).

It is not clear whether the two PCL factors differentially predict recidivism. Hemphill and colleagues' review suggests that PCL and PCL-R Factor 2 scores are stronger predictors of general recidivism than Factor 1 scores but that both factors predict violent recidivism (Hemphill & Hare, 1995; Hemphill et al., 1998). Serin (1996) reported that PCL-R Factor 1 was a better predictor of violent recidivism than Factor 2 and suggested that the core affective and interpersonal features of psychopathy may contribute uniquely to the prediction of violent recidivism. In contrast, Salekin and colleagues' (1996) meta-analysis indicated that PCL Factor 2 scores predicted general *and* violent recidivism better than Factor 1 scores. The relation between PCL-R factor scores and recidivism has been inconsistent across studies and requires additional investigation.

The PCL-R has consistently been found to predict recidivism, particularly violent and sexual recidivism, above and beyond measures of criminal history, demographic variables, and personality disorder diagnoses (Hare, 1996; Hare et al., 1991). Actuarial measures, which typically use static demographic variables (e.g., marital status) in addition to offense history to generate predictions about an individual's likelihood of reoffending, are often better predictors of criminal behavior than personality traits (Hare, 1996). In several studies, however, the PCL-R has outperformed actuarial measures of recidivism (e.g., Nuffield's [1982] Statistical Index of General Recidivism Scale [SIR]) (Hart & Hare, 1997; Serin, 1992, 1996; see also Webster, Rice, Cormier, & Quinsey, 1994). Zamble and Palmer

(1995) outlined an approach for predicting recidivism that involves using the PCL-R in combination with other measures. They found that at two to four years after release the PCL-R was more accurate in predicting recidivism than the SIR.

In summary, the literature supports the PCL-R's use in clinical assessments of general and violent recidivism risk (Hemphill et al., 1998) and suggests that this measure possesses incremental validity above and beyond actuarial risk indices. Although the findings regarding psychopathy and recidivism, especially sexual recidivism, warrant replication in nonwhites and females, forensic psychologists can justifiably consider using the PCL-R in making rough probability statements regarding parole and conditional release decisions and community placements among white male inmates (Salekin et al., 1996).

THE PROGNOSIS OF PSYCHOPATHIC CRIMINALS

Relatively little is known about the long-term prognosis of psychopaths (Hare, 1998). Some evidence suggests, however, that psychopaths exhibit age-related patterns of offending that differ from those of criminal nonpsychopaths.

The Natural History of Psychopathy

Psychopaths begin their criminal careers at relatively young ages (Hart & Hare, 1997). Furthermore, the crime rates (particularly violent crime rates) of psychopathic criminals tend to decrease around the age of 40 (Hare, 1996). Harpur and Hare (1994) found that PCL-R-defined psychopathy was less prevalent in older than in younger inmates. After conducting cross-sectional and longitudinal analyses, Hare, McPherson, and Forth (1988) found that although nonpsychopaths' rates of nonviolent crime were relatively constant over the life span, psychopaths' rates of nonviolent crime were consistent until about age 40, after which they decreased substantially. These findings support the contention that around or shortly after the age of 40, psychopaths exhibit burnout with respect to nonviolent offending (e.g., Robins, 1966).

Harris, Rice, and Cormier (1991) examined violent recidivism in forensic patients and found that even beyond age 40 PCL-defined psychopaths engaged in more violent recidivism than nonpsychopaths. Overall, the findings concerning age and psychopathy suggest that after the age of 40 psychopaths' involvement in nonviolent crimes tends to decline and resemble that of nonpsychopaths, whereas psychopaths' rates of violent crime remain above those of nonpsychopaths throughout the life span. Wong's (1995) preliminary results in a longitudinal study of psychopathy and recidivism similarly indicated that criminal activities of psychopaths tend to decrease with age. Nevertheless, replication of these findings using additional longitudinal analyses are required before forensic psychologists can offer strong predictions regarding psychopaths' potential for violent and nonviolent crimes at different ages.

A decline in criminal behavior with age does not, however, necessarily imply a change in underlying personality traits. As psychopaths commit fewer crimes, they may manifest different antisocial behaviors (Hare, 1996) or channel their psychopathic tendencies into more prosocial or at least less overtly antisocial behaviors (Harkness & Lilienfeld, 1997). Harpur and Hare (1994) found that psychopaths' PCL Factor 1 scores were stable over time, whereas their Factor 2 scores decreased with age. The researchers suggested that core psychopathic traits (e.g., egocentricity, deceitfulness) do not parallel apparent age-related declines in impulsivity, social deviance, and antisocial behavior. Because Harpur and Hare's data are cross-sectional, however, their conclusions should be interpreted with caution. Overall, preliminary findings on the longitudinal course of psychopathy suggest that psychopaths' interpersonal and affective traits are more stable over time than their antisocial and criminal behaviors (Hart & Hare, 1997).

Because psychopathy researchers have typically examined recidivism in relatively young adult parolees, there is a paucity of research on the manifestations of the personality traits and antisocial behaviors of psychopathic criminals at older ages. This is a particular limitation in decisions regarding parole after multidecade incarceration periods because it is not clear whether psychopathic offenders tend to naturally cease committing certain crimes as they age (Cunningham & Reidy, 1998). Forensic psychologists should cautiously evaluate the evidence on psychopaths' age-related changes in affective and behavioral characteristics when making correctional placement and treatment decisions.

The Treatment of Psychopathy

Cleckley (1941/1988) depicted psychopaths as virtually incurable and recommended that they be continually monitored to prevent their violation of others. Craft (1969) argued that knowledge concerning psychopaths' treatment responsivity was hindered by a lack of long-term follow-up intervention studies. He further asserted that there was no empirical basis for forming appropriate treatment and after-care services for psychopathic offenders.

Unfortunately, over three decades later psychologists are scarcely further advanced in their understanding of psychopaths' amenability to treatment. Although no structured treatment or resocialization programs are clearly known to be effective in decreasing psychopaths' criminality, it is common for offenders to be labeled psychopathic and then sentenced to treatment in correctional institutions or be asked to participate in treatment programs (Hare, 1996). Furthermore, parole boards are more willing to consider a conditional release for an inmate who has received treatment than one who has not, regardless of whether the treatment was successful (Ogloff, Wong, & Greenwood, 1990). In some correctional institutions, offenders with high PCL-R scores are excluded from traditional treatment programs (Hare, 1998), but it is unclear how effective these traditional treatment programs are in treating psychopaths.

Only a handful of psychopathy treatment programs have been systematically evaluated. Some clinicians have argued that Therapeutic Community (TC) treatment, a corrections-based community program in which inmates are encouraged to learn to take responsibility for their behaviors, is helpful in treating psychopaths (Ogloff et al., 1990). Ogloff and colleagues examined treatment outcomes in federal inmate volunteers to a TC program and found that psychopathy correlated negatively with time spent in the TC before being discharged for failure to complete the program, for lack of motivation, or for being a security risk. The researchers also reported that PCL-defined psychopaths showed less motivation, effort, and clinical improvement than nonpsychopaths. TC appeared to be somewhat effective for inmates with moderate, but not high, PCL scores, Rice, Harris, and Cormier (1992) evaluated the efficacy of a maximum-security TC program among mentally disordered offenders, some of whom were psychopaths. Compared with no treatment conditions, TC treatment was generally found to have little impact on recidivism, although it was associated with lower recidivism among nonpsychopaths. Among psychopaths, general recidivism was equally high in treated and untreated groups, and violent recidivism was higher in the treated groups than in the untreated groups. Thus, TC actually appeared to be harmful among psychopathic offenders. The researchers speculated that group therapy and insight-oriented programs may help psychopaths learn to better manipulate and deceive others.

Garrido, Esteban, and Molero (1995) conducted a meta-analysis on controlled and pre-post studies of treatment efficacy among psychopaths. Their results suggested that psychopaths are less likely than nonpsychopaths to benefit from treatment, especially TC program treatment. In addition, psychopaths showed some evidence for improvement (1) when treatment was not designed to address drug abuse, (2) when they were younger than 30, (3) with increases in intervention length, and (4) when they had moderate rather than high levels of psychopathy. Nevertheless, these findings will require corroboration in controlled outcome studies. In a study of the PCL-R in a youthful offender sample, Brandt and colleagues (1997) found that the short-term treatment of psychopathic juvenile offenders did not prevent future offenses over an extended period of time. Most studies of treatment efficacy among psychopaths are limited by inadequate assessments, poorly defined interventions, a lack of post-treatment follow-up, and an absence of appropriate control/comparison groups (Hart & Hare, 1997).

In summary, as suggested by the extensive anecdotal literature indicating that psychopaths lack insight into their antisocial attitudes and behaviors and tend to seek treatment only when it is in their best interest (e.g., applying for parole) (Cleckley 1941/1988), the admittedly limited research literature suggests that psychopaths are not generally responsive to existing treatments (Hare, 1998). Some analyses hint that individuals with low to moderate levels of psychopathy (i.e., PCL-R scores of 10 to 29) are potentially treatable, but the overall findings on the efficacy of treatment for psychopaths are sparse and contradictory (Cunningham & Reidy, 1998).

Although there is little compelling evidence that psychopathy is treatable. there is no conclusive evidence that it is untreatable (Hart & Hare, 1997). Because psychopaths do not clearly benefit from treatment programs geared towards developing empathy, conscientiousness, and interpersonal skills, Hare and colleagues have suggested tailoring programs specifically to psychopaths. They argue that such programs should convince psychopaths that emotion is less important in controlling, directing, and inhibiting their behavior than in other individuals and that they must work toward developing motivating and guiding strategies that do not rely on emotion (Hare, 1998). Hare and others have further proposed that relapse-prevention techniques be supplemented by cognitive-behavioral correctional programs to help psychopaths understand that they are responsible for their behaviors and to learn prosocial ways of satisfying their desires (Hare, 1996; Hart & Hare, 1997). Extensive supervision during institutionalization and in the community following release has also been suggested. Nevertheless, such treatment programs have not been extensively examined for their effectiveness as treatment alternatives for psychopaths within criminal justice systems.

CONCLUSION: TEN TAKE-HOME MESSAGES FOR FORENSIC PSYCHOLOGISTS

In this chapter, we reviewed the literature on the classification, assessment, and correlates of psychopathy, with particular emphasis on findings of relevance to forensic psychologists. We delineated two approaches to operationalizing psychopathy (i.e., personality based and behavior based) and emphasized the limitations of using purely behavior-based criteria, such as the *DSM-IV* criteria for ASPD, to assess criminal offenders. We urge all forensic psychologists to bear the following 10 points in mind when assessing and working with psychopaths.

- 1. The classical construct of psychopathy, as delineated by Cleckley, is not synonymous with ASPD, although these two syndromes overlap moderately. There are good reasons to believe that the *DSM-IV* criteria for ASPD are both underinclusive and overinclusive compared with the Cleckley-type (i.e., personality-based) criteria for psychopathy and possess weaker construct validity than the latter criteria among criminal offenders.
- 2. Because most studies of psychopathy have examined this syndrome in samples of white male North American inmates, forensic psychologists should cautiously apply the research findings discussed in this chapter to other forensic samples. Although there is promising evidence that the psychopathy construct can be meaningfully assessed in women and blacks, these findings warrant replication. Moreover, the possibility that psychopathy measures exhibit sex, ethnic, or cultural biases cannot be excluded with confidence on the basis of extant data.

- 3. The PCL and its progeny are the most extensively construct-validated measures of psychopathy. These measures consist of two factors, one of which assesses the core affective and interpersonal features of psychopathy and the other of which assesses chronic antisocial and criminal behaviors. These two factors differ substantially in their correlates and assessment implications, and should be examined separately in all clinical applications and research studies.
- 4. Most commonly used self-report measures of psychopathy, including the MMPI and MMPI-2 Pd scale and CPI So scale, primarily assess the antisocial and criminal behavior sometimes associated with psychopathy rather than the core personality components of this syndrome. As a consequence, such measures should not be used in isolation to assess Cleckley psychopathy or to distinguish Cleckley psychopaths from other offenders in criminal samples. Although a few recently developed self-report measures, such as the PPI, show promise in assessing the affective and interpersonal traits of psychopathy, these measures require further construct validation, particularly in forensic samples.
- 5. Relatively little progress has been made in the development of observer rating measures of psychopathy, although such measures hold considerable promise in circumventing the "blind spots" that may characterize psychopaths' self-reports. One such measure, the PQS, has been found to possess encouraging validity in nonclinical samples, although its construct validity in criminal samples is unknown.
- 6. The Rorschach and other projective techniques have not demonstrated consistent construct validity in the assessment of psychopathy and cannot presently be recommended for distinguishing psychopathic from nonpsychopathic criminals.
- 7. There is no convincing evidence that psychopaths are better than nonpsychopaths at either malingering or faking good on psychological measures, and there is relatively little evidence bearing on psychopaths' proclivity toward engaging in these response styles. Much more research is needed to address the relations between psychopathy and various forms of dissimulation, and forensic psychologists should not assume that the PCL-R or other psychopathy measures can be validly used to detect malingering or other forms of dishonesty.
- 8. As typically assessed by the PCL and PCL-R, psychopathy has been found to be associated with violent offending, including instrumental violent offending and violent-sexual offending, criminal recidivism, and institutional misbehavior, although the latter association has generally been found to be only weak or moderate in magnitude. Moreover, the PCL and PCL-R possess incremental validity above and beyond actuarial risk indices for predicting criminal recidivism. The homicides of psychopathic criminals are more likely to involve strangers than those of nonpsychopathic criminals, whereas the homicides of the latter

- criminals are more likely to occur during domestic disputes or intense emotional arousal.
- 9. Psychopathic criminals engage in less criminal offending, especially non-violent offending, after age 40, although core psychopathic traits appear to remain stable with age. More research derived from longitudinal designs needs to be conducted on the relation between psychopathy and aging.
- 10. There is little compelling evidence that psychopaths are responsive to treatment, although further research on this issue is clearly warranted. The oft-cited conclusion that "psychopaths cannot be treated" is premature. Because there is some suggestion that certain treatments may produce harmful effects among psychopaths, however, forensic psychologists should not assume that "some treatment is always better than no treatment."

We believe that all forensic psychologists will benefit from a greater familiarity with the psychopathy literature, and that this extensive body of research provides valuable information regarding the assessment, diagnosis, correlates, course, and treatment of psychopaths. We encourage all forensic psychologists to integrate the scientific findings concerning psychopathy into their routine clinical assessment and practice.

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