PREDICTION OF AGGRESSIVE AND SOCALLY DISRUPTIVE
BEHAVIOR AMONG FORENSIC PATIENTS: A VALIDATION
OF THE PSYCHOPATHY CHECKLIST
SCREENING VERSION

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Christie D. Hill, B.S., M.A.
Denton, Texas
May, 1997
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Psychopathic criminals commit more crimes, are more prone to recidivism, and more likely to engage in violent crimes and other aggressive behavior than nonpsychopathic criminals. Less is known about forensic patients, both with and without psychopathy, and their aggression. In the current study, patients in a maximum security hospital were examined with respect to their psychopathy and its predictive value on institutional management and dangerousness. In this regard, the Psychopathy Checklist (PCL) and the Psychopathy Checklist - Revised (PCL-R) have proven to be valid and reliable measures of psychopathy. The present study was an attempt to establish predictive validity for a new version: the Psychopathy Checklist Screening Version (PCL-SV). As such, this study examined the PCL-SV's relationship to (a) diagnoses of Antisocial Personality Disorder according to DSM-III-R criteria and (b) the Personality Assessment Inventory (PAI) Aggression, Drug Problems, and Antisocial Features scales. The influence of major Axis I disorders on the assessment of psychopathy with the PCL-SV was also examined. Participants were 150 male forensic psychiatric patients at Vernon State Hospital who were committed for various reasons: incompetence to stand trial, initial evaluation and treatment after having been found not guilty by reason of insanity,
and manifest dangerousness. Chart reviews were completed for a six month follow-up period during which all instances of aggressive or socially disruptive behaviors were recorded. Results supported the predictive validity of the PCL-SV as a measure of psychopathy for aggression and treatment noncompliance. Unexpected findings among correlations of the PCL-SV with the PAI Antisocial Features scale were examined and discussed. A review of the costs and benefits of the PCL-SV in clinical decision making is presented and the clinical utility of the present findings is discussed.
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CHAPTER I

INTRODUCTION

The public perception of the mentally ill as dangerous and violence prone is neither a time- nor culture-bound belief (Field Institute, 1984; Jones & Horne, 1973; Monahan, 1992; Slovic & Monahan, 1995; Rosen, 1968; Westermeyer & Kroll, 1978). Current day media portrayal, both print and film, tend to propagate the image of the mentally ill as violent, even homicidal (Gerner, Gross, Morgan, & Signorielli, 1981; Shain & Phillips, 1991; Steadman & Cocozza, 1978). The alternative view espoused by advocates for the mentally ill, as well as many psychological and sociological researchers, asserts that the association between mental disorders and violent behavior is no greater than the population base rate (Campbell & Schraiber, 1989; Monahan, 1992; Monahan & Steadman, 1983; National Mental Health Association, 1987). Although historically there has been considerable disagreement among researchers, several recent reviews (Mullen, 1992; Otto, 1992; Wesley & Taylor, 1991) support the popular perception of an increased dangerousness risk posed by the mentally disordered. For example, the presence of physical assaults ranges from 10.0% to 40.0% both prior to admissions (Mdn = 15.0%) and during psychiatric hospitalizations (Mdn = 25.0%). Menuck (1983) has reported that more than one-half of psychiatric patients seen in emergency settings or admitted to hospitals are physically aggressive.
One study (Steadman et al., 1992) examined post-discharge aggression and found similar results. The self-reports of ex-psychiatric patients at four months post-discharge suggested that 27.0% engaged in one or more violent acts within this time period (Steadman et al., 1992). Rates of physical aggression appear to remain fairly consistent with increased follow-up time. For example, Klassen and O'Connor (1988, 1989) found that approximately 25.0% to 30.0% of male psychiatric patients with histories of at least one violent act commit another violent act within one year of release from the hospital.

Although the percentage of patients engaging in violent acts appears to be consistent across these studies, this line of research provides no information regarding the relative risk imposed by psychiatric patients over that imposed by members of the public at large. However, when comparing the prevalence of serious violent acts committed by ex-psychiatric patients and nonpsychiatric community participants over a one year period, Steadman and Felson (1984) found a considerably higher percentage of ex-psychiatric patients engaged in physical assaults (22.3% vs. 15.1%) and weapon use (8.1% vs. 1.6%).

Rigorous efforts by Swanson, Holzer, Ganju, and Jono (1990) to clarify the nature of the relationship between psychiatric disorder and increased prevalence of violence have indicated that people who met criteria for a DSM-III Axis I disorder engaged in more than five times the violent acts than did persons who received no Axis I diagnosis. On closer examination, Swanson et al. (1990) discovered that (a) only negligible differences occurred between the prevalence of violence among persons diagnosed with schizophrenia, major depression, or bipolar disorder, but (b) those meeting criteria for alcohol dependence were twelve times more likely to engage in violent behavior than
nonmentally ill persons. Even more alarming was the finding that persons meeting criteria for a nonalcohol substance abuse disorder were sixteen times more likely to engage in violence than those who received no Axis I diagnosis. Thus, it appears that the increased prevalence of violence found in the mentally ill cannot be attributed solely to the severely, chronically disturbed, such as those experiencing severe psychotic symptomatology.

These findings have been challenged by Link, Cullen, and Andrews (1992). These authors have taken rigorous efforts to identify factors that may account for the increased violence prevalence in the mentally disordered. Only one of the numerous demographic and personal factors they controlled influenced their findings: current symptomatology. Link et al. (1992) noted that controlling for current psychotic symptomatology eradicated the difference between the prevalence of violence in psychiatric patients and never-treated community participants. Finally, one additional concern regarding forensic psychiatric and corrections populations is that they typically pose a further risk of violent behavior based on their prior histories of aggressive behavior (Litwack & Schlesinger, 1987; Steadman & Felson, 1984).

Meanwhile, amidst the contentions, constraints and recent clarifications in the field of dangerousness research, the legal community has increasingly sought to incorporate the opinions of mental health professionals concerning dangerousness in their decision making processes regarding a variety of legal issues (Dix, 1980, Otto, 1994; Shah, 1978). This increasing reliance upon the opinions of mental health professionals in the court system has been most observable in the past twenty-five years following the advent of civil rights reforms for the mentally ill in the 1970s. As Monahan (1981) has noted, the subsequent
increased interaction between the mental health and legal systems has resulted in further
demands on mental health professionals to render opinions on the dangerousness of
psychiatric patients as well as offenders.

Not surprisingly, predictions of dangerousness have the capacity to exert
substantial influence on the systems which invoke them, institutions which rely on them for
management and release decisions, and the patients and offenders themselves (Wyda &
Black, 1989). Dangerousness predictions affect institutions through their influence on the
formation and alteration of public policy, legal standards, and resulting public perceptions.
Additionally, the lives of patients and offenders are invariably impacted by dangerousness
predictions through involuntary hospitalization, sentencing determinations and parole
hearings.

Despite the profound consequences that opinions and predictions of dangerousness
may impose, it was not until the 1970s that researchers turned a vigilant eye toward the
accuracy of their predictions and methods for these determinations (Otto, 1994). The
findings of what has subsequently been termed “first generation” research in the area of
dangerousness coalesced in an apparent demonstration of mental health professionals’
disconcerting failures in predicting dangerousness through excessive over-prediction,
resulting in nearly two times more inaccurate predictions than accurate ones (Monahan &
Steadman, 1994). In retrospect, the rapidly accepted conclusions that mental health
professionals could not predict violence and possessed no expertise which might even
qualify them to do so (Ennis & Emery, 1978; Ennis & Litwack, 1974; Steadman &
Cocozza, 1978), appears to have been premature (Monahan, 1984; Otto, 1994). For
example, reviews of first generation research have exposed methodological problems which have constricted their predictive power and limited their generalizability (Litwack & Schlesinger, 1987; Monahan, 1984; Mulvey & Lidz, 1985; Slobogin, 1984). Methodological constraints have included: inadequate predictors, poorly defined follow-up criteria, constricted and skewed follow-up samples, and excessively narrow definitions of violence (Apperson, Mulvey, & Lidz, 1993; Litwack & Schlesinger, 1987; Otto, 1994; Slobogin, 1984). As a result, past and present attempts to predict aggression have yielded disappointing results for dangerousness predictions (Cocozza & Steadman, 1978; Menzies et al., 1994; Steadman & Cocozza, 1974; Thornberry & Jacoby, 1979).

Thus, a critical issue to forensic psychology is the establishment of empirically validated methods of identifying patients who may present an increased institutional risk by acting in an aggressive or socially disruptive manner. Presumably, if clinicians were able to more reliably predict which forensic patients were likely to act aggressively or disruptively on maximum security units, then timely, focused interventions may reduce such behaviors. The obvious benefits would be reduced risk to staff and other patients and a greater capacity to focus unit programming on therapeutic interventions.

Renewed interest has surfaced regarding the role of psychopathy as a predictor of future aggression in correctional and forensic populations. Unfortunately, the traditional use of psychopathy as a predictor of aggressive and/or socially disruptive behavior has not fared well (Hare, 1981). Several factors have contributed to these findings and continue to impede research attempts to make such predictions. These factors include the absence of a standard definition of psychopathy, attempts to equate psychopathy with antisocial
personality disorder, lack of a reliable and valid measure of psychopathy, and the possible influence of psychiatric comorbidity.

Recent trends in the development of the Psychopathy Checklist (PCL; Hare, 1980; Hare, 1981; Hare, 1985; Harpur, Hakstian, & Hare, 1988), its revision, the PCL-R (Hare, 1991; Hare et al., 1990; Hart, Hare, & Harpur, 1992) and the Psychopathy Checklist Screening Version (PCL-SV; Hare, Hart, & Cox, 1989; Hart, Hare, & Forth, 1994) have demonstrated improved effectiveness in predicting aggressive behavior (Forth, Hart, & Hare, 1990; Hare & McPherson, 1984; Harris, Rice, & Cormier, 1991; Kosson, Smith, & Newman, 1990; Quinsey, Rice, & Harris, 1995; Rice & Harris, 1992; Rice, Harris, & Cormier, 1992; Rice, Harris, & Quinsey, 1990; Serin, 1991; Serin & Amos, 1995), and recidivism (Forth et al., 1990; Harris et al., 1991; Hare, McPherson, & Forth, 1988; Rice et al., 1992; Rice et al., 1990; Serin, Peters, & Barbaree, 1990; Serin & Amos, 1995; Wong, 1984), in offenders and forensic psychiatric patients (Hare & Hart, 1993; Hare & McPherson, 1984).

The PCL and PCL-R have demonstrated high inter-rater reliability, as well as construct, predictive and discriminant validity (Forth et al., 1990; Hare, et al. 1990; Harpur, Hare, & Hakstian, 1989; Hart & Hare, 1989; Hart et al., 1992; Hart, Kropp, & Hare, 1988; Kosson et al., 1990; Serin et al., 1990). The PCL-SV is theoretically similar to its predecessors. However, in its construction the authors sought to produce a measure of psychopathy which facilitated clinical applications (Hare et al., 1989). The authors reported that the considerably shortened interview, significantly reduced time commitment for record review, and sensitivity to time- and treatment-related changes in psychopathy
(based on findings of the measure’s instability) have established an effective measure of psychopathy for use in clinical settings. The substantiation of their claims, as well as the logic employed in arriving at their conclusions is discussed in a following section (see the “Development” subheading under “The Psychopathy Checklist-Screening Version”).

Given the history of its predecessors, the PCL-SV appears to be a promising instrument for the assessment of psychopathy in clinical populations despite possible flaws in the authors’ logic regarding its clinical utility.

This study was an attempt to establish predictive validity for the PCL-SV through an examination of its ability to predict the occurrence of aggressive and socially disruptive behaviors among maximum security forensic psychiatric patients. The relationships between the PCL-SV and the Personality Assessment Inventory (PAI; Morey, 1991) scales of Aggression (AGG), Drug Problems (DRG), and Antisocial Features (ANT) and diagnoses of Antisocial Personality Disorder (APD) based on criteria set forth in the revised third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; American Psychiatric Association, 1986) were also examined in an attempt to further investigate the construct validity of the PCL-SV.

The Construct of Psychopathy

The conceptualization of psychopathy as a construct has proven controversial throughout the history of its use with researchers not only failing to agree upon one consistent definition, but also continuing to debate its mere existence and clinical utility (Hare, 1981; Blackburn, 1988; Valliant, 1975; Wulach, 1983). Blackburn (1988) presented a practical organization of the various approaches to the comprehension,
explanation, and definition of psychopathy. According to his organizational structure, all explanatory models of psychopathy fall into one of three basic formats: psychopathy as social deviance, psychopathy as intrapersonal deviance, or psychopathy as a combination of both social and intrapersonal deviance. This organizational structure appears inherently logical and is used subsequently to provide the framework for an overview of the major conceptualizations of psychopathy following a brief review of the debate regarding the existence and clinical utility of psychopathy as a construct.

The Utility of Psychopathy as a Construct. Although it appears that Cleckley's definition of psychopathy has inspired research that validates psychopathy as a construct, Blackburn (1988) contended that the research has not produced sufficient results to abolish suspicions that it remains a speculative construct. His primary point of contention regarding the diagnosis of psychopathic personality is that it does not define a homogenous class. In support of his assertion, he noted that the variability of competing psychopathy definitions suggests that the defining characteristics have been drawn from two separate domains: personality characteristics and antisocial behaviors. As evidence to justify his argument, he presents the case of DSM-III Antisocial Personality Disorder (APD) criteria that contain both personality characteristics and behavioral features although designed to measure deviance in personality. Furthermore, he has suggested that combining personality characteristics and behavioral features in an attempt to identify a homogenous class may be as questionable as the classification of political affiliation by eye color.
However, two obvious problems with Blackburn's (1988) position attest to the murkiness of this debate. First, it appears that his position is based upon the same fallacy which he has implicated as central, if not causal, in psychopathy's lack of utility as a construct, i.e., the failure to correctly identify the domain from which diagnostic criteria are sampled. More specifically, whereas he faults other classification methods for the inclusion of behavioral features without considering their genesis, he summarily excludes such features without considering their genesis. In other words, as he criticizes other systems for using behavioral criteria in the identification of a characterological disorder prior to assessing their relationship to the personality features, he discounts these same criteria, also prior to assessing their relationship to personality features. Second, although not directly stated, his use of APD diagnoses to demonstrate the heterogeneity of the class of psychopathic personality suggests that he may perceive psychopathy and APD as interchangeable constructs, a perception which evokes an entirely distinct set of issues regarding construct validity (see "Psychopathy as APD" for a critique of this practice).

Mounting evidence (Eysenck & Eysenck, 1977; Krueger et al., 1994) has accumulated within the psychological literature in support of the belief that a subset of criminals share a set of personality characteristics. Additionally, researchers have identified groups of maximum security psychiatric patients (Rasmussen & Levander, 1996) as well as noninstitutionalized samples (Belmore & Quinsey, 1994) who exhibit similar personality characteristics. These recent gains in the identification of shared characterological traits have likely resulted from several improvements in personality
assessment measures, follow-up measures, and improved sampling methods designed to increase generalizability (Krueger et al., 1994).

In an attempt to identify specific personality characteristics which may functionally differentiate criminal populations from noncriminal populations, Krueger et al. (1994) examined a birth cohort of 1,139 18-year olds. These researchers examined the relationships among ten scales obtained from a modified version of the Multidimensional Personality Questionnaire (Tellegen, 1982) and multiple measures of delinquency, including self-reports, informant reports (family or friend nominated by the participants), and official reports (police contacts, and court convictions). Collapsing across gender, a pattern of significant correlations emerged between delinquency measures and MPQ Traditionalism, Control, and Aggression scales. This pattern of associations remained with no significant alteration, even after controlling for item overlap between the MPQ and measures of delinquency.

Additional findings included significant correlations between two MPQ higher order personality factors and measures of delinquency. More specifically, the MPQ Constraint factor was negatively correlated with delinquency measures while the Negative Emotionality factor was positively correlated with all delinquency measures excluding court convictions for females. Overall, the findings characterized the prototypical delinquent youth as rebellious, impulsive, manipulative, emotionally reactive in response to frustration, prone to feel stressed and/or harassed, and interpersonally adversarial. Although Krueger et al. (1994) described the correlations as “robust” and “impressive”, those which produced reliable, significant coefficients across gender and delinquency
measures ranged from .11 to .52, an extremely variable range, the upward bounds of which could best be described as moderate.

Rasmussen and Levander (1996) examined psychiatric symptoms and personality characteristics of 94 patients admitted to a maximum security psychiatric unit over a 76 month period. Using correlational and cluster analyses, they demonstrated that psychopaths form a distinct class of patients exhibiting virtually no relationship between psychopathy symptoms and any other psychiatric symptoms or personality characteristics. Although an association was found between a summed borderline criteria score and psychopathy, this correlation was determined to be attributable to a single item: impulsiveness. The authors also reported a strong relationship between substance abuse and psychopathy. Unfortunately, no further investigation of this finding was reported.

Eysenck and Eysenck (1977) have compared criminals and a control group on the Psychoticism, Extraversion, and Neuroticism scales of the Eysenck Personality Questionnaire (EPQ). They found higher scores on all three scales for incarcerated offenders. Furthermore, they suggest that this difference is an underestimation of the true difference, which they assert would be significantly larger, if corrected for attenuation due to unreliability of the instrument and lack of validity of the criterion. However, these results are questionable, as Hare (1982) has been unable to duplicate their findings while using similar methodology.

Some researchers have begun to uncover promising results in relatively new approaches to the investigation of psychopathy. Investigators have expanded the scope of their explorations into the underpinnings of psychopathy to examine noninstitutionalized
populations in both laboratory and naturalistic correlational studies (Belmore & Quinsey, 1994; Kipnis, 1971; Widom, 1977; Widom & Newman, 1985). As Widom and Newman (1985) theorized, studies of noninstitutional samples offer the prospect of contributing to the understanding of psychopathy by disentangling its underlying factors from those of criminality.

In an initial study of psychopathy in noninstitutionalized samples, Widom (1977) identified 28 participants who obtained high MMPI Pd scores and California Psychological Inventory (CPI) Socialization Scale (So) scores lower than those typically found in prison samples. In addition, all but six of these participants met criteria for psychopathy as outlined in Robins's (1966) list of antisocial behavioral symptoms. An extremely similar study conducted by Widom and Newman (1985) obtained nearly identical findings regarding psychometric scales.

Kipnis (1971) has conducted similar studies using noninstitutionalized samples; however, he has focused on impulsiveness, a construct which historically has been integrally related to psychopathy. His findings indicate that scores on the Impulsiveness Scale, created for noncriminal populations, are moderately correlated with scores on the CPI So scale and the MMPI Pd scale, as well as psychiatric diagnoses of psychopathy. In addition, characteristics which Kipnis (1968) has considered hallmark to the concept of psychopathy (i.e., poor time estimation, easily incited to aggression, proclivity for antisocial behavior, and diminished capacity to experience shame and fear) were associated with high scores on the Impulsiveness Scale. Of particular interest was the finding that intelligence acted as a moderator variable in these correlations, with
significance being reached only for those participants near or above average intelligence. This finding is reminiscent of Cleckley's (1976) criterion describing the psychopath as possessing good intelligence.

Belmore and Quinsey (1994), using two childhood history items, identified community participants highly likely to be categorized as psychopaths using a set of 16 predetermined items shown to be good predictors of membership in the psychopathy taxon (Harris et al., 1991; Harris, Rice, & Quinsey, 1994). On the basis of the previously reviewed findings (Kipnis, 1968; Kipnis, 1971; Widom, 1977; Widom & Newman, 1985), and results suggesting that psychopaths fail to incorporate feedback and alter their behavior accordingly (Newman, Patterson, & Kosson, 1987), Belmore and Quinsey (1994) examined the association between scores on psychopathy taxon items, CPI So scale, the Impulsiveness Scale, and performance on a task requiring incorporation of feedback to alter behavioral responses (e.g., a computerized card playing task). Using an extreme groups design, results indicated, as expected, that the participants scoring high on the criteria for psychopathy obtained lower CPI So scale scores and higher Impulsiveness Scale scores similar to those found using incarcerated samples. Participants in the high psychopathy group played more cards during a behavioral task when faced with consistently increasingly odds of losing with each card played. However, contrary to expectations, findings indicated that their response patterns were not perseverative. In fact, participants in Belmore and Quinsey's (1994) high group played fewer cards than did participants in Newman et al.'s (1987) low group. The authors postulated a plausible explanation for these findings may be that rather than suffering from failures of response
modulation, psychopaths may be responding to the relative value of the task. Such a view would anticipate incarcerated psychopaths to exhibit perseverative-like behavior in their continuance of the task regardless of programmed rewards or punishments because of the relative incentive of entertainment. On the other hand, psychopaths in the community, especially when recruited from an employment office as in this study, are likely to be more in need of money than entertainment, resulting in behaviors which minimize the risk of monetary loss.

The emerging, if nonconclusive, literature supports the convergent validity of the psychopathy construct. As reviewed above, similar personality characteristics and behaviors have been found in incarcerated, psychiatric, and community samples identified as psychopaths. Evidence supporting the existence of such a construct constitutes consideration and determination of the defining characteristics as a requisite for the advancement of our understanding of psychopathy. As outlined in the subsequent three sections, definitions of psychopathy have encompassed a vast array of personality and behavioral signs and symptoms (c.f., Buss, 1966; Cleckley, 1976; Craft, 1965; Fotheringham, 1957; Foulds, 1965; Hare, 1970; Karpman, 1961; McCord & McCord, 1964; Partridge, 1930; Robbins, 1966). Given the numerous attributes incorporating a wide variety of characteristics which have been inconsistently applied to measure this construct, it is not entirely surprising that it has not proven very useful in predicting behavior.

**Psychopathy construed as social deviance.** Blackburn (1988) noted that the origins of the construct of psychopathy in America were initially influenced by German
concepts from the likes of Koch (1891; cited in Blackburn, 1988). The original concept was increasingly narrowed with the development of the fields of psychoanalysis and sociology (Millon, 1981). By 1930, the construct, now termed sociopathy by Partridge (1930), was employed to describe a disorder characterized by deviant or pathological interactions in social relationships. Blackburn (1988) described the essential psychopath as exhibiting chronic maladjustment associated with antisocial motivation. As he noted, this conceptualization infers psychological abnormality from socially objectionable behavior without identifying any personality deviations.

In an attempt to define and conceptualize psychopathy, Fotheringham (1957) has relied on stressing its distinction from other mental disorders. More specifically, he proposed that psychopathy is an illness which is distinct from mental deficiency/intellectual impairment, organicity, epilepsy, psychosis, or neurosis. Additionally, he emphasized that psychopathy is a behavioral disorder. This belief is reflected in his assertion that the predominant manifestation of psychopathy is poorly motivated antisocial behavior which is lacking in purpose, poorly concealed, and often detrimental to the psychopath as well as others.

The primary problem with Fotheringham's (1957) approach is that it tends to develop conceptualizations and definitions of psychopathy based solely on exclusion criteria rather than inclusion criteria or a combination of inclusion and exclusion criteria. Such an approach would well prepare clinicians and researchers to identify nonpsychopaths on the basis of exclusion criteria. However, diagnoses of psychopathy would be based upon failure to conform to any other defined category, making
psychopathy, in essence, a residual category. In such a case, the validity and reliability of psychopathy diagnoses would be virtually determined by the validity and reliability of the established diagnostic system as a whole. This manner of establishing a diagnosis would require an excessively high degree of confidence in our diagnostic system which seems unfounded given the numerous changes to the psychiatric diagnostic system over the years (e.g., APA, 1968, 1980, 1987, 1994).

**Psychopathy construed as intrapersonal deviance.** An initial generic category of psychopathic personalities was first delineated by Kraepelin (1904; cited in Blackburn, 1988). Partridge (1930) described Kraepelin’s view of psychopathy as “in part undeveloped psychoses, and in part as distorted personalities whose evolution was interfered with” (p. 64). Although several typologies closely followed Kraepelin’s account, likely the most influential was that of Schneider (1928, cited in Partridge, 1930; 1950, cited in Blackburn, 1988). Schneider viewed the psychopathic personality as heterogenous in nature and proposed an unsystematic classification system consisting of ten types. According to Partridge (1930), Schneider (1928) described psychopaths as “such abnormal personalities as by reason of their abnormality suffer or cause other people to suffer” (p. 64). In stark contrast to social deviance theories, Schneider specifically excluded antisocial behavior from the criteria, viewing it of importance only as it relates to and stems from personality deviations. Notwithstanding Schneider’s own description of his classification as unsystematic and the lack of research using his criteria, it is the essence of ICD-8, ICD-9, and DSM-II personality disorders (Blackburn, 1988).
Millon (1981) also proposed a typology of trait clusters identifying eight distinct coping patterns, that loosely formed the basis for the DSM-III Axis II personality disorders. However, there is a major departure from his description in the criteria of APD. Millon's (1981) classification corresponding to DSM-III diagnoses of APD is termed the "aggressive pattern" and is characterized by hostile affect, assertive self-image, interpersonal vindictiveness, hyperthymic fearlessness, and malevolent projection, whereas DSM-III APD criteria reflected predominantly antisocial behavior (APA, 1980). He has contended that although antisocial behavior may be correlated with the aggressive pattern, only a minority who fit this pattern will engage in blatant antisocial behavior. As Millon (1983) has reported, one criticism of his aggressive pattern is its apparent heterogeneity inferred from its overlap with his histrionic and narcissistic patterns.

Psychopathy as social and intrapersonal deviance. Several concepts of psychopathy have emerged in which the characterization is one of combined personality and social deviance (Blackburn, 1988; e.g., Buss, 1966; Cleckley, 1976; Craft, 1965; Karpman, 1948). Although these theorists may differ in their respective emphases of characterological traits over antisocial behaviors, or vice versa, they all incorporate both aspects into their conceptualizations of psychopathy.

For instance, Karpman (1948, cited in Blackburn, 1988) contended that there existed a small group of 'true psychopaths' who are all antisocial and characterized by an incapacity to develop a conscience. He criticized previous criteria as creating psychodynamically heterogenous groups sharing only the feature of antisocial behavior. He further asserted that individuals so classified did not merit classification as
psychopathic since their antisocial behavior was simply symptomatic of their neuroses. Thus, Karpman (1928, cited in Partridge, 1930; 1948, cited in Blackburn, 1988) developed his own basis for categorizing “true psychopaths.” He proposed replacing character descriptions with explanations of behavioral motivations in order to improve upon the conceptualizations of psychopathy. Blackburn (1988) has contended that in doing so, Karpman diagnosed psychopathy on the basis of the person’s dynamic structure, broadened psychopathic personality’s scope to that of abnormal personality, and equated psychopathy with a lack of conscience.

Craft’s (1965) conceptualization of psychopathy was based on two levels of symptoms. The first level combined what he viewed as the two primary symptoms of psychopathy: a lack of feeling for others and a tendency to act on impulse. From this core, he derived his secondary symptoms which were predominantly concerned with behavioral manifestations. Although Craft (1965) considered characterological traits the core of psychopathy without which a diagnosis could not be made, his description was heavily influenced by secondary, or behavioral symptoms.

Buss (1966) viewed psychopathy from a slightly different perspective. He proposed that psychopaths exhibited a more balanced disturbance in both behavioral symptoms and personality traits. However, in contrast to Craft (1965), he placed the behavioral symptoms at the core of psychopathy, emphasizing thrill-seeking behavior and disregard for social convention. Of lesser importance were the characterological traits he included, focusing on impaired interpersonal, as opposed to affective functioning.
The most influential contribution to the current conceptualizations of psychopathy was Cleckley’s *The Mask of Sanity* (1976, 1982; see also Hare, 1981, 1985). He proposed a set of 16 differentiating characteristics, including affective, interpersonal and behavioral components, while excluding evidence of psychoneurotic symptoms (see Table 1). These distinguishing characteristics have continued to spur the development of psychopathy assessment measures.

**Psychopathy and Diagnosis of APD.** The most common psychiatric diagnosis related to psychopathy is Antisocial Personality Disorder (APD; APA, 1968, 1980, 1987, 1994). Some researchers have proposed that psychopathy and APD are equivalent in nature and therefore interchangeable (e.g., Guze, 1976; Robbins, 1966). Other researchers contend that although psychopathy and APD are significantly correlated, they are neither equivalent nor interchangeable (Hare, 1983; Hare, 1985; Newman & Kosson, 1986). Several problems associated with using the diagnosis of APD interchangeably with psychopathy are delineated in the subsequent paragraphs.

If psychopathy is to be a clinically useful construct, it should have a consistent conceptualization. Our knowledge and understanding of psychopathy reaps little benefit from numerous investigations of the psychopathic character conducted from divergent models. This argument also holds true for seemingly arbitrary changes in the definition of psychopathy. Without research findings to support changes in the definition of psychopathy, research serves only to create bodies of knowledge which are not comparable and cannot build upon one another due to inconsistency of the conceptualization of psychopathy.
Table 1

Cleckley’s criteria for psychopathy

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<tr>
<td>1</td>
<td>Superficial charm and good intelligence</td>
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<tr>
<td>2</td>
<td>Absence of delusions and other signs of irrational thinking</td>
</tr>
<tr>
<td>3</td>
<td>Absence of “nervousness” or psychoneurotic manifestations</td>
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<tr>
<td>4</td>
<td>Unreliability</td>
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<td>5</td>
<td>Untruthfulness and insincerity</td>
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<td>6</td>
<td>Lack of remorse or shame</td>
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<td>7</td>
<td>Inadequately motivated antisocial behavior</td>
</tr>
<tr>
<td>8</td>
<td>Poor judgement and failure to learn by experience</td>
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<tr>
<td>9</td>
<td>Pathologic egocentricity and incapacity for love</td>
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<tr>
<td>10</td>
<td>General poverty in major affective relations</td>
</tr>
<tr>
<td>11</td>
<td>Specific loss of insight</td>
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<tr>
<td>12</td>
<td>Unresponsiveness in general interpersonal relations</td>
</tr>
<tr>
<td>13</td>
<td>Fantastic and uninviting behavior with drink and sometimes without</td>
</tr>
<tr>
<td>14</td>
<td>Suicide rarely carried out</td>
</tr>
<tr>
<td>15</td>
<td>Sex life impersonal, trivial and poorly integrated</td>
</tr>
<tr>
<td>16</td>
<td>Failure to follow any life plan</td>
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Regarding the tendency to equate APD with psychopathy, Rogers, Dion, and Lynett (1992) have noted that research findings have not justified the dramatic shifts in the diagnostic criteria for APD across DSM revisions. For example, the second edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-II; APA, 1968) focused primarily on characterological weaknesses which brought the individual into conflict with society. DSM-II did not require that these conflicts lead to delinquent or criminal behavior.

The third edition of the DSM (DSM-III; APA, 1980) presented drastic alterations in the APD criteria, shifting the focus almost exclusively to dysfunctional behavior both
prior to the age of fifteen, and as an adult. This revision did not share one criterion with DSM-II (Rogers & Mitchell, 1991). The revised third edition of the DSM (DSM-III-R; APA, 1987) narrowed the childhood focus to a specific emphasis on criminal and violent acts. In fact, the more developmentally dysfunctional symptoms were rejected in favor of aggressive criminal acts. Thus, this revision presents APD as a behavioral disorder manifested predominantly by aggressive, violent, criminal acts. DSM-III-R APD is associated closely with criminality. Finally, while touted as the personality disorder most likely to reflect major alterations in diagnostic criteria (APA, 1990), in the most recent revision of the DSM (DSM-IV; APA, 1994) criteria changes were minimal. Several adult criteria were combined, and all subcriteria were omitted. The DSM-IV APD diagnostic focus remains centered predominantly on aggressive and dyssocial behaviors to the exclusion of characterological traits. DSM-IV APD criteria continue to require evidence of childhood Conduct Disorder. However, the criteria for Conduct Disorder have shifted from strictly behavioral in DSM-III-R to a combination of behavioral and motivational items in DSM-IV. With this shift in focus, many of the criteria require evidence of more extreme behaviors. For example, DSM-III-R “has deliberately engaged in firesetting” has become DSM-IV “has deliberately engaged in firesetting with the intention of causing serious damage.”

Seemingly arbitrary alterations in the inclusion criteria for APD over the years raises questions regarding what signs and symptoms are viewed as characteristic of APD. In an attempt to address this issue, Rogers, Duncan, Lynett, and Sewell (1994) conducted a prototypical analysis of DSM-II descriptors, DSM-III and DSM-III-R inclusion criteria,
PCL-R items and proposed criteria for ICD-10, as well as DSM-IV Psychopathic Personality Disorder (PPD). The results of a principal components analysis of the prototypicality ratings yielded a four factor solution. The factors were described as (a) instability of self image and relationships, and irresponsibility; (b) manipulation and lack of guilt; (c) aggressive behavior; and (d) nonviolent delinquency. The findings of Rogers et al. (1994) suggest the importance of characterological traits overlooked in DSM APD criteria in the conceptualization of APD by forensic clinicians.

Several studies have yielded results indicative of APD's failure to correspond to clinical conceptions of antisocial personality (Blashfield & Breen, 1989; Livesley, Reiffer, Sheldon, & West, 1987; Tennent, Tennent, Prins, & Bedford, 1990). Although Widiger and Corbitt (1993) suggested that results of several studies (Hare, 1991; Hare, Hart, & Harpur, 1991; Hyler et al., 1989; Skodol, Oldham, Rosnick, Kellman, & Hyler, 1991) provide evidence of consistency between DSM-III-R APD diagnoses and clinicians' diagnoses, other factors may account for these findings. First, as Widiger and Corbitt (1993) noted, these results may simply reflect adherence to the diagnostic criteria rather than clinicians' actual conceptualization. Furthermore, although limited by methodological constraints, Stevens' (1994) account of results from surveys and interviews implied that clinicians employ APD diagnoses often and liberally, frequently straying from the DSM criteria. For example, although 52.0% of clinicians surveyed indicated a complete reliance on DSM-III criteria for APD diagnosis, when presented with a list of fifteen characteristics commonly associated with psychopathy as defined by Cleckely (1976) and Hare (1980), an overwhelming 87.0% reported that most were
present in inmates diagnosed with APD. Although limited by the use of a descriptive
design of self-reported practices, these findings tend to suggest that DSM APD has failed
to conform to clinical conceptions, resulting in lax adherence to established diagnostic
criteria.

Thus, given these marked variations in DSM criteria and the failure of DSM APD
to adequately capture the clinical conceptualization, psychopathy and APD diagnoses
cannot be viewed as equivalent. To view the two as equivalent would result in frequent
nonempirical alterations for psychopathy. In essence, psychopathy would be arbitrarily
reconceptualized approximately every seven to ten years. Robins, Tipp, and Przybeck
(1991) have suggested an approximate base rate of 50.0% for APD across studies, which
is within theoretical and clinical expectations. However, some researchers (Bland,
Newman, Dyck, & Orn, 1990; Hare, 1980; Hare, 1983; Hare, 1985; Harpur et al., 1989;
Hart & Hare, 1989; Robins, Helzer, Croughan, & Ratcliff, 1981; Widiger & Corbitt,
1993) have noted higher base rates and suggested that psychopathy's utility at making
differential predictions concerning recidivism and institutional risk is undermined by its
over diagnosis in forensic settings.

Notwithstanding the frequent seemingly arbitrary changes in diagnostic criteria,
diagnoses of APD, as a chronic personality disorder, should remain stable over the lifespan
of the majority of those so diagnosed. Unfortunately, the literature has not produced
findings in accord with this expectation. For example, results of several studies have
suggested inadequate temporal stability with anywhere from 20.0% to nearly 60.0% of
those diagnosed with APD failing to meet criteria in as little as six months post initial
diagnosis (Helzer, Spitznagel, & McEnvoy, 1987; Perry, Lavori, Copper, Hoke, & O'Connell, 1987; Vandiver & Sher, 1991). As Rogers et al. (1994) noted, clearly with such poor stability over time, the validity of APD diagnoses is questionable.

Furthermore, in addition to problems with diagnostic stability, researchers have recently discovered evidence of less-than-adequate interrater reliability (Rogers et al., 1992). Rogers et al. (1994) have noted that in only three of thirteen studies reviewed did APD diagnoses produce evidence of good reliability. In addition, problems with agreement regarding APD inclusion criteria appear to be surfacing. For example, Hasin and Grant (1987) found only a modest level of agreement (median kappa = .47) when examining inclusion criteria across the Diagnostic Interview Schedule (DIS) and the Schedule of Affective Disorders and Schizophrenia-Lifetime Version (SADS-L; Endicott & Sptitzer, 1978) using a sample of 120 inpatients.

In the recidivism literature, where the relationships of DSM-III and DSM-III-R diagnoses of APD and psychopathy have been examined, diagnoses of APD have not produced significant findings (Harris, Rice, & Cormier, 1991; Hart et al., 1988; Rogers & Mitchell, 1991; Salekin, Rogers, Ustad, & Sewell, 1996). The vast majority of research comparing diagnoses of APD with the presence of psychopathy has utilized DSM-III criteria. Although there was a shift in diagnostic criteria from DSM-III to DSM-III-R, leading to increased emphasis on aggressive, violent, and criminal behaviors, little research has examined the relationship between DSM-III-R APD diagnoses and psychopathy.

I decided to include an investigation of the relationship between psychopathy and DSM-III-R diagnoses of APD in this study. APD DSM-III-R criteria focus almost
exclusively on behavioral manifestations, whereas the construct of psychopathy measured by the Psychopathy Checklist Screening Version (PCL-SV) incorporates both behavioral and characterological traits in separate factors. Therefore, differential correlations were hypothesized. First, I hypothesized that DSM-III-R diagnoses and total PCL-SV scores would be only moderately correlated. The two factors of the PCL-SV were expected to differentially correlate with diagnoses of APD. The correlation between APD and Factor 2 of the PCL-SV, measuring behavioral attributes, was expected to be significant and higher than the correlation between APD and Factor 1 of the PCL-SV, measuring personality attributes.

**Psychopathy and Psychiatric Comorbidity**

Although frequently used in research, comorbidity has been poorly defined and continues to lack clear conceptualization (Maser & Cloninger, 1990). There exists neither a uniformly accepted definition nor a theoretical framework enabling the consolidation of various research findings (Wittchen, 1996a, 1996b). Consequently, the literature has produced extremely variable results with regard to the prevalence of psychiatric comorbidity (from 25.0% to 62.0%; Wittchen & von Zerssen, 1988, cited in Wittchen, 1996b). These discrepancies are further exaggerated when examining only clinical studies, as psychiatric comorbidity in clinical settings appears to be the rule rather than the exception (Wittchen, 1996b).

Researchers have continued to debate the influence of psychiatric comorbidity on the accurate assessment of psychopathy (Cleckley, 1976; Geller, 1980; Hare, 1982; Hare, 1985; Hart & Hare, 1989; Raine, 1985; Travin & Protter, 1982). Most frequently,
authors have disputed the relative influence of psychopathy on psychotic disorders and vice versa (Cleckley, 1976; Eysenck & Eysenck, 1976; Goodwin & Guze, 1984; Hare, 1982; Hare, 1985; Hart & Hare, 1989; Johnson, Butcher, Null, & Johnson, 1984; Prins, 1980; Raine, 1985). Hart and Hare (1989) have stressed the fact that very little research has been done examining comorbidity of psychopathy with other psychiatric disorders, or the influence that psychiatric comorbidity may have on the diagnosis of psychopathy. The research that does exist in this area has produced mixed results (Boyd, et al., 1984; Morey, 1988; Raine, 1985; Wolf, et al., 1988). However, as Hart and Hare (1989) suggested, two possible explanations exist for mixed findings regarding the relationship between psychopathy and major mental disorders. First, mixed results may be due to the use of populations with either low base rates of psychopathy, or low base rates of serious mental disorders. Second, the use of APD diagnoses for determination of psychopathy neglects the personality traits that clinicians and researchers have considered central to the conceptualization of psychopathy (Cleckley, 1976; Hare, 1985; McCord & McCord, 1964). Despite these concerns, studies have consistently failed to find indicators that would suggest a relationship between psychopathy and Axis I disorders, with the exception of substance abuse disorders (Hare, et al., 1990; Hart & Hare, 1989; Rice & Harris, 1995).

Clinicians and researchers alike have noted that both psychopaths and psychotics may exhibit some of the same symptoms and behaviors. Specifically, both psychopaths and psychotics have been known to exhibit shallow affect, impulsivity, illogical antisocial behaviors, and chronically disturbed interpersonal functioning (Cleckley, 1976; Geller,
1980; Travin & Protter, 1982). These findings have led some researchers to suggest that individuals diagnosed as psychopaths usually qualify for other psychiatric diagnoses, particularly schizophrenia-spectrum disorders (Eysenck & Eysenck, 1976; Goodwin & Guze, 1984).

The positions of Cleckley (1976), Hare (1985), and Raine (1985) oppose this perspective. Instead, these researchers have argued that psychopathy is distinctly different from and independent of other mental disorders. They proposed that the shared symptoms are simply a part of a larger and fundamentally different syndrome, and that the similarities between psychotic spectrum disorders and psychopathy may simply be an indication of antisocial tendencies and behavior common to both (Hare, 1982; Hart & Hare, 1989).

Evidence supporting the positions held by Cleckley (1976), Hare (1985), and Raine (1985) is derived from two main sources: examinations of the prevalence of co-occurrence of criminality and psychopathology, and examination of the relationships among psychopathy and other forms of psychopathology.

Prins (1980) has reported that most studies indicate that the majority of criminals are not mentally ill and the majority of psychiatric patients are not criminals. Although this finding provides initial support for the existence of psychopathy as a distinct disorder, it is by no means conclusive. Additionally, analyses of self-report inventories, such as the MMPI, indicate that factors related to delinquency and psychosis are uncorrelated (Johnson et al., 1984). The primary limitation of these findings is that, as described above, neither criminality nor delinquency is equivalent to psychopathy. In fact, although psychopathy is likely prevalent in the criminal population, according to several authors
criminality and delinquent behavior do not encompass the core of psychopathy (Cleckley, 1976; Hare, 1985).

Wolf et al. (1988) performed a principal components analysis on the diagnoses of 205 psychiatric inpatients. Three factors accounting for 67.0% of the total variance emerged. Factor 1 (accounting for 44.2% of the total variance) was comprised of APD, alcoholism, and drug dependence. Factor 2 (accounting for 34.0% of the total variance) was comprised of mood disorders, and Factor 3 (accounting for 21.8% of the total variance) was comprised of schizophrenia. The authors suggested that these results reflected the lack of association between psychopathy (defined as APD) and major mental disorders. Finally, in a specific examination of the influence of psychopathy, schizophrenia, alcohol abuse, and violent recidivism, Rice and Harris (1995) found only 13 participants, or 2.21% of their sample, received diagnoses of both psychopathy and schizophrenia. Furthermore, this comorbidity actually reduced the magnitude of the violent recidivism rates between psychopaths and nonpsychopaths. For example, nonschizophrenic psychopaths had a violent recidivism rate of 57.0% whereas schizophrenic psychopaths had a violent recidivism rate of 23.0%. Thus, psychopathy was more highly related to likelihood of violent recidivism than was schizophrenia.

Regarding Axis II comorbidity, Raine (1986) found that the correlations among Schizotypal and Borderline Personality Disorders and psychopathy were low and nonsignificant ($r_s \leq .23$) with the exception of a significant correlation between the psychopathy item measuring superficial relationships and Borderline Personality Disorder ($r = .32$). Additionally, Morey (1988) found a significant relationship between
nonaggressive antisocial features and Narcissistic Personality Disorder which was proposed to create a syndrome similar to Cleckley's psychopathy.

In examining descriptive data for the PCL-R between prison and forensic psychiatric samples, Hare et al. (1990) found no significant differences between the means, medians, or standard deviations of PCL-R total scores. However, these findings could also be interpreted as an indication of the strong similarity between the prevalence of psychopathy in the two populations, or the presence of significant overlap between psychopathy and psychiatric diagnoses. To address the question of overlap, Hart and Hare (1989) utilized odds ratios\(^1\) to determine if the diagnosis of psychopathy was significantly related to any Axis I or Axis II diagnosis. More specifically, they examined the relationship of psychopathy to mental retardation, organic disorders, Schizophrenia, Bipolar Disorder, substance disorders (alcohol and other), Schizotypal Personality Disorder, Histrionic Personality Disorder, and Antisocial Personality Disorder. Resulting odds ratios indicated that there was no significant relationship between a diagnosis of psychopathy and any individual Axis I diagnosis, excluding nonalcohol substance abuse disorders. In fact, overall, they found that high PCL total scores were associated with the absence of an Axis I principal diagnoses and with the presence of substance abuse disorders other than alcohol. The patterns of correlations found by Hart and Hare (1989) \(^1\)Fleiss (1981, cited in Hart & Hare, 1989) describes an odds ratio as the conditional probability of Disorder A being present given that Disorder B is present, divided by the conditional probability of A being present given that B is not present, where Disorder A represents psychopathy and Disorder B represents any Axis I Disorder.
supports the clinical description of psychopaths as individuals who are superficial, unfeeling, exploitative, egocentric, emotionally shallow, nonanxious, and relatively free of psychotic symptomatology.

In contrast to Hart and Hare's (1989) findings regarding nonalcohol substance abuse disorders, Rice and Harris (1995) found a relationship between psychopathy and alcohol abuse. However, the presence of alcohol abuse did not increase psychopaths' already high probability of violent recidivism (Rice & Harris, 1995).

These results (Hare et al., 1990; Hart & Hare, 1989; Johnson et al., 1984; Morey, 1988; Prins, 1980; Raine, 1986; Rice & Harris, 1995; Wolf et al., 1988) provide strong support for the argument that psychopathy is a discrete syndrome independent of other major mental disorders (with the exception substance abuse disorders), including psychotic disorders. Although these results provide support for the view of psychopathy as being distinct from other major mental disorder, particularly psychoses, the effect of comorbid major mental disorders on the determination of psychopathy has not been examined.

Rather, researchers have limited their investigations to examining the probability of being diagnosed with one (either psychopathy or another major mental disorder) given the presence of the other, and the correlational relationships among major mental disorders and psychopathy. Thus, I hypothesize that major Axis I mental disorders (e.g., mood, organic, or psychotic) would have no significant affect on ratings of psychopathy as assessed by the PCL-SV. Additionally, based on the previous findings of the presence of psychopathy's significant correlation with nonalcohol substance abuse disorders, I
hypothesize that the PCL-SV total score would be significantly correlated with a measure of drug abuse disorders (i.e., the PAI Drug Problems Scale).

**Measures of Psychopathy**

Historically, measures of psychopathy have included clinical diagnoses, self-report measures, and checklists/behavioral ratings (Carbonell, Megargee, & Moorhead, 1984; Hare & Cox, 1978; Hundleby & Ross, 1977). Unfortunately, much of the early research attempting to measure psychopathy was conducted in the absence of a standard definition for the construct. Such approaches left both researchers and clinicians alike trying to decipher whether the literature has provided a well-defined measures of psychopathy or a measurement-based definition. This situation has resulted in both clinicians and researchers struggling to determine the boundaries along which the definition and measurement are delineated. As the use of clinical diagnosis for the measurement of psychopathy has been previously discussed (see section entitled “Psychopathy as APD”), the following paragraphs will review the utility of the most commonly used self-report inventories and checklists.

**Studies Comparing Effectiveness of Measures.** Initial efforts in this line of inquiry were undertaken by Hundleby and Ross (1977). These authors conducted a factor analysis of responses made by a total of 397 (actual n per instrument ranged from 143 to 397) inmates from three adult male federal correctional institutions in Canada on a variety of assessment instruments. Specifically, they examined the revised Activity Preference Questionnaire (APQ; Lykken, Tellegen, & Katzenmayer, 1973) the Sixteen Personality Factor Questionnaire (16 PF; Gough, 1957), the Minnesota Multiphasic Personality
Inventory (MMPI), the Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1963), and the Sensation-Seeking Scale (SSS; Zuckerman, 1964), and the Personal Opinion Study (POS; Quay & Parsons, 1971). Results of their analysis suggested an eight-factor solution in which one factor was uninterpretable: (a) anxiety; (b) ruthless practicality; (c) education; (d) extraversion; (e) MMPI Maladjustment; (f) superego strength; and (g) independence from social pressure. Although they offered little in the way of additional explanation of these eight factors, their composites and the loadings, they contended that there was no manner of convergence among the scales that could lead to a factor interpretation of psychopathy.

However, in retrospect this conclusion is at best premature and possibly erroneous. Although Hundleby and Ross (1977) did not explicitly describe their methodology, it appears that their investigation contained several potentially serious methodological flaws. Their actual sample size, ranging from 143 to 397, per instrument suggests two major design flaws. First, their analysis incorporated six assessment measures. Although they offer no additional explanation as to specific variables used in the factor analysis, the correlational matrix they present suggested test scales were the variables for analysis. Such an analysis would likely require substantially more participants than their reported 397. Second, the practice of conducting a factor analysis on variables having such extremely unequal sample sizes is questionable in itself and could lead to mathematically impossible factor solutions.

Carbonell et al. (1984) examined correlations between two variables associated with institutional risk (i.e., disciplinary violations and days spent in segregation), MMPI
scales and California Psychological Inventory (CPI) scales. They found that only the K-corrected Pd scale of the MMPI was associated with these two criterion measures. However, these correlations were generously described as modest and were practically insignificant (rs < .15). Other correlations with multiple MMPI and CPI scales were also very low.

Hare (1985) compared several psychopathy assessment methods. He found considerably higher agreement among clinical ratings, checklists completed by clinicians, and diagnoses by DSM-III criteria than among various self-report inventories which included the Pd and Ma scales of the MMPI, the So scale of the CPI, and a self report psychopathy scale. Simourd, Bonta, Andrews, and Hoge (1990) conducted a meta-analysis of 33 studies investigating the utility of the MMPI, the CPI So scale, and the PCL as measures of psychopathy. These authors' results suggested that the CPI So scale and the PCL are similar in their effectiveness, possessing equivalent levels of criterion validity. Furthermore, the performance of both measures surpassed that of the MMPI which was only found to exhibit small effect sizes after controlling for extreme groups designs found in several studies.

**Investigations of Specific Measures.** Although studies comparing the effectiveness of commonly used assessment methods for the measurement of psychopathy are of significant consequence to the identification of the most efficient method of assessing psychopathy, they seldom provide indepth information regarding the utility of individual measures. Several studies have focussed their attention on this issue in an attempt to identify a valid and reliable measure of psychopathy. These studies have focussed
primarily on scales of the MMPI, MCMI, the EPI/EPQ, and a handful of measures specifically designed for the assessment of psychopathy. The remainder of this section is devoted to a brief review of the major findings in this area of inquiry.

The MMPI Pd scale has traditionally been used as a measure of social deviance, antisocial behavior, and psychopathy (Rogers, Gillis, & Dickens, 1989). These authors investigated the association of Pd scale elevations with antisocial behaviors in an attempt to determine whether clinicians were justified in making differential interpretations of moderate, marked, or extreme elevations. They found no evidence that increasingly elevated Pd scales are related to increased severity of criminal behavior. Their findings also failed to support the use of the Pd scale two point codes to identify diagnostic groups. In fact, Rogers et al. (1989) conclude by arguing in favor of a reexamination and reinterpretation of two point Pd codes with respect to sociopathy.

An additional study of the MMPI in identifying psychopathy has examined the Antisocial Personality Disorder Scale (ANT; Rogers & Bagby, 1994) devised to assess DSM-III APD (Morey, Waugh, & Blashfield, 1985). Rogers and Bagby (1994) found that a two-factor solution of the MMPI ANT scale provided the best solution for both forensic and nonforensic samples. Their results suggested only mild differences in the factor interpretation of the ANT scale between the forensic and nonforensic samples. The factors for the nonforensic sample were: Factor 1 (16.9% of the total variance) delinquency; Factor 2 (9.1% of the total variance) dishonesty/dissatisfaction. In the forensic sample the factors that emerged were: Factor 1 (20.5% of the total variance)
delinquency/substance abuse; Factor 2 (10.1% of the total variance)
dishonesty/contumacy.

The forensic sample exhibited a modestly higher score on the ANT scale as well as both factors. However, based on the influence of delinquency, Rogers and Bagby (1994) determined that dimensions of APD measured by the ANT scale correspond more closely with DSM-III APD diagnostic criteria than with either DSM-III-R or DSM-IV criteria. Finally, the authors concluded that elevations on the MMPI ANT scale should not be interpreted as evidence of APD, as it appears to emphasize nonviolent delinquency and dishonesty/contumacy over the violent and criminal acts emphasized in APD diagnostic criteria.

In an attempt to identify Millon Clinical Multiaxial Inventory-II (MCMI-II; Millon, 1987) codetypes associated with a variety of clinical and personality disorders, Craig (1995) has conducted a comprehensive literature review of approximately 400 citations referencing the MCMI. Results are discouraging for the convergence of any MCMI codetype which might be useful in the assessment of psychopathy. The literature examined yielded results for two “personality disorders” (Aggressive/Sadistic, and Antisocial) as well as two clinical groups (child molesters and offenders) which might produce codetypes useful to the identification of psychopathy. Unfortunately, there did not appear to be any convergent evidence indicating the utility of the MCMI as a measurement of psychopathy. Any potential findings may have been obscured by the small sample sizes in the majority of the studies (7 of the 9 studies examined used samples of less than 50 participants).
Eysenck and Eysenck (1977) reported that the Psychoticism (P), Extraversion (E), and Neuroticism (N) scales of the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1975) differentiated psychopaths from nonpsychopaths. However, Hare (1982) was unable to demonstrate their effectiveness when comparing psychopaths and nonpsychopaths as classified according to Cleckley's (1976) criteria. In fact, he found that offenders' scales were similar to Eysenck's (1977) control participants. Hare (1982) concluded that the associations between psychopathy and the EPQ were very weak.

Hare (1991) has devised the experimental two factor Self-Report Psychopathy-II (SRP-II) scale from the PCL-R. Zagon and Jackson (1994) investigated the construct validity of the SRP-II by examining its relationships with multiple other self-report measures in a sample of 149 university students. The measures examined included the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970), the Interpersonal Reactivity Index (IRI; Davis, 1983, cited in Zagon & Jackson, 1994), the Crowne-Marlowe Social Desirability scale (C-M SD; Crowne & Marlowe, 1960), and the MMPI Lie Scale (Dahlstrom & Welsh, 1960). Overall the results provided initial evidence for the construct validity of the SRP-II. In general, lower levels of anxiety and empathy, as well as higher levels of narcissism correlated with the SRP-II. These findings appear to be consistent with the conceptualizations of psychopathy which emphasize the importance of personality characteristics (Cleckley, 1976; Hare, 1981).

Reise and Oliver (1994) developed a California Q-set (CAQ; Block, 1961) in an attempt to create a broadly applicable observer-based indicator of psychopathy. The
authors focused their attention on the identification and assessment of the primary psychopath which they define as: (a) exhibiting antisocial behavior which defies any obvious psychological or sociological explanation, (b) unable to understand certain affective experiences (e.g., guilt and humiliation), and (c) failing to comprehend their need for treatment. In their methodology, Reise and Oliver (1994) asked seven psychologists to sort CAQ items as they deemed appropriate based on their experience and readings of research literature to describe the primary psychopath. The authors obtained an average inter-judge Q-correlation of .60, and a reliability coefficient (based on the seven judge composite Psychopathy Prototype) of .90. The items found to be most characteristic of the Psychopathy Prototype appeared to reflect characteristics suggested in the psychopathy literature. For example, these item contents reflected traits such as hostility and externalization, charm/lack of social anxiety, advantage-taking, self-centeredness and rebellion. Primary psychopaths as identified by the CAQ could be discriminated from female hysterics (Reise & Oliver, 1994). Finally, although psychopaths and narcissists were found to share many common characteristics, Reise and Oliver (1994) differentiated the two on the basis of self-concern, and interpersonal sensitivity, both being more salient in narcissists.

In a follow-up to the 1994 development of the Psychopathy Q-sort (PQS; Reise & Oliver, 1994), Reise and Wink (1995) examined the construct validity of the PQS in an applied rather than theoretical method. Results indicated that in clinical applications, three of the items previously identified as most characteristic of the Psychopathy Prototype exhibited weak relationships with the PQS (see Table 2). An examination of the table
reveals that several of these correlations were not only extremely weak, but in the wrong direction. Although expected to correlate with scores on Morey's personality disorders' scales (Morey et al., 1985) for cluster B disorders, and to show little or no correlation with disorders from clusters A and C, the emerging pattern of correlations between the 11 personality disorders' scales and the PQS were much less apparent (Reise & Wink, 1995). The PQS correlated with 3 of the 4 cluster B personality disorders' scales for men and all 4 for women. However, regardless of gender, it also correlated with Schizoid and Avoidant. Additionally, when used with females, the PQS also correlated with Paranoid and Passive-Aggressive (Reise & Wink, 1995).

Table 2

Unexpectedly Weak Correlations between Most Characteristic Psychopathy Prototype Items and the Psychopathy O-sort (PQS)

<table>
<thead>
<tr>
<th>Item</th>
<th>Males</th>
<th>Females</th>
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<tbody>
<tr>
<td>charming</td>
<td>.05</td>
<td>.12</td>
</tr>
<tr>
<td>calm and relaxed manner</td>
<td>-.13</td>
<td>-.23</td>
</tr>
<tr>
<td>self-defeating</td>
<td>-.06</td>
<td>-.16</td>
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</tbody>
</table>

When the relationships between the PQS and various CPI scales were examined, the results were as expected (Reise & Wink, 1995). PQS scores correlated positively with five measures of externality, social poise, and assurance, and negatively with four measures of normative control of impulse. Correlations between Adjective Checklist (ACL) and PQS ratings were generally as expected whether completed by Institute of Personality Assessment and Research staff or spouses. Overall, the PQS appears to hold promise as a broad-based measure of psychopathy; however, further validity studies are needed, particularly using populations with higher base rates of psychopathy.

Widom (1977) and Smith (1985) have contended that there exists a subclinical psychopathy or social psychopathy. Although they postulated that many of the same traits exist, this more moderate level of psychopathy seldom brings the psychopath into conflict with the law, and depending on the societal or cultural environment, it may even be an instrumental attribute. Smith (1985) developed the Social Psychopathy Scale to assess subclinical psychopathy and psychopathic-like characteristics in normal samples. The 18-item scale is reported to be multifactorial with items derived from 9 criteria suggested by the literature. These criteria are (a) beguiling; (b) guiltless; (c) manipulative; (d) cynical; (e) primitive egocentricity; (f) unempathic; (g) unperturbed; (h) restless; and (i) oriented in the present. Edelmann and Vivian (1988) have conducted a thorough investigation of the SPS. They found significant gender differences and, thus, presented findings separately for males and females. Their results suggest that the SPS has inadequate interitem correlations with $M = .06$ for males and $M = .07$ for females. Gender influenced factor solutions, with different solutions obtained for males and females. Analysis of the data
from males provided a five-factor solution which accounted for over 60.0% of the variance; in contrast, results provided a three-factor solution accounting for over 40.0% of the variance in females. Edelmann and Vivian (1988) described the five-factor solution for males as follows (percentage of total variance accounted for follows in parentheses): F1, unperturbability (16.9%); F2, low guilt (12.9%); F3, low empathy (11.2%); F4, beguiling (10.7%); and F5, self-concern (9.4%). For females they found: F1, restless egocentricity (18.3%); F2, self-concern (12.9%); and F3, lack of concern (9.6%). Unfortunately, there appears to be serious conceptual problems with the SPS as evidenced by the three- and five-factor solutions obtained from an 18-item scale. Additionally, in both the three- and five-factor solutions, at least one item loaded on more than one factor, and at least one factor contained an item which loaded in the opposite direction than expected.

Recently, researchers have utilized combinations of APD diagnoses with specific scales from self-report inventories. For instance, Sutker and Allain (1987) used a combination of APD diagnoses and elevated Pd, Ma and Pd-So scores on the MMPI to distinguish between psychopaths and nonpsychopaths. Harpur et al. (1989) have criticized this practice, stating that although this constellation identifies antisocial and undersocialized individuals, it is insensitive to the personality construct of psychopathy. In addition to the criticisms from Harpur et al. (1989), logically, it is doubtful that combining a scale which research has demonstrated to be a poor measure of psychopathy (MMPI Pd) with other unexamined scale(s) would produce conceptually elegant findings.

The most reliable and valid method for determining psychopathy to date is Hare’s (1980) Psychopathy Checklist. This measure assesses both the behavioral aspects of
psychopathy, and the personality dimensions considered central to the construct. Researchers have proposed that its ability to assess both behavioral and personality aspects and identify a homogenous group differentiates the PCL from previously used measures (Hart & Hare, 1989). Furthermore, the PCL appears to embody the range of psychopathic traits as defined in clinical practice (Cleckley, 1976; Davies & Feldman, 1981; Gray & Hutchison, 1964; Rogers, 1995), research (Albert, Brigante, & Chase, 1959; Fotheringham, 1957), and standard diagnostic criteria according to the DSM (Hart et al., 1992).

The Psychopathy Checklist

The PCL was originally devised to operationalize the assessment procedures used to identify psychopaths by Hare and his colleagues (Hare, 1980; Hare, 1990; Hare & Frazelle, 1980). The initial version was a 22-item research scale that was devised to be completed on the basis of combined interview and chart review information. The PCL provided basic, if somewhat vague, scoring instructions for the items. Over the next 15 years, investigators launched numerous research studies, and the PCL became the standard for the majority of present-day research on psychopathy.

The PCL has its origin in Hare's (1980) 7-point ratings of psychopathy which reportedly evolved from the theoretical framework of Cleckley's conceptualization of psychopathy (Cleckley, 1976). However, Rogers (1995) has clearly demonstrated that there are minimal similarities between the PCL/PCL-R and the sixteen criteria posed by Cleckley (1976). His examination of both sets of criteria revealed that only four Clecklian characteristics are embodied by PCL/PCL-R. Three Clecklian characteristics share central
elements and the remaining nine are not depicted in the PCL/PCL-R. Thus, upon closer examination, the PCL and its successors appear to be atheoretical measures of psychopathy (Lilienfeld, 1994; Rogers, 1995; Salekin, Rogers, & Sewell, 1996).

**PCL Development and Factor Structure.** In Hare's (1980) study, two independent raters assessed the 16 Cleckley criteria on a scale of 0 to 2, where 0 = definitely not present, 1 = possibly present, and 2 = definitely present (see Table 1 for Cleckley criteria). The mean independent ratings were subjected to principal components analysis which yielded 5 factors with eigenvalues greater than one, accounting for 64.0% of the total variance (see Table 3). Hare (1980) described Factor 1 (29.3% of the variance) as reflecting the “core of psychopathy” (p. 113): an inability to develop warm, genuine interpersonal relationships, a lack of empathy, and an insensitivity to the rights and feelings of others. Factor 2 (12.0% of the variance) reflected the psychopaths' transitory, unstable lifestyle and their absence of long-term goals or commitments. Factor 3 (8.3% of the variance) reflected the psychopath's inability to accept responsibility for continuous antisocial behavior. Factor 4 (7.1% of the variance) reflected an absence of clinically significant mental disorder, whether intellectual or psychiatric. Factor 5 (6.6% of the variance), although not entirely clear, was suggested to reflect weak or erratic behavioral controls.

Multiple regression analyses were run with factor scores as predictors and global ratings of psychopathy as criterion measures. The beta weights for Factors 1 to 5 ranged from .66 to .20, indicating the largest contribution to the prediction of global ratings of psychopathy was made by Factor 1. Following these analyses, Hare (1980) devised the
22-item Psychopathy Checklist utilizing items that best distinguished between those inmates with low and high ratings of psychopathy. He reported very high inter-rater reliability for the PCL total scores (rs from .91 to .95), and excellent internal consistency (alpha = .88).

The PCL produced five factors accounting for 61.0% of the variance, although only four were readily interpretable. Factor 1 (accounting for 27.3% of the total variance) reflected an impulsive, unstable life style. Factor 2 (accounting for about 13.0% of the total variance) reflected self-centeredness, callousness, lack of empathy and concern for others. Factor 3 (accounting for 8.0% of the total variance) reflected the tendency to develop primarily superficial relationships with others. Factor 4 (accounting for 6.9% of the variance) reflected the early appearance of antisocial behavior. Finally, Factor 5 (accounting for 5.7% of the total variance) seemed to reflect impulsive or inadequately motivated criminal acts. These factors were strongly associated with the previous global assessments of psychopathy.

The canonical correlation between the two sets of factors was .90, which Hare (1985) interpreted as indicating a high degree of agreement between the factors derived from the 16 Cleckley criteria and those derived from the 22-item checklist. However, in examining the factor structure more closely, it is interesting to note that Factor 1 and Factor 2, accounting for the majority of the variance, did not reproduce as expected. For example, Factor 1 using the Cleckley criteria is broadly defined as a lack of empathy and Factor 2 as transient lifestyle. Using the PCL criteria the two factors do not remain stable.
### Table 3

**PCL Factor Structure Across Studies**

<table>
<thead>
<tr>
<th>Study</th>
<th>Variance Accounted for</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hare (1980)*</td>
<td>64.0%</td>
<td>lack of empathy</td>
<td>transient</td>
<td>rejects</td>
<td>absence of</td>
<td>unclear</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(29.3)</td>
<td>(12.0%)</td>
<td>lifestyle</td>
<td>responsibility</td>
<td>mental disorder</td>
<td>(7.1%)</td>
<td>(6.6%)</td>
<td></td>
</tr>
<tr>
<td>Hare (1980)b</td>
<td>61.0%</td>
<td>unstable</td>
<td>lack of</td>
<td>superficial</td>
<td>early</td>
<td>criminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lifestyle</td>
<td>empathy</td>
<td>lifestyle</td>
<td>relationships</td>
<td>antisociality</td>
<td>impulsivity</td>
<td>(5.7%)</td>
<td>(5.7%)</td>
</tr>
<tr>
<td>Raine (1985)</td>
<td>65.0%</td>
<td>impulsivity</td>
<td>emotional</td>
<td>egocentricity/</td>
<td>superficial</td>
<td>unclear</td>
<td>early</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>detachment</td>
<td>duplicity</td>
<td>relationships</td>
<td>(25.0%)</td>
<td>(7.6%)</td>
<td>antisociality</td>
<td>(5.2%)</td>
</tr>
<tr>
<td></td>
<td>(25.0%)</td>
<td>(10.5%)</td>
<td>(7.6%)</td>
<td></td>
<td>(6.5%)</td>
<td>(5.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harpur, Hakstian, &amp;</td>
<td>44.0%*</td>
<td>selfish/</td>
<td>ant-social</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hare (1988)</td>
<td></td>
<td>callous</td>
<td>lifestyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(29.0%)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(9.0%)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(6.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harpur, Hakstian (1989)*</td>
<td>53.0%</td>
<td>unlabeled</td>
<td>unlabeled</td>
<td>unlabeled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(34.0%)</td>
<td>(12.0%)</td>
<td>(7.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note:* Percentages of variance accounted for by the two-factor solution obtained by Harpur et al. (1988) were not provided. *based on 7-point ratings of Cleckley criteria; *based on 22-item PCL; *unclear whether Harpur et al. (1989) conducted PCA or are reporting on the findings of Harpur et al. (1988).
Specifically, whereas lack of empathy accounts for the majority of the variance in Cleckley criteria ratings (29.3%), it accounts for only 13.0% in the PCL ratings. Alternatively, transient lifestyle (Factor 2) which accounts for only 12.0% of the variance in Cleckley criteria ratings accounts for 27.3% of the variance in PCL ratings (Factor 1).

While Hare (1985) has concluded that all of the clinically meaningful material contained in Cleckley's criteria appeared to be covered by the checklist, he apparently overlooked that the two rating methods appear to emphasize different characteristics. Additionally, as Rogers (1995) has demonstrated, the PCL substantially deviates from the Clecklian criteria. Only 7 of the original 16 Cleckley criteria are represented, even in considerably altered form. The remaining 9 criteria are notably absent from the PCL and a significant number of items unrelated to the Cleckley criteria are included.

Notwithstanding the PCL's apparent departure from the Cleckley criteria, the PCL appears to represent the concept of psychopathy found in clinical practice (Rogers, 1995).

Raine (1985) conducted an independent factor analysis of the PCL using an English prison population. His results yielded a seven-factor solution. Furthermore, his Factor 1, accounting for 25.0% of the variance was neither lack of empathy nor unstable lifestyle, as previously obtained by Hare (1985). Instead, Raine found that impulsivity accounted for the majority of variance in his seven factor-solution. Additional factors yielded by his analysis were: Factor 2, emotional detachment (10.5%), Factor 3, egocentricity/duplicity (7.6%), Factor 4, superficial relationships (6.5%), and Factor 6, early antisociality (5.2%). Additionally, two factors, Factor 5 (5.4%) and Factor 7 (4.8%), were uninterpretable.
Harpur et al. (1988) criticized previous studies of the PCL factor structure for utilizing too few participants, and making questionable interpretations of congruence coefficients between independent factor solutions. These authors utilized six separate data samples, comprising 1,119 participants, in their analysis of the PCL factor structure. They reported obtaining two replicable PCL factors in both split-half cross validation and replication across samples. Factor 1 consisted of core personality traits and measures such characteristics as superficiality, lying, manipulation, and lack of affect, guilt and remorse. Factor 2 consisted of items that measured chronic instability and antisocial lifestyle.

In their analyses, they utilized samples 1, 2, and 3 for the split-half cross validation method. After obtaining a factor solution for each of the randomly split groups, they computed comparability coefficients (correlations between the sets of factor scores) as a measure of the similarity between the two independently derived factor solutions. Various solutions of a principal components analysis with varimax rotation extracted from two to six components. Harpur et al. (1988) noted that "spurious" components (as determined by low comparability coefficients) emerged for the final factor for all samples when five or six components were retained. Thus, these results were considered indicative of solutions which extracted too many factors and omitted from further consideration. When examining the comparability coefficients for the two-, three- and four-component solutions, both samples 1 and 3 produced three reliable components. Sample 2, however, only produced two reliable components. Harpur et al. (1988) then examined the factor congruence for the three-factor solution across all six samples. Unfortunately, only samples 1 and 3 produced even moderate congruence across samples. The authors then
obtained a two-factor solution for each of the six samples. After examining item loadings for the common solution as well as the solutions for samples 1 through 5, they asserted that their procedures yielded "conceptually identical factors" (p. 744). However, after re-examining the item loadings for the common solution in comparison with the item loadings for the individual sample solutions, there appear to be significant differences. If one considers an absolute difference of .20, or opposite directions in item loadings as an indicator of possible significant differences in factor solutions, every sample and 14 of the 22 items reveal significantly different loadings across the various solutions (see Table 3).

Harpur et al. (1988) then transformed the factors for the five samples into congruence with the pooled, or common solution. They then computed congruence coefficients for the two-factor solutions across all five samples. Not surprisingly, the congruence coefficients were very high, with all equaling or exceeding .85. The authors concluded that their findings supported factor equivalence across the samples.

As a step in attempting to establish support for the unidimensionality of the PCL, Harpur et al. (1989) present results of a principal components analysis which yielded three factors. The unrotated first component accounted for between 29.0% and 34.0%, while the unrotated second and third components accounted for 9.0% to 12.0%, and 6.0% to 7.0% respectively. Although presented as results in Harpur et al. (1989), it remains unclear whether they are reporting the results of their own analysis, or that of Harpur et al. (1988). Further obscuring this determination are the facts that Harpur et al. (1988) did not report the percent of variance accounted for by the factors they obtained, and Harpur
Table 4

Inconsistent Item Loading Patterns Across Various Samples

<table>
<thead>
<tr>
<th>Sample:</th>
<th>Common</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four</th>
<th>Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor:</td>
<td>1 2 1 2 1 2</td>
<td>1 2</td>
<td>1 2</td>
<td>1 2</td>
<td>1 2</td>
<td>1 2</td>
</tr>
<tr>
<td>2</td>
<td>15 13  -  -  -  -</td>
<td>-  -</td>
<td>-  -</td>
<td>-  -</td>
<td>30  -18 -19 38</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>51 09  -  -  39 29  -  -  -  -</td>
<td>57  -16</td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>65 04  -  -  37 21  -  -  -  -</td>
<td>-  -  -  -</td>
<td></td>
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<tr>
<td>7</td>
<td>56 11 70  -03  -  -  -  -  -  -</td>
<td>-  -  -  -</td>
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<td>10</td>
<td>-06 62  -  -  -  -  -  -  -  -</td>
<td>16  39  -  -</td>
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<td>12</td>
<td>32 18 15 43  -  -  -  -  -  -  -</td>
<td>-  -  -  -</td>
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<td>13</td>
<td>05 47  -  -  -  -  -04 56  -02  32  -  -</td>
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<td>-  -  -  -</td>
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<td>15</td>
<td>-09 68  -16 90  -  -  -  -  -  -  -06 48</td>
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<tr>
<td>17</td>
<td>10 44  -  -  -  - 02  51  -  -  -  -</td>
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<td>18</td>
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<tr>
<td>19</td>
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<tr>
<td>21</td>
<td>01 45  -  -  -  - 06 53  -  -  -  -  -  -  -  -  -  -  -  -</td>
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<tr>
<td>22</td>
<td>48 -23  -  -  32 03  -  -  -  -  -  -  -  -  -  -  -  -  -  - 51 -19</td>
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</tbody>
</table>

Note. Decimal points are omitted. Where an item exhibited a factor loading consistent with the common solution ' - ' was inserted.

*data from Harpur, Hakstian, & Hare (1988).

et al. (1989) provided a footnote in their description of the PCA which explains methodology of Harpur et al. (1988) and refers the reader to that study for a review of item loadings. Regardless of whether they are reporting on the findings of Harpur et al.'s (1988) PCA, or their own, the three-factor solution they allude to does not appear to be consistent with earlier findings.
Overall, a critical examination of the literature available to date on the PCL factor structure calls into serious question the acclaimed stable two-factor conceptualization. As it appears from this overview, only one study has documented a two-factor structure. Furthermore, there appear to be some problems with that structure across the various samples that the authors utilized (Harpur et al., 1988). However, as Harpur et al. (1989) have noted the two factors are differentially correlated with criterion measures. For example, Factor 1 exhibits a significantly stronger relationship with global ratings of psychopathy based on Cleckley criteria, self-ratings of dominance, STAI state and trait anxiety (inverse relationships), EPQ Neuroticism (inverse relationship), and Fenz-Epstein Anxiety Scale scores (inverse relationship; Harpur et al., 1989). Alternatively, Factor 2 has demonstrated significantly stronger relationships with diagnoses of APD (with DSM-III and DSM-III-R criteria), Pd-Sq scores, SRP ratings, EPQ Psychoticism, EPQ Lie scale, Sensation Seeking Scale DIS scale scores and total scores, institutional behavior, and conditional release violation, and CPI Sd scale scores (inverse relationship; Harpur et al., 1989).

Following the identification of separate factors exhibiting distinct relationship with criterion measures, Harpur et al. (1989) investigated the homogeneity of the PCL. In order to assess the homogeneity of the PCL, these authors examined mean interitem correlations. Results of this analysis were consistent with the use of the PCL as a homogenous unidimensional scale. Next, they applied a statistic recommended by Green, Lissitz, and Mulaik (1977) to the items (i.e., a statistic based on the ratio of the interitem
correlations to the product of the item communalities). Again, the results were indicative of a high degree of scale homogeneity.

Despite the findings regarding the differential correlates of Factors 1 and 2, Harpur et al. (1989) stated that this should not be interpreted as evidence that use of the full-scale score of the PCL is questionable. In support of this statement, they emphasized the findings that the two factors are significantly correlated with one another, and that by their usual scoring system an individual could not be classified as a psychopath with a score below the mean on either factor. They also asserted that a considerable body of literature attests to the validity of psychopathy as assessed by the PCL. Finally, they added that psychopathy need not be unidimensional. Thus, rather than invalidating the concept, identification of the factors was presented as a further step in distinguishing the mechanisms underlying psychopathy. However, as noted by Rogers (1995), the PCL does not appear to be as closely related to the body of literature from which its authors profess it is derived. Additionally, the Harpur et al. (1988) appears to be the only study conducted to date which has derived a two-factor structure. Thus, it appears that it is the factor scores which should be considered questionable rather than the full-scale score.

Despite the concerns presented above regarding the stability of the PCL/PCL-R factor structure, researchers have continued to utilize factor scores in their studies. While an in-depth analysis of the factor structure of the PCL measures is beyond the scope of this study, an investigation of the differential correlations between the factors and criterion measures is possible. While some of the characteristics of the PCL appear to be similar to the diagnostic criteria for APD, the characteristics similar to DSM-III-R and DSM-IV
criteria appear to be primarily subsumed under Factor 2. The relationship between PCL scores and the diagnosis of APD according to DSM-III-R or DSM-IV criteria has yet to be investigated. However, earlier research (Hare, 1985) suggested a moderate correlation between the PCL and DSM-III APD diagnosis (biserial correlation of .67; Hare, 1985). Thus, I hypothesized that a moderate correlation between DSM-III-R APD and PCL-SV total scores would be obtained. Additionally, I hypothesized that PCL-SV Factor 2 would exhibit a stronger relationship with APD than would Factor 1. Although in light of the seemingly dubious status of the PCL/PCL-R factor structure results of analyses employing factor scores should be interpreted cautiously, the observation of expected correlations may provide indirect evidence of factor stability.

The Revised Psychopathy Checklist (PCL-R)

Hare et al. (1990) developed a revision of the PCL (PCL-R) for the assessment of psychopathy in male forensic populations which incorporates both behaviors and inferred personality traits related to Cleckley’s (1976) conceptualization. Hare (1991) reported the following alterations in the PCL-R: omitting two items, broadening the scope of one item, altering slightly the titles of 10 items, and modifying items’ descriptions and scoring criteria (Hare, 1991). More specifically, the author has reported the removal of items “previous diagnosis of psychopathy or similar” and “drug or alcohol abuse not direct cause of antisocial behavior” because of their uncertainty in meaning, unreliability, and difficulty in scoring. Additional changes included broadening the scope of Item 6, improving item descriptions, omitting the majority of behavioral examples, clarifying scoring procedures, and changing the procedures for dealing with inadequate information.
Hare (1991) provided a slightly more indepth explanation of the modifications, a summary of which follows. Item 6, originally designed to assess irresponsibility as a parent, was believed to result in a limited measure of irresponsibility and was broadened in scope to assess irresponsibility in general. The author reported that the ten items whose titles were changed retained the nature of the trait or behavior they were originally designed to measure. Item content was clarified by improving descriptions and omitting behavioral examples on all but five items. Finally, scoring difficulties and inconsistencies were addressed by improving item descriptions, explaining scoring procedures in more detail, and changing the procedure for dealing with inadequate information from scoring the median to omitting the item and pro-rating the total score.

Hare et al. (1990) conducted a study examining the reliability and factor structure of the PCL-R in order to determine whether the literature that has been accumulated on the PCL may be generalized to the PCL-R. Following procedures used by Harpur et al. (1988), Hare et al. (1990) obtained two-factor solutions for five separate samples as well as a two-factor solution for the combined sample. However, a closer examination reveals that every sample has items which have loaded in a manner inconsistent with their loadings in the common solution. Additionally, 14 of the 20 items appear to load inconsistently across samples.

Hare et al. (1990) found high internal consistency for the PCL-R total score (alphas from .85 to .89). These authors also reported interitem correlations, $r_{s} = .23$ to .30, which they reported as optimal, noting that interitem correlations in this range reflect an underlying common construct as well as an individual contribution for each item.
Additionally, Hare et al. (1990) found the correlations between the PCL and PCL-R total scores and Factors 1 and 2 to be .88, .82, and .81 respectively. On the basis of these findings, the authors concluded that the PCL and its revision measure the same construct. Thus, they concluded that the research findings obtained with the PCL are generalizable to the PCL-R.

**Descriptive Findings with the PCL/PCL-R**

Psychopathy as a construct has been consistently associated with criminal behavior. As outlined above, historically many researchers have presented psychopathy as nearly synonymous with criminal behavior. However, such a view overlooks important characterological traits found in psychopaths. Additionally, this view essentially invalidates any attempts to quantify the relationship between psychopathy and criminal behavior or to utilize psychopathy in a clinically meaningful manner. After all, if psychopathy is nearly synonymous with criminal behavior, it becomes a useless construct in the forensic setting. In the following paragraphs, I will review the literature regarding the relationship between psychopathy as defined by the PCL and criminal behavior.

Hare and Jutai (1983) found that criminals who were classified as psychopaths committed more crimes per year over an eleven year follow-up period than those who were classified as nonpsychopaths. Those criminals classified as psychopaths also committed significantly more violent offenses, including possession of a firearm, breaking and entering,\(^2\) robbery, assault, and escapes.

\(^2\)Hare and Jutai (1983) noted that although breaking and entering is not generally considered to be a violent crime, it was included in their analyses due to the potential for
Hare and McPherson (1984) found that criminals classified as psychopaths were significantly more likely to have committed a violent crime than were nonpsychopaths. In addition, they found that 84.9% of the participants classified as psychopaths were convicted of some type of violent crime, as compared to 54.4% of those classified as nonpsychopaths. Furthermore, although only 32.2% of the participants in the Hare and McPherson (1984) study were classified as psychopaths, they received 60.3% of the total convictions. The findings of Hare and Jutai (1983) and Hare and McPherson (1984) were extended by Forth et al. (1990) to an adolescent population. Similar to the findings for adult participants, Forth et al. (1990) found that PCL scores as a measure of psychopathy in male adolescents were significantly correlated with the number of charges or convictions for violent offenses.

Williamson, Hare, and Wong (1987) reported that psychopaths commit acts of violence following drinking bouts, and as a form of revenge or retribution more frequently than nonpsychopaths. Unlike nonpsychopaths, their violent acts were not related to any extreme affective states or understandable motives. Furthermore, Williamson et al. (1987) characterized the violent acts of psychopaths as callous and cold-blooded, suggesting that they may simply be aggressive displays rather than emotional responses or instrumental behaviors. The fact that robbery emerged so frequently as one of the most serious offenses led Williamson et al. (1987) to hypothesize that the psychopath is simply more willing than other criminals to place him- or herself in a situation where violence may be necessary.

violence this crime presented.
Hare, McPherson, and Forth (1988) compared the criminal careers of psychopaths with those of nonpsychopaths, using both cross-sectional and longitudinal analyses. The cross-sectional analyses examined differences between six groups comprised of participants separated into five-year periods based on age. The longitudinal analyses utilized both retrospective and prospective criminal history data on the same participants. Unexpected differences emerged from the two approaches. From a cross-sectional perspective, conviction rates for both nonpsychopaths and psychopaths reached their maximum in the age range of 21-25. In addition, conviction rates for psychopaths remained high until about age 35, after which they sharply declined.

In contrast, the longitudinal perspective revealed that the conviction rate for psychopaths did not reach its maximum until approximately age 30. Hare et al. (1988) found that between the ages of 16-40 psychopaths spent more time in prison than did other criminals; however, their criminal activities appeared to decrease sharply after the age of 40. This apparent decrease was preceded by increasing convictions until approximately age 35-40 and did not continue beyond the age of fifty. This finding may result, at least partially, from underestimates of prior illegal behavior, especially juvenile crimes, due to incomplete juvenile records and reluctance to prosecute juveniles in adult courts. Furthermore, results of their longitudinal analyses indicated that the psychopaths' violent criminal activities remained fairly stable over the duration of the study.

Hare et al. (1988) proposed that findings obtained using a cross sectional design which present sharply declining conviction rates after age 35 for psychopaths may be due to the psychopath's reduced readiness to engage in forms of illegal and/or antisocial
behavior which are not violent. Although some authors (Hare et al., 1988) have elected to label this phenomena “burnout”, the implied tension, stress, anxiety or conflict in this term is not congruent with commonly accepted psychopathic characteristics indicating that they are less likely to experience these affective states (Cleckley, 1976). Shover (1985) has suggested that the decrease in convictions may be accounted for by factors such as maturational lag, development of strategies to remain out of prison, or realization that radical behavioral changes must be made to insure future happiness.

**Predictive Validity of the PCL/PCL-R**

Many studies have found that psychopaths are more prone to recidivism than other criminals (Forth et al., 1990; Ganzer & Sarason, 1973; Hart et al., 1988; Serin et al., 1990). Specifically, Hart, Kropp, and Hare (1988) have reported findings that indicate that psychopaths, as classified by the PCL, are four times more likely to fail on conditional release than are other criminals. These researchers also found that male psychopaths received more suspensions of their conditional releases, violated the conditions of their release more often, and had greater problems developing a stable life-style while under supervision.

Serin et al. (1990) found that the PCL predicted the outcomes of unescorted temporary absences and parole. Forth et al. (1990) attempted to extend these findings by validating the use of the PCL with male adolescents. However, they were not able to predict recidivism in male adolescents using the PCL. Forth et al. (1990) suggested that this finding may be a result of the high recidivism rate of their sample (i.e., 78.9% of those participants released subsequently committed another crime).
Hare and McPherson (1984) surveyed institutional files in an attempt to determine whether significant differences in aggressive behavior existed between psychopaths and nonpsychopaths. Two independent raters used file information to decide whether or not aggressive behaviors were characteristic of psychopaths. They found that psychopaths were significantly more verbally abusive, verbally threatening, easily annoyed or irritated, aggressive, and likely to engage in fighting. They also found that psychopaths were more frequently engaged in violent or aggressive behavior within the institutions than were nonpsychopaths.

Very little research has been done examining possible predictors of institutional risk, or management difficulties. However, given the findings of Hare and McPherson (1984) and the evidence that psychopaths are more prone to violent behavior in general, I hypothesized that this would generalize to the psychiatric institutional setting. Specifically, I expected psychopaths to exhibit significantly more verbal abuse, verbal threats, irritability, belligerence, and fighting.

The PCL has proven to be a valid and reliable tool for the measurement of psychopathy in forensic populations. The findings of Serin et al. (1990) clearly demonstrate differences in recidivism rates between psychopaths and nonpsychopaths. More specifically, when used with white adult male offenders, the PCL has been shown to more effectively predict unescorted temporary absence and parole release outcome than a derived predictive score and three actuarial risk instruments (Serin et al., 1990). The recommittal rate was 7.0% for nonpsychopaths versus 33.0% for psychopaths. Further findings were: (a) 37.5% of the psychopaths failed on unescorted temporary absence
versus 0% of nonpsychopaths, and (b) 33.3% of psychopaths failed on parole versus 9.1% of nonpsychopaths.

The PCL has also been shown to make a significant contribution to the prediction of conditional release from prison beyond information derived from criminal history and demographic variables. Hart et al. (1988) demonstrated that PCL scores (high, medium, and low) as defined by preset cuts, adequately differentiated between offenders on the likelihood of violation of conditions of release, and the probability of remaining out of prison for one year. In addition, offenders scoring in the high group on the PCL received more suspensions and presented more supervisory problems than offenders in either the medium or low scoring group. Not only did the PCL predict recidivism, but it correctly identified 80.0% of violent recidivists in a maximum security sample (Harris et al., 1989). Researchers have hypothesized that the PCL differentially predicted post-release behavior so well because it considers both criminal history variables and core personality traits of psychopathy (Hart et al., 1988).

The Psychopathy Checklist-Screening Version (PCL-SV)

Although research findings with the PCL and PCL-R produced excellent results in the literature with regards to criminal behavior, recidivism, and institutional risk factors, they were neither intended nor developed for general clinical use. For example, Hare et al., (1989) cite several impediments to the use of the PCL and PCL-R in clinical practice settings. First, conducting the PCL or PCL-R interview is a time-intensive process, sometimes requiring two to three hours for the interview and additional time to review the case file. Second, the PCL and PCL-R were developed and normed using incarcerated
offenders. Therefore, the PCL and PCL-R may not be applicable to other populations. Finally, the PCL and PCL-R are both geared toward assessing life-long psychopathy and, thus, are not sensitive to time- or treatment-related changes in symptomatology. In the development of the PCL-SV, Hare et al. (1989) addressed these issues by creating a measure of psychopathy which they described as shorter, easier to administer, and sensitive to changes in psychopathy.

The PCL-SV was developed as an abbreviated version of the PCL which is less concerned with overt criminal acts (Hare et al., 1989). In the development of the PCL-SV, the initial step was the selection of six items from the PCL that assessed interpersonal and affective characteristics. The original PCL descriptions of these six items were altered to make them brief and nonhistorical in content. The six items chosen were: (a) superficial, (b) grandiose, (c) manipulative, (d) lacks remorse, (e) lacks empathy, and (f) doesn’t accept responsibility. The same scoring system that was utilized for the PCL and the PCL-R was maintained for the PCL-SV, yielding possible total scores ranging from 0 to 12 (Hare et al., 1989).

Initial validity studies of the PCL-SV indicated that it possessed excellent psychometric properties (Cox, Hart, & Hare, 1987, cited in Hare et al., 1989; Roy, 1988, cited in Hare et al., 1989). When utilized with violent offenders, the PCL-SV was found to have an excellent inter-rater reliability ($r = .86$), a greater than expected mean interitem correlation ($r = .51$) when compared to the interitem correlations obtained for the PCL-R ($rs = .23$ to .30), and good internal consistency ($alpha = .86$).
Roy (1988) found that scores on the PCL-SV were only moderately correlated with scores on the PCL and PCL-R ($r_s = .38$ and .42, respectively) which have been devised to assess lifetime psychopathy. He contended that these findings provided evidence to substantiate the use of the PCL-SV to measure changes in symptomatology. However, this conclusion is premature, as the moderate correlations with the PCL and PCL-R likely reflect little more than the absence of items measuring behavioral symptoms in the PCL-SV.

The PCL-SV was altered as a consequence of Roy’s (1988) results. First the administration of the measure was changed from only an interview to an interview plus review of the case file. Second, six new behavior-related items were added and labeled as Part 2 of the interview, with the original six comprising Part 1. The six new items were: (a) impulsive, (b) poor behavior controls, (c) lacks goals, (d) irresponsible, (e) adolescent antisocial behavior, and (f) adult antisocial behavior (Hare et al., 1989). The new draft of the PCL-SV retained the psychometric properties of the original draft (Hare & Hart, 1989, cited in Hare et al., 1989). An analysis of the factor structure of the PCL-SV and its correlation with APD diagnoses indicated that the PCL-SV measured the same construct as the PCL-R. Hare and Hart (1989) reported that the factor analysis supported the two part structure of the PCL-SV, revealing two factors, accounting for 53.3% of the variance. Furthermore, similar to the PCL and PCL-R, the PCL-SV scores were only moderately correlated with diagnoses of APD ($r = .53$).

Hare and Hart (1989) also conducted a series of categorical analyses to determine the predictive efficiency of the PCL-SV in identifying psychopaths. They concluded that
an optimal cutoff score of 19 results in sensitivity = 1.00, specificity = .76, positive predictive power = .44, and negative predictive power = 1.00. This cutting score provides an adequate classification of psychopaths, while ensuring that no psychopaths are misclassified as nonpsychopaths.

**Rationale**

Psychopaths in general have been shown to commit more overall crime, more violent crimes and other aggressive behavior, and spend more time in prison between the ages of 16-40. Given these findings, an assessment measure, such as the PCL-SV, that could reliably distinguish between psychopaths and nonpsychopaths and discriminate among them to predict institutional risk could provide highly useful information. These predictions would include persons at risk for management difficulties, poor release outcomes, and dangerous behavior toward staff, other inmates/patients, or themselves.

The PCL, PCL-R, and PCL-SV have substantial reliability, validity, and predictive utility when used in forensic institutional settings. The PCL-SV was utilized in this study for two reasons: (a) there was a greater need for further research on the PCL-SV than on the PCL or PCL-R, and (b) the PCL-SV has a briefer interview.

The primary goal of this study was to establish the PCL-SV as a valid assessment measure for predicting those individuals which may present institutional management difficulties. Additionally, this study attempted to provide further evidence for the construct validity of the PCL-SV with adult male offenders through correlations with specific scales from the Personality Assessment Inventory (PAI), and to determine the strength of the relationship between PCL-SV scores and the diagnoses of APD according
to DSM-III-R criteria. Finally, this study attempted to determine the influence that DSM-
III-R mood, organic, and/or psychotic disorders have on PCL-SV total scores.

Hypotheses

Hypothesis 1. It was hypothesized that psychopaths as identified by the PCL-SV using the predetermined cut score of 19 would exhibit significantly more verbal abuse, verbal threats, irritability, belligerence, and fighting during a six month follow-up period than would nonpsychopaths.

Hypothesis 2. It was hypothesized that the PCL-SV would predict verbal abuse, verbal threats, irritability, belligerence, and fighting both when used as a continuous and a dichotomous measure. Additionally, it was hypothesized that PCL-SV total scores would exhibit a stronger predictive relationship than would classification according to the PCL-SV.

Hypothesis 3. It was hypothesized that PCL-SV total scores would be, positively correlated with the PAI Antisocial Features, Drug Problems, and Aggression scales.

Hypothesis 4. It was hypothesized that the PCL-SV total score would be only moderately correlated with DSM-III-R diagnoses of APD; however, APD and Factor 2 of the PCL-SV were expected to exhibit a higher correlation than total PCL-SV and APD, or Factor 1 and APD.

Hypothesis 5. It was hypothesized that the effects of major Axis I mental disorders (e.g., psychotic, organic, mood) would not have a significant affect on total PCL-SV scores.
CHAPTER II

METHODS

Participants

Participants were 150 male adult offenders hospitalized at Vernon State Hospital in Vernon, Texas. The data gathered on two participants who were discharged prematurely was insufficient to be included in the analyses. One participant was discharged prematurely from the hospital after all charges against him were dropped following a diagnosis of an advanced stage of cancer. The other was medically hospitalized for the majority of the follow-up period after being severely beaten.

The remaining participants were comprised of 60 Caucasians (40.3%), 66 African Americans (45.0%), 18 Hispanic Americans (12.1%), 1 Asian American (0.7%), and 3 (2.0%), of other racial minorities. Included in the other racial minorities were two Native Americans and one Eastern Indian. The participants' ages ranged from 19 to 69, $M = 35.33$, $SD = 9.36$. The sample consisted of 112 or 75.8%, who had been found incompetent to stand trial, 11 or 7.4% who had been deemed not guilty by reason of insanity, and 5 or 3.4%, who had been determined manifestly dangerous. Information regarding commitment type was not available at the time of record review for 20 participants, or 13.4% of the sample. Those who were committed to Vernon State Hospital after having been deemed manifestly dangerous were transferred from other state.
facilities following a determination that they were too violent to remain in a less secure environment, or following the commission of a felony while hospitalized in a state facility.

Materials

Psycopathy Checklist: Screening Version (PCL-SV). The 12-item Psychopathy Checklist-Screening Version measures behavioral and personality aspects from a combination of interview and file information (Hare et al., 1989). Total possible PCL-SV scores range from 0 to 24. It possesses good mean interitem correlation ($\tau = .31$), good internal consistency (alpha = .85), and a greater than expected correlation with the PCL-R ($\tau = .75$).

In a summary of unpublished results, Cox, Hart and Hare (1987, cited in Hare et al., 1989) reported that the mean interitem correlation and Cronbach’s alpha obtained indicate that the PCL-SV is a unidimensional measure. These researchers also conducted a principal components analysis of the averaged scores from two independent raters and concluded that one dimension accounted for 59.0% of the common item variance.

The Interview Schedule for the PCL-SV (Hare, 1989; see Appendix A) was designed to be completed during the interview and used in conjunction with case file information (see Appendix B) to rate the PCL-SV Scoresheet items (see Appendix C). The original scoresheet listed each of the twelve items, below which relevant descriptive criteria were typed in paragraph form. Although descriptively useful, this method of presentation provided little information regarding the comparative relevance of specific criteria, the threshold specific criteria should meet for the assignment of the various
scores, or the relative influence of mental disorders on individual item ratings. Thus, this study used a modified version of the scoresheet which addressed these issues.

Modifications included listing relevant criteria beneath each item and rating each criterion on a scale of 0 to 2 (0 = definitely not present, 1 = possibly present, and 2 = definitely present). Although individual criteria for the items were not analyzed in this study, these data were collected for future investigations. An additional modification in the scoresheet requested the rater to code information concerning the influence of psychotic, organic, and mood disorders. The coding of such information was restricted to those cases in which the participant was diagnosed with a DSM-III-R psychotic, organic, or mood disorder, and the rater believed unequivocally that the presence of the specific disorder influenced the rating of that criterion. After scoring each criterion for a specific item in this manner, the individual item was then assigned two scores in the same manner (i.e., rating of 0 to 2), one excluding and one including any possible influence of mental disorders. Resultingly, each participant received two total PCL-SV scores, one reflecting the level of psychopathy without excluding any influence of a mental disorder and one excluding any influence of a psychotic, organic, or mood disorder. One additional notation of the scoring method utilized is that the categories of mental disorders were not discrete. In other words, if a participant carried a diagnoses falling in more than one of the three categories, and one or more were thought to influence the rating, then all appropriate mental disorder categories were noted on the scoresheet.

**Personality Assessment Inventory (PAI).** The PAI is a self-report objective clinical assessment instrument (Morey, 1991). It was designed to provide information about adult
personality through its 22 nonoverlapping scales. The PAI scales are grouped into 4 validity scales, 11 clinical scales, 5 treatment scales and 2 interpersonal scales. Additionally, 10 scales provide subscales to facilitate clinical interpretation. Clinical syndromes which were selected for inclusion in the PAI were chosen on the basis of their importance in mental disorder nosology and their significance in contemporary diagnostic practice. A major benefit of the PAI in comparison with other objective self-report personality measures for adults is the fact that it is written on a fourth grade level.

Evidence of criterion related validity for the PAI with Hare’s self-report psychopathy scale is good when assessed with a college sample ($\tau = .82$) and moderate with an alcohol and drug treatment sample ($\tau = .54$; Morey, 1991). Specific PAI scales utilized in this study included: Antisocial Features, Aggression, and Drug Problems. The Antisocial Features and Aggression scales are comprised of three subscales. The Antisocial Features Clinical Scale is comprised of Antisocial Behaviors (ANT-A), Egocentricity (ANT-E), and Stimulus-Seeking (ANT-S). The Aggression Treatment Consideration Scale is comprised of Aggressive Attitude (AGG-A), Verbal Aggression (AGG-V), and Physical Aggression (AGG-P). Table 5 provides the coefficient alphas and test-retest reliabilities for each scale and its subscales.

Wide Range Achievement Test-Revised. The Wide Range Achievement Test-Revised (WRAT-R; Jastak & Wilkinson, 1984) Level 2 Reading Subtest score was used to determine whether participants had a fourth grade reading level. The WRAT-R Level 2 Reading Subtest has an item separation index of .99 for all age groups above 18 years old, with the exception of 25-34 year olds, for which the item separation index is .98. The
item separation index demonstrates the consistency with which the items of a subtest separate a sample of persons and distinguish among samples of persons on the basis of their measure. Jastak and Wilkinson (1984) define it as a ratio of the standard deviation

Table 5

Coefficient Alphas and Test-Retest Reliabilities for PAI Subscales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Coefficient alpha</th>
<th>Test-retest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antisocial Features</td>
<td>.86</td>
<td>.89</td>
</tr>
<tr>
<td>Antisocial Behaviors</td>
<td>.80</td>
<td>.83</td>
</tr>
<tr>
<td>Egocentricity</td>
<td>.63</td>
<td>.75</td>
</tr>
<tr>
<td>Stimulus Seeking</td>
<td>.75</td>
<td>.85</td>
</tr>
<tr>
<td>Aggression</td>
<td>.90</td>
<td>.81</td>
</tr>
<tr>
<td>Aggressive Attitude</td>
<td>.80</td>
<td>.72</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>.70</td>
<td>.75</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>.84</td>
<td>.77</td>
</tr>
<tr>
<td>Drug Problems</td>
<td>.89</td>
<td>.79</td>
</tr>
</tbody>
</table>

Note. Coefficients extracted from Morey (1991). The mean interval between initial testing and retesting for all samples was 24 days.

*a*Coefficient alphas reported here are based on clinical samples.

*b*Test-retest reliabilities reported here were obtained from combined community and college samples.
corrected for calibration error of the item difficulty in the test, divided by the standard
error of their calibration. The WRAT-R Reading Subtest has been shown to correlate .87
with grade levels obtained from the Reading Recognition subtest of the Peabody
Individual Achievement Test (PIAT) and .81 with the Total Reading scale on the
California Achievement Test.

Hospital Case Files. Vernon State Hospital maintains comprehensive case files on
all of its patients. Because the hospital is a maximum security forensic psychiatric facility,
these files thoroughly document patients' treatment responses and behavior on the various
units. Specific information required to be documented by staff includes: aggressive
behaviors, self harm, potential escape attempts, threats of escape attempts, refusal of
medication, refusal of physicians' and laboratory appointments, and inappropriate sexual
behavior.

Unfortunately, there is no way to control for the reliability of staff reports
regarding such behaviors. Staff at Vernon State Hospital are especially vigilant regarding
chart notation of any possible infraction or treatment concern because patients' hospital
chart information provides crucial data upon which legal decisions are often made. These
staff are acutely aware of the increased importance of accurate and thorough notation on
their part relative to nonforensic psychiatric institutions. However, individual differences
continue to exist. Staff likely differ in their threshold for reporting infractions, especially
where comparatively minor incidents, such as verbal abuse, are concerned. Additionally,
individual staff members generally form closer working relationships with select patients
which may result in patient-specific thresholds for reporting infringements. Thus, as noted
by Werner et al. (1983), record reviews do not reflect all occurrences of problematic behaviors on a unit. Despite this concern, charted reports within the case files were the best available outcome measure of all serious infractions and violent behaviors.

Hospital case files were reviewed at two points during the study. First, shortly after completing the PCL-SV interview and later, subsequent to a six month follow-up period. During the initial review information gathered included data necessary to complete the PCL-SV (see Appendix B), date of admission, treatment unit placement, and commitment type. In the second review of the participants’ case files, information gathered consisted of frequencies and dates of the following infractions: verbal abuse, verbal threats, evidence of irritability, evidence of belligerence, fighting, suicide attempts, self-mutilation, refusal of psychoactive medication, refusal of physician (psychiatric) appointments, and refusal of laboratory appointments (or attendance with refusal to comply with blood draws, urine specimens, etc.; see Appendix D). Refer to Appendix E for operational definitions of the above follow-up variables. Additional data gathered at this time included the dates of any furloughs, discharges and readmissions occurring within the follow-up period.

Procedure

Method of recruiting participants varied somewhat over the course of the investigation depending upon the requirements of the treatment unit in which potential participants were housed, the availability of staff to assist with the process, and the comfort level of the investigator on a given unit. Initially, participants were approached individually by the investigator and a staff psychologist or social worker with whom the
patient was familiar. However, this approach did not prove to be time-efficient, as it required considerable time from professional staff and frequently necessitated locating patients during their therapies. A new approach under which the majority of participants were recruited was instituted. In this approach, a list of approximately 20 potential participants taken in alphabetical order from the unit roster was provided to the unit coordinators and staff a minimum of 24 hours prior to requesting patient participation. These patients were then excused from their therapies and held on the unit until their participation had been requested. This method was routinely repeated without omitting any patients, so that all patients admitted during the study period were requested to participate.

The investigator sat in a separate room, both visible and audible to unit staff, while patients remained in the common living areas of the units prior to being called in to talk with the investigator. Patients were individually called in to meet with the investigator. A minimum of one unit staff member was present in the room with the investigator or immediately outside the open door. The investigator introduced herself to the patient and explained her duties in the hospital. The entirety of the study as covered by the informed consent (see Appendix F) was then explained prior to requesting participation or allowing any patient to volunteer.

Participants were told upon meeting the investigator that she would like to talk with them but that they were not required to stay and could leave then, or at any time. This method of initial contact was utilized for three of the five units from which participants were requested. A different approach was necessary for the remaining two
units, due to their specialized population. On the behavioral management unit which typically housed the most aggressive and violent patients, each potential participant was approached individually in an open area generally with one male unit staff member within arms' reach of both the patient and the investigator. Finally, it was generally necessary for the investigator to locate patients residing on the earned opportunity unit and establish a time to meet with them to discuss their possible participation. This approach was required, as these patients were responsible for structuring much of their own time and many were employed as client-workers. Although a staff member was not always present during this discussion, the patients were required to explain the study and their participation in it to their primary counselor prior to consenting.

Patients were given a written copy of the informed consent to read; however, to ensure that all information was covered, the entire form was read to them. This form was written in the simplest possible language, explaining the research topic, rationale, duration, and the tasks the patient was being requested to complete. Additionally, special care was taken both in the written form, and while discussing the project with the patients, to ensure that patients understood that they were under no obligation to participate in the study. Patients were explicitly informed that they could discontinue their participation at any time for any reason without fear of negative consequences. Although not explicitly stated in the informed consent, patients were also reassured that no information from their participation would be entered in their case files, nor would information regarding a refusal to participate. Patients were informed of the appropriate persons to contact, both at Vernon State Hospital and the University of North Texas, should they wish to file a
complaint regarding their treatment during the course of the study. They were also provided with means of contacting these persons, including the department or hospital unit in which they worked and phone numbers of contact persons. Finally, all patients were provided with a written copy of this form to keep for themselves. To ensure that patients understood the informed consent prior to agreeing to participate, they were requested to explain it to the investigator in their own words. Participants who did not clearly understand the task were not permitted to volunteer regardless of their willingness.

Many potential participants expressed concern regarding their anonymity. Specifically, patients were generally keenly aware that their adjustment and behavior was routinely noted in their case file and that this file would return to court with them. Thus, a common concern among those approached was that information obtained during the course of the study would be placed in their hospital case file, or reported to their psychiatrist, psychologist, social worker, or lawyer. In such instances, generally an explanation of the assignment of research participant numbers and the use of group (rather than individual) data interpretation proved sufficient to allay their fears. One additional common concern appeared to be related to the wording of the informed consent which specified the duration of the study as being two years. It was not uncommon for participants to initially interpret that as meaning they would be studied for two years requiring them to remain hospitalized for that duration of time. After several such occurrences, the verbal presentation of the study in the recruitment of participants was altered to include an explanation that the duration of the study would in no way affect their length of stay as a patient at Vernon State Hospital.
After completing an informed consent, all participants were administered the PCL-SV interview. The environment in which the interviews were conducted varied depending on the patient’s general level of aggression as well as the unit in which he was housed. Every attempt was made to provide a level of privacy with which the patient would feel comfortable. With the few patients who were considered to be so violent that they were required to be accompanied by a staff member, and/or interviewed in a common living area, the investigator explicitly informed the staff member of the confidentiality of the material provided by the patient during the study. Additionally, the investigator informed the staff member that no information offered by the patient in the course of the interview was permitted to be documented in the patient’s chart. The interview proceeded only when it was evident that the patient was in agreement with this approach and felt comfortable in continuing. In some instances, arrangements were made to have specific staff sit in on the interview at the request of the patient.

Immediately following the interview, participants were assessed with the WRAT-R reading subtest to determine whether their reading level was appropriate for the administration of the PAI. Those obtaining a fourth grade reading level were requested to complete the PAI. Although 108, or 73.2%, of the participants assess obtained a fourth grade reading level, only 69, or 47.0%, of participants completed the PAI. In all, 64.2% of participants with the required reading level completed the PAI. Patients who refused to complete the instrument cited various reasons, including blurry vision from psychoactive medication, cognitive interference from psychiatric disorders, and time required to complete the PAI. In addition, several participants who were able to read at a fourth
grade level were not able to complete the PAI due to the effects of organic disorders (e.g., perseverative writing errors). Initially, supervised group administrations of the PAI were attempted. However, this approach proved too distracting for many patients and was ineffective due to vastly differing reading skills among the participants. Instead, the PAI directions were explained to the participants who completed them on their own time. Patients received supervision while completing the inventory from unit staff, as they may not use writing implements unsupervised.

Patients' hospital case files were initially reviewed to obtain chart information necessary to complete the PCL-SV rating immediately after administering the interview. In some cases, as patients were being interviewed shortly after their admission, this was not possible because the necessary information had not been placed in the chart. In these instances, the charts were rechecked approximately once per week until the information needed was obtained. A minimum of six months following the initial contact, the case files were again reviewed for a follow-up period of six months from the date of the PCL-SV interview, or until their discharge, whichever occurred first. If patients were discharged and subsequently readmitted within six months from the date of their PCL-SV interview, the data from their second admission, up until the end of the six month follow-up period, was also included. The chart review collected information, as described above, regarding their treatment and adjustment over the follow-up period.
CHAPTER III

RESULTS

Description of Sample

Participants varied widely with respect to their mental health histories. Prior psychiatric hospitalizations ranged from 0 to 51, with a $M = 4.32$, $SD = 5.95$. Documented substance abuse histories were common with 116 (77.9%) of participants having either documented drug or alcohol abuse in their past. Histories of drug abuse were slightly more prevalent (67.1%; $n = 100$) than were histories of alcohol abuse (60.4%; $n = 90$). Psychiatric diagnoses within the sample were variable, with 98 (66.2%) being diagnosed with only an Axis I disorder, one (0.7%), being diagnosed with only an Axis II disorder, and 49 (33.1%) being diagnosed with both Axis I and II disorders.

Regarding specific categories of diagnoses, 101 (68.2%), were diagnosed with a psychotic disorder, 15 (10.1%), with an organic disorder, and 32 (21.6%), with a mood disorder.

With respect to legal histories, considerable variability was also evident. The number of prior documented felony arrests ranged from 0 to 11. The upper limit of this range is thought to be an underestimate as Vernon State Hospital was not provided with information concerning prior legal history and was forced to rely on patients' self-reports. Additionally, interviews to gather history information are generally conducted during the first week of hospitalization when the patient may have been confused and irrational due
to mental illness. Thus, many charts simply reported “numerous previous felony arrests.” Regarding the crimes which precipitated their commitment, 66 or 44.6%, of participants were charged with crimes described as “property crimes.” These included offenses such as auto theft, trespassing, and burglary. Charges for crimes described as “personal” were brought against 82 or 55.4% of the participants. These included crimes such as murder, assault, and sex offenses.

Data Screening

Prior to analysis, the data were examined as ungrouped and grouped (split on PCL-SV classification) through various SPSS programs to assess accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analysis. No missing values were found on variables to be analyzed. Three dichotomous variables were found to have extreme splits: organic diagnosis (133 to 15), readmission during follow-up (129 to 19), and furlough during follow-up (146 to 2). These poor splits may truncate the correlations with other variables; however, they were retained as none of these variables were to be used as primary factors in the data analyses, and they may provide useful descriptive information regarding the sample.

Five follow-up variables were omitted from all analyses: aggressive homosexuality, suicide attempts, self mutilation, escape attempts, and escape threats. No occurrences of aggressive homosexuality or escape threats were reported in this sample during the follow-up period. Although five cases with escape attempt data were recorded, the number of data points were insufficient to analyze. Only two cases with suicide attempts and three with self-mutilation were recorded.
The remaining follow-up variables, verbal abuse, verbal threats, irritability, belligerence, fighting, medication refusal and appointment refusal were found to violate normal distribution assumptions with significant ($p \leq .05$) kurtosis and skewness. A logarithmic transformation was attempted to create distributions which more closely approximated the normal distribution. This transformation did not result in significant improvement in the kurtosis or skewness. The variables were analyzed despite these violations. This decision was based on both practical and statistical considerations. First, it was felt that the application of more complex transformation which might improve the distribution of the variables would significantly hinder the interpretation of clinically useful results. Second, although the distributions deviated significantly from the normal distribution, these deviations were moderate across all follow-up variables. Third, all distributions were positively skewed and leptokurtic. Thus, concerns over significantly discrepant distributions among the follow-up variables were not serious. More specifically, although all of the follow-up variables deviated from the normal distribution, they all evidenced extremely similar distributions. The positive skew and leptokurtic distributions resulted from a majority of participants exhibiting a very low prevalence of the follow-up variables. Since the prevalence rates of the follow-up variables is typically low in forensic psychiatric settings, the similar finding in this sample is believed to be representative. For example, if psychopaths represent approximately 30% of this population and are responsible for the majority of aggressive and socially disruptive behaviors in institutional settings, I would not expect to find observations of such behaviors normally distributed within this population. Fourth, multivariate analyses are
less affected by moderate deviations from the normal distribution, because they are based on the sampling distribution of means.

Data were screened for univariate outliers by examining scatterplots and z-score transformations of the follow-up variables. These techniques identified one case exhibiting outliers which were a minimum of four standard deviations from the mean on three of the follow-up variables. Since such extreme outliers will unduly influence regression analyses, this participant’s data were deleted from regression analyses as well as survival analyses utilizing the Cox regression method. A total of 6 univariate outliers remained, two each on the follow-up measures of fighting and belligerence, and one each on the follow-up measures of medication refusal and refusal of physician/laboratory appointment. These seemingly randomly distributed univariate outliers were replaced with the means for their respective variables to protect against disproportionate effects they might have on regression analyses. In an attempt to obtain the most conservative values, all outliers were omitted in the calculation of variable means.

To assess the relationships among the follow-up variables, a correlational matrix was computed (see Table 6). For the sake of investigating the relationship among the follow-up variables, all variables for which data had been recorded were included. The results of this matrix produced two discrete groups of variables which were significantly correlated at \( p \leq .01 \), with the majority in each group significantly correlated at \( p \leq .001 \). These two groups were self harm (suicide attempts and self mutilation) and aggression (verbal abuse, verbal threats, irritability, belligerence, and fighting). The correlational matrix results for medication refusal and refusal of physician or laboratory appointments
Table 6

Inter-Item Correlation Matrix for Follow-up Variables

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>SM</th>
<th>VA</th>
<th>VT</th>
<th>IR</th>
<th>BE</th>
<th>FI</th>
<th>EA</th>
<th>PMR</th>
<th>P/LAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMR</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Bracketed correlations represent the relationships among variables combined to form the composite measure aggression. For variables, SA = suicide attempt, SM = self-mutilation, VA = verbal abuse, VT = verbal threat, IR = irritability, BE = belligerence, FI = fighting, EA = escape attempt, PMR = physician/medication refusal, P/LAR = physician/laboratory appointment refusal.

*p < .01  **p < .001

were less definitive. Although the two were significantly correlated with each other, refusal of medication was also correlated with verbal abuse, verbal threats, irritability, and fighting. Refusal of physician or laboratory appointments was correlated with irritability. Despite the indistinct pattern of correlations, it was decided to group refusal of medication
and refusal of physician or laboratory appointments into a composite follow-up variable representing treatment noncompliance. This decision was made on the basis of their conceptual similarities. Combining refusal of medication and refusal of physician or laboratory appointments to form a composite variable measuring treatment noncompliance seemed intuitive and created a clinically interpretable follow-up variable. A correlational matrix was computed for the composite follow-up variables to assess the relationships among them (see Table 7).

Table 7

Correlational Matrix for Composite Variables

<table>
<thead>
<tr>
<th></th>
<th>Self Harm</th>
<th>Aggression</th>
<th>Treatment Noncompliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Harm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>-0.02</td>
<td></td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.37*</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .001

Analyses of Hypotheses

Hypothesis 1. The hypothesis that participants classified as psychopaths by the PCL-SV would exhibit significantly more verbal abuse, verbal threats, belligerence, and fighting was tested utilizing a multivariate analysis of variance (MANOVA). Given the moderate correlations among these variables, the initial MANOVA was performed on the
composite follow-up variables as the dependent measures. A one-way MANOVA with classification based on the PCL-SV as the independent variable was performed on the two composite dependent variables: aggression and treatment noncompliance. Examination of the Wilks' criterion indicated the presence of a significant finding, $F(4, 143) = 10.09, p < .001$. An examination of the univariate tests revealed significant results for both dependent variables: aggression with $F(1, 146) = 38.68, p < .001$, and treatment noncompliance with $F(1,146) = 5.51, p = .02$. Patients classified as psychopaths engaged in significantly more aggressive behaviors ($M = 4.15$) than nonpsychopaths ($M = .72$), and refused treatment significantly more frequently ($M = 1.38$) than nonpsychopaths ($M = .56$).

Two subsequent one-way MANOVAs were performed utilizing variables that comprised the measures of aggression (verbal abuse, verbal threats, irritability, belligerence, and fighting) and treatment noncompliance (refusal of psychoactive medication and refusal of physician or laboratory appointments). An examination of the Wilks' criterion for the components of aggression revealed significant results, $F(10, 137) = 5.27, p < .001$. Univariate F tests indicated significant results for all of the variables that comprised the aggression composite: verbal abuse, $F(1, 146) = 23.63, p < .001$; verbal threats, $F(1, 146) = 16.35, p < .001$; irritability, $F(1, 146) = 22.37, p < .001$; belligerence, $F(1, 146) = 38.23, p < .001$; and fighting, $F(1, 146) = 9.91, p = .002$. Regarding treatment noncompliance components, univariate F tests revealed significant findings only for psychoactive medication refusal, $F(1, 146) = 3.83, p = .05$. Results were not significant for refusal of physician or laboratory appointments, $F(1, 146) = 2.83, p = .10$. 
On all variables with significant univariate F tests psychopaths exhibited greater frequency of occurrences (see Table 8).

**Hypothesis 2.** The second hypothesis that both total score and classification according to the PCL-SV would predict verbal abuse, verbal threats, and fighting, and that PCL-SV total scores would exhibit a stronger predictive relationship was analyzed through a series of regression analyses. Given the significant correlation between verbal abuse, verbal threats, and fighting, the analyses utilized the composite measure, aggression, as the criterion variable.

### Table 8

**Comparison of Aggression and Treatment Noncompliance Follow-up Variables in Psychopaths and Nonpsychopaths**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Psychopaths</th>
<th>Nonpsychopaths</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Verbal Abuse</td>
<td>1.59</td>
<td>2.31</td>
<td>.32</td>
</tr>
<tr>
<td>Verbal Threats</td>
<td>.67</td>
<td>1.34</td>
<td>.12</td>
</tr>
<tr>
<td>Irritability</td>
<td>.72</td>
<td>1.49</td>
<td>.05</td>
</tr>
<tr>
<td>Belligerence</td>
<td>.61</td>
<td>.85</td>
<td>.06</td>
</tr>
<tr>
<td>Fighting</td>
<td>.57</td>
<td>1.03</td>
<td>.17</td>
</tr>
<tr>
<td>Medication Refusal</td>
<td>.95</td>
<td>1.58</td>
<td>.40</td>
</tr>
</tbody>
</table>

*p ≤ .05  **p < .01  ***p < .001
PCL-SV total score was a significant predictor variable of the composite measure aggression, Multiple R = .37, $R^2 = .14$, Beta = .37. The equation was significant with $T = 4.87$, $p < .001$. In an effort to investigate the predictive power of the PCL-SV total scores, as well as the nature of their relationship with aggression, a second multiple regression was computed using PCL-SV classification as the predictor of aggression. Classification according to the PCL-SV was also a significant predictor of the composite measure aggression, Multiple R = .44, $R^2 = .20$, Beta = .44. The equation was significant with $T = 5.97$, $p < .001$. Although dichotomizing the PCL-SV reduced statistical power, $R^2$ increased (from .14 to .20) when the PCL-SV was used as a categorical variable. This finding suggests that the relationship between PCL-SV total scores and the composite measure of aggression is not linear.

**Hypothesis 3.** Pearson product-moment correlations were computed to test the second hypothesis that total scores on the PCL-SV would be positively correlated with the PAI scales of Antisocial Features, Drug Problems, and Aggression. A total of 34 PAIs were available for analysis. The low number of PAIs available for analysis reflected several contributing factors. As previously mentioned, only 73.2% of the total sample could read at the required fourth grade level. Of those who could read well enough to complete the instrument, only 58.7% did so. The remaining patients either refused to complete the assessment, offering a variety excuses, or were omitted due to inability to complete the assessment because of the effects of an organic mental disorder. Because of these factors a total of 69 PAIs were collected. As recommended by the PAI manual (Morey, 1991), profiles with Inconsistency scales at or above 73T, Infrequency scales at
or above 75T, Negative Impression scales at or above 92T, or Positive Impression scales at or above 68T were considered invalid and omitted from analyses. These exclusions resulted in a total of 34 valid PAIs available for analysis. Thus, only 49.27% of the PAIs collected were valid. Of those profiles omitted for invalidity, the following scale elevations were noted: (a) Inconsistency, 6 (17.1%) profiles, (b) Infrequency, 21 (60.0%) profiles, (c) Negative Impression, 20 (57.1%) profiles, and (d) Positive Impression, 3 (8.6%) profiles. Clearly, since the PAI is composed of nonoverlapping scales, the considerable percentage of profiles with elevated Negative Impression scales argues against the explanation of psychotic interference producing inconsistent responding is responsible for the high percentage of invalid profiles.

The total PCL-SV score was positively correlated with the PAI Antisocial Features scale; however, the correlation did not reach significance, \( r = .26, p = .14 \). Similar findings held for the correlation between the PCL-SV total score and the PAI Drug Problems scale, \( r = .30, p = .08 \). The Aggression scale of the PAI was positively and significantly correlated with the PCL-SV total score, \( r = .38, p = .03 \). The lack of expected significant results may reflect the small sample size, the inflated standard deviations in the ANT and DRG scales, or a weak relationship between the measures (see Table 9). Additionally, ANT subscale correlations were examined in an attempt to illuminate possible causes for the low correlation. Total PCL-SV was not significantly correlated with any ANT subscale: ANT-A \( r = .27 \), ANT-E \( r = .10 \), ANT-S \( r = .20 \). Neither the ANT scale, nor any of the subscales, was significantly correlated with either Factor 1 or Factor 2 of the PCL-SV (see Table 10).
Table 9

**PAI ANT, DRG, and AGG Scale Means, Standard Deviations, and Correlations with PCL-SV**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>PCL-SV Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggression</strong></td>
<td>55.24</td>
<td>11.72</td>
<td>.38*</td>
</tr>
<tr>
<td><strong>Antisocial Features</strong></td>
<td>62.65</td>
<td>14.15</td>
<td>.26</td>
</tr>
<tr>
<td><strong>Drug Problems</strong></td>
<td>66.41</td>
<td>16.85</td>
<td>.30</td>
</tr>
</tbody>
</table>

*p* ≤ .05

Table 10

**Correlations Between PAI ANT Scale Components and PCL-SV Components**

<table>
<thead>
<tr>
<th></th>
<th>ANT-A</th>
<th>ANT-F</th>
<th>ANT-S</th>
<th>PCL-SV</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>APD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANT</strong></td>
<td>.78***</td>
<td>.79***</td>
<td>.93***</td>
<td>.18</td>
<td>.09</td>
<td>.24*</td>
<td>.20</td>
</tr>
<tr>
<td><strong>ANT-A</strong></td>
<td>.33**</td>
<td>.67***</td>
<td>.24*</td>
<td>.12</td>
<td>.31**</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td><strong>ANT-E</strong></td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td>.00</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td><strong>ANT-S</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.22</td>
<td>.22</td>
<td>.20</td>
</tr>
<tr>
<td><strong>PCL-SV</strong></td>
<td></td>
<td></td>
<td></td>
<td>.89***</td>
<td>.83***</td>
<td>.33***</td>
<td></td>
</tr>
</tbody>
</table>

**Factor 1**

|            |        |        |       |        |          | .48***  | .20* |

**Factor 2**

|            |        |        |       |        |          | .39***  |     |

**Note.** Correlations containing PAI variables were computed using 69 cases. All other correlations used 148 cases.

*p* ≤ .05  **p** ≤ .01  ***p** ≤ .001
Hypothesis 4. The fourth hypothesis proposed that PCL-SV total scores would be moderately correlated with DSM-III-R diagnoses of APD. It was also hypothesized that the PCL-SV Factors would differentially correlate with APD. Specifically, it was hypothesized that Factor 2 would be significantly correlated with diagnoses of APD and would exhibit a stronger relationship with APD than would Factor 1 or the total PCL-SV score. Since diagnoses of APD was represented as a categorical variable, point biserial correlations were utilized. Moderately low correlations were in the expected direction between diagnoses of APD and total PCL-SV, \( r = .33, p \leq .001 \), PCL-SV Factor 1 and diagnoses of APD, \( r = .20, p = .02 \), and PCL-SV Factor 2 and APD diagnoses, \( r = .39, p \leq .001 \) (see Table 10). As hypothesized, a stronger correlational relationship between APD and Factor 2 of the PCL-SV was found than for either Factor 1 of the PCL-SV or PCL-SV total score.

To determine whether there were significant differences among the correlation coefficients, an improved analog of Fisher's Z statistic recommended by Steiger (1980) was used. This statistic, \( Z_1^* \), rather than Fisher's Z was employed to further control Type I error.\(^3\) The difference between the correlations of PCL-SV Factor 1 and APD and PCL-

\[ Z_1^* = (N - 3)^{1/2} \left( z_k - z_h \right) (2 - 2s_{jk,jh})^{-1/2}. \]

Steiger (1980) further modified \( Z_1^* \) to improve Type I error control by using pooled sample correlations to obtain \( s_{jk,jh} \). Replacing \( s_{jk,jh} \) with the pooled estimate, \( s_{jk,jh} \), the resulting statistic is defined as

\[ Z_1^* = (N - 3)^{1/2} \left( z_k - z_h \right) (2 - 2s_{jk,jh})^{-1/2}. \]

\(^3\)Fisher's Z statistic was first improved by Dunn and Clark (1969). This improvement was defined as \( Z_1^* = (N - 3)^{1/2} (z_k - z_h) (2 - 2s_{jk,jh})^{-1/2} \). Steiger (1980) further modified \( Z_1^* \) to improve Type I error control by using pooled sample correlations to obtain \( s_{jk,jh} \). Replacing \( s_{jk,jh} \) with the pooled estimate, \( s_{jk,jh} \), the resulting statistic is defined as \( Z_1^* = (N - 3)^{1/2} (z_k - z_h) (2 - 2s_{jk,jh})^{-1/2} \).
SV Factor 2 and APD was significant, $Z^*_{1} = -2.40$, $p = .008$. The correlation between APD and total PCL-SV was significantly higher than the correlation between APD and PCL-SV Factor 1, $Z^*_{1} = 3.49$, $p < .001$; however, the difference in the correlations between APD and total PCL-SV, and APD and PCL-SV Factor 2, was not significant, $Z^*_{1} = 1.34$, $p = .09$.

**Hypothesis 5.** A two-tailed t-test for correlated groups was performed to test the hypothesis that the effects of mood, organic, and/or psychotic disorders would not significantly affect the total PCL-SV score. A chi square analysis was utilized to test the associated hypothesis that the effects of mood, organic, and/or psychotic disorders would not significantly affect the classification of participants by the PCL-SV. Results of the t-test (see Table 11) indicated a significant difference in total PCL-SV scores reflecting presence of a mental disorder and those reflecting absence $t(148) = 4.45$, $p < .001$. PCL-SV total scores reflecting the presence of mental disorders were significantly higher, $M = 14.31$, than total scores reflecting an absence of mental disorder, $M = 13.41$. When the influence of mental disorders is partitioned and examined separately for the three categories of disorders being considered (psychotic, organic, and mood), it becomes clear that the influence of mental disorders on the total PCL-SV scores is almost entirely attributable to psychotic disorders. Using two-tailed tests significant differences were obtained between PCL-SV total scores reflecting absence of mental disorder and those reflecting presence of organic disorders, $t(14) = 2.78$, $p = .02$, and psychotic disorders $t(100) = 4.00$, $p < .001$. No significant difference were revealed between PCL-SV total scores reflecting an absence of mental disorder and those reflecting the presence of mood...
disorders, $t(31) = 2.08, p = .05$. Although statistically significant, the differences in the mean scores when examining organic and psychotic disorders diagnostic groups is minimal and, as such, clinical utility of these findings is questionable.

Table 11

Differences in PCL-SV Total Scores for Three Common Diagnostic Groups

<table>
<thead>
<tr>
<th>Diagnostic Group</th>
<th>Presence</th>
<th>Absence</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>Mental Disorder</td>
<td>14.31</td>
<td>5.00</td>
<td>13.41</td>
</tr>
<tr>
<td>Psychotic Disorders</td>
<td>14.05</td>
<td>4.90</td>
<td>12.90</td>
</tr>
<tr>
<td>Organic Disorders</td>
<td>14.53</td>
<td>4.32</td>
<td>14.00</td>
</tr>
<tr>
<td>Mood Disorders</td>
<td>15.28</td>
<td>5.75</td>
<td>14.84</td>
</tr>
</tbody>
</table>

Note. Tests of significance were two-tailed.

*p $\leq .025$  **p $\leq .001$

A chi square analysis was computed on classification according to the PCL-SV to determine whether the presence of major mental disorders significantly affected classification of psychopathy. The frequencies of the levels of classification (0, 1) were included as the expected values against which classification based on the absence of mental disorder was compared. No significant difference was found, $\chi^2 (1) = .37, p = .54$. Finally, an examination of the relationship between PCL-SV classification and diagnoses of organic disorders (phi = .01) and psychotic disorders (phi = -.17)
demonstrated virtually no relationship between these diagnostic categories and PCL-SV classification. Thus, although the presence of organic and psychotic disorders appears to affect the total PCL-SV score, their mere presence did not impact psychopathy classification.

**Exploratory Analyses**

Given that PCL-SV classification was able to predict aggression, additional multiple regression analyses were computed in an attempt to improve the regression equation. Additionally, analyses examined the affects of various demographic and criminal history variables which the literature has demonstrated are associated with aggressive behavior (see Table 12). First, a stepwise multiple regression was performed to examine the combined predictive utility of history of substance abuse, number of prior felony arrests, and total PCL-SV. The criterion measure was the composite aggression score. Total PCL-SV was the only variable to enter the equation with Multiple R = .34, R² = .12, Beta = .34. As expected, total PCL-SV was able to predict aggression, as was previously found for PCL-SV classification. Neither abuse history nor history of prior felony arrests increased the predictive utility.

Based on clinical knowledge that patients' adjustment generally improves over the length of institutionalization, I questioned whether improved adjustment might generalize to psychopaths and their disruptive behaviors. Thus, to examine this relationship a second stepwise multiple regression was run to examine the combined effectiveness of stabilization time and total PCL-SV in predicting aggression. Stabilization time was defined as the number of days that a participant was hospitalized prior to the PCL-SV
Table 12

PCL-SV Predictive Utility for Aggression: Results of Multiple Regression Analyses

<table>
<thead>
<tr>
<th>Analysis and Variable</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² Change</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCL-SV Classification</td>
<td>.44</td>
<td>.20</td>
<td></td>
<td>.44</td>
<td>5.97**</td>
</tr>
<tr>
<td>Regression 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PCL-SV</td>
<td>.36</td>
<td>.13</td>
<td></td>
<td>.36</td>
<td>4.40**</td>
</tr>
<tr>
<td>Regression 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PCL-SV</td>
<td>.36</td>
<td>.13</td>
<td></td>
<td>.36</td>
<td>4.59**</td>
</tr>
<tr>
<td>Stabilization</td>
<td>.40</td>
<td>.16</td>
<td>.03</td>
<td>.17</td>
<td>2.25*</td>
</tr>
</tbody>
</table>

Note. History of substance abuse and number of prior felony arrests failed to enter the equation for Regression 2.

*p ≤ .05  **p ≤ .001

As another method of gauging the predictive utility of the PCL-SV, a discriminant function analysis was performed to determine the PCL-SV's accuracy in identifying which patients would engage in aggressive behavior. The discriminant function analysis used total PCL-SV as the predictor of membership in two groups: those who engaged in aggressive behaviors during the follow-up period (n = 76) and those who did not (n = 72).
Group membership was determined on the basis of composite aggression scores. Those patients obtaining a composite aggression score of zero were identified as those who did not engage in aggressive behavior. Alternatively, those whose composite aggression score was greater than zero were identified as those who engaged in aggressive behaviors. One discriminant function (see Table 13) was derived, yielding a Wilks’ lambda = .88, $\chi^2 (1, 147) = 17.71$, $p \leq .001$. The overall classification rate was moderate for the PCL-SV total score with 64.86% of the participants being correctly classified. Classification according to the PCL-SV was then utilized as the predictor. The discriminant function derived yielded a Wilks’ lambda = .91, $\chi^2 (1, 147) = 13.37$, $p < .001$. The overall correct classification percentage retained was remarkably similar (62.84%). Although the overall correct classification rate did not substantially differ from that obtained using PCL-SV total score as the predictor, PCL-SV classification fared considerably better at correctly identifying those who would not engage in aggressive behaviors (61.80% vs. 90.80%). However, PCL-SV classification fared considerably worse in correctly identifying those who would engage in aggressive behaviors (33.30%). Finally, the utility of DSM-III-R APD diagnoses to identify patients who would engage in aggressive behaviors was investigated to determine whether APD diagnoses might provide a more economical indicator of aggression prone patients. One discriminant function was derived, yielding a Wilks’ lambda = .94, $\chi^2 (1, 147) = 8.59$, $p = .003$. The overall correct classification percentage retained (61.22%) remained similar to percentages obtained using the PCL-SV as a predictor. Similar to PCL-SV classification, APD diagnoses performed best in
identifying those who would not engage in aggressive behaviors, correctly identifying 81.58%.

Table 13

Classification of Aggressive Patients by the PCL-SV and DSM-III-R APD

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Actual Group Membership</th>
<th>Predicted Group Membership</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No Aggressive Behavior</td>
<td>Aggressive Behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correlation</td>
<td></td>
</tr>
<tr>
<td>Total PCL-SV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Aggressive Behavior (n = 76; 51.35%)</td>
<td>47 (61.80%)</td>
<td>29 (38.20%)</td>
<td>.34</td>
</tr>
<tr>
<td>Aggressive Behavior  (n = 72; 48.65%)</td>
<td>23 (31.90%)</td>
<td>49 (68.10%)</td>
<td></td>
</tr>
<tr>
<td>PCL-SV Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Aggressive Behavior (n = 76; 51.35%)</td>
<td>69 (90.80%)</td>
<td>7 (9.2%)</td>
<td>.30</td>
</tr>
<tr>
<td>Aggressive Behavior  (n = 72; 48.65%)</td>
<td>48 (66.70%)</td>
<td>24 (33.30%)</td>
<td></td>
</tr>
<tr>
<td>APD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Aggressive Behavior (n = 76; 51.35%)</td>
<td>62 (81.58%)</td>
<td>14 (18.42%)</td>
<td>.24</td>
</tr>
<tr>
<td>Aggressive Behavior  (n = 72; 48.65%)</td>
<td>44 (61.10%)</td>
<td>28 (38.90%)</td>
<td></td>
</tr>
</tbody>
</table>
Based on the initial findings that psychopaths exhibited more aggressive and more treatment noncompliant behaviors, as well as the PCL-SV's ability to predict aggression, I speculated that the PCL-SV might predict treatment noncompliant behaviors as well. To examine this possibility, a regression analysis was computed using PCL-SV total score as the predictor of the composite measure of treatment noncompliance. Total PCL-SV predicted treatment noncompliance, $F(1, 146) = 4.16, p = .04$, Multiple $R = .17$, $R^2 = .03$, Beta = .17. Since the PCL-SV predicted both aggression and treatment noncompliance, I questioned whether treatment noncompliance might be acting as a mediating variable between the PCL-SV and aggression. It was speculated that treatment noncompliance may be responsible for the PCL-SV's ability to predict aggression. Another regression analysis was computed on aggression with the PCL-SV remaining as the predictor. In order to assess the PCL-SV's ability to predict aggression independent of treatment noncompliance, all treatment noncompliant participants were omitted from the analysis. Even after the removal of all treatment noncompliant patients, total PCL-SV maintained its ability to predict aggression, $F(1, 96) = 11.88, p = .001$, Multiple $R = .33$, $R^2 = .11$, Beta = .33 (see Table 14).

To assess the relative contributions of treatment compliance and the PCL-SV in the prediction of aggression, another multiple regression was computed. Treatment noncompliance was forced into the regression equation on the first step to remove the variance accounted for by it prior to entering the PCL-SV total score. Treatment noncompliance entered the equation as a significant predictor of aggression, $T = 3.58, p < .001$, with Multiple $R = .28$, $R^2 = .08$, Beta = .28. Total PCL-SV was then allowed to
enter the equation, and was also a significant predictor of aggression, \( T = 4.48, p < .001 \).
The equation was improved with the addition of PCL-SV total score, with Multiple \( R = .44, R^2 = .19, \) Beta = .34.

Table 14

**Influence of Treatment Noncompliance on the Predictive Utility of the PCL-SV**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Multiple R</th>
<th>( R^2 )</th>
<th>Beta</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined (n = 148)</td>
<td>.36</td>
<td>.13</td>
<td>.36</td>
<td>21.67</td>
<td>( p &lt; .001 )</td>
</tr>
<tr>
<td>Treatment Compliant (n = 96)</td>
<td>.33</td>
<td>.11</td>
<td>.33</td>
<td>11.88</td>
<td>( p = .001 )</td>
</tr>
</tbody>
</table>

A survival analysis was computed utilizing the Cox linear regression method in an attempt to determine how demographic variables and criminal history variables differentially influence length of treatment for psychopaths and nonpsychopaths (see Figure 1). The analysis was stratified on classification according to the PCL-SV. This stratification allowed the computation of separate survival functions for psychopaths and nonpsychopaths. The time variable for the analysis was number of follow-up days. The event variable was identified as discharge during the follow-up. Covariates included diagnosis of a psychotic disorder, number of prior hospitalizations, type of crime (personal vs. property), and number of prior arrests.
Examining nonpsychopaths first, none of the variables entered the equation, indicating that for nonpsychopaths length of treatment in a forensic psychiatric setting not affected by any of the above mentioned variables. When psychopaths were examined, a different picture emerges. Utilizing a forward stepwise (Wald) entry method, two variables, psychotic diagnosis and nature of crime, converged to form one survival function. The first variable to enter the equation after three iterations was psychotic diagnosis, \( R = .07, \) Beta = .26. Nature of crime entered on the second step with \( R = .07, \) Beta = .25 after three iterations. None of the remaining variables entered the equation. For psychopaths, of the variables analyzed psychotic diagnosis remained as the primary influence of length of treatment, with nature of crime making a slight, although significant contribution.

Finally, to assess the relationships between PCL-SV scores and various scales on the PAI, Pearson correlations were examined (see Table 15). In addition to exploring the relationship between these two measures, it was hoped that the pattern of correlations would provide evidence of convergent validity for the PCL-SV. Of particular interest are the significant correlations between total PCL-SV and scores on the PAI scales of Mania, Paranoia, Alcohol Problems, and Aggression. Also noteworthy is the absence of relationships between total PCL-SV and the PAI scales of Anxiety, Anxiety-Related Disorders, Depression, Schizophrenia, Stress, and Warmth. Taken together these results lend support to the conceptualization of the psychopath as relatively free from anxiety, stress, guilt and remorse, impulsive, and aggressive. Additionally, there was no
relationship between Schizophrenia and psychopathy. However, anticipated relationships between total PCL-SV and PAI scales Dominance and Treatment Rejection did not occur.
Table 15

Correlations between PAI Scales and PCL-SV Scores

<table>
<thead>
<tr>
<th>PAI Scale</th>
<th>Correlation with Total PCL-SV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Validity Scales</strong></td>
<td></td>
</tr>
<tr>
<td>Inconsistency</td>
<td>-.21</td>
</tr>
<tr>
<td>Infrequency</td>
<td>-.08</td>
</tr>
<tr>
<td>Negative Impression</td>
<td>.15</td>
</tr>
<tr>
<td>Positive Impression</td>
<td>-.20</td>
</tr>
<tr>
<td><strong>Clinical Scales</strong></td>
<td></td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>.17</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.01</td>
</tr>
<tr>
<td>Anxiety-Related Disorders</td>
<td>.06</td>
</tr>
<tr>
<td>Depression</td>
<td>.03</td>
</tr>
<tr>
<td>Mania</td>
<td>.34*</td>
</tr>
<tr>
<td>Paranoia</td>
<td>.39*</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>.07</td>
</tr>
<tr>
<td>Borderline Features</td>
<td>.27</td>
</tr>
<tr>
<td>Antisocial Features</td>
<td>.26</td>
</tr>
<tr>
<td>Alcohol Problems</td>
<td>.35*</td>
</tr>
<tr>
<td>Drug Problems</td>
<td>.30</td>
</tr>
<tr>
<td><strong>Treatment Consideration Scales</strong></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.38*</td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>.28</td>
</tr>
<tr>
<td>Stress</td>
<td>-.03</td>
</tr>
<tr>
<td>Nonsupport</td>
<td>.26</td>
</tr>
<tr>
<td>Treatment Rejection</td>
<td>-.19</td>
</tr>
<tr>
<td><strong>Interpersonal Scales</strong></td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td>.01</td>
</tr>
<tr>
<td>Warmth</td>
<td>-.03</td>
</tr>
</tbody>
</table>

*p ≤ .05
In addition to being four times more likely to fail on conditional release, psychopaths receive more suspensions of conditional release and violate release conditions more often than nonpsychopaths (Hart et al., 1988). The PCL has proven to be a reliable predictor of parole and unescorted temporary absence outcomes (Serin et al., 1990), as well as violent and aggressive behavior (Hare & McPherson, 1984; Harris et al., 1989; Harris et al., 1994; Quinsey et al., 1995). These findings have significant ramifications for the institutional management of psychopaths. The ability to identify psychopaths within an institutional setting provides clinicians with additional information upon which to base institutional management and clinical decisions. With decreasing treatment funding and increasing expectations regarding clinicians' predictions and release decisions, identifying which patients would be good candidates for traditional treatments and/or conditional release, becomes central to the clinicians' decision making process. The PCL-SV appears promising as a measure which could significantly aid institutional management and clinical treatment.

The PCL-SV demonstrated the ability to predict aggressive behavior with a forensic psychiatric sample. It also appears that the PCL-SV may provide additional clinical utility through the prediction of treatment noncompliance within forensic
psychiatric populations. Although several studies have examined treatment outcome for psychopaths, the current results suggest a previously unexamined implication of psychopathy for the course of treatment. Additionally, several findings from the current analyses lend credence to the dual concept of psychopathy as conceptualized by Cleckley (1976) and Hare (1981, 1985). Finally, although the any conclusions must be tempered by the small sample size, correlational analyses suggest possible problems with the PAI ANT scale, specifically the ANT-E subscale, which may be gender specific.

PCL-SV as a Predictor of Aggression

The PCL-SV was a significant predictor of aggression among forensic psychiatric patients, even when classification rather than total score was utilized. Furthermore, the PCL-SV outperformed other variables examined (history of substance abuse and prior number of felony arrests) in the prediction of institutional aggression. This finding is especially significant, given that these other variables were chosen on the basis of demonstrated associations with aggressive behavior. These results are consistent with those obtained by Hare and McPherson (1984) using the PCL-R with a correctional sample. However, this investigation extended their findings by examining the utility of the PCL-SV with a forensic psychiatric sample, and examining the effect of stabilization time as an additional predictor of aggression.

It is generally accepted clinical knowledge that psychiatric patients become less aggressive over the length of their hospitalization. Clinical knowledge would assert that such an occurrence is related to the amount of time the patient has been treated as well as the amount of time they have had to adjust to the new environment. Thus, it is expected
that aggressive and socially disruptive behaviors decrease as the length of hospitalization increases. As would be expected when investigating a forensic psychiatric sample, stabilization time improved the prediction made by the PCL-SV alone. In fact, of all the additional variables examined, only stabilization time augmented the PCL-SV’s ability to predict aggression. Interestingly, when psychopaths and nonpsychopaths are examined separately, stabilization time predicted aggression only for nonpsychopaths. Thus, it appears that psychiatric stabilization is related to the risk of aggressive or socially disruptive behavior within an institution only for nonpsychopaths.

Of particular clinical significance was the PCL-SV’s ability to predict aggression when used as a categorical variable. However, the increased predictive efficiency which accompanied the dichotomization of the PCL-SV was unexpected, and suggested a nonlinear relationship between PCL-SV total scores and aggression. Thus, it appears that a closer examination of the nature of the relationship between the PCL-SV and aggression is in order. Furthermore, until this relationship is clarified, it is likely premature to interpret increasing PCL-SV scores as representative of increased dangerousness risk.

Although several previous studies (Forth et al., 1990; Hare & McPherson, 1984; Harris et al., 1991; Kosson et al., 1990; Quinsey et al., 1995; Rice & Harris, 1992; Rice et al., 1992; Rice et al., 1990; Serin, 1991; Serin & Amos, 1996) have examined the PCL scales’ abilities to predict aggression within correctional institutions, to date, none have examined the PCL’s effectiveness at identifying which patients would engage in aggressive behavior. The present results suggest that the PCL-SV performed moderately well at identifying patients who will behave aggressively. When assigning patients to one of two
groups, those who engage in aggressive behaviors and those who do not, the total PCL-SV correctly classified 64.86% patients. Although a moderate predictor, the use of the PCL-SV in this manner offers only a slight improvement over chance, and results in 35.14% of patients being misclassified. This is a serious concern for the clinical use of the PCL-SV, as classification as a psychopath will likely influence future treatment, criminal convictions, parole decisions, and release decisions.

Because clinicians are more likely to utilize classification rather than the total score in making management recommendations and decisions, the efficiency of PCL-SV classification was also examined. As such, the finding that the PCL-SV retained a similar percentage of correct classifications when used as a categorical variable (62.84%) is of particular significance for its clinical use. However, one disconcerting finding is that when used in this manner, the PCL-SV’s percentage of correct positive predictions (i.e., psychopathy classification reflects those who would engage in aggressive behaviors) is drastically reduced (from 68.10% to 33.30%). Correspondingly, however, a substantial increase in the correct negative predictions (from 61.80% to 90.80%) was found. One conclusion that it appears can be safely drawn from this investigation is that nonpsychopaths are highly unlikely to engage in aggressive behaviors within institutional settings, even those experiencing psychiatric symptomatology. Thus, clinicians would be ill advised to use the PCL-SV or classification of psychopathy as an indicator of which patients would exhibit aggressive behaviors. However, the use of psychopathy classification to rule out those who would not engage in aggressive behavior appears very promising.
Previous studies have examined the effects of treatment in a therapeutic community on the recidivism rates for psychopaths and nonpsychopaths (Ogloff, Wong, & Greenwood, 1990; Rice et al., 1992); however, to date, treatment compliance of psychopaths has not been examined. In the current study, the PCL-SV was predictive of treatment noncompliance. In light of the PCL-SV's ability to predict aggression treatment noncompliance was examined as a possible confounding variable. Clinicians and researchers alike have long realized that patients experiencing active psychoses may behave aggressively. Thus, it is plausible that treatment noncompliance could serve as a mediating variable in the prediction of aggression. For example, within forensic psychiatric settings aggression may be an artifact of treatment noncompliance.

To examine this possibility we removed all treatment noncompliant patients from the analysis and reexamined the PCL-SV's ability to predict aggression. Remarkably, even after treatment noncompliant patients were removed from the analyses, the PCL-SV continued to predict aggression. As an alternative method of examining the relationship among the PCL-SV, treatment noncompliance and aggression, treatment noncompliance was forced to enter the regression equation prior to the PCL-SV. Although treatment noncompliance contributed significantly to the prediction of aggression, the PCL-SV exhibited a stronger relationship.

Thus, the assertion of two clinically relevant determinations can be confidently made. First, within a forensic psychiatric institution psychopaths seem to constitute a distinct clinical group who pose additional risk of disruptive, possibly endangering behavior. This risk is seriously increased by any comorbid psychiatric disorder due to their
likelihood to refuse psychoactive medication. Thus, for a forensic psychiatric sample this would seem to indicate that the PCL-SV is sensitive to characteristics which predict violence that are distinct from psychiatric symptomatology.

**Course of Treatment**

Psychopaths have routinely been considered by clinicians and researchers alike as less amenable and less responsive to treatment (Cleckley, 1982; McCord, 1982; Meloy, 1988; Woody, McLellan, Rubersky, & O'Brien, 1985). Researchers have examined both treatment outcome (Rice et al., 1992; Ogloff, Wong, & Greenwood, 1990) and institutional behavior (Hare & McPherson, 1984; Ogloff et al., 1990). Although research has demonstrated that psychopaths and nonpsychopaths exhibit different treatment responses, there has been a dearth of research attempting to determine possible antecedents to the poorer treatment outcomes obtained by psychopaths. To date, the literature has implicated enduring characteristics within the psychopath as primarily causal in their lack of treatment gains (Cleckley, 1982; Meloy, 1988; Ogloff et al., 1990; Rice et al., 1992). However, the possibility that psychopaths are not receiving the appropriate treatment has been ignored decisively. This study has made an initial attempt to expand the research regarding the treatability of psychopaths by examining various factors which may be related to course of treatment. Although the current investigation did not provide a comprehensive examination of factors influencing treatment outcome for psychopaths, several findings provide indications for a closer examination of the prototypical treatment programs.
In essence, psychopaths in the forensic psychiatric institution are a serious institutional management challenge. They are more frequently verbally abusive, verbally threatening, belligerent, and irritable (Hare & McPherson, 1984). Further compounding the institutional management difficulties they present are Hare and McPherson's (1984) findings that psychopaths engaged in more fighting and more frequently refused treatment. Although the finding that 50.0% of nonpsychopaths engaged in socially disruptive behaviors (either aggression or treatment noncompliance) is of little clinical utility; the fact that 83.4% of psychopaths engaged in socially disruptive behaviors implicates clinical utility for the presence of psychopathy in institutional management. Examining these findings more closely, it was noted that 77.4% of psychopaths exhibited aggressive behaviors while only 41.0% of nonpsychopaths did. Thus, it is not simply treatment noncompliance accounting for their socially disruptive behavior within the forensic psychiatric institution.

When paired with the observation of increased socially disruptive behaviors over all for psychopaths as compared to nonpsychopaths, this finding certainly strengthens the proposal that institutional management could be improved with consideration of psychopathy included in the decision making process. One argument against this proposal might be that with the inclusion of psychopathy as a criterion on which institutional management decisions are made, many psychopaths who may never engage in socially disruptive behaviors may be unfairly placed in institutions or units with more security than they would require, and as a consequence, they would be unjustly deprived of certain freedoms. However, contradicting this argument is the finding that of all the patients who
engaged in no socially disruptive behaviors during the course of the follow-up period, only 5 (7.8%) were psychopaths.

Survival analyses were utilized in an attempt to augment previous studies examining the treatment of psychopaths. Survival analyses are particularly suited to this type of exploratory research, as they provide information regarding the course of treatment rather than simply the final outcome. Additionally, survival analyses are able to statistically control for dissimilar follow-up periods so that the function representing the course of treatment for a group is not unduly influenced by the attrition rate.

Survival analyses were employed to examine differences in course of treatment between psychopaths and nonpsychopaths. Over the six month follow-up period nonpsychopaths were almost 3 1/2 times more likely to remain in treatment. Since all participants in the study were committed by the courts, this finding is not a reflection of the psychopaths' lack of investment in treatment. In other words, this finding cannot be accounted for by psychopaths dropping out of treatment, as that was not an option.

Given that a significant difference in PCL-SV scores was found between psychotic and nonpsychotic patients, the possibility that higher prevalence of psychotic disorders in nonpsychopaths might account for these findings was considered. Several other factors were considered as possible influences on length of treatment, including type of crime, number of prior hospitalizations, and number of prior arrests. Whereas number of prior hospitalizations and prior arrests did not affect length of treatment, type of crime and diagnosis of a psychotic disorder did. Remarkably, after controlling for the effects of those two variables, nonpsychopaths were over 5 times more likely to remain in treatment.
over the six month follow-up period. Furthermore, initial evidence of the emerging
difference in treatment length is found within the first month. Thus, it appears that
psychopaths are remaining in treatment for shorter periods of time. Furthermore, their
shortened length of treatment cannot be accounted for by their lack of motivation or
commitment, the type of crime they have been charged with or severity of their mental
illness.

These findings raise the question of whether mental health institutions and
providers approach the treatment of psychopaths with the same vigor as they approach the
treatment of nonpsychopaths. One possibility for further research is that mental health
providers have negative reactions to patients who exhibit psychopathic characteristics.
Consequently, mental health providers may be less willing to invest in the treatment of
psychopaths, trying fewer treatment modalities for shorter periods of time before declaring
the psychopath “untreatable.” Alternatively, psychopaths could simply be conning mental
health providers into believing that they have responded effectively to the treatment they
have received. Although not examined in the current study, observations of hospital
staffs’ reactions to patients believed to be psychopaths argues against this explanation.
For instance, it was not uncommon for hospital staff to speak derogatorily about patients
perceived as psychopaths. In general, hospital staff appeared to hold the belief that
patients they had determined to be psychopaths had no other mental illness and were not
in need of treatment. One comment repeatedly heard during the course of the study was
that psychopaths con their lawyers into sending them to a forensic psychiatric hospital in
attempts to avoid impending court dates, elicit empathy from the judge and/or jury, or
even attempt to get charges dropped by being found unrestorably incompetent to stand trial.

Survival analyses were also employed to examine differences between psychopaths and nonpsychopaths on the length of time prior to engaging in aggressive behavior. Again, as with the analyses for treatment length, survival analyses were able to statistically control for those subject who never engaged in aggressive behaviors, as well as inconsistent follow-up periods. Over the course of the follow-up period, nonpsychopaths as a group were over 5 1/2 times less likely to engage in aggressive behavior. After statistically controlling for the influence of psychotic disorders on the probability of engaging in aggressive behavior, the results are even more discrepant. Almost unbelievably, the probability of nonpsychopaths engaging in aggressive behavior was over 900% lower than the probability for psychopaths.

Convergent Validity

The current results provide considerable evidence of convergent validity for the concept of psychopathy as measured by the PCL scales. First, although comorbid psychotic disorders influenced the PCL-SV total score, the presence of psychiatric comorbidity did not affect classification of psychopathy. Furthermore, although the presence of psychotic disorders statistically increased PCL-SV total scores, this difference appears clinically meaningless (M psychotic = 14.05, M nonpsychotic = 12.90). Additional evidence indicating that the findings obtained for organic and psychotic disorders were not clinically relevant was obtained from their low correlations with psychopathy (organic disorders’ phi = .01, psychotic disorders’ phi = -.17).
The correlations between various PAI scales and the PCL-SV were low to moderate, at best. Overall, only four correlations reached significance: Mania, Paranoia, Alcohol Problems, and Aggression. Although the correlations ranged from nonsignificant to low-moderate, their pattern appears to offer evidence supporting the concept of psychopathy as defined by Cleckley (1976), Hare (1981, 1985), and the PCL measures. The results portray the psychopath as nonanxious, calm, cold, impulsive, interpersonally guarded, and aggressive.

The relationships among substance abuse disorders and psychopathy has been examined by various authors (Hare et al., 1990; Hart & Hare, 1989; Rice & Harris, 1995a). The results of these investigations have been inconsistent. For example, Wolf et al. (1988) found three factors accounting for psychiatric diagnosis, the first of which include antisocial personality disorder, alcohol and drug dependence. Rice and Harris (1995a) found associations between psychopathy and alcohol abuse, but not drug abuse. Finally, Hare et al. (1990) obtained significant correlations between psychopathy and nonalcohol substance abuse only. Thus, the relationships among classes of substance abuse and psychopathy have not been clearly delineated.

In an attempt to examine the relationships among psychopathy, alcohol abuse, and drug abuse, correlations of psychopathy with PAI ALC and DRG scales were examined. A significant relationship was found between psychopathy and alcohol problems; however, although positively associated, a significant correlation was not obtained between the PAI Drug Problems scale and psychopathy. Unfortunately, as outlined below, limitations of the current study preclude inferences from the unexpected results regarding the
relationship between the PAI DRG scale and psychopathy. Clearly, one serious limitation was the extremely limited number of valid PAIs available for analysis, suggesting possible problems with generalizability from a potentially biased sample.

The possibility of a biased sample in which drug abuse problems were not prevalent was considered. However, 73.5% of the sample had documented histories of alcohol abuse and 90.0% of the psychopaths had documented histories of drug abuse. Thus, an explanation based on low prevalence of drug abuse in the sample was not viable. The possibility that the PAI was either not able to identify drug problems, or their denial, in this sample was considered. As previously stated, all PAI profiles were screened for significant elevations on the validity scales. A closer examination of the Positive Impression validity scale indicated that 20.0% of the participants with documented drug abuse histories exhibited moderate, though not sufficient to invalidate the profile, elevations on this scale. Defensiveness may be partially responsible for the lack of a significant correlation between the PAI Drug Problems scale and the PCL-SV; however, it is doubtful that such a small percentage could account for the current results.

One additional consideration pertains to the PAI Drug Problems scale itself. First, Morey (1991) reported that the Drug Problem scale is the most transparent of all PAI scales, making it the easiest to manipulate. It is plausible that participants were able to easily identify those items which comprised the Drug Problems scale and opted to deny the presence of drug problems. As there is no item overlap between the Drug Problems scale and the validity scales, it is plausible that participants could elect to deny drug problems when responding to PAI questions without producing profiles of questionable validity.
Another unexpected finding was the low and nonsignificant correlation between the PCL-SV total score and the PAI Antisocial Features scale. This finding was extremely unexpected, given that this scale was developed to measure psychopathy rather than simply antisocial traits as defined by DSM diagnoses of APD. Morey (1991) reported a correlation of .82 between the ANT scale and the Hare Self-Report Psychopathy scale. The author also reported a correlation of .77 with the MMPI Antisocial Personality Disorder scale. These high correlations would seem to suggest that the PAI does indeed capture both the personality traits and the behavioral manifestations inherent in psychopathy. These correlations were obtained using a sample of 83 college students.

Unfortunately, when the associations between these measures were examined using a sample which, logically, one would expect to exhibit more psychopathic characteristics (e.g., an alcohol and drug treatment sample), there is a dramatic decrease in the coefficient obtained ($r = .54$). One possible explanation for these data is that the ANT scale does not measure criminal psychopathic characteristics of the type assessed by the PCL scales; rather, it may gauge characteristics such as developmentally appropriate narcissism, or noncriminal aggression.

In an attempt to determine what factors accounted for the nonsignificant correlation, the relationships between the PCL-SV and the ANT subscales (ANTA, ANTE, and ANTS) were examined. Suprisingly, it was the correlation with the ANT-E scale purported to measure the Clecklian personality attributes of psychopathy which had the lowest correlation with the total PCL-SV. Remarkably, a significant correlation was not even obtained between ANT-E and Factor 1 of the PCL-SV. An evaluation of the
construction, development and validation of the ANT-E subscale unearthed some interesting possibilities.

First, as with the DRG scale, Morey (1991) reported that the ANT-E subscale was one of the most transparent of all PAI scales. ANT-E was also reported to have one of the lowest mean interitem correlation values compared to all other scales and subscales (.18). Although the coefficient alpha was considerably higher (.63), this measure can be affected by scale length. Furthermore, regardless of scale length, only 3 subscales were reported as exhibiting lower coefficient alphas.

The ANT-E subscale is comprised of eight items intended to measure the characterological aspects of psychopathy. In reviewing these items, they appear to primarily be conceptually related to PCL-SV items that measure manipulativeness (4 items), and impulsiveness (2 items). Of the two remaining items, one seems to tap both lack of empathy and irresponsibility while the other does not fit well with any of the PCL-SV items. The most remarkable findings were obtained from correlational analyses of the PAI and PCL-SV items. Only three of the ANT-E subscale items were significantly correlated with any items from the PCL-SV. Even more surprising was the finding that these items were correlated with items from Factor 2 of the PCL-SV, rather than Factor 1.

Finally, the current results regarding the PAI ANT-E subscale are in stark contrast to those obtained by Salekin, Rogers, Ustad, and Sewell (1996). These authors examined the ability of the PAI ANT and AGG scales, their subscales, the PCL-R, and its two factor scores to predict recidivism in female inmates. Although only moderate results were obtained, of all measures examined, the PAI ANT-E subscale performed best. In
attempting to account for the glaring difference in results obtained by Salekin et al. (1996), and the current investigation, the possibility of gender differences for the PCL measures as well as the PAI ANT-E subscale is suggested as the next logical step in furthering this research.

Limitations of this Research

Regarding the current findings for treatment noncompliance, several possible confounds deserve further consideration. First, although difficult, it is not impossible for patients to be treatment noncompliant without the knowledge of institutional staff. For example, patients have been known to “cheek” their medication, holding it in their mouths until they can spit it out rather than swallowing it. Second, the findings for treatment noncompliance rest on the assumption that all acutely psychotic patients are receiving treatment which effectively managed their symptomatology. However, some treatment compliant patients may have been experiencing acute symptomatology resulting from ineffective psychoactive medication. A lack of beneficial psychopharmacological interventions could result in treatment compliant patients’ experiencing significant psychiatric symptomatology. Resultingly, the findings regarding the PCL-SV’s ability to predict aggression independent of psychiatric influence would be suspect. Two arguments lend credence to the PCL-SV’s ability to predict aggressive behaviors independent of psychiatric status and treatment compliance, the first based on probabilities and the second on previous PCL/PCL-R research.

Typically forensic psychiatric institutions take a more aggressive approach to treatment than do less specialized psychiatric institutions. Thus, it is highly unlikely that
any single or joint occurrence of situations resulting in ineffectual psychopharmacological
treatment would occur to such a degree as to confound the outcome. Additionally,
numerous studies have demonstrated the PCL scales' abilities to predict aggressive
behavior in nonpsychiatric samples, thereby refuting the explanation of psychotic
symptomatology as an aggression precursor (Forth et al., 1990; Hare & McPherson, 1984;
Harris et al., 1991; Kosson et al., 1990; Quinsey et al., 1995; Rice & Harris, 1992; Rice et
al., 1990; Rice et al., 1992; Serin, 1991; Serin & Amos, 1995).

Current course of treatment findings regarding psychopathy yielded interesting
results and suggested possible avenues for future research. However, two primary factors
limit the inferences that may be drawn from these findings. First, the differential findings
regarding course of treatment for psychopaths and nonpsychopaths did not consider
release criteria as a possible confound. More specifically, participants in the current study
were committed to Vernon State Hospital under different statutes for defendants found
incompetent to stand trial, not guilty by reason of insanity and manifestly dangerous.
Commitments under each of these statutes have differential release criteria, as well as
minimum and maximum commitment periods. Secondly, treatment modalities differed by
commitment type and treatment unit within the hospital. Although beyond the scope of
the current investigation, differences in treatment approaches cannot be overlooked as a
methodological limitation.

Regarding the lack of expected correlations between PAI scales and the PCL-SV,
the most influential limitation appears to be the small number of valid PAIs available for
analysis. After screening participants for the necessary reading level, then screening the
resulting profiles for invalidity, only 34 profiles remained for analysis. Such a limited
number of valid profiles for analysis likely placed serious constrictions on the
generalizability of the current findings. Future research examining the PAI scales
relationship to the PCL-SV in male forensic psychiatric patients may clarify the current
results. Additionally, an examination into possible gender differences for the PAI ANT
scale, specifically the ANT-E subscale, as well as the PCL-SV would likely prove very
fruitful in determining the causes of the current low correlations.

Future Research Directions

Although not analyzed as a part of the current investigation, a critical review of the
literature suggested possible problems with the PCL factor structure. More specifically,
whereas researchers (Hare, 1980, 1985; Harpur et al., 1988, 1989) continue to assert that
the PCL possesses a stable two-factor structure, this does not appear to be the case. In
fact, the research to date has failed to yield a replicable two-factor structure and solutions
have ranged from two to seven factors. Furthermore, these studies have often failed to
present data necessary for independent reviews of the findings, such as eigenvalues, item
loadings, and the percent of variance accounted for by the overall solution, as well as the
individual factors.

Clearly, additional investigations of the PAI ANT scale, especially the ANT-E
subscale, may clarify its relationship to psychopathy as defined by the PCL scales. The
investigation of the PAI ANT scale and, in particular, the ANT-E subscale, yielded results
discrepant from previous findings (Salekin et al., 1996). Since the current study utilized
an exclusively male sample, whereas Salekin et al. (1996) employed an exclusively female
sample, an investigation of potential gender effects appears to be the next logical step in understanding these differential findings. Finally, in examining the development of the PAI ANT scale, in particular the ANT-E scale, potential problems with generalizability which may implicate construct validity issues which have yet to be thoroughly examined. More specifically, the sizeable reduction in the strength of the correlations between ANT-E and the SRP when a drug and alcohol treatment sample is employed rather than a college student sample, results in concerns regarding the validity of ANT-E as a measure of psychopathy characteristics related to PCL Factor 1.

Regarding the differences in the course of treatment between psychopaths and nonpsychopaths, one unexamined and possibly enlightening variable is mental health providers' perceptions of psychopaths. Examining mental health professionals' opinions of psychopaths may elucidate any potential biases held by these professionals which may affect the treatment provided to psychopaths. For example, if mental health providers generally view psychopaths as untreatable, this belief may reduce their willingness to invest time and effort in the treatment of psychopaths. An examination of any potential interactions between mental health providers' perceptions of psychopaths and their corresponding treatment efforts is a logical step in delineating and comprehending the course of treatment differences between psychopaths and nonpsychopaths.
APPENDIX A

PCL:SV INTERVIEW SCHEDULE
SUBJECT #

INTERVIEW SCHEDULE FOR THE

PSYCHOPATHY CHECKLIST: SCREENING VERSION

A. SUBJECT INFORMATION:

1. NAME: ________________________________________________

2. ID#: _________________________________________________

3. RACE: ________________________________________________

4. AGE: _________________________________________________

5. GENDER: ______________________________________________

6. DATE OF BIRTH: __________________________________________

B. INTERVIEW INFORMATION:

1. INTERVIEWER: ____________________________________________

2. INTERVIEWED AT: __________________________________________

3. TYPE OF SETTING: __________________________________________

4. DATE OF INTERVIEW: _______________________________________

5. TIME OF INTERVIEW: _______________________________________

6. OBSERVED BY: _____________________________________________

C. RATER INFORMATION:

1. RATER: _________________________________________________
D. CURRENT PROBLEMS:

1. HOW LONG HAVE YOU BEEN IN PRISON/HOSPITAL?
   **HOW DID YOU END UP HERE? WHAT HAPPENED? DESCRIBE IT.
   **WHAT KIND OF PROBLEMS HAVE YOU BEEN HAVING LATELY?
   **WHY HAVE YOU BEEN HAVING THESE PROBLEMS?

E. WORK HISTORY:

1. WHAT KIND OF WORK HAVE YOU DONE IN THE PAST?
   **HOW MANY DIFFERENT JOBS DO YOU THINK YOU HAVE HAD?
   **WHY HAVE YOU HAD SO MANY DIFFERENT JOBS?
   **WHEN YOU WORK AT SOMETHING FOR A LONG TIME, DO YOU GET BORED EASILY?

2. DID YOU EVER GET IN TROUBLE AT WORK FOR BEING LATE OR ABSENT, DRINKING OR USING DRUGS ON THE JOB, AND SO FORTH?
   **HAVE YOU EVER BEEN FIRED?

3. HAVE YOU EVER BEEN UNEMPLOYED?
   **HOW DID YOU SUPPORT YOURSELF?
**Were you looking for work? How seriously?**

4. Have you ever collected UI, welfare, or some other form of social assistance?

5. Did you ever have to rely on somebody else to support you?

F. Goals:

1. Is there any trade or occupation you would like to have?
   **How long have you wanted to do this?**
   **Have you planned or prepared for this trade/occupation in any way?**
   **What training do you require?**

2. What are your plans after you are released from here?
   **Where are you going to live?**
   **How will you support yourself?**

3. Do you have any long-term goals?
   **What problems might you have in achieving those goals?**
4. ARE YOU WORRIED ABOUT THE FUTURE?

**WHY/WHY NOT?

G. HEALTH:

1. DO YOU HAVE ANY SERIOUS MEDICAL PROBLEMS?

**DESCRIBE THEM.

**WHEN DID THEY START?

2. HAVE YOU EVER BEEN SEEN BY A PSYCHOLOGIST OR PSYCHIATRIST BEFORE?

**WHAT FOR?

**AT WHAT AGES?

**IN PRISON OR ON THE STREET?

**WHAT WAS THE DIAGNOSIS?

**WHAT TREATMENTS DID YOU RECEIVE?

**HAVE YOU EVER BEEN HOSPITALIZED FOR MENTAL OR EMOTIONAL PROBLEMS?

**WHAT FOR?

**AT WHAT AGES?

3. WERE YOU EVER ON MEDICATIONS FOR YOUR NERVES?

**WHAT MEDICATIONS?
**WHAT DOSAGES?**

**WHAT FOR?**

**WHO PRESCRIBED THEM?**

4. HAVE YOU EVER TRIED TO COMMIT SUICIDE?

**HOW MANY TIMES?**

**WHY?**

**AT WHAT AGES?**

**WERE THE ATTEMPTS SERIOUS OR WERE THEY A MEANS OF GETTING ATTENTION?**

H. FAMILY/HOME LIFE:

1. WHAT WAS YOUR HOME LIFE LIKE WHEN YOU WERE GROWING UP?

**WHO RAISED YOU?**

**WHAT WERE THEY LIKE?**

**HOW DID YOU GET ALONG WITH THEM?**

**WHO ELSE LIVED IN YOUR HOUSE?**

**HOW DID YOU GET ALONG WITH THEM?**

**WHAT WERE THINGS LIKE IN YOUR HOUSE?**

**WAS THERE ANY PHYSICAL, SEXUAL, OR EMOTIONAL ABUSE?**

**DID ANYBODY HAVE ANY SERIOUS MENTAL OR EMOTIONAL PROBLEMS?**
**WAS ANYBODY EVER IN TROUBLE WITH THE LAW?**

**HOW WAS YOUR BEHAVIOR?**

**DID YOU BREAK THE RULES A LOT?**

**WERE YOU CAUGHT?**

**WHAT HAPPENED?**

2. HOW OLD WERE YOU WHEN YOU LEFT HOME?

**WHY DID YOU LEAVE THEN?**

**WHAT DID YOU DO?**

3. WHAT IS YOUR RELATIONSHIP WITH YOUR FAMILY LIKE NOW?

**HOW OFTEN DO YOU HAVE CONTACT WITH THEM?**

4. HAVE YOU EVER "HIT THE ROAD" AND TRAVELED WITHOUT REAL PLANS?

**AT WHAT AGES?**

**WHAT WAS THE LONGEST TIME YOU WERE GONE?**

**WHERE DID YOU GO?**

**WHAT DID YOU DO?**

**DID YOU TELL ANYONE YOU WERE GOING?**

5. DO YOU MOVE AROUND VERY MUCH?
**HOW MANY DIFFERENT PLACES HAVE YOU LIVED IN?**

**WHY DO YOU MOVE AROUND SO MUCH?**

I. SEX/RELATIONSHIPS:

1. HOW MANY LIVE-IN RELATIONSHIPS HAVE YOU HAD?

**WHY HAVE YOU HAD SO MANY RELATIONSHIPS?**

2. WHAT HAVE YOUR RELATIONSHIPS BEEN LIKE?

**HOW LONG DO THEY USUALLY LAST?**

**WHAT WAS THE LONGEST ONE?**

**WHAT WAS THE SHORTEST?**

**WHY DO THEY USUALLY END?**

**WHO USUALLY ENDS THEM?**

**HOW LONG DOES IT TAKE YOU TO GET OVER THEM?**

**WHAT TYPE OF PARTNERS DO YOU GENERALLY CHOOSE?**

**WHAT DO YOU LIKE BEST ABOUT YOUR PARTNERS?**

**ARE YOU USUALLY IN LOVE WITH YOUR PARTNERS, OR ARE THE RELATIONSHIPS JUST PHYSICAL?**

**ARE YOUR RELATIONSHIPS USUALLY STABLE, OR ARE THINGS UP-AND-DOWN?**

**DO YOU ARGUE MUCH?**

**HAVE YOU EVER HAD PHYSICAL FIGHTS?**
**HAVE YOU EVER BEEN UNFAITHFUL TO ANY OF YOUR PARTNERS?**

3. HAVE YOU EVER BEEN DEEPLY IN LOVE?

**WITH WHO?**

1. **CHILDHOOD/ADOLESCENT BEHAVIOR PROBLEMS:**

   1. WHEN YOU WERE YOUNG, DID YOU DO ANYTHING LIKE VANDALIZE A SCHOOL OR SOMEONE ELSE'S PROPERTY, SET FIRES, HURT ANIMALS FOR FUN, OR STEAL FROM YOUR PARENTS?

      **DID YOU EVER GET CAUGHT?**

      **HOW WERE YOU PUNISHED?**

      **HOW DID IT AFFECT YOU?**

2. HOW WAS YOUR BEHAVIOR AT SCHOOL?

   **DID YOU GET INTO TROUBLE FOR THINGS LIKE SKIPPING CLASSES, FIGHTING, DISTURBING THE CLASS, BEING DRUNK OR STONED AT SCHOOL, CHEATING, STEALING, AND SO FORTH?**

   **WERE YOU EVER EXPELLED?**

   **HOW MANY TIMES?**

   **WHAT FOR?**

3. WERE YOU EVER ARRESTED AS A JUVENILE?
**WHAT FOR?

**WERE YOU CONVICTED?

**HOW OLD WERE YOU WHEN YOU FIRST STARTED DOING CRIME?

**DID YOU EVER COMMIT CRIMES AND NOT GET CAUGHT?

**WHAT?

K. ADULT BEHAVIOR PROBLEMS:

1. DID YOU EVER HAVE A PROBLEMS WITH ALCOHOL OR DRUG ABUSE?

**DID YOU EVER DO ANYTHING DANGEROUS OR GET INTO TROUBLE WHEN YOU WERE DRUNK OR STONED (E.G. DRIVE WHILE IMPAIRED, GET INTO FIGHTS, GET ARRESTED, ETC.)?

2. DO YOU HAVE A BAD TEMPER?

**WHAT TYPES OF THINGS GET YOU REALLY ANGRY?

**WHAT DO YOU DO WHEN YOU ARE ANGRY?

**DO YOU GET INTO PHYSICAL FIGHTS?

**HAVE YOU EVER "LOST CONTROL"?

**WHAT WAS THE WORST INJURY YOU EVER CAUSED SOMEONE?

3. HAVE YOU EVER DONE ANYTHING THAT REALLY HURT SOMEBODY'S FEELINGS?

**DESCRIBE IT.
**WHY DID YOU DO THAT?**

4. DO YOU LIE A LOT?
   **HOW OFTEN?**
   **ARE YOU GOOD AT IT?**

5. DO YOU THINK THAT PEOPLE ARE EASY TO "CON" OR MANIPULATE?
   **DO YOU EVER DO IT?**
   **WHAT ARE SOME EXAMPLES?**

6. DID YOU EVER GET IN TROUBLE FOR NOT PAYING YOUR BILLS, DEFAULTING ON A LOAN, OR NOT PAYING CHILD SUPPORT?

**ADULT CRIMINAL RECORD:**

1. HAVE YOU EVER BEEN ARRESTED AS AN ADULT?
   **WHAT FOR?**
   **DESCRIBE WHAT HAPPENED.**
   **WERE YOU CONVICTED?**
   **HOW LONG WAS YOUR SENTENCE?**
   **DO YOU FEEL IT WAS A FAIR ONE?**
   **WHAT KIND OF A JOB DID YOUR LAWYER DO?**
2. DO YOU THINK YOUR CRIMINAL RECORD WILL HAVE ANY EFFECT ON YOUR LIFE?

**WHAT TYPE OF EFFECT? GOOD OR BAD?

3. WHAT FACTORS ARE RESPONSIBLE FOR YOU GETTING INTO TROUBLE WITH THE LAW?

**WHY DO YOU COMMIT CRIME?

**WHY DID YOU START CRIME?

**WHAT COULD YOU HAVE DONE TO AVOID COMMITTING CRIMES?

**HAVE YOU EVER TRIED TO STOP CRIME?

**HOW?

4. WHAT FACTORS WOULD HELP KEEP YOU OUT OF TROUBLE WITH THE LAW?

5. DO YOU REGRET HAVING COMMITTED YOUR OFFENSES?

**WHY/WHY NOT?

6. WHAT EFFECT HAVE YOUR OFFENSES HAD ON THE VICTIMS?

**HOW DO YOU FEEL ABOUT THE EFFECT ON THE VICTIMS?

**HAVE YOU HAD CONTACT WITH THEM?
7. ARE YOUR CRIMES USUALLY PLANNED OR ARE THEY "SPUR OF THE MOMENT"?

M. INTERVIEW NOTES:

1. RATE CLARITY AND COHERENCE OF SUBJECT'S RESPONSES DURING INTERVIEW:
   
   A) SUBJECT'S RESPONSES WERE CLEAR AND COHERENT
   
   B) SOME MILD PROBLEMS UNDERSTANDING SUBJECT'S RESPONSES
   
   C) SOME MODERATE PROBLEMS UNDERSTANDING SUBJECT'S RESPONSES
   
   D) SUBJECT'S RESPONSES WERE ALMOST TOTALLY UNCLEAR OR INCOHERENT

2. RATE CONSISTENCY OF SUBJECT'S RESPONSES DURING INTERVIEW:

   A) SUBJECT'S RESPONSES WERE CONSISTENT
   
   B) SOME MILD INCONSISTENCIES WERE APPARENT IN INTERVIEW
   
   C) SOME MODERATE INCONSISTENCIES WERE APPARENT IN INTERVIEW
D) SUBJECT'S RESPONSES WERE ALMOST TOTALLY INCONSISTENT

3. RATE THE OVERALL VALIDITY OF THE INTERVIEW:
   A) VALID AND PROBLEM FREE
   ___ B) VALID BUT WITH MILD PROBLEMS
   C) VALID, BUT WITH MODERATE PROBLEMS
   ___ D) INVALID; MOST ITEMS SHOULD BE SCORED TOTALLY ON
   THE BASIS OF FILE INFORMATION

4. DESCRIBE ANY ASPECTS OF THE SUBJECT'S DEMEANOR AND BEHAVIOR DURING THE INTERVIEW THAT SEEM IMPORTANT OR THAT MAY NOT BE APPARENT IN AUDIO- OR VIDEO-TAPES. SUCH COMMENTS MAY FOCUS ON THE SUBJECT'S STYLE OF SPEECH, NONVERBAL BEHAVIORS, INTERPERSONAL STYLE, OR SELF-IMAGE. ________________________________

______________________________

______________________________
APPENDIX B

PCL:SV FILE INFORMATION
FILE INFORMATION

Subject #: ___________________________ Date: ___________________________

Date of Admission: ________________ Date of Discharge: ________________

I. Demographic Data

Age: ___________________________ Date of Birth: ___________________________

Race: ____________________________

Comments:________________________________________________________________

II. Employment History

a) Occupation (latest): ____________________________

b) Employment record:

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<tr>
<th>Position/Location</th>
<th>Dates</th>
<th>Reliability/Fired</th>
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c) Illegal occupations:________________________________________________________________

d) Institutional work performance: ________________________________________________________

e) Comments:___________________________________________________________________________
III Background Data

A. Family

a) Birth order: ____________________________

b) Raised by: ____________________________

c) Family history of mental illness: ____________________________

d) Quality of family life (good, average, or poor): ____________________________

e) Comments: ____________________________

B. Education

a) Years of education: ____________________________ GED (Y or N): ________________

Years GED: ____________________________

Attendance (good, average, or poor): ____________________________

Performance (good, average, or poor): ____________________________

Behavior (good, average, or poor): ____________________________

Comments: ______________________________________________________

b) If problems, age at onset: ________________

c) Apprenticeship or training programs / university courses:

__________________________________________

__________________________________________

__________________________________________
IV Marriages/Common-Law Relationships

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<th>Length of marriage/common law relationships</th>
<th>Children</th>
<th>Present relationship</th>
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b) Comments: __________________________________________

V Medical Data

A. Psychiatric history (diagnoses, treatments, medications)

a) Childhood/Adolescence:

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<th>Diagnosis</th>
<th>Treatment</th>
<th>Medications</th>
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b) Adulthood:

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<th>Diagnosis</th>
<th>Treatment</th>
<th>Medications</th>
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c) Current diagnosis and treatment: ____________________________

B. Physical History

a) Major illnesses and hospitalizations:

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b) Current status: ____________________________________
VI Institutional Data

a) Adjustment:

- Chronic problem
- Behavior problem
- Slight problem
- Good
- Excellent

b) Institutional charges:

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<th>Type</th>
<th>Number</th>
<th>Sentence</th>
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C) General level of aggression:

D) Comments:

VII Criminological Data

A. Juvenile History

a) age at first contact Longest sentence:

b) Crimes (numbers, types/sentences):

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<tr>
<th>charge</th>
<th>sentence</th>
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C) Comments:

B. Adult History

a) Present Offense(s) Sentence(s):

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b) First Federal Offense (Y or N): ________________
c) Age at first adult conviction: ________________
d) Ever applied for parole (Y or N): ________________
e) Ever violated parole/ms/temporary release (# of times): ________________
f) Suspected criminal activity: ________________
g) Family history of criminal activity: ________________
h) Aliases: ________________
i) Comments/prior charges: ________________

VII Substance Use

A. Drugs

a) Usage:
   Duration/Frequency
   
   Addict........................
   Heavy use of Hard...........
   Heavy use of soft...........
   Infrequent user............... 
   Nonuser........................

Drugs: ____________________________  Ages: ____________________________

   ________________________________
   ________________________________

b) Comments: ____________________________

B. Alcohol

a) Usage:
Alcoholic.............
Problem Drinker.....
Moderate User.......  
Nonuser...............  

b) age of onset of use:

c) Family history of use:

Mother.....
Father....
Other.....  
(specify: ____________________________ )

d) Comments:

IX Psychological Test Results

a) Case management strategies classification:

b) MMPI profile/raw score attached (Y or N):

c) Intellectual:

d) Other personality/behavioral tests:

X Personality/ Behavioral Descriptions:

______________________________
______________________________
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APPENDIX C

PCL:SV RATING FORM
PCL:SV SCORESHEET

Name: ___________________________ Diagnosis: ___________________________

MR ______ Age __________ Sex: M or F

Psychotic, Organic, or Mood should only be endorsed if the criterion was the direct result of a mental disorder.

Item 1: Superficial .............................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Presentation is shallow and difficult to believe (both)
0 1 2 P O M Displays of emotion do not appear genuine
0 1 2 P O M Attempts to portray self in a good light
0 1 2 P O M Tells unlikely stories, has convincing explanations for behaviour
0 1 2 P O M Alter statements when challenged with facts or inconsistencies
0 1 2 P O M Uses technical language and jargon, often inappropriately
0 1 2 P O M Conversation and interpersonal behavior are engaging

Item 2: Grandiose .............................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M View of abilities and self-worth is inflated
0 1 2 P O M Self-assured and opinionated (both)
0 1 2 P O M Exaggerates status and reputation
0 1 2 P O M Considers circumstances to be the result of bad luck
0 1 2 P O M Sees self as a victim of the system (Criminal Justice System)
0 1 2 P O M Displays little concern for the future

Item 3: Manipulative .............................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Manipulates without concern for the rights of others
0 1 2 P O M Distorts the truth (i.e., does not tell what he/she believes to be true)
0 1 2 P O M Deceives with self-assurance and with no apparent anxiety
0 1 2 P O M A fraud artist or con man
0 1 2 P O M Enjoys deceiving others

Item 4: Lacks Remorse .............................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Appears to have no capacity for guilt; no conscience
0 1 2 P O M Verbalizes remorse in an insincere manner
0 1 2 P O M Displays little emotion in regard to actions
0 1 2 P O M Does not appreciate impact on others
0 1 2 P O M Concerned more with own suffering than with that of others
**Item 5: Lacks Empathy**................................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Cold and callous
0 1 2 P O M Indifferent to the feelings or concerns of others
0 1 2 P O M Unable to appreciate the emotional consequences of actions
0 1 2 P O M Expressed emotions are shallow and labile (both)
0 1 2 P O M Verbal and nonverbal expressions of emotion are inconsistent

**Item 6: Doesn't Accept Responsibility (criminal/antisocial acts)... 0 1 2 omit**

Excluding mental illness 0 1 2 omit

0 1 2 P O M Rationalizes; downplays the significance of actions
0 1 2 P O M Minimizes the effects of behaviour on others
0 1 2 P O M Projects blame onto others or circumstances
0 1 2 P O M May maintain innocence or minimize involvement in crimes
0 1 2 P O M May claim to have been framed or victimized, may claim amnesia or blackouts surrounding offenses

**Item 7: Impulsive**................................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Does things on the spur of the moment (including crimes); spends little time considering the consequences
0 1 2 P O M Frequently changes jobs, schools, or relationships
0 1 2 P O M Is a drifter; lives a nomadic lifestyle, with frequent changes of residence
0 1 2 P O M Is easily bored; has difficulty doing things that require sustained attention
0 1 2 P O M Likes to do things that are exciting, risky, and challenging

**Item 8: Poor Behaviour Controls**................................................................. 0 1 2 omit

Excluding mental illness 0 1 2 omit

0 1 2 P O M Is easily angered or frustrated, especially when drinking
0 1 2 P O M Is often verbally abusive (swears and makes threats)
0 1 2 P O M Is often physically abusive (breaks or throws things; pushes, slaps or punches people)
0 1 2 P O M Abuse may be sudden and unprovoked
0 1 2 P O M Outbursts are often short-lived
**Item 9: Lacks Goals**

0 1 2 P O M Does not have realistic long-term plans and commitments
0 1 2 P O M Has lived life “day-to-day”, not thinking of the future
0 1 2 P O M Has relied excessively on family, friends, and social assistance for financial support
0 1 2 P O M Has poor academic and employment records
0 1 2 P O M May describe far-fetched plans or schemes

**Item 10: Irresponsible**

0 1 2 P O M Behaviour frequently causes hardship to others or puts them at risk
0 1 2 P O M Unreliable as a spouse or parent: lacks commitment to relationships, fails to care adequately for children, etc.
0 1 2 P O M Job performance is inadequate: is frequently late, absent, etc.
0 1 2 P O M Untrustworthy with money: has been in trouble for defaulting on loans, not paying bills, not paying child support, etc.

**Item 11: Adolescent Antisocial Behaviour**

0 1 2 P O M Had conduct problems at home and at school as an adolescent
0 1 2 P O M Was in trouble with the law as a youth/minor
0 1 2 P O M Antisocial activities were varied and frequent

**Item 12: Adult Antisocial Behaviour**

0 1 2 P O M Disregards rules and regulations; has had legal problems as an adult
0 1 2 P O M Has been charged with or convicted of criminal offenses
0 1 2 P O M Antisocial activities are varied and frequent

On the basis of the quality of the interview and collateral information, indicate your confidence in the validity of your PCL-SV rating:

<table>
<thead>
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<tr>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
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APPENDIX D

FOLLOW-UP INFORMATION
Follow-up Information

Subject # ___________  Admission Date: ________________

Discharge Date: ___________  Readmission Dates: ________________

Furlough Dates: _____________________

1. Verbal Abuse

Number of occurrences: ________________________________

Dates: ________________________________

2. Verbal Threats

Number of occurrences: ________________________________

Dates: ________________________________

3. Belligerence

Number of occurrences: ________________________________

Dates: ________________________________

4. Easily annoyed/irritated

Number of occurrences: ________________________________

Dates: ________________________________

5. Fighting

Number of occurrences: ________________________________

Dates: ________________________________
6. Escape threats

Number of occurrences: ________________________________________

Dates: _______________________________________________________

7. Escape attempts

Number of occurrences: ________________________________________

Dates: _______________________________________________________

8. Refusal of physician's appointments

Number of occurrences: ________________________________________

Dates: _______________________________________________________

9. Refusal of Laboratory work

Number of occurrences: ________________________________________

Dates: _______________________________________________________
APPENDIX E

OPERATIONAL DEFINITIONS OF FOLLOW UP VARIABLES
Operational Definitions of Follow Up Variables

**Suicide Attempts:** Any documented attempt to commit suicide.

**Self Mutilation:** Any documented self injurious behavior, including burning, cutting, head banging (e.g., on the wall, floor, etc.), biting, and ingestion of potentially dangerous substances (i.e., swallowing batteries). The behavior must be clearly intended to be self harming (e.g., an instance of a patient eating substances which could be harmful without the intent of self harm, as might occur during psychotic episodes, would not be considered an instance of self mutilation).

**Verbal Abuse:** Any documented use of racial slurs or profanity directed toward a peer or staff.

**Verbal Threats:** Any documented threat comprised of an identified action which is potentially physically harmful directed at an identified person. Vague threats (i.e., you’re going to get it; I’m going to hurt somebody) are not to be considered an instance of verbal threats.

**Irritability/Easily Annoyed:** Any documented occurrence of a situation wherein a patient becomes agitated, irritated, annoyed, or angered in response to a situation which would not affect the average person in that manner.
Belligerence: Any documented instance in which the patient is attempting to engage another patient or staff member in a verbal or physical dispute, most likely through repeated, constant harassment.

Aggressive Homosexuality: Any documented instance of homosexual contact occurring between two patients, one of whom is clearly an unwilling partner.

Fighting: Any documented instance of a physical altercation between two patients, or a patient and staff member. The physical altercation must include hitting, slapping, biting, scratching, pushing, or kicking carried out by the patient.

Escape attempt: Any documented instance wherein a patient attempted to leave the facility without supervision or permission. This does not include those instances in which patients are merely too close to the fence; however, it does include all instances in which patients are under the fence, in the drainage ditches, climbing the fence, unweaving the fence, or attempting to leave through the service entrance, or the security gate.

Escape Threat: Any documented threat in which a patient clearly states plans to leave the hospital grounds unescorted and without permission. Any documented discovery of escape plans is also considered an escape threat.
Medication Refusal: Any documented refusal of psychoactive medication whether through refusal to ingest the medication, or 'cheeking'. Refusal of nonpsychoactive medications is not considered medication refusal.

Physician/Laboratory Appointment Refusal: Any documented refusal to meet with a psychiatrist, or refusal to comply with lab work. Refusal of lab work includes refusal to go to the lab as well as refusal to comply with lab procedures once there (i.e., refusal to have blood drawn, refusal to give a urine specimen).
APPENDIX F

INFORMED CONSENT
Research Protocol No.

Informed Consent

Predictors of Adjustment Problems in a Maximum Security Forensic Hospital

Many patients sent to Vernon State Hospital have trouble adjusting because of their mental disorders. We want to help identify these problems ahead of time so that positive changes can be made. We also want to know how well you cope with your problems during your stay at Vernon State Hospital.

1. **Risks:** There are no known risks to the study. In other words, it should not hurt you in any way.

2. **Procedure:** Your participation in the whole study will take about three hours. We will make plans so that you will be released from other programs so that you will have plenty of time. We will ask you to participate in an interview and complete a questionnaire. The questionnaire is the Personality Assessment Inventory which was written especially for psychiatric patients. It has been made so that it is easy to read.

3. **Duration:** The study will continue for approximately two years. You will only need to participate one time for about three hours. After that, we will look at clinical records to see how patients are adjusting.

4. **Benefits:** The real benefit of the study is to help us determine what problems or symptoms make it difficult for patients to adjust to Vernon State Hospital. With this knowledge we may be able to build treatment programs that can help with these problems.

5. **Privacy:** Your name and personal information will be kept private. All information will be entered into a computer that will only have research numbers and no names. No publication will list any personal information.

6. **Withdrawing from the study:** You can withdraw from the study at any time for any reason.

7. **Contact persons:** You can contact the coordinator at Vernon State Hospital and Dr. Richard Rogers, the principal investigator from the University of North Texas.

Subject’s Initials __________
8. **Consultation:** You may consult with a member of the IRB at any time concerning your treatment and welfare by calling the IRB chairman at the facility where the research has been approved. You may consult with a member of the public responsibility committee at any time concerning your treatment and welfare. The public responsibility committee is a group of volunteers who work to protect the rights and interests of clients.

I understand each of the above items relating to the participation of

____________________________________ in the research of "Predictors of Adjustment Problems in a Maximum Security Forensic Hospital" under the care of Dr. Richard Rogers and I hereby consent to my participation in the research project.

____________________________________  (Date)

(Signature of subject)

I have explained the above items to ____________________________________________

and believe that ______ understands each of the items.

____________________________________  (Date)

(Researcher’s signature)

I was present at the explanation of the above items to ____________________________________________

and believe that ______ understands each of the above items.

____________________________________  (Date)

(Witness signature)
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