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PSYCHOPATHY FACTORS AND DEGREE OF FORCEFULNESS IN
SEX-OFFENDERS: IMPLICATIONS FOR CURRENT RISK-ASSESSMENT PRACTICES

By

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B.S., Pennsylvania State University, 2000
M.A., University of Louisville, 2004

A Dissertation
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for the Degree of

Doctor of Philosophy

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University of Louisville
Louisville, Kentucky

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A Dissertation Approved on

September 15, 2005

by the following Dissertation Committee:

Dissertation Director

DEDICATION

This dissertation is dedicated to my family

Gabriela Quiros,

David Tristan,

Roberto Tristan,

Fernando Alvarado,

Sergio Tristan,

and especially to my beautiful wife

Miranda Tristan.

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I would first like to thank my family for their whole-hearted support and sacrifice, without which I could have never attained this level of education. I owe it all to you. I also want to thank my wonderful wife Miranda for being my main source of happiness and inspiration.

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ABSTRACT

PSYCHOPATHY FACTORS AND DEGREE OF FORCEFULNESS IN SEX-OFFENDERS: IMPLICATIONS FOR CURRENT RISK-ASSESSMENT PRACTICES

Luciano Tristan

May 13, 2006

Based primarily on theory, it is suspected that violent and non-violent sex-offenders can be differentiated by their psychopathic profile, as measured by the Psychopathy Checklist-Revised (PCL-R; Hare, 1991). There is some concern that current risk-assessment instruments are not designed according to the characterological composition of violent and non-violent sex-offenders, which is believed to be essential to the instruments' predictive ability. Specifically, it is believed that such instruments are not sufficiently sensitive to the psychopathic characteristics associated with non-violent sex-offenders, as well as not sufficiently specific to the psychopathic characteristics associated with violent sex-offenders. A sample of convicted sex-offenders (N = 1739) from the Kentucky State Reformatory (KSR) was analyzed in order to examine the nature of the relationship between their PCL-R Factor and facet scores, and the degree of forcefulness used during their offense(s) (i.e. violent or non-violent). The degree to which the same elements of psychopathy correlate with the total scores on three commonly used risk-assessment instruments (VRAG, Static-99, and MnSOST-R) was then measured. As expected, results revealed that violent and non-violent sex-offenders were significantly differentiated by their PCL-R profiles; however the pattern of their respective PCL-R

profiles was not as expected. In addition, it was revealed that all three risk-assessment instruments were primarily sensitive to the psychopathic characteristics contained in Factor 2 and facet 4 in particular, even though both violent and non-violent sex-offenders were primarily characterized by other dimensions of psychopathy, facets 2 and 3 in particular. Theoretical and clinical implications are discussed.

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INTRODUCTION

The aim of this investigation is to determine whether the design of instruments currently used for the risk-assessment of sexual recidivism allows for the effective detection of risk in both violent and non-violent sex-offenders. It is believed that the personal characteristics of sex-offenders can influence their propensity to engage in either violent or non-violent sex-offending. This study will first identify the personal characteristics of the sex-offender, as measured via the construct of psychopathy, that are meaningfully associated with violent and non-violent types of sex-offending. Then, the degree to which those characteristics are accounted for by currently available risk-assessment instruments will be measured.

One concern is that such instruments may not be sufficiently sensitive to the characterological descriptors associated with non-violent sex-offenders, which are thought to provide important information vis-à-vis their risk to reoffend. Such arguable structural and conceptual defect could potentially allow some genuinely dangerous sex-offenders, even if non-violent, to go undetected by these instruments. Clearly, the potential gravity of “missing” actual risk is serious. Dangerous offenders, who are mistakenly considered not to pose a high risk to reoffend, could receive attenuated sentences and end up being released into the community sooner and with minimal notification to the public.

A second concern is that the design of the same risk-assessment instruments may only allow them to capture one general aspect of what is thought to be a multidimensional net of characterological descriptors and risk factors that are associated with violent sex-offenders. Such lack of specificity would help explain the high number of false-positive identifications of danger that is currently observed in risk-assessment practices. In contrast to the first concern, which has root in the interest of maintaining public safety, this concern is centered on the interest of protecting the civil rights of those offenders who do not pose a high risk for dangerousness. The potential problem here is that at least some offenders may unwarrantedly be labeled as “high-risk,” which could unjustly result in longer sentences, loss of privileges, social stigma, and public humiliation.

Legal Background and Significance

Megan’s Law (1994) was enacted as a response to the sexual assault and murder of 7-year-old New Jersey resident Megan Kanka by a twice convicted sexual predator named Jesse Timmendequas. The law, which is now federal, requires convicted sex-offenders to register with a public database and provide for community notification depending upon the degree of risk that they will commit sexual crimes in the future. Although well received by the community, the law raised serious constitutional issues that remain to this date. Among these are the double jeopardy nature of the punishment, and the fact that in many states, types of sexual offenses are not differentiated when determining notification requirements. Still, the predominant source of controversy emanating from that case was the fact that Mr. Timmendequas was released into the

community in the first place, which many believed to be alarmingly irresponsible and unacceptable.

That public concern was addressed by the US Supreme Court decision in *Kansas v. Hendricks* (1997), which established procedures for civilly committing sex-offenders who had completed their prison term, but who were still found to be at risk for future sexual violence. Following the Court's ruling, which translated into the Kansas Sexually Violent Predator Act (KSVPa), a number of states passed similar legislation. As a result, many sex-offenders today, who are deemed to be dangerous, are likely to be involuntarily committed for indefinite periods of time.

The case of *Kansas v. Crane* (2002) loosened the criteria for civil commitment even further, with the US Supreme Court holding that the US Constitution no longer requires a finding that a dangerous sexual offender must exhibit *total* or *complete* lack of control over his/her sexually deviant behavior in order to justify civil commitment (as dictated in KSVPa), but that demonstration by the state that the offender has *some* lack of control is sufficient.

Kentucky is one of the states operating under a Community Notification statute instead of the above described Sexual Predator statute. This system applies to all pre-release sex-offenders. Offenders are administered a battery of risk-assessment measures, in addition to the PCL-R, from which each offender receives a recidivism risk rating of "high" or "not high." This recommended level is offered in a court hearing where a judge decides the ultimate risk level of the offender. Depending upon the final risk designation, the released offender is subjected to different levels of community notification. Community notification and registration requirements are also tied to the person's

convictions (number/type). Originally, levels of notification ranged from having their personal information published on a web page operated by the Kentucky State Police, to having their picture, address and offense information hand-delivered to community residents. Today, all offenders have their information placed on the State Police web site. Face-to-face information dissemination is no longer possible due to time and staff constraints, but any community member may search the web site by zip code to determine the address, offense characteristics, and designated risk level of any offender living in the community.

Clearly, the decision of whether or not an offender should be released into the community can have severe consequences both for the offender and the public. Similarly, the risk-label that a released offender carries for the rest of his life has obvious and significant implications. The decision-making process in both matters must weigh the interest of maintaining public safety against denying someone the most fundamental of civil liberties, individual freedom and privacy.

It therefore becomes critical for risk-assessment practices to be as accurate as possible in identifying those sexual offenders whom are most likely to reoffend. For this to occur, mental health and correctional professionals who conduct these assessments must first understand the risk factors for sexual reoffending, and then incorporate that knowledge into the design of risk-assessment instrumentation. Even the slightest gains in the accuracy of this type of assessment can be of potential significance to the public as well as the offender.

Current Risk-Assessment Resources: Actuarials

The last decade or so has produced several instruments designed to ascertain the degree of risk posed by sex-offenders. The majority of these instruments are based on the actuarial approach, which is founded on the behaviorist proposition that knowing enough about an individual's past enables one to predict their future behavior. A number of historical and highly stable variables (e.g., offense history, deviant sexual preferences) have been documented as being fairly reliable risk factors for sexual recidivism (e.g., Marshall, 1994; Thornton & Travers, 1991), and therefore account for the majority of the content in such risk-assessment measures. However, empirical examination has revealed that the level of predictive accuracy based on such risk factors alone (e.g., criminal history) is far from acceptable (Grubin, 1999).

One problem is that research on personality-based risk factors has been limited; leaving us blind to the potential influence that offender characteristics such as interpersonal typology, affective composition, and lifestyle may have on their risk to reoffend. As Quinsey, Rice, & Harris (1995; p. 85) so aptly stated, "the effective prevention of a problem requires an understanding of its causation, something beyond mere recognition of associations." Simply knowing that certain historical variables are associated with the problem (in this case sex-offending), does not tell us anything about the nature of the offender or the real reasons why he may or may not reoffend. It is proposed that there is a need to adapt current actuarial risk-assessment tools, which focus primarily on static characteristics such as criminal history, into more comprehensive instruments that incorporate an examination of the more dynamic and characterological dimensions of the offender.

A multi-dimensional construct that has both theoretical and empirical support for being included in risk-assessments of any type of criminal recidivism is *psychopathy*. As such, it offers a framework that may help correct the arguable structural limitation of actuarial instruments. Even though psychopathy represents only one of the factors to be considered in a thorough assessment of risk (Gacono & Bodholdt, 2001), it has been argued that the failure to do so constitutes unprofessional and even unethical practice (Hart, 1998; Hare, 2003).

Psychopathy

Psychopathy¹, as measured by the Psychopathy Checklist-Revised (PCL-R; Hare, 2003), has been found to be directly and independently associated with criminal behavior and violence (Harris, Rice, & Lalumiere, 2001; Hart & Hare, 1997), and it is considered to be one of the most powerful and reliable predictors of criminal recidivism, including sex-offending (Hildebrand, de Ruiter, & de Vogel, 2004; Seto & Barbaree, 1999). In fact, psychopathy in and of itself is considered one of the most explanatory and generalizable risk factors identified to date (Hemphill & Hare, 2004).

Evolution of the Psychopathy Construct²

"Not deeply vicious, he carries disaster lightly in each hand."
- Hervey Cleckley (1955)

Ever since the early days of psychiatry a series of theoretical conceptualizations have attempted to describe a distinct group of individuals for whom their antisocial nature cannot be clearly and directly attributed to a mental or emotional disorder, or to inadequate rearing. In 1801, prominent French psychiatrist Phillipe Pinel coined the

¹ In this paper, the term *psychopathy* will refer to the psychopathy construct as defined by the PCL-R (Hare, 2003).

² Drawn in part from Lykken (1995) on his review of the history of psychopathy.

phrase *manie sans delire* to describe this group of people, which he noted behaved crazily without actually being crazy. American psychiatrist Benjamin Rush (1812) described them as having an “innate preternatural moral depravity.” A similar conceptualization was adopted by J.C. Pritchard who, in 1835, utilized the label of “moral insanity” to describe such individuals. Rush and Pritchard believed in an innate lack of moral sensibility. This view was later revised by Hervey Cleckley (1941) who regarded such individuals as being unable to develop moral feelings or compunction due to an innate organic defect.

The term *psychopathic* was first used by Koch (1843-1910), but with it he referred to the much more general and heterogeneous array of clinical conditions which we now know as the personality disorders. It was Kraepelin in 1915 that first used *psychopathic personality* to specifically identify the amoral criminal type. Partridge (1930) later introduced the term *sociopath*, noting that these individuals share a fundamental disposition to violate social norms. Mainly as a result of Lykken’s (1957) work, the *sociopath* was later differentiated from the *psychopath* in that, unlike the latter, the former’s antisocial manifestation could be directly tied to social or familial dysfunction. Lykken’s *psychopath*, on the other hand, is conceptualized as being deviant as a result of an innate aberration.

Lykken’s work expanded on what Karpman (1941) first identified as the idiopathic or *primary psychopath*, who is said to possess “several innate peculiarities of temperament or endowment that conduce toward a complete or partial failure of socialization and to antisocial behavior” (Lykken, 1957, p.114). Lykken explains that the psychopath lacks the restraining effect of conscience and of empathic concern for others.

He clarifies, in agreement with Cleckley's conceptualization (1941), that psychopaths possess an inherent psychological peculiarity that makes them very difficult to socialize, which in turn prevents them from successfully developing a conscience. Lykken states that their notorious behavior, which is suggestive of an indifference to the possible consequences, is in itself a consequence of that innate peculiarity. This indifference, Lykken believes, when combined with their characteristic perverse appetites and commonly hostile and aggressive temperament, can result in the explosiveness and dangerousness that is popularly attributed to the psychopath.

Psychopathy was conceptualized by Cleckley (1941, 1955) as a pathological personality construct characterized by sixteen symptoms (Appendix A). According to Cleckley, the prototypical psychopath is a charming, egocentric, deceptive, and unreliable individual who lacks empathy and respect for others, suffers of poor judgment and lack of insight, leads an irresponsible, self-serving, antisocial, and parasitic lifestyle, and is devoid of anything resembling a human conscience. Cleckley mentions that psychopaths are often engaging individuals who are seemingly normal. He explains that although psychopaths do experience some affect, it is to an extremely superficial level, and that they truly are incapable of experiencing or understanding deep and lasting emotions. One aspect on which Cleckley missed was his citing above average intelligence as a characteristic feature of the psychopath. Otherwise his conceptualization of the psychopathy construct has remained virtually intact.

In an effort to operationalize and quantify Cleckley's conceptualization of the construct, Hare (1980) used the 16 Cleckley symptoms as the basis to develop the Psychopathy Checklist (PCL). The 22-item scale, listing the traits and behaviors

determined to be explicitly and implicitly associated with psychopathy, was partly derived from interview and case history information from several male inmate samples. Subsequent refinement of the definition of psychopathy led to a series of minor changes in the format and content of the PCL (i.e., some items were dropped and others reworded), eventually resulting in the 1991 version of the Psychopathy Checklist-Revised (PCL-R). The PCL-R is a 20-item factorial scale that describes psychopathy in terms of a characteristic pattern of interpersonal, affective, and socially deviant features. Even though some limitations of the PCL-R have been identified (Lilienfeld, 1994), the PCL-R is widely used and it remains the “gold standard” measure of psychopathy.

Etiology of Psychopathy

There is still some debate regarding the true etiology of psychopathy, but it is generally agreed that it represents a debilitating personality disorder (Hare, 1996). Lykken (1957) proposed that the etiology of psychopathy is a constitutionally low level of fear and anxiety. His basic theory was that, because much of the normal socialization process depends on punishment of antisocial behavior, and because punishment works, when it works, by the fearful inhibition of those impulses the next time that temptation knocks, then someone who is relatively fearless will be relatively harder to socialize. In his classic study on the anxiety of psychopaths, Lykken (1957) found them to exhibit significantly less anxiety on a questionnaire device, less galvanic skin reactivity to a conditioned stimulus associated with shock, and less avoidance of punished responses on a test of avoidance learning.

Somewhat related to Lykken’s conceptualization are the neurobehavioral theories of Fowles (1980) and Gray (1975, 1987) which explain psychopathy in terms of two

biofeedback loops that influence behavior: 1) the behavioral inhibition system (BIS), which is activated by cues associated with fear and that produces the experience of anxiety that results in the inhibition of ongoing and subsequent behavior, and 2) the behavioral activation system (BAS), which is activated by stimuli associated with reward or with escape from fear or pain. Primary psychopaths were said to possess a relatively weak BIS, while secondary psychopaths were those who suffer from an unusually strong BAS.

Other researchers have contributed with similar disinhibitory theories of psychopathy (e.g., Gorenstein & Newman, 1980). Most recently, Birbaumer, Veit, Lotze, Erb, Hermann, Grodd, & Flor (2005) concluded that the dissociation of emotional and cognitive processing may be the neural basis of the lack of anticipation of aversive events in criminal psychopaths. It was found that psychopaths, unlike non-psychopathic controls, do not display differential activation of the limbic-prefrontal circuit when exposed to fear conditioning, and they fail to show conditioned skin conductance and emotional valence ratings.

Newman (1987, 1998) believed that the psychopath has a deficit in the ability to attend to normal cognitive and affective cues, suggesting that the deficiency occurs at the input level. He also thought that this difficulty was due to an essential defect in the structure of the psychopathic brain. Except for the assertion of a specific structural deficit, Newman's view differed from Cleckley's (1941) notion, which contended that the psychopath has a discrete pathology that precludes him from utilizing his knowledge and experience to regulate ongoing behavior, pointing to impairment at the processing and application level. Recent findings (Brinkley, Schmitt, & Newman, 2005) however,

suggest that, at least in tasks requiring significant semantic processing, psychopaths do not display the expected differential deficiency.

Hare's contribution to the etiological discussion consists of his lateralization theory which, based on his own as well as others' empirical findings, claims that the psychopathic brain may be less strongly lateralized – that linguistic functions are less concentrated in the left brain hemisphere and emotional functions less focused in the right hemisphere. Although the significance and potential effects of this possible structural distinction remains unclear, a recent and interesting finding may be related. Kroner, Forth, & Mills (2005) found that while psychopaths are able to report and disclose on negative affective dimensions in the same manner as non-psychopaths, their processing of negative affect is different, and arguably dysfunctional.

Perhaps psychopathy is in fact etiologically heterogeneous, as some have recently postulated (Brinkley, Newman, Widiger, & Lynam, 2004). This hypothesis proposes that there is a more complex network of specific biopsychosocial mechanisms that possess the potential to explain specific psychopathic syndromes.

Some researchers have argued that psychopathy may not be a disorder but rather “an evolved life strategy” (Harris, Rice & Lalumiere, 2001; p.402), or a lifestyle that has been molded by the adverse circumstances and demands of the individual's environment. This notion is consistent with the argument that personality disorders simply represent rigid and maladaptive extremes of the continuum of “normal” personality, rather than being discrete, abnormal categories of interpersonal behavior. Siding with the former perspective, Hare's scaled design of the PCL and PCL-R was founded on the theory that

there are grades of psychopathy, as well as severity degrees within the characteristics that make up the construct.

Factor Structure of Psychopathy

Arguably the most significant clinical construct in forensic psychology, psychopathy boasts an extensive amount of research that supports its validity and utility in a variety of forensic contexts (e.g., Hart & Hare, 1997; Seto & Barbaree, 1999; Rogers, Salekin, Hill, Sewell, Murdock, & Neumann, 2000). Until recently, the preponderance of that research had been based on Hare's (1991) original conceptualization of psychopathy, which consists of a 2-Factor structure: Factor 1 (Interpersonal/Affective), which represents the selfish, callous, and remorseless use of others; and Factor 2 (Behavioral/Lifestyle), which represents the chronically unstable, antisocial, and socially deviant lifestyle of the psychopath (see Appendix B).

In 2001, Cooke & Michie proposed that a 3-Factor hierarchical model (Appendix C) posed a better fit to the construct of psychopathy than the original 2-Factor model. Contending that the development of the 2-Factor model had been based on a statistical fallacy, Cooke & Michie postulated that psychopathy is in fact underpinned by three correlated factors: Factor 1 (Arrogant and Deceitful Interpersonal Style), Factor 2 (Deficient Affective Experience), and Factor 3 (Impulsive and Irresponsible Behavioral Style). A closer look at Cooke & Michie's 3-Factor model reveals that they essentially split Hare's original Factor 1 (Interpersonal/Affective) into their first two factors, and kept five of the nine PCL-R items that made up the original Factor 2 in order to make their third factor. The most significant structural and theoretical difference from the 2-

Factor model was the omission of seven original items, which Cooke & Michie described as criminal consequences of psychopathy.

Although theoretically appealing, and perhaps more clinically pragmatic, the 3-Factor model was criticized primarily on two bases. The first criticism arose from Cooke & Michie's decision to discard seven of the twenty original PCL-R items. They argued that the items represent antisocial manifestations of the core traits of psychopathy, but are not in themselves integral characteristics of the construct. This was viewed by many as detracting a fundamental component from the overarching construct of psychopathy, which, as indicated above, had been repeatedly validated by the literature in its full, 20-item form. Hare (2003) stated that personality pathology *is* deviant behavior, and thus the propensity for such behavior should be considered as an integral component of psychopathy. Even Cleckley (1941) identified "Inadequately motivated antisocial behavior" as a clearly psychopathic trait.

There is some direct evidence supporting Hare's contention, indicating that the criminality items contain clinically important information and that the 3-Factor model loses some predictive validity by omitting such items (e.g., Skeem, Mulvey, & Grisso, 2003). Two recent investigations have provided further empirical support, indicating that the 4-Factor model (discussed below), which includes the criminality items, is clinically superior to the 3-Factor model in predicting proximal and distal correlates of psychopathy (Vitacco, Neumann, & Jackson, 2005), and it better accounts for variance in generally violent recidivism risk as well as in sexually violent risk (Weaver, 2005).

The second major criticism that the 3-Factor model received was that its development, which utilized subsamples from the original data that was used in the

development of the 2-Factor model, had been based on a series of statistical misinterpretations and faulty methodology (see Hare, 2003 for details).

Debate ensued among investigators regarding the most accurate or appropriate factorial structure of the construct (see Hare, 2003 for review), until the work of Hare & Forth (2002) and Parker, Sitarenios, & Hare (2003) led to what appears to be the currently accepted conceptualization of psychopathy. As described in the latest revision of the PCL-R manual (Hare, 2003), psychopathy is now defined by the 2 original Factors, each of which is divided into two sub-factors or *facets* (Appendix D). Factor 1 (Interpersonal/Affective-8 items) is broken down into facet 1 (Interpersonal-4 items) and facet 2 (Affective-4 items), while Factor 2 (Behavioral/Social Deviance-10 items) is broken down into facet 3 (Lifestyle-5 items) and facet 4 (Antisocial-5 items). Factor 1 is identical to its original version, while the only change in Factor 2 is the addition of item 20, “Criminal Versatility.” The first three facets mirror Cooke & Michie’s 3 Factors, while facet 4 (Antisocial) is made up of five of the seven criminality items discarded in the 3-Factor model.

The first two facets of psychopathy can be conceptualized as follows. *Facet 1 (Interpersonal)*, which consists of items 1-Glibness/Superficial Charm, 2- Grandiose Sense of Self Worth, 4-Pathological Lying, and 5-Conning/Manipulative, represents the psychopath’s narcissistic patronization of others, sense of entitlement, egocentrism, and self-serving deceitfulness. *Facet 2 (Affective)*, which consists of items 6- Lack of Remorse or Guilt, 7-Shallow Affect, 8-Callous/Lack of Empathy, and 16-Failure to Accept Responsibility for Own Actions, represents the psychopath’s overall affective detachment and seeming absence of what we commonly refer to as a conscience.

Together, these two facets make up Factor 1, which has traditionally been identified as “a constellation of interpersonal and affective traits commonly considered to be fundamental to the construct of psychopathy” (Hare, 1991, p. 38).

The other two facets of psychopathy can be conceptualized as follows. *Facet 3 (Lifestyle)*, which consists of items 3-Need for Stimulation/Proneness to Boredom, 9-Parasitic Lifestyle, 13-Lack of Realistic, Long-Term Goals, 14-Impulsivity, and 15-Irresponsibility, represents the psychopath’s sense of disinhibition, poor judgment, and child-like egocentrism. *Facet 4 (Antisocial)*, which consists of items 10-Poor Behavioral Controls, 12-Early Behavioral Problems, 18-Juvenile Delinquency, 19-Revocation of Conditional Release, and 20-Criminal Versatility, represents the psychopath’s socially deviant history and criminal disposition. Together, these facets make up Factor 2, which is said to reflect the “chronically unstable, antisocial, and socially deviant lifestyle” (Hare, 1991, p. 38) that is characteristic of the psychopath.

Recent findings (Hall, Benning, & Patrick, 2004) have associated the interpersonal facet with social dominance, low stress reactivity, and higher adaptive functioning. The affective facet has been found to correlate with low social closeness and violent offending. The behavioral facet has been associated with negative emotionality, disinhibition, reactive aggression, and poor adaptive functioning.

Psychopathy and General Criminality

A collection of studies have consistently shown that psychopaths³ in general commit more crimes than non-psychopaths (Porter, Birt, & Boer, 2001; Hildebrand et al.,

³ Some researchers have defined psychopathy by a PCL-R Total score of 30 or greater (Hare, 1991), while others have set the threshold score at 27 (Rice & Harris, 1995). The former standard has been recommended for research purposes (Hare, 1991).

2004), with some reports indicating a 4 to 1 ratio (Wong, 1984). It has also been reported that psychopaths commit a greater variety of offenses, both violent and non-violent (Kosson, Smith, & Newman, 1990). High PCL-R scores have been associated with higher rates of violent crime (Williamson, Hare, & Wong, 1987), criminal recidivism (Hart, Kropp, & Hare, 1988; Serin, Peters, & Barbaree, 1990; Salekin, Rogers, & Sewell, 1996), and sexual recidivism (Quinsey, Rice, & Harris, 1995). These trends have motivated many to examine the relationship between psychopathy and criminality more closely.

Relative to Factor 1, Factor 2 has been found to be the more predictive component of psychopathy regarding both violent and non-violent types of offending (Barbaree, Seto, Langton, & Peacock, 2001; Gendreau, Goggin, & Smith, 2002). Gendreau et al. (2002) reported mean effect sizes to be larger for Factor 2 in predicting both, general (.24 vs .10) and violent (.19 vs .13) recidivism. Other investigations have listed Factor 2 as having significantly stronger correlations with both types of offending than does Factor 1 (Pham, Remy, Dailliet, & Lienard, 1997; Hare, Clark, Grann, & Thornton, 2000). It is well supported by the literature that the PCL-R's predictive strength lies upon Factor 2 items; at least for non-sexual type of offenses.

A more recent investigation indicates that within Factor 2, it is facet 4 (Antisocial) that is more strongly associated with both general and violent offending (Hare, 2003). Post-hoc analyses of Hare et al. (2000) data revealed that not only are criminal versatility and violence correlated with Factor 2 to a higher degree than with Factor 1, but they were clearly associated with facet 4 (Antisocial) to a significantly higher degree than with the other facets (Hare, 2003). It seems appropriate then, that instruments currently used to

predict the likelihood of general and violent reoffending have been shown to associate strongly with facet 4 of the PCL-R (Hare, 2003).

Psychopathy and Violence

Hare & McPherson (1984) were the first to examine the nature of the relationship between the components of psychopathy and violence, and found general violence ratings to be correlated .47 with Factor 2, .46 with PCL Total scores, and only .30 with Factor 1. Their study was the first of many that would differentiate Factor 1 from Factor 2 in terms of their relationship with violence.

One of such studies (Molto, Poy, & Torrubia, 2000) found Factor 2 to be significantly correlated with violent offenses such as rape (.24) and assault (.24), while Factor 1 failed to reach significance. Rape and assault are crimes clearly more characteristic of explosiveness, impulsivity, and violence, all of which are highly related to Factor 2. Several other studies have consistently tied Factor 2 to violent behavior, such as physical and verbal aggression against institution staff (Buffington-Vollum, Edens, Johnson, & Johnson, 2002; Rogers, et al. 2000), and assault against fellow inmates (Shine & Hobson, 2000).

In summary, the literature indicates that the predictive utility of the PCL-R for general offending and violence lies primarily on Factor 2 and perhaps facet 4 in particular. This does not mean that the same pattern holds true for sex-offending.

Psychopathy and Sex-Offending

It is arguably imprudent to assume that with respect to risk-assessment, sex-offending can be approached in the same way as general offending. There is clear data that supports this argument. Hare (2003) examined the relationship between PCL-R

scores and criminal convictions by different types of sex-offenders, and found that while offenses by violent sex-offenders (e.g., rapists) were related to Factor 2 more so than to Factor 1, offenses by non-violent sex-offenders (e.g., child molesters) were associated to a higher degree with Factor 1 than with Factor 2, thereby exemplifying the subtle yet potentially critical distinction between general offending and sexual offending with regard to risk-assessment. That is, while it has been well-established that Factor 2 accounts for both violent and non-violent versions of general offending to a greater degree than Factor 1 (e.g., Barbaree et al., 2001), Factor 1 has shown to be more predictive of non-violent offending than Factor 2 when referring to a sexual offense (Hare, 2003).

In a landmark study, Porter, Fairweather, Drugge, Herve, Birt, & Boer (2000) investigated the role that psychopathy plays in understanding the heterogeneity that is observed in sex-offending. For instance, while child molesters are thought to be motivated by sexual deviance (Malcolm, Andrews, & Quinsey, 1993) and seem to display interpersonal deviance and affective deficits (Prentky & Knight, 1991), rapists are driven more by anger and violence (Barbaree, Seto, Serin, Amos, & Preston, 1994) and tend to be characterized by their marked antisocial histories (Quinsey, Rice, & Harris, 1995). If looked at within the framework of psychopathy, these distinctions suggest that different types of sex-offenders must be characterized by different psychopathic profiles. Namely, non-violent sex-offenders seem to be better characterized by Factor 1, while violent sex-offenders seem to be better characterized by Factor 2.

Porter et al. (2000) findings were in fact consistent with this view. It was found that Factor 2 scores were higher for sex-offenders committing the more violent type of

sex-offenses (rape) than for those committing non-violent sex-offenses (molestation). More interestingly, results showed that while violent sex-offenders had higher Factor 2 scores than Factor 1 scores, non-violent sex-offenders had higher Factor 1 scores than Factor 2 scores. This last finding, again, illustrates the different predictive role of Factor 1 in sex-offending as opposed to general offending.

In addition, several studies have found that while Factor 2 scores have failed to correlate significantly with sexual recidivism in general, Factor 1 has shown to possess a significant level of predictive utility in this capacity (Langstrom & Grann, 2000; Olver & Wong, 2003; Hildebrand et al., 2004). For instance, Porter et al. (2001) reported that sex-offenders in general have significantly higher scores on Factor 1 than Factor 2. This consistent finding is in sharp contrast to the pattern observed in general and violent offending, where PCL-R Total and Factor 2 carry the majority of the predictive weight, and not Factor 1 (Porter et al., 2001).

Despite the availability of such empirical evidence, sex-offending risk-assessment instruments are seemingly designed without its consideration. That is, such instruments are thought to account significantly for the characteristics represented by Factor 2, and facet 4 (i.e. criminal history) in particular, while virtually ignoring the inquiry into the other facets of psychopathy. According to the aforementioned literature, such design makes sense for the risk-assessment of general offending and violence, but not necessarily for that of sexual offending, at least not for the non-violent type of sex-offending, which has loaded primarily on Factor 1.

Not surprisingly, 10 out of the 12 most commonly used instruments for the risk-assessment of sexual recidivism have shown to be more effective in the prediction of

general recidivism (Craig, Browne & Stringer, 2003), while only demonstrating moderate predictive accuracy for sexual recidivism (Epperson, Kaul, & Hesselton, 1998; Hanson & Thornton, 1999). This suggests that the risk factors that have been identified as effective predictors of general and violent offending may not behave exactly the same way (or be sufficient) when predicting sexual recidivism, which raises questions about the validity of using those measures with sex-offenders.

One of the objectives of this investigation is to provide empirical support for that argument, and hopefully encourage both the development of new sex-offender risk-assessment measures as well as the appropriate adjustment of existing ones.

Factors of Psychopathy and their Relationship to Sex-Offending

Individuals who score high on Factor 1 items of the PCL-R have generally been described as shallow and callous individuals who utilize manipulation and deceit for self-serving purposes while maintaining complete disregard for others (Hare, 1991). Such characterization seems to be fitting of the prototypical child molester, who is often non-violent. Factor 2 on the other hand, is descriptive of a more erratic and impulsive type of criminal, who would be more likely to recur to violence (instead of, or in addition to, psychological deviance) in order to attain some self-serving goal (Newman, 1998). This characterization seems to be more descriptive of the prototypical rapist, who is almost invariably violent. Naturally, offenders that are characterized to a different degree by each Factor have been associated with different types of offending (Hare, 2003).

Factors 1 and 2 have been differentiated by the type of deviance with which they most commonly associate. Cornell (1993) differentiated *instrumentality*, or aggressiveness carried out to achieve some goal (e.g., sexual gratification), from *reactive*

violence, which refers to the violent emotional response to a perceived threat or provocation. Cornell's definition of instrumentality reflects the features contained in Factor 1, such as callousness, deceitfulness, planning, and calculation, whereas the definition of reactive violence reflects Factor 2 features such as impulsivity and explosiveness. Not surprisingly, Factor 1 has repeatedly been found to associate significantly with instrumentality and goal-directedness, while Factor 2 has associated more strongly with reactive violence and harm to the victim (Dempster et al., 1996; Stafford, 1997).

Factor 1, facet 1 (Interpersonal) and non-violent sex-offending.

Foreman (1988) found that Factor 1 lies in the Arrogant/Calculating octant of the interpersonal circumplex, also labeled Narcissistic/Exploitative, while Factor 2 lies in the Cold-Hearted octant. The two Factors related equally negatively to the Love dimension (also called Affiliation), but were differentiated by the Dominance dimension, in which Factor 1 was found to load on dominance to a significantly greater degree than Factor 2. Based on these findings, one could conclude that, although similarly callous and detached, sex-offenders characterized by high Factor 1 scores possess a greater interpersonal ability to dominate their victims than those offenders better characterized by high Factor 2 scores. Further, one could extrapolate that the latter type of sex-offender compensates the relative deficiency of interpersonal dominance with the use of physical force or violence.

Factor 1 was also shown to be the stronger measure of interpersonal behavior in general, which is consistent with its conceptual structure, especially facet 1 (Interpersonal). High facet 1 (Interpersonal) scorers in particular, are thought to possess a

refined interpersonal style that could conceivably enable them to attain a self-serving goal (e.g., sexual gratification) without having to recur to violence, be it by threat of force or actual force. Recent findings (Hall, Benning, & Patrick, 2004) have already associated the interpersonal facet with social dominance.

One of the concerns driving this investigation is the belief that the characteristics represented by facet 1 of the PCL-R are relatively unaccounted for by currently used risk-assessment instruments, which could potentially render those instruments insensitive to the risk posed by the non-violent type of sex-offender.

Factor 2 (facets 3 & 4) and violent sex-offending.

In an examination of the relative association of the two Factors to sexual violence, Brown & Forth (1997) found that the sexual violence perpetrated by psychopaths tends to be impulsive and opportunistic rather than planned and goal-directed, suggesting that Factor 2 is more indicative of sexual violence than Factor 1. Corroborating that conclusion, Firestone, Bradford, Greenberg, and Serran (2000) reported that only Factor 2 correlated significantly with the more violent types of sexual offenses, such as rape and pedophile assault. Similarly, Porter et al. (2000) found Factor 2 scores to be significantly higher among the more violent type of sex-offenders (rapists) as compared to the less violent type (child molesters). Thus, the literature seems to indicate that the strong relationship between Factor 2 and violence that has been extensively documented for general offending is observed in sexual offending as well.

Factor 1, facet 2 (Affective) and violent sex-offending.

Despite forming part of Factor 1, facet 2 (Affective) of the PCL-R has been associated with sexual violence much like Factor 2 (Hare, 2003). Regarding sexual

offending, it is thought that the callous lack of empathy that is tapped by this facet is more characteristic of the sexual offender who would recur to physical aggression during an offense, than of the sexual offender who would refrain from escalating the offense to that level. Research suggests that sex-offenders with strong affective deficits (e.g., lack of empathy) are more likely to use aggression in their offenses than those without such deficits (Paris, Yuille, Walker, & Porter, 1999). In terms of psychopathy, high facet 2 (Affective) scores are likely to associate with sexual violence, and thus with Factor 2.

In comparing sexual murderers with rapists who had not killed their victim, Grubin (1999) found a significant distinction in the degree of both social and emotional isolation endured since childhood, with the sexual murderers being the most deprived. Grubin alludes to the possible relationship between such isolation and the lack of empathy that is observed in the most violent type of sex-offenders. That position is supported by earlier data, in which sadistic offenders and sexual killers have been identified as introverted, timid, socially isolated, and as having general difficulties in social relationships (Brittain, 1970; MacCulloch et al., 1983).

Aggression then, seems to be facilitated in sex-offenders by an inability to empathize or understand the pain and suffering of others. This deficiency is tapped by facet 2 of the PCL-R, which represents the affective component of psychopathy. A recent review strongly supports the notion that a causal relationship in fact exists between particular affective states and violent forms of sex-offending (Howells, Day, & Wright, 2005).

In summary, facets 2, 3, and 4 seem to reflect the characteristics associated with violent types of sexual offending, while there is some theoretical suggestion that facet 1

may be more representative of the non-violent type of sexual deviance. The violent type is conceptualized as the callous, impulsive antisocial who personifies an indiscriminant and unpredictable criminal time-bomb. The non-violent type, on the other hand, is viewed more as the criminal mastermind who utilizes his psychological deviance and interpersonal stealth in an analytical plot to satisfy his self-interests.

Admittedly, clear and definitive data is not yet available regarding the role that the different elements of psychopathy play within the realm of sex-offending. Even though some research has associated general psychopathy with both violent and non-violent recidivism rates by sex-offenders (Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001; Hildebrand et al., 2004), the nature of that relationship at the facet level of psychopathy remains unclear.

This investigation attempts to clarify how the characteristics represented by the different components of psychopathy (i.e. PCL-R Factors and facets) relate to the type of sex-offenses that are committed, particularly in terms of the degree of forcefulness (i.e. violent or non-violent) that is used during the offense.

Sexual Offending and Violence

A review of the literature on sex-offending reveals that the criteria used to categorize sex-offenses as either violent or non-violent vary across studies. Although researchers usually have a theoretical rationale for the way in which they decide to categorize sex-offenses, the lack of consistency makes it difficult to interpret the results in the context of other findings. Often the distinction between a violent and non-violent offense has been based on the formal charge or conviction, where offenses such as rape and sodomy are considered to be violent, and an offense like molestation is considered to

be non-violent (Barbaree, Seto, Langton & Peacock, 2001). This criterion is completely objective and does not take into consideration the offender, the victim, or the context of the offense. Other researchers have based the distinction on the degree of physical harm resulting from the offense, regardless of the nature of the offense or the offender's intentions (Sjoestedt & Langstroem, 2001).

Independent of which criterion is selected to determine whether an offense is violent or non-violent, it is apparent how there can often be gray areas between the two categorizations. For instance, one variable that always muddies the water is the victim's age. A young child can be so weak and fragile that even if the offense does not meet the first criterion for violence mentioned above, it could still result in serious physical injury, thus meeting the second criterion. This leads to yet another criterion used by some statutes, where a sex-offense is automatically labeled as violent if the victim is younger than a certain age.

The above criteria for determining whether an offense is violent or non-violent share the seeming lack of interest in both the offender and the nature of the offense (beyond its mere denomination). Very rarely are the perpetrator's integral characteristics (e.g., motivation, intention, affective state, interpersonal style, lifestyle) accounted for, even though the ultimate purpose is to identify which offenders are dangerous, and in what way. Such determination has commonly been based on the legal denomination of the offense and not on how or why it occurred; or it has been based more so on the victim's characteristics (e.g., age, gender) rather than on the offender's personal characteristics.

If mental health and correctional professionals intend to make an assessment of, not only the level of danger posed by an offender, but also the type of danger that is posed (e.g., violent or non-violent; sexual or non-sexual), it seems nonsensical and arguably irresponsible for evaluators not to conduct a thorough examination of the offender's core characteristics, given that such characteristics are likely to be significant contributors to the very behavior of interest.

This research project is interested in understanding the dynamics that make sex-offenders either violent or non-violent, so that we can become smarter judges about the type and degree of risk that they pose. It is believed that in order to gain such understanding, it is necessary to study the personal characteristics of the offender, including his interpersonal, affective, and lifestyle characteristics, instead of relying exclusively on his criminal record. It is argued that a more clear sense of what the offender is like in general, and what the offender was like during the offense, is critical to the accurate prediction of the type and degree of dangerousness that he represents.

In this study, then, sex-offenses are categorized as either violent or non-violent based on the *degree of forcefulness* utilized by the perpetrator in order to commit the offense. This measure of violence is thought to be directly informative about the true nature of the offender; not only of what he is capable of doing, but also of what he is willing to do. This method also provides an objective index of reference from which predictions of dangerousness can be made. Here, a sex-offense is considered to be violent when, in order for the act to occur, the perpetrator used either *threat of force* or some level of *actual force*. Sex-offenses that did not occur under either of these conditions are considered to be non-violent. Common examples of non-violent sex-offenses include

those in which the act was *consensual*, and those in which the perpetrator used no more than *manipulation* or *coercion* in order for the act to occur.

The threshold discriminating between violent and non-violent sex-offenses, as derived for the purpose of this investigation, can be conceptualized from two different perspectives; that of the victim and that of the perpetrator. From the victim's perspective, an act is considered to be forceful as soon as the victim feels that there is no choice other than to comply with the offender in order to remain relatively safe. Even when the victim is manipulated or coerced into participating in a sexual act, it is considered that technically, the victim still maintains some level of control over the situation and could opt not to participate, and therefore the act is not considered to be necessarily forceful. From the perpetrator's viewpoint, the discriminating question becomes how far the offender is willing to go in order to get what is wanted from the victim. The offense becomes forceful once the perpetrator disregards the victim's will to participate or not, and recurs to threatening the victim with the use of force, or actually uses physical force in order for the act to occur.

This investigation aims to determine if the psychopathic profile of sex-offenders is meaningfully related to the degree of forcefulness that is utilized in their offenses, and if so, to examine the potential implications for current risk-assessment practices.

PCL-R and Other Risk-Assessment Instruments

Although the PCL-R was not designed as a risk-assessment tool, the construct that it measures, psychopathy, has consistently and convincingly demonstrated to have predictive validity in the risk-assessment of criminal behavior and violence (Hare, 1996; Hare et al., 1999; Hart, 1998; Hemphill & Hare, 2004). Accordingly, the PCL-R,

especially Factor 2, has been shown to have an impressive level of convergent validity with risk-assessment instruments that were specifically intended for the prediction of general and violent offending (Serin, Peters, & Barbaree, 1990; Hemphill, 1992; Serin, 1996). In fact, several studies have found the PCL-R to be just as accurate as those instruments (e.g., Barbaree, Seto, Langton, et al., 2001), and some times better (Pham et al., 2000).

One of such measures is the Violence Risk Appraisal Guide (VRAG; Harris, Rice, Quinsey, 1993), which is currently recognized as one of the most effective instruments for the prediction of violence (Harris, Rice, & Cormier, 2002). In that capacity, the VRAG has demonstrated an Area Under the Curve (AUC) of .76, indicating three correct classifications for every false-positive. Studies using the PCL-R to predict violence have reported moderate effect sizes ranging from $r = 0.27$ (Hemphill, Hare, & Wong, 1998) to $r = 0.37$ (Salekin et al., 1996), indicating a comparable, better than chance index of predictive accuracy.

Despite not being designed specifically for the prediction of sexual recidivism, the VRAG's predictive accuracy in that domain has shown to be of some significance (Rice & Harris, 1997). More specifically, the tool has demonstrated to be moderately successful in the prediction of violent sex-offenses, and to a somewhat lesser degree, non-violent sex-offenses (Barbaree, Seto, Langton, & Peacock, 2001).

The PCL-R has consistently been found to correlate significantly with the VRAG, even after considering that the PCL-R Total score is the most weighted item on the VRAG. Loza & Dhaliwal (1997) reported a correlation of .76 between the two total scores, which was admittedly inflated by keeping the PCL-R item on the VRAG.

Nevertheless, subsequent studies have confirmed that the correlation remains high and significant even after partialing out the PCL-R item from the VRAG score; some of the published correlation indexes are .60 (Hemphill, Hare, & Wong, 1998), .70 (Barbaree, Seto, Langton & Peacock, 2001), and .77 (Kroner, Mills, & Reddon, 2002).

In an attempt to better understand the nature of the strong relationship between the PCL-R and the VRAG, Glover, Nicholson, Hemmati, Bernfeld, & Quinsey (2002) utilized a sample of general offenders (non-sexual offenders) to examine how their VRAG scores were related to each of the PCL-R Factor scores. Given that the content of the VRAG focuses on criminal behavior, scores were expected to be more strongly related to Factor 2 of the PCL-R. Not surprisingly, the authors found the VRAG to correlate .82 with Factor 2, and only .12 with Factor 1. Such results provide compelling support to the notion that the dimension of psychopathy that the VRAG utilizes in its predictive equation is primarily the one associated with the offender's antisocial lifestyle and social deviance (F2), while it virtually disregards the offender's interpersonal and affective constitution (F1). It is believed that this may help explain why the VRAG is relatively more effective in the prediction of violent sex-offenses than non-violent sex-offenses.

In addition, VRAG and Factor 2 scores were found to be highly correlated with violent recidivism, while Factor 1 scores failed to correlate significantly with violent recidivism. These results indicate that both the VRAG and Factor 2 tap into the more violent end of the criminality continuum, whereas Factor 1 does so to a significantly lesser degree. Even though this is what would be expected from the VRAG given that it

was designed to predict violence, what is of most relevance here is the distinct functional difference between the two PCL-R Factors in terms of general risk-assessment.

This investigation reexamines the relationship between PCL-R scores and the VRAG, this time using a sex-offender sample, and will attempt to expand on Glover et al. (2002) findings by analyzing the relationship at the facet level of psychopathy in addition to the factor level.

Unlike the VRAG, several other instruments have been developed specifically for the prediction of sexual re-offending. Two of the best known instruments in that capacity are the Static-99 (Hanson & Thornton, 1999) and the Minnesota Sex-Offender Screening–Revised (MnSOST-R; Epperson, Kaul, & Hesselton, 1998). These two instruments have been reported to have AUC values ranging from .73 to .80 (Epperson et al., 1998; Hanson & Thornton, 1999) in the prediction of sexual recidivism, which is considered to be moderately effective.

Barbaree, Seto, Langton & Peacock (2001) reported that, among a sample of 212 sex-offenders, the PCL-R correlated .45 with the Static-99, and .30 with the MnSOST-R. It is generally accepted that the PCL-R is more closely associated with instruments designed to predict general and violent recidivism (e.g., VRAG), than with those specifically intended to predict sexual re-offending (e.g., Static-99, MnSOST-R) (Hare, 2003).

The Static-99 (Hanson & Thornton, 1999) was developed specifically to estimate the probability that a sex-offender will re-offend sexually. Partly because it is composed of empirically validated variables, the Static-99 is able to yield an explicit probability estimate of a sexual reconviction. In addition, the Static-99 has shown to be robustly

predictive with a wide variety of forensic samples (Harris, Phenix, Hanson, & Thornton, 2003). In a recent study evaluating the long term predictive validity of various risk assessment instruments (Static-99, HCR-20, SVR-20, PCL-R), the Static-99 was found to be the most effective predictor of both violent and non-violent sexual recidivism (Stadtland, Hollweg, Kleindienst, Dietl, Reich, & Nedopil, 2005). For its empirical foundation and practical advantages, the Static-99 is highly regarded in sex-offender risk-assessment practices.

Nevertheless, the Static-99 has been found to be only moderately predictive of sexual recidivism (Sjoestedt & Langstroem, 2001; Hanson & Thornton, 2000). More specifically, its predictive accuracy has shown to be more significant for violent types of sex-offending than for the non-violent type (Harris, Rice, Quinsey, Lalumiere, Boer & Lang, 2003), much like the pattern observed with the VRAG. Perhaps the most notable criticism of the Static-99 is that it does not include all of the relevant risk factors for sex-offenders, some of which are argued to reflect the offenders' core attributes. This arguable deficiency in design may help explain why the Static-99 has demonstrated only moderate predictive accuracy ($AUC = .71$) (Hanson & Thornton, 2000).

This investigation addresses this concern, and suggests that the Static-99, as well as the VRAG and the MnSOST-R (discussed below), may improve their predictive effectiveness by addressing other aspects of the offender in addition to his criminal record.

The Minnesota Sex-Offender Screening Tool-Revised (MnSOST-R; Epperson, Kaul, Hesselton, 1998) was developed on a population of adult, male, incarcerated sex-offenders, and was designed to be scored based upon file review. Some evidence suggests

that the MnSOST-R may not be as effective as the VRAG or the Static-99 in the prediction of sexual recidivism (Barbaree, Seto, Langton & Peacock, 2001). Much like the VRAG and the Static-99, the variables addressed by the MnSOST-R items focus primarily on stable characteristics such as the offender's criminal career, basic description of the offense(s), and victim(s) descriptors. The MnSOST-R does include four "dynamic" items that address the offender's institutional behavior and adjustment to incarceration. However, the interpersonal, affective, and lifestyle components of the offender are absolutely unaccounted for by this as well as the aforementioned instruments (VRAG & Static-99).

Following is a brief review of the four instruments used in this investigation.

Psychopathy Checklist-Revised (PCL-R; Hare, 1991)

The Psychopathy Checklist is a 20-item factorial scale designed to assess the degree to which an individual fits the interpersonal, affective, and behavioral composition of the prototypical psychopath. Each item is rated zero (not present), one (present to some degree), or two (definitely present) depending on the degree to which the item characterizes the individual. For research purposes, individuals who score 30 or above (out of a maximum possible score of 40) are considered *psychopaths*. The instrument was developed on a sample of adult, male incarcerates, and has been validated consistently in a variety of forensic settings and with a diversity of forensic samples.

Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 1998)

The Violence Risk Appraisal Guide (VRAG) is an actuarial instrument designed to ascertain an offender's risk of general and violent recidivism (Quinsey, Harris, Rice, & Cormier, 1998). The instrument was normed on a sample of Canadian offenders,

including sex-offenders. Scores on the VRAG are interpreted as representing the risk of committing any future violent offense, sexual or non-sexual. Twelve items make up the VRAG, one of which is the total score on the PCL-R.

Static-99 (Hanson & Thornton, 1999)

The Static-99 is named so because Canadian researchers Hanson & Thornton first developed it in 1999, and designed it to tap into the *static*, or unchangeable, criminal characteristics of the sex-offender in order to predict the likelihood of sexual recidivism. The instrument is made up of ten items that address variables shown to be statistically associated with sexual recidivism by adult males, such as prior criminal history (sexual and non-sexual) (Andrews & Bonta, 2003), incidence and type of violence in those offenses (Thornton & Travers, 1991), relationship to the victim (Hanson & Bussiere, 1998), and other basic demographic information of both the offender (age, relationship status) (Hanson, 2001), and the victim (gender) (Hanson & Bussiere, 1998). The Static-99 was developed on a series of sex-offender samples in the United Kingdom and Canada.

Minnesota Sex-Offender Screening Tool-Revised (MnSOST-R; Epperson, Kaul, & Hesselton, 1999)

The Minnesota Sex-Offender Screening Tool-Revised (MnSOST-R) is an actuarial instrument designed specifically for the purpose of predicting sexual recidivism by convicted sex-offenders (Epperson, Kaul, & Hesselton, 1998). It consists of 16 actuarially weighted items measuring variables associated with sex-offending history, nature of the sex-offense(s), and victim characteristics. The original validation sample consisted of 256 sex-offenders convicted of rape or extrafamilial child sexual abuse.

Concerns with Current Risk-Assessment Practices

Mental health professionals rely heavily, and some times exclusively, on these and other similar actuarial instruments in order to appraise the level of risk posed by sex-offenders. The reason for the apparent level of confidence on the effectiveness of the actuarial method is founded upon some empirical data suggesting that knowing enough about a sex-offender's past enables one to predict his future behavior with fairly good accuracy. Nevertheless, the validity and utility of such data is questionable.

Thornton & Travers (1991) indicated that previous convictions and repeated offending of any type (sexual or non-sexual) are reliable risk indicators of sexual recidivism. Similarly, Marshall (1994) found sex-offending history to be an important risk factor for re-offending. However, closer examination of such findings reveals that "statistical significance" does not necessarily equal practical utility. In Thornton & Travers (1991) sample, out of the high-risk group, three out of four individuals were never reconvicted (75% false-positives), and only 7% of the high-risk individuals in Marshall (1994) were actually reconvicted (93% false-positives). Observations like these give strength to the argument that the exclusive use of actuarial data for assessing risk can yield a concerning proportion of false-positives. It is proposed that by assessing the core characteristics of the offender, in addition to his criminal history, it is possible to reduce the unacceptable rate of false-positives, and maximize the identification of only those offenders who pose real danger.

Actuarial measures consist on gathering historical data with the purpose of predicting the future. One criticism for employing this approach in risk-assessments, is that it subsumes that human beings are a linear and direct function of their histories, and

that their behavior is somehow predetermined by static and unchangeable characteristics of their past (Grubin, 1999). In addition, the nature of the actuarial approach does not allow it to factor in the specifics and idiosyncrasies of individual offenders. While helpful in identifying group types, actuarials inform us little about the individuals within the group, and thus should be complemented by the assessment of other dimensions that can add a quality of specificity to the overall evaluation. Current instruments virtually ignore the inquiry into the personal traits of the offender (e.g., interpersonal, affective), focusing instead on what he has done in the past.

Another concern with actuarial instruments for the assessment of risk is that they don't have a sound theoretical basis, as they are solely concerned with significant associations among otherwise unrelated variables. This is of both clinical and theoretical relevance. Clinically, it has already been discussed that risk estimates based exclusively on actuarial, static data is adequate at best, with an undeniably high resulting index of false-positive errors. Theoretically, the lack thereof leaves us in the darkness with regard to the true understanding of the core components and dynamics that drive criminal behavior (in this case sex-offending).

The latter concern has encouraged several researchers (Knight, 1999; Hudson, Ward, & McCormack, 1999; Proulx, 2000; Hanson & Bussiere, 1998; Roberts, Doren, & Thornton, 2002) to develop empirically grounded theoretical models of sex-offending, so that they may provide foundation for the development of more effective and cohesive risk-assessment instruments. The resulting theories seem to share a common view. Different forms of sexual-offending seem to be motivated by two independent components or dimensions: 1) a sexually deviant preoccupation that is characterized by

explicit planning, negative affect, immaturity, lack of intimate attachments, insecure attachments, lack of social integration, and lack of remorse, and/or 2) a set of personality characteristics related to a history of antisocial and violent behavior, aggressiveness, and hostility.

While these two components have been found to be equally indicative of underlying risk for sexual recidivism (Roberts et al., 2002), they are thought to be relatively separable in that they make independent contributions to overall prediction. More specifically, the first dimension is more apparent in non-violent sex-offenses such as pedophilia, while the second one is characteristic of the more violent forms of sexual-offending (Roberts et al., 2002). Looking at these findings through the tinted glass of the PCL-R, one can easily associate the two types of sex-offending (non-violent and violent) with the two factors of psychopathy (F1 and F2, respectively).

Altogether, this line of research provides reliable empirical support for a theoretical framework within which new assessment instruments can be designed. Evidently, different types of offenders can be differentiated by more than just their criminal record. Therefore, it is proposed that current risk-assessment practices can be improved by assessing the clearly multidimensional nature of the offender, rather than merely recording his past history. The multidimensional nature of the psychopathy construct, as portrayed in the PCL-R, offers an empirically validated and theoretically appealing blueprint from which more accurate and effective sex-offending risk-assessment instruments can be developed.

Theoretical Basis

It is argued that due to the conceptual design of currently used risk measures, at least some genuinely dangerous sex-offenders may not be effectively detected and identified as posing *high-risk*, which of course could result in serious consequences for the public at large. The main purpose of this research is to provide empirical evidence to support that argument. In addition, the results from this investigation may help explain why current risk-assessment instruments yield such a high rate of false-positive identifications of danger, and a theoretically-based solution to that problem will be suggested.

It is believed that sex-offenders who commit different types of sex-offenses are significantly different from one another, not only in their lifestyle and behavior, but also in their characterological constitution. Such differences are thought to predispose each sex-offender to commit a particular type of sex-offense more so than another.

In this investigation, it is anticipated that violent and non-violent sex-offenders will be characterized by distinct psychopathic profiles. It is believed that their respective characteristics not only define the type of offenders that they are, but they also indicate the type of offense they are likely to commit if they were to reoffend. Specifically, it is hypothesized that non-violent sex-offenders (e.g. child molesters) are characterized by the type of psychological and interpersonal deviance represented by facet 1, while violent sex-offenders (e.g. rapists) are characterized by the overtly criminal tendencies represented by Factor 2 (facets 3 & 4) as well as by the cold-heartedness represented by facet 2.

The impetus behind this investigation is the concern that currently available risk-assessment instruments are not designed in a way that properly accounts for such differences in typology. More specifically, instruments are thought to unwarrantedly tap into only one dimension (facet 4) of what is thought to be a multidimensional net of risk factors.

It is argued that the design of such instruments does not allow for the detection of risk in certain types of offenders. It is proposed that the instruments do not probe sufficiently, or proportionately, into particular aspects of the offender believed to be vital to the type and severity of risk that is posed. The fact that there is a conceptually homogeneous design among all available risk-assessment instruments for sex-offenders suggests that there is a general assumption that all sex-offenders are typologically the same, or that the same risk factors apply to all types of sex-offenders. This investigation contests that assumption.

In order to maximize the likelihood of making an accurate risk assessment, the assessor, be it a person or an instrument, needs to thoroughly examine the offender and measure the degree to which he personifies the risk factors previously established to be associated with the behavior in question. However, if those risk factors have not yet been clearly identified by valid empirical work, the assessment process should aim to examine the subject in a much more comprehensive and multidimensional manner, so as to avoid missing the information that is actually indicative of risk.

Consider the following analogy. Imagine that all violent sex-offenders, risky and not-risky, have been associated with three independent features: brown hair, green eyes, and a stature under 6 feet. As of yet unbeknownst to clinicians, however, it is only those

who possess the brown hair / green-eyed / stature combination that pose a heightened risk to reoffend. It is argued that until such specification of risk has been empirically established, prudent risk-assessment practices should evaluate all three characteristics, hair-color, eye-color, and height, equally. The concern is that current practices tend to rely exclusively on eye-color, and only label all green-eyed sex-offenders as risky just because green eyes alone have been associated with crime in general. This method, it is argued, allows for two major clinical problems to occur. First, many harmless green-eyed sex-offenders (i.e. those with hair color other than brown and/or stature over 6 feet) will be mislabeled as risky (false-positives). Secondly, this method may miss an entire subgroup of risky sex-offenders who may actually be better characterized by hair color and height alone. For instance, the non-violent type of sex-offender that is prone to reoffend may be found to be exclusively characterized by the brown hair / stature combination, regardless of eye-color. These individuals would be “missed” by the eye-color biased measures.

The relationship between psychopathy and sexual offending is neither as strong nor as clear as it is with general and violent offending (Gretton & Hare, 2003; Barbaree, Seto, Langton, et al., 2001). It has even been proposed that psychopathic sex-offenders are simply psychopaths who commit sex-offenses as part of their much more extensive repertoire of offenses (Hare, 2003). Nevertheless, some data suggests that there may be something unique about the way psychopathy relates to sexual offending. For instance, several studies have documented that the relationship between psychopathy and sexual-offending strengthens significantly when there is an added component of sexual deviance in the offender (Rice and Harris, 1997; Olver & Wong, 2003; Hildebrand et al., 2004),

making such individuals a particularly high-risk group (Harris, Rice, Quinsey, Lalumiere, Boer & Lang, 2003). It is clear that this line of research must continue its course, not only for the theoretical advancement of the field, but more importantly for the clinical implications of its findings.

The essential guideline in Cleckley's symptom list as well as in Hare's checklist is that the more psychopathic traits an individual possesses, the closer he is to the prototypical psychopath, and thus the more dangerous he is. Yet, given the different elements making up the construct of psychopathy, it is conceivable that two quantitatively equivalent psychopaths can be of two distinct typologies, and as such, represent different types of danger. It has already been discussed that constitutionally different sex-offenders, with different psychopathic profiles, are likely to be responsible for different types of offenses. Therefore, it is critical for sex-offenders to be studied and evaluated more thoroughly and comprehensively, including at a more characterological level, in order to make better, more educated decisions regarding both the type and severity of danger that they pose.

Hypothesized Results

This investigation can be conceptualized as consisting of two phases. The initial phase will examine the nature of the relationship between sex-offenders' PCL-R Factor and facet scores, and the degree of forcefulness used during their offense(s) (i.e. violent or non-violent). Once that relationship is defined in terms of statistical and practical significance (i.e. effect sizes), the second phase will measure the degree to which the same elements of psychopathy are accounted for by three actuarial instruments

commonly used for the risk-assessment of sexual recidivism (VRAG, Static-99, and MnSOST-R).

Phase I

The objective of Phase I is to determine whether there is a meaningful relationship between the elements of psychopathy (PCL-R Factors and facets) and the degree of forcefulness (violent or non-violent) used by sex-offenders during their offenses. Based on a review of the literature pertaining to psychopathy and its role in criminality and sex-offending in particular, the hypotheses for Phase I are as follows:

Factor and Facet Differences within Violence Category

- 1a) Violent sex-offenders will have significantly higher Factor 2 scores than Factor 1 scores.
- 1b) Violent sex-offenders will have significantly higher scores on facets 2, 3, and 4 than on facet 1.
- 2a) Non-violent sex-offenders will have significantly higher Factor 1 scores than Factor 2 scores.
- 2b) Non-violent sex-offenders will have significantly higher scores on facet 1 than on facets 2, 3, and 4.

Factor and Facet Differences between Violence Categories

- 3a) Violent sex-offenders will score significantly higher than non-violent sex-offenders on Factor 2.
- 3b) Violent sex-offenders will score significantly higher than non-violent sex-offenders on facets 2, 3, and 4.

4a) Non-violent sex-offenders will score significantly higher than violent sex-offenders on Factor 1.

4b) Non-violent sex-offenders will score significantly higher than violent sex-offenders on facet 1.

The results from Phase I will reveal whether PCL-R Factor and facet scores can meaningfully differentiate between violent and non-violent sex-offenders.

Phase II

The objective of Phase II is to determine the degree to which three actuarial instruments commonly used for the risk-assessment of sexual recidivism (VRAG, Static-99 and MnSOST-R) associate with the characteristics represented by the different elements of psychopathy (PCL-R Factors and facets). Based on a review of the relevant literature, the hypotheses for Phase II are as follows:

5) VRAG, Static-99, and MnSOST-R scores will be more highly related to Factor 2 than Factor 1.

6) VRAG, Static-99, and MnSOST-R scores will be more highly related to facet 4 than facets 1, 2, or 3.

Hypotheses 5 and 6 are based both on previous findings (Glover et al., 2002; Hare, 2003) as well as theory. Given the content of these risk measures (criminal history), it is clear why they should be more strongly associated with the social-deviance component of psychopathy (Factor 2) than with the interpersonal and affective components (Factor 1). More specifically, a cursory review of the items on all three risk-assessment tools suffices to recognize the overlapping content with the dimension of psychopathy that is tapped by facet 4 of the PCL-R, criminal history.

The results from Phase II will reveal the degree to which these risk measures address the characteristics represented by the different Factors and facets of the PCL-R.

Phases I & II: Implications for Clinical Practice

The risk-assessment instruments are not expected to appropriately reflect the pattern of characterological and behavioral descriptors associated with violent and non-violent sex-offenders, which, in light of the results from Phase I, could be cause for clinical concern. The particular concern with these risk-assessment resources can be broken into two parts. First, there is concern with the tools' sensitivity to the risk factors associated with a particular type of offender (possibly non-violent sex-offenders). Second, their specificity for the risk factors associated with another type of offender (possibly violent sex-offenders) is dubious.

If results show that the VRAG, Static-99, and MnSOST-R in fact tap primarily into offenders' overtly criminal characteristics (PCL-R Factor 2), while lacking sensitivity to the more subtle and covert dimension of the psychopathic sex-offender (PCL-R Factor 1), it could be argued that mental health and correctional professionals who use these measures run the risk of missing an entire subtype of sex-offender who may be characterized to a greater degree by Factor 1 than by Factor 2 (here speculated to be non-violent sex-offenders). More specifically, the relative disinterest in the characteristics represented by facets 1, 2, and 3, would preclude the detection of potentially dangerous sex-offenders who may be primarily characterized by those dimensions of psychopathy.

If such measures are in fact predominately associated with the characteristics represented by facet 4 of the PCL-R, while failing to account sufficiently or

proportionately for the characteristics represented by PCL-R facets 1, 2, and 3, there would be empirical support to the theory proposing why the instruments yield such a high rate of false-positive identifications of danger. It is argued that while the risk factors represented by facet 4 (i.e. criminal history) may help amass a large group of possibly dangerous individuals, the additional and proportionate assessment of the characteristics represented by facets 1, 2, and 3 would help raise the specificity of the overall evaluation, and thus reduce the ratio of false-positives.

For instance, if results from Phase I reveal that in addition to high facet 4 scores, violent sex-offenders tend to be characterized by equally high scores on facets 2 and 3, then what would have originally been a high number of possibly dangerous offenders (all high facet 4 scorers) could be reduced to a more specific and accurate number of offenders that actually fit the multi-faceted prototype of violent dangerousness simply by also measuring their facet 2 and facet 3 features.

Hypothesis 7

Finally, in order to determine if current instrumentation is differentially sensitive to violent and non-violent sex-offenders, their total scores in all three risk measures will be compared. The last hypothesis is as follows:

7) Violent sex-offenders will score significantly higher than non-violent sex-offenders in all three measures of risk.

One of the purposes of this investigation is to determine whether current risk-assessment instruments can effectively detect risk not only in violent sex-offenders, but also in non-violent sex-offenders. If current instrumentation does not account for risk in

non-violent sex-offenders, their conceptual design, along with the role of psychopathy in sex-offending, may help explain why it is that these tools are faced with such problem.

It may be argued that the reason why risk-assessment measures are better attuned to violent offending is because violent offenders are in fact more likely to reoffend than non-violent offenders. While this may be true for general offending, such claim has yet to be empirically supported for sexual offending.

Furthermore, the fact that violent offenders have higher recidivism indices than non-violent offenders could only mean that they are being reported and “caught” at a higher rate. Violent offenses are much more salient and more immediately perceived as being perpetrated by the riskiest of offenders. On the other hand, non-violent offenses, particularly of a sexual nature, can go undetected for longer periods of time even though they can be just as prevalent and damaging as physically violent offenses.

More importantly, the perpetrators of non-violent offenses can pose serious risk without necessarily having to be violent offenders. The degree of violence that characterizes an offender is not necessarily indicative of the level of risk he poses, at least not when referring to sex-offending.

Further research is needed to clarify the relative prevalence of recidivism by violent and non-violent sex-offenders. Until then, current risk-assessment instrumentation needs to broaden its focus in order to account for the risk factors associated with every type of sexual offending.

GENERAL METHOD

Participants

The total sample used in this investigation (N = 1739) consists of every adult, male, convicted sex-offender assessed in the Sex-Offender Risk-Assessment (SORA) unit of the Kentucky State Reformatory (KSR) from December 1998 to December 2003⁴.

The entire sample was assessed by qualified non-research clinicians as part of a comprehensive state-mandated risk-assessment procedure in accordance to the original Sex-Offender Community Notification Law. SORA began its evaluations, “Sex Offender Risk Assessments,” in December 1998. As a result of a change in legislature, it changed from “SORA’s” to Comprehensive Sex Offender Pre-Sentence Evaluations (CSOPE’s) in April 2000 and has had this form ever since.

The purpose of the original risk assessments (1998-2000) was to recommend to the court a risk level (low, moderate, high) for sexual reoffense. The Court, of course, made the final determination of risk level. Based upon the risk level assigned by the Court, the offender would have different sex-offender registration requirements (e.g., “high-risk” meant lifetime registration, with more detailed information being released vs. moderate/low requiring 10-year registration and less personal information being released). Many of the evaluations done from 1998 to 2000 were conducted on

⁴ At the time of this investigation risk-assessment data from January, 2004 to the present date had yet to be fully coded and/or configured into the general SORA database, therefore it was not included in the analyses.

defendants being released from prison, though some pre-sentence cases were also included (the same type of report was done in those cases).

From April 2000 to the present, all the evaluations have been on pre-sentence cases. Risk to reoffend sexually has continued to be an important component of the current evaluations. In addition, the professional opinion now includes recommendation for treatment location (institution/community).

SORA evaluators responsible for gathering and coding the data used for this investigation consist of six Ph.D./Psy.D. clinicians, one Ed.D., and one M.S., all of whom received formal training through monthly and yearly meetings which consist of inservice didactic lectures conducted by the Department of Corrections. Those meetings include discussion and intensive training on use of the PCL-R and the various risk-assessment instruments that are utilized in the SORA unit. All but two Ph.D/Psy.D. clinicians obtained additional formal training in standard training seminars conducted by certified experts on particular instruments. Given the standardized structure of the SORA interview, no interrater reliability indexes have been recorded, as the entire group of SORA clinicians is considered a single rater.

All assessments were conducted on sex-offenders on either pre-sentence or pre-release status in order to determine the level of risk that they posed, and deliberate accordingly. Such assessments are ongoing at KSR at an approximate rate of thirty to forty new cases a month, making the growing sample one of the largest data sets of its kind in the literature on sex-offender risk-assessment.

Offender Characteristics

Basic Offender Demographics

Tables 1 and 2 below display the ethnic distribution of the violent and non-violent sex-offender groups analyzed in this investigation. The clear majority in both groups is White, followed by a minority of African-Americans, and a virtually negligible proportion of other ethnic denominations. Interestingly, the White to Black ratio in the violent group is approximately 80:20, while in the non-violent group it is approximately 90:10. This difference seems meaningful and, although not addressed further in the present investigation, it appears important enough to examine it further in future research. Possible hypotheses⁵ for the discrepancy include the following: a) African-American sex-offenders are more prone to commit violent offenses than non-violent offenses, and b) the current legal system is in some way biased, and as a result more African-American sex-offenders are convicted of violent offenses than non-violent offenses. According to the latest national Census, African-Americans make up roughly 15% of the U.S. population, which falls between the two proportions mentioned above (U.S. Census, 2000).

Table 1.

Violent Sex-Offenders - Ethnic Distribution			
	Frequency	Percent	Cumulative Percent
White	589	78.8	79.0
African-American	133	17.8	96.8
Hispanic	16	2.1	98.9
other	4	.5	99.4
unknown	5	.6	100.0
Total	747	100.0	

⁵ Parallel hypotheses could be made with the focus on the majority (White sex-offenders).

Table 2.

Non-Violent Sex-Offenders - Ethnic Distribution

	Frequency	Percent	Cumulative Percent
White	687	88.8	88.8
African-American	71	9.2	98.0
Asian	1	.1	98.1
Hispanic	11	1.4	99.5
other	4	.5	100.0
Total	774	100.0	

Tables 3, 4, and 5 below display the ethnic distribution of the sex-offenders that were evaluated, in addition to the PCL-R, with the VRAG, Static-99, and the MnSOST-R, respectively. The proportional distribution of ethnic denominations in the three groups is fairly consistent with the description above. Of most relevance to the present investigation is that the composition of the three groups does not differ drastically from one another, with the exception that the PCL-R/VRAG group does have a somewhat higher proportion of African-American offenders, approximating the 20% mark that was observed in the violent group illustrated in Table 1. Of course, it makes sense that the composition of the violent group is similar to the group that was assessed with the VRAG, an instrument specifically designed to ascertain the risk of future violence.

Table 3.

PCL-R/VRAG – Ethnic Distribution			
	Frequency	Percent	Cumulative Percent
White	484	80.0	80.0
African-American	108	17.9	97.9
Asian	1	.2	98.1
Hispanic	4	.6	98.7
other	4	.6	99.3
multi	1	.2	99.5
unknown	3	.5	100.0
Total	605	100.0	

Table 4.

PCL-R/Static-99 – Ethnic Distribution			
	Frequency	Percent	Cumulative Percent
White	1104	84.6	84.6
African-American	164	12.6	97.2
Asian	1	.1	97.3
Hispanic	26	2.0	99.3
other	4	.3	99.6
multi	3	.2	99.8
unknown	3	.2	100.0
Total	1305	100.0	

Table 5.

PCL-R/MnSOST-R – Ethnic Distribution			
	Frequency	Percent	Cumulative Percent
White	1193	83.8	83.8
African-American	192	13.5	97.3
Asian	1	.1	97.4
Hispanic	27	1.9	99.3
other	5	.3	99.6
multi	3	.2	99.8
unknown	3	.2	100.0

Total	1424	100.0	
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Offense Characteristics

Tables 6, 7, and 8 below list the type of offenses for which the group of violent sex-offenders (N = 747) was charged. As it would be expected of the more violent type of offenders, the clear majority of charges are Rape I, Sodomy I, and Sex Abuse I.

Table 6.

Violent Sex-Offenders - Index Sex Offense Charge 1			
	Frequency	Percent	Cumulative Percent
Rape I	305	40.8	40.8
Incest	13	1.7	42.5
Unlawful Transaction with a Minor I	4	.5	43.0
Use of a Minor in a Sexual Performance	7	.9	43.9
Rape II	43	5.8	49.7
Other sex offense	5	.7	50.4
Rape III	25	3.4	53.8
Sodomy I	134	17.9	71.7
Sodomy II	19	2.6	74.3
Sodomy III	10	1.3	75.6
Sex Abuse I	171	22.9	98.5
Sex Abuse II	2	.3	98.8
unknown	9	1.2	100.0
Total	747	100.0	

Table 7.

Violent Sex-Offenders - Index Sex Offense Charge 2			
	Frequency	Percent	Cumulative Percent
none	191	25.6	25.6
Rape I	15	2.0	27.6
Incest	12	1.6	29.2
Unlawful Transaction with a Minor I	7	.9	30.1
Use of a Minor in a Sexual Performance	4	.5	30.6
Rape II	17	2.3	32.9

Other sex offense	14	1.9	34.8
Rape III	11	1.5	36.3
Concurrent violent offense	18	2.4	38.7
Sodomy I	98	13.1	51.8
Sodomy II	26	3.5	55.3
Sodomy III	13	1.7	57.0
Sex Abuse I	101	13.5	70.5
Sex Abuse II	13	1.7	72.3
Sex Abuse III	6	.8	73.1
unknown	201	26.9	100.0
Total	747	100.0	

Table 8.

Violent Sex-Offenders - Index Sex Offense Charge 3

	Frequency	Percent	Cumulative Percent
none	284	38.0	38.0
Rape I	2	.3	38.3
Incest	11	1.5	39.8
Unlawful Transaction with a Minor I	3	.4	40.2
Use of a Minor in a Sexual Performance	2	.3	40.5
Rape II	4	.5	41.0
Other sex offense	12	1.6	42.6
Rape III	9	1.2	43.8
Concurrent violent offense	16	2.1	45.9
Sodomy I	14	1.9	47.8
Sodomy II	6	.8	48.6
Sodomy III	6	.8	49.4
Sex Abuse I	47	6.3	55.7
Sex Abuse II	5	.7	56.4
Sex Abuse III	3	.4	56.8
unknown	327	43.2	100.0
Total	747	100.0	

Tables 9, 10, and 11 below list the type of offenses for which the group of non-violent sex-offenders (N = 774) was charged. Although this group also has a considerable proportion of charges of Rape I, Sodomy I, and Sex Abuse I, it also includes charges of second and even third degree.

Table 9.

Non-Violent Sex-Offenders - Index Sex Offense Charge 1			
	Frequency	Percent	Cumulative Percent
Rape I	105	13.6	13.6
Incest	26	3.4	17.0
Unlawful Transaction with a Minor I	16	2.1	19.1
Use of a Minor in a Sexual Performance	16	2.1	21.2
Rape II	93	12.0	33.2
Other sex offense	9	1.2	34.4
Rape III	119	15.4	49.8
Sodomy I	119	15.4	65.2
Sodomy II	32	4.1	69.3
Sodomy III	23	3.0	72.3
Sex Abuse I	200	25.8	98.1
Sex Abuse II	7	.9	99.0
Sex Abuse III	3	.4	99.4
unknown	6	.6	100.0
Total	774	100.0	

Table 10.

Non-Violent Sex-Offenders - Index Sex Offense Charge 2			
	Frequency	Percent	Cumulative Percent
none	261	33.7	33.7
Rape I	2	.3	34.0
Incest	18	2.3	36.3
Unlawful Transaction with a Minor I	15	1.9	38.2
Use of a Minor in a Sexual Performance	9	1.2	39.4
Rape II	15	1.9	41.3
Other sex offense	18	2.3	43.6

Rape III	12	1.6	45.2
Sodomy I	50	6.5	51.7
Sodomy II	34	4.4	56.1
Sodomy III	32	4.1	60.2
Sex Abuse I	90	11.6	71.8
Sex Abuse II	18	2.3	74.1
Sex Abuse III	5	.6	74.7
unknown	195	25.3	100.0
Total	774	100.0	

Table 11.

Non-Violent Sex-Offenders - Index Sex Offense Charge 3

	Frequency	Percent	Cumulative Percent
none	385	49.7	49.7
Rape I	2	.3	50.0
Incest	10	1.3	51.3
Unlawful Transaction with a Minor I	8	1.0	52.3
Use of a Minor in a Sexual Performance	6	.8	53.1
Rape II	5	.6	53.7
Other sex offense	8	1.0	54.7
Rape III	6	.8	55.5
Concurrent violent offense	2	.3	55.8
Sodomy I	2	.3	56.1
Sodomy II	8	1.0	57.1
Sodomy III	11	1.4	58.5
Sex Abuse I	27	3.5	62.0
Sex Abuse II	11	1.4	63.4
Sex Abuse III	2	.3	63.7
unknown	281	36.3	100.0
Total	774	100.0	

Tables 12, 13, and 14 below list the type of charges of those who were evaluated with the PCL-R and the VRAG (N = 591). It is evident that the group for which the VRAG was chosen as the principal measure of risk is characterized primarily by the most violent type of sex-offenses, such as Rape I, Sex Abuse I, and Sodomy I.

Table 12.

PCL-R/VRAG - Index Sex Offense Charge 1			
	Frequency	Percent	Cumulative Percent
none	2	.3	.3
Rape I	198	32.7	33.0
Incest	11	1.8	34.8
Unlawful Transaction with a Minor I	3	.5	35.3
Use of a Minor in a Sexual Performance	11	1.8	37.1
Rape II	49	8.1	45.2
Other sex offense	5	.8	46.0
Rape III	60	9.9	55.9
Sodomy I	95	15.7	71.6
Sodomy II	17	2.8	74.4
Sodomy III	13	2.1	76.5
Sex Abuse I	124	20.5	97.0
Sex Abuse II	5	.8	97.8
unknown	12	2.2	100.0
Total	605	100.0	

Table 13.

PCL-R/VRAG - Index Sex Offense Charge 2			
	Frequency	Percent	Cumulative Percent
none	201	33.2	33.2
Rape I	7	1.2	34.4
Incest	11	1.8	36.2
Unlawful Transaction with a Minor I	10	1.7	37.9
Use of a Minor in a Sexual Performance	6	1.0	38.9
Rape II	11	1.8	40.7
Other sex offense	13	2.1	42.8
Rape III	11	1.8	44.6
Concurrent violent offense	14	2.3	46.9

Sodomy I	70	11.6	58.5
Sodomy II	16	2.6	61.1
Sodomy III	21	3.5	64.6
Sex Abuse I	74	12.2	76.8
Sex Abuse II	7	1.2	78.0
Sex Abuse III	2	.3	78.3
unknown	131	21.7	100.0
Total	605	100.0	

Table 14.

PCL-R/VRAG - Index Sex Offense Charge 3			
	Frequency	Percent	Cumulative Percent
none	312	51.6	51.6
Incest	2	.3	51.9
Unlawful Transaction with a Minor I	3	.5	52.4
Use of a Minor in a Sexual Performance	5	.8	53.2
Rape II	4	.7	53.9
Other sex offense	10	1.7	55.6
Rape III	4	.7	56.3
Concurrent violent offense	11	1.8	58.1
Sodomy I	8	1.3	59.4
Sodomy II	3	.5	59.9
Sodomy III	6	1.0	60.9
Sex Abuse I	24	4.0	64.9
Sex Abuse II	5	.8	65.7
unknown	208	34.3	100.0
Total	605	100.0	

Tables 15, 16, and 17 display the charges of the sex-offenders selected to be assessed with the Static-99 as the primary risk measure (N = 1305). Although the crime

proportions don't differ drastically from the group evaluated with the VRAG, the actual crimes are likely to have been less violent.

Table 15.

PCL-R/Static-99 - Index Sex Offense Charge 1			
	Frequency	Percent	Cumulative Percent
Rape I	355	27.2	27.2
Incest	31	2.4	29.6
Unlawful Transaction with a Minor I	18	1.4	31.0
Use of a Minor in a Sexual Performance	22	1.7	32.7
Rape II	121	9.3	42.0
Other sex offense	15	1.1	43.1
Rape III	115	8.8	51.9
Sodomy I	216	16.6	68.5
Sodomy II	44	3.4	71.9
Sodomy III	26	2.0	73.9
Sex Abuse I	328	25.1	99.0
Sex Abuse II	7	.5	99.5
Sex Abuse III	3	.2	99.7
unknown	4	.3	100.0
Total	1305	100.0	

Table 16.

PCL-R/Static-99 - Index Sex Offense Charge 2			
	Frequency	Percent	Cumulative Percent
none	336	25.7	25.7
Rape I	13	1.0	26.7
Incest	29	2.2	28.9
Unlawful Transaction with a Minor I	19	1.5	30.4
Use of a Minor in a Sexual Performance	11	.8	31.2
Rape II	29	2.2	33.4
Other sex offense	25	1.9	35.3
Rape III	16	1.2	36.5
Concurrent violent offense	17	1.3	37.8
Sodomy I	130	10.0	47.8

Sodomy II	54	4.1	51.9
Sodomy III	37	2.8	54.7
Sex Abuse I	173	13.3	68.0
Sex Abuse II	30	2.3	70.3
Sex Abuse III	9	.7	71.0
unknown	377	29.0	100.0
Total	1305	100.0	

Table 17.

PCL-R/Static-99 - Index Sex Offense Charge 3

	Frequency	Percent	Cumulative Percent
none	501	38.4	38.4
Rape I	4	.3	38.7
Incest	20	1.5	40.2
Unlawful Transaction with a Minor I	9	.7	40.9
Use of a Minor in a Sexual Performance	7	.5	41.4
Rape II	6	.5	41.9
Other sex offense	17	1.3	43.2
Rape III	13	1.0	44.2
Concurrent violent offense	17	1.3	45.5
Sodomy I	13	1.0	46.5
Sodomy II	13	1.0	47.5
Sodomy III	16	1.2	48.7
Sex Abuse I	67	5.1	53.8
Sex Abuse II	12	.9	54.7
Sex Abuse III	6	.5	55.2
unknown	584	44.8	100.0
Total	1305	100.0	

Finally, Tables 18, 19, and 20 list the charges of those sex-offenders evaluated with the MnSOST-R as the main risk instrument (N = 1424). As with the group evaluated

with the Static-99, these charges are likely to have been characterized more by sexual deviance than by violence.

Table 18.

PCL-R/MnSOST-R - Index Sex Offense Charge 1			
	Frequency	Percent	Cumulative Percent
none	2	.1	.1
Rape I	400	28.1	28.2
Incest	32	2.2	30.4
Unlawful Transaction with a Minor I	18	1.3	31.7
Use of a Minor in a Sexual Performance	20	1.4	33.1
Rape II	129	9.1	42.2
Other sex offense	15	1.1	43.3
Rape III	129	9.1	52.4
Sodomy I	236	16.6	69.0
Sodomy II	52	3.7	72.7
Sodomy III	30	2.1	74.8
Sex Abuse I	337	23.7	98.5
Sex Abuse II	8	.6	99.1
Sex Abuse III	3	.2	99.3
unknown	13	.7	100.0
Total	1424	100.0	

Table 19.

PCL-R/MnSOST-R - Index Sex Offense Charge 2			
	Frequency	Percent	Cumulative Percent
none	393	27.6	27.6
Rape I	16	1.1	28.7
Incest	31	2.2	30.9
Unlawful Transaction with a Minor I	21	1.5	32.4
Use of a Minor in a Sexual Performance	12	.8	33.2
Rape II	33	2.3	35.5
Other sex offense	28	2.0	37.5
Rape III	20	1.4	38.9
Concurrent violent offense	19	1.3	40.2

Sodomy I	147	10.3	50.5
Sodomy II	58	4.1	54.6
Sodomy III	41	2.9	57.5
Sex Abuse I	183	12.9	70.4
Sex Abuse II	31	2.2	72.6
Sex Abuse III	10	.7	73.3
unknown	381	26.7	100.0
Total	1424	100.0	

Table 20.

PCL-R/MnSOST-R - Index Sex Offense Charge 3

	Frequency	Percent	Cumulative Percent
none	594	41.7	41.7
Rape I	4	.3	42.0
Incest	19	1.3	43.3
Unlawful Transaction with a Minor I	9	.6	43.9
Use of a Minor in a Sexual Performance	9	.6	44.5
Rape II	9	.6	45.1
Other sex offense	21	1.5	46.6
Rape III	13	.9	47.5
Concurrent violent offense	18	1.3	48.8
Sodomy I	16	1.1	49.9
Sodomy II	13	.9	50.8
Sodomy III	16	1.1	51.9
Sex Abuse I	74	5.2	57.1
Sex Abuse II	14	1.0	58.1
Sex Abuse III	6	.4	58.5
unknown	589	41.5	100.00
Total	1424	100.0	

The observed difference in group sizes (PCL-R/VRAG, PCL-R/Static-99, and PCL-R/MnSOST-R) reflects a judgment on behalf of the SORA clinician regarding

which measures to use in assessing a specific offender. For instance, the lower number of subjects with available VRAG scores reflects the instrument's lesser relevance (compared to the Static-99 and MnSOST-R) in the assessment of sexual recidivism.

The MnSOST-R and VRAG were selected in the fall of 1998 by the Sex-Offender Risk-Assessment Advisory Board (SORAAB) to be used in the risk-assessments, along with the PCL-R mainly because they had been cross-validated at least one time. The process was reevaluated in April, 2000 (mostly for political reasons) and it was decided to not list specific instruments since: a) the field changes so rapidly, and b) it was considered that, ultimately, evaluators could use their professional discretion on instrument selection. By that time the Static-99 was out and getting good reviews, so clinicians began using it with the MnSOST-R.

Although not set in explicit guidelines, SORA clinicians agreed theretofore on using the VRAG with men who committed particularly violent offenses, and on using the MnSOST-R and the Static-99 interchangeably except for cases of intra-familial sexual abuse, in which the MnSOST-R is contraindicated. The MnSOST-R is commonly used with rapists and extra-familial sex-offenders. Another variable that was, and still is, considered in the decision of which measure to utilize in any given case is the type and amount of information that is available. In many cases considered to warrant the extra time, and provided that sufficient data is available, more than one, or all, measures have been completed.

Even though the tables above show that there are no substantial demographic or criminal differences among the subjects that were evaluated with one battery over the other, it is acknowledged that the lack of uniformity presents a limitation to this and all

other studies based on this database. However, this can also be viewed as a strength. We are ultimately studying the process of risk-assessment that actual clinicians went through. That is, we are studying ecologically valid risk-assessment. This includes, for better or worse, when they decide to use a particular instrument and when they decide not to. Furthermore, the fact that this data has been gathered exclusively by and for clinicians provides for research that is relatively uncontaminated with researcher bias.

Sample Size

This investigation targeted the entire population of convicted sex-offenders that have been held at the Kentucky State Reformatory at some point during the five year period of December, 1998 to December, 2003. The complete population consists of 1739 adult, male sex-offenders, from which 218 were discarded from the first phase of the investigation due to missing data. Thus, the total sample utilized in Phase I consists of 1521 sex-offenders. Phase II of the investigation examined three samples of offenders. The groups consisted of those evaluated, in addition to the PCL-R, with the VRAG (N = 591), the Static-99 (N = 1305), and the MnSOST-R (N = 1424) respectively. Some sex-offenders formed part of more than one group, as they had been evaluated with more than one risk assessment instrument.

Handling of Missing Data

A small and insignificant proportion of sex-offenders (218 of 1739; 12.5%) was not utilized in the first phase of the investigation given that there was not sufficient case information in the database to assign them a label of *violent* or *non-violent*. Upon direct verbal consultation with the SORA clinicians who conducted and coded the risk-assessments, it was asserted that there was no identifiable demographic, personal, or

criminal difference between the group of offenders without the relevant data and the rest of the sex-offender population (informal discussions with John Scanish, Psy.D. and Jim VanNort, Ph.D.; SORA unit, KSR, 2005).

In the second phase of the investigation, three different groups were utilized for the analysis: PCL-R/VRAG, N = 591; PCL-R/Static-99, N = 1305; and PCL-R/MnSOST-R, N = 1424. These were the total number of sex-offenders who received the respective test batteries when they were evaluated. Those who were evaluated with one battery naturally had missing data for the measures that were not used on them due to clinical judgment.

Design and Procedure

This investigation used archival data from the Sex-Offender Risk-Assessment (SORA) unit at the Kentucky State Reformatory (KSR), located in Lagrange, KY. The SORA database, which is in SPSS format, contains extensive psychometric (e.g., PCL-R, VRAG, Static-99, MnSOST-R) and demographic information for every convicted sex-offender for whom a state-mandated risk-assessment evaluation was conducted. In addition, the database contains a series of offense and victim descriptors for each offender.

The entire sample of sex-offenders (N = 1739) was divided into two groups for the purpose of this investigation, *violent* (N = 747) and *non-violent* (N = 774)⁶. Such categorization was based on the highest degree of forcefulness utilized by the offender in his index sex-offense(s). *Degree of forcefulness* is one of the variables coded in every SORA evaluation, and it is based on the following scale: 01 = overtly consensual, 02 =

⁶ The information required to make the categorization between *violent* and *non-violent* was not available for 218 sex-offenders.

manipulation, 03 = coercion, 04 = threat of force, 05 = use of force without necessity of medical attention to the victim, or 06 = use of force with necessity of medical attention to the victim. For each sex-offender, the SORA evaluator assigned the highest applicable code number to the offender's index sex-offense(s). Coding was based on the victim(s)' account of the incident as well as on the available collateral information (e.g., police reports). For this investigation, sex-offenders charged with a sex-offense coded 04, 05, or 06, were categorized as *violent*, whereas those not charged with a sex-offense coded higher than 03, were categorized as *non-violent*.

In Phase I, the two groups (violent and non-violent) were compared on their PCL-R Factor and facet scores (see details in *Analysis* section below). The SORA database includes the offenders' score on each of the 20 PCL-R items, their PCL-R Total score, and their score on the two PCL-R Factors. It was necessary to adjust the scores for Factor 2, given that the original Factor 2 scores do not include item 20 "Criminal Versatility". This was done simply by adding the score for that item to the recorded Factor 2 score. Facet scores were derived by summing up the scores of the corresponding items.

In Phase II, PCL-R Factor and facet scores were correlated with the total scores on the VRAG, Static-99, and MnSOST-R. Given that not every offender in the overall sample (N = 1739) was assessed with the exact same battery of tests, there were different group sizes for offenders with available PCL-R and VRAG scores (N = 591), PCL-R and Static-99 scores (N = 1305), and PCL-R and MnSOST-R scores (N = 1424). The observed difference in group sizes reflects a judgment on behalf of the SORA clinician regarding which measures to use in assessing a specific offender.

Within each of the three groups, the correlation values were then compared with one another to determine if they were significantly different. The purpose of these comparisons was to see if the risk assessment instruments were disproportionately associated with the different elements of psychopathy (PCL-R Factors and facets). This of course, would be of clinical importance if the pattern of relatedness between the instruments and the PCL-R descriptors was not congruent with the psychopathy profiles manifested by sex-offenders, or if the strength of relatedness did not correspond to the offenders' degree of psychopathy.

Finally, violent and non-violent sex-offenders were compared on their total scores in all three risk-assessment measures. The objective of this part was to document that violent offenders score higher than their counterparts. The argument here is that this may be a product, not necessarily of the possibility that violent offenders are in fact at a higher risk to reoffend, but perhaps that the design of the instruments is deficient for the detection of risk in the non-violent type of sex-offender.

Ethical Considerations

Although prisoners usually represent a special class of subjects with regard to research, the fact that this investigation utilized unidentified archival data ensures all parties that the experimental design did not pose any known physical, emotional, or mental threat to the sampled subjects, nor did it impinge in any way on their rights. Legally, inmates were not and will not be affected negatively in any way as a result of this investigation. Their identities were not used, and the data derived from their records has not and will not be misused in any way by a third party. Realistically, the design of

this study did not pose any foreseeable risks or likelihood of danger, nor did it in any way violate the basic human rights of the offenders.

Due to the absolute anonymity of the data used in the investigation, formal and direct consent by the subjects involved was not applicable. Instead, this investigation was approved by the SORA unit research committee, and as such, it met all ethical and confidentiality requirements as dictated by the Kentucky State Department of Corrections.

General Analysis

Phase I

Phase I Method: Analyses

Hypotheses 1 through 4 were tested using two separate 2-way mixed design analyses of variance (ANOVAs), each of which was followed by specific comparisons of interest.

The first mixed design ANOVA, with degree of forcefulness (violent, non-violent) as the between-subjects factor and PCL-R Factor (F1, F2) as the within-subjects, or repeated measures (RM), factor, was utilized as the first step to test hypotheses 1a, 2a, 3a, and 4a. These hypotheses essentially state that: not only do violent sex-offenders have higher scores on Factor 2 than on Factor 1, but their Factor 2 scores are also higher than those of non-violent sex-offenders; and not only do non-violent sex-offenders have higher scores on Factor 1 than on Factor 2, but their Factor 1 scores are also higher than those of violent sex-offenders. That is, both main effects as well as the interaction effect were expected to be significant.

In order to address the specific hypotheses, four planned pairwise comparisons followed the ANOVA; Factors 1 and 2 were compared within each group, and the two groups were compared on each Factor. A correction of alpha was not necessary at this point, and no post-hoc analyses were conducted for this ANOVA.

The second mixed design ANOVA, with degree of forcefulness (violent, non-violent) as the between-subjects factor and PCL-R facet (f1, f2, f3, f4) as the within-subjects factor, was utilized as the first step to test hypotheses 1b, 2b, 3b, and 4b. These hypotheses essentially state that: not only do violent sex-offenders have higher scores on facets 2, 3, and 4 than on facet 1, but their facet 2, 3, and 4 scores are also higher than those of non-violent sex-offenders; and not only do non-violent sex-offenders have higher scores on facet 1 than on facets 2, 3, and 4, but their facet 1 scores are also higher than those of violent sex-offenders. Again, both main effects as well as the interaction effect were expected to be significant.

In order to address the specific hypotheses, ten planned pairwise comparisons followed this ANOVA; facet 1 was compared with facets 2, 3, and 4 within each group, and the two groups were compared on each facet. After the pattern of facet scores for each group was revealed, four post-hoc comparisons of interest were conducted. The Bonferroni correction was utilized to control for Type I errors (Cohen, 2001). Even though such method is often viewed as too conservative, and thus susceptible to Type II errors, it is acceptable when employed with a sample size as large as the one used here, which inherently yields ample power. Thus, the Bonferroni correction was considered to be the best protection against Type I errors (false positives), while still being robust enough to prevent Type II errors (misses).

Even though the group sizes in the two ANOVAs described above are not exactly the same (violent sex-offenders $N = 747$, non-violent sex-offenders $N = 774$), the groups are large enough that the difference between them is not big enough to be of statistical concern (Cohen, 2001). Nevertheless, because the group sizes are so large, there is a risk that the results may be statistically significant even if they are not clinically meaningful. For this reason, it was necessary to consider effect sizes (Cohen, 1988).

Phase I Results & Discussion

A 2 x 2 mixed design ANOVA (Fig. 1), which compared violent ($N = 747$) and non-violent ($N = 774$) sex-offenders on their PCL-R Factor scores, yielded a significant main effect of both degree of forcefulness, $F(1, 1519) = 107.973$, $MSE = 26.745$, $p < .0001$, and PCL-R Factor, $F(1, 1519) = 90.752$, $MSE = 9.214$, $p < .0001$. Partial eta squared values for each main effect (η^2 deg-force = .066, η^2 factor = .056) indicate that the proportion of explained variance by each variable is 6.6% and 5.6% respectively. Both proportions are well above the 1% mark designated by Cohen (1988) as a small effect size.

The interaction between the two variables failed to reach significance, $F(1, 1519) = 2.965$, $MSE = 9.214$, $p = .085$.

Figures 1a & 1b. 2 x 2 Mixed Design ANOVA (Forcefulness x PCL-R Factors)

Fig. 1a. PCL-R Factor main effect & interaction

		Tests of Within-Subjects Effects					
FACTOR		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
	Sphericity Assumed	836.160	1	836.160	90.752	.000	.056
	Greenhouse-Geisser	836.160	1.000	836.160	90.752	.000	.056
	Huynh-Feldt	836.160	1.000	836.160	90.752	.000	.056
	Lower-bound	836.160	1.000	836.160	90.752	.000	.056

FACTOR * DEG-FORCE	Sphericity Assumed	27.317	1	27.317	2.965	.085	.002
	Greenhouse- Geisser	27.317	1.000	27.317	2.965	.085	.002
	Huynh-Feldt	27.317	1.000	27.317	2.965	.085	.002
	Lower-bound	27.317	1.000	27.317	2.965	.085	.002
Error(FACTOR)	Sphericity Assumed	13995.617	1519	9.214			
	Greenhouse- Geisser	13995.617	1519.000	9.214			
	Huynh-Feldt	13995.617	1519.000	9.214			
	Lower-bound	13995.617	1519.000	9.214			

Fig. 1b. Degree of forcefulness main effect

Tests of Between-Subjects Effects						
	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	119392.773	1	119392.773	4464.041	.000	.746
DEG-FORCE	2887.780	1	2887.780	107.973	.000	.066
Error	40626.338	1519	26.745			

The four a priori comparisons corresponding to hypotheses 1a, 2a, 3a, and 4a are illustrated by Figures 3, 4, 5 & 6, respectively. Results revealed that both violent and non-violent sex-offenders scored significantly higher on Factor 2 than on Factor 1 (violent: $t(746) = -7.947$, $SE = .156$, $p < .0001$, $d = 1.2382$; non-violent: $t(773) = -5.526$, $SE = .156$, $p < .0001$, $d = 0.8591$). In addition, it was found that violent sex-offenders scored significantly higher than non-violent sex-offenders on each Factor (Factor 2: $t(1519) = -9.011$, $SE = .237$, $p < .0001$, $d = 2.1385$; Factor 1: $t(1510) = -8.987$, $SE = .196$, $p < .0001$, $d = 1.7594$). All four comparisons exceeded the $d = .8$ value, which is the accepted indicator of a large effect size (Faul & Erdfelder, 1992). The mean Factor scores by group are presented below.

Fig. 2. Factor scores by group

Group Statistics				
	DEG-VIO	Mean	Std. Deviation	N
Factor 1	N-vio	4.8618	3.73269	774
	vio	6.6212	3.89675	747
	Total	5.7258	3.91309	1521
Factor 2	N-vio	5.7209	4.32444	774
	vio	7.8594	4.92140	747
	Total	6.7712	4.74774	1521

Graph 1. Factor scores by group (Bar)

Graph 2. Factor scores by group (Line)

Figures 3a & 3b. Paired Samples T-Test (Violent) – Hypothesis 1a

Fig. 3a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Violent	PCLR-2 F1	6.6212	747	3.8968	.1426
	PCLR-2 F2	7.8594	747	4.9214	.1801

Fig. 3b. T-test (Vio F1 < F2)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	Factor 1 < Factor 2	-1.2383	4.2587	.1558	-1.5442	-.9324	-7.947	746	.000

Figures 4a & 4b. Paired Samples T-Test (Non-violent) – Hypothesis 2a

Fig. 4a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Non-violent	PCLR-2 F1	4.8618	774	3.7327	.1342
	PCLR-2 F2	5.7209	774	4.3244	.1554

Fig. 4b. T-test (N-vio F1 < F2)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	Factor 1 < Factor 2	-.8592	4.3253	.1555	-1.1644	-.5540	-5.526	773	.000

Figures 5a & 5b. Independent Samples T-Test (Factor 2) – Hypothesis 3a

Fig. 5a. Descriptives

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
PCLR-2 F2	Non-violent	774	5.7209	4.3244	.1554
	Violent	747	7.8594	4.9214	.1801

Fig. 5b. T-test (N-vio F2 < Vio F2)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
		Lower	Upper							
Factor 2	Equal variances assumed	23.268	.000	-9.011	1519	.000	-2.1385	.2373	-2.6040	-1.6730
	Equal variances not assumed			-8.990	1479.304	.000	-2.1385	.2379	-2.6051	-1.6719

Figures 6a & 6b. Independent Samples T-Test (Factor 1) – Hypothesis 4a

Fig. 6a. Descriptives

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
PCLR-2 F1	Non-violent	774	4.8618	3.7327	.1342
	Violent	747	6.6212	3.8968	.1426

Fig. 6b. T-test (N-vio F1 < Vio F1)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Factor 1	Equal variances assumed	3.467	.063	-8.994	1519	.000	-1.7594	.1956	-2.1431	-1.3757
	Equal variances not assumed			-8.987	1509.702	.000	-1.7594	.1958	-2.1434	-1.3754

The four comparisons described above yielded both expected and unexpected results. As it was anticipated, violent sex-offenders were characterized by higher Factor 2 scores than Factor 1 scores, and their Factor 2 scores were in fact higher than those of their non-violent counterparts. However, it had been hypothesized that non-violent sex-offenders would be characterized more so by Factor 1 than by Factor 2. This was not the case; as their violent counterparts, they also had higher scores on Factor 2 than on Factor 1. Also against what was hypothesized, but perhaps not unexpectedly, violent offenders scored higher than their counterparts not only on Factor 2 but on Factor 1 as well. This last finding is consistent with the literature on general offending. It had been postulated that the relative pattern of factor scores might have been different in a sample of sexual

offenders. Perhaps a more interesting type of difference would become apparent in the following part of the analysis, which compared the two groups of sex-offenders at the facet level.

A 2 x 4 mixed design ANOVA (Figure 7), which compared violent (N = 747) and non-violent (N = 774) sex-offenders on their PCL-R facet scores, yielded a significant main effect of both degree of forcefulness, $F(1, 1519) = 107.973$, $MSE = 13.373$, $p < .0001$, and PCL-R facet, $F(3, 4557) = 292.974$, $MSE = 3.155$, $p < .0001$. Partial eta squared values were .066 (6.6%) and .162 (16.2%) respectively, indicating considerable effect sizes.

More interestingly, the interaction between degree of forcefulness and PCL-R facet scores was also significant, $F(3, 4557) = 11.488$, $MSE = 3.155$, $p < .0001$, albeit with a small effect size, $\eta^2 = .008$ (.8%).

Figures 7a & 7b. 2 x 4 Mixed Design ANOVA (Forcefulness x PCL-R Facets)

Fig. 7a. PCL-R facet main effect & interaction

Tests of Within-Subjects Effects							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
FACET	Sphericity Assumed	2772.683	3	924.228	292.974	.000	.162
	Greenhouse-Geisser	2772.683	2.559	1083.328	292.974	.000	.162
	Huynh-Feldt	2772.683	2.566	1080.636	292.974	.000	.162
	Lower-bound	2772.683	1.000	2772.683	292.974	.000	.162
FACET * DEG-FORCE	Sphericity Assumed	108.724	3	36.241	11.488	.000	.008
	Greenhouse-Geisser	108.724	2.559	42.480	11.488	.000	.008
	Huynh-Feldt	108.724	2.566	42.375	11.488	.000	.008
	Lower-bound	108.724	1.000	108.724	11.488	.001	.008
Error(FACET)	Sphericity Assumed	14375.710	4557	3.155			
	Greenhouse-	14375.710	3887.747	3.698			

Geisser						
Huynh-Feldt	14375.710	3897.433	3.689			
Lower-bound	14375.710	1519.000	9.464			

Fig. 7b. Degree of forcefulness main effect

Tests of Between-Subjects Effects						
	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	59696.386	1	59696.386	4464.041	.000	.746
DEG-FORCE	1443.890	1	1443.890	107.973	.000	.066
Error	20313.169	1519	13.373			

The ten a priori comparisons corresponding to hypotheses 1b, 2b, 3b, and 4b are illustrated by Figures 9, 10, & 11. Results revealed that both violent and non-violent sex-offenders scored significantly higher on facets 2, 3, and 4, than on facet 1 (violent $f1 < f2$: $t(746) = -24.863$, $SE = .076$, $p < .0001$, $d = 1.8822$; violent $f1 < f3$: $t(746) = -18.543$, $SE = .085$, $p < .0001$, $d = 1.577$; violent $f1 < f4$: $t(746) = -15.882$, $SE = .097$, $p < .0001$, $d = 1.5435$; non-violent $f1 < f2$: $t(773) = -20.137$, $SE = .078$, $p < .0001$, $d = 1.5672$; non-violent $f1 < f3$: $t(773) = -19.039$, $SE = .081$, $p < .0001$, $d = 1.5465$; non-violent $f1 < f4$: $t(773) = -9.707$, $SE = .091$, $p < .0001$, $d = 0.8798$). In addition, it was found that violent sex-offenders scored significantly higher than non-violent sex-offenders on each of the four facets (facet 1: $t(1519) = -7.182$, $SE = .101$, $p < .0001$, $d = 0.7222$; facet 2: $t(1519) = -8.496$, $SE = .122$, $p < .0001$, $d = 1.0372$; facet 3: $t(1504) = -6.099$, $SE = .123$, $p < .0001$, $d = 0.7527$; facet 4: $t(1519) = -9.838$, $SE = .141$, $p < .0001$, $d = 1.3859$). Again, all ten d values indicate large effect sizes. The mean facet scores by group are presented below.

Fig. 8. Facet scores by group

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Facet 1	N-violent	774	1.6473	1.84409	.06628
	violent	747	2.3695	2.07436	.07590
Facet 2	N-violent	774	3.2145	2.43104	.08738
	violent	747	4.2517	2.33021	.08526
Facet 3	N-violent	774	3.1938	2.32677	.08363
	violent	747	3.9465	2.47991	.09074
Facet 4	N-violent	774	2.5271	2.52668	.09082
	violent	747	3.9130	2.95710	.10819

Graph 3. Facet scores by group (Bar)

Graph 4. Facet scores by group (Line)

Figures 9a, 9b, & 9c. Paired Samples T-Tests (Violent) – Hypothesis 1b

Fig. 9a. T-test (Vio f1 < f2)

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	Facet 1 < Facet 2	-1.8822	2.0691	7.570E-02	-2.0308	-1.7336	-24.863	746	.000

Fig. 9b. T-test (Vio f1 < f3)

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	Facet 1 < Facet 3	-1.5770	2.3243	8.504E-02	-1.7439	-1.4100	-18.543	746	.000

Fig. 9c. T-test (Vio f1 < f4)

		Paired Samples Test							
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	Facet 1 < Facet 4	-1.5435	2.6562	9.719E-02	-1.7343	-1.3527	-15.882	746	.000

Figure 9 shows that, as expected, violent sex-offenders obtained significantly higher scores on facets 2, 3, and 4 than on facet 1. Based as much on theory as on previous research it is understandable why violent offenders would be associated with high scores on facets 3 and 4, which make up the thoroughly studied Factor 2. However, this part of the analysis also ties violent offenders with facet 2 (Affective), which despite being part of Factor 1, has theoretical ties to the more violent type of sex-offender. Finally, it is important to remind the reader that these associations are being made with *sexual* offenders, not the usually sampled *general* offenders.

Figures 10a, 10b, & 10c. Paired Samples T-Tests (Non-violent) – Hypothesis 2b

Fig. 10a. T-test (N-vio f1 < f2)

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	Facet 1 < Facet 2	-1.5672	2.1652	7.783E-02	-1.7200	-1.4144	-20.137	773	.000

Fig. 10b. T-test (N-vio f1 < f3)

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	Facet 1 < Facet 3	-1.5465	2.2599	8.123E-02	-1.7060	-1.3871	-19.039	773	.000

Fig. 10c. T-test (N-vio f1 < f4)

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	Facet 1 < Facet 4	-.8798	2.5218	9.064E-02	-1.0578	-.7019	-9.707	773	.000

Figure 10 shows that, like their violent counterparts, non-violent sex-offenders also scored significantly higher on facets 2, 3, and 4 than on facet 1. The opposite pattern had been hypothesized, with the theoretical basis being that non-violent sex-offenders might have been primarily characterized by the psychologically deviant interpersonal traits captured by facet 1 (Interpersonal) of psychopathy.

Figure 11. Independent Samples T-Tests – Hypotheses 3b & 4b

Fig. 11. Planned comparisons between groups on each facet

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Facet 1	Equal variances assumed	16.760	.000	-7.182	1519	.000	-.7222	.10056	-.91944	-.52494
	Equal variances not assumed			-7.167	1484.521	.000	-.7222	.10077	-.91985	-.52453
Facet 2	Equal variances assumed	3.769	.052	-8.489	1519	.000	-1.0372	.12218	-1.27685	-.79755
	Equal variances not assumed			-8.496	1518.929	.000	-1.0372	.12208	-1.27667	-.79773
Facet 3	Equal variances assumed	3.283	.070	-6.106	1519	.000	-.7527	.12326	-.99443	-.51088
	Equal variances not assumed			-6.099	1504.227	.000	-.7527	.12340	-.99471	-.51060
Facet 4	Equal variances assumed	37.012	.000	-9.838	1519	.000	-1.3859	.14087	-1.66217	-1.10954
	Equal variances not assumed			-9.811	1465.486	.000	-1.3859	.14126	-1.66295	-1.10876

Illustrated in Figure 11 are the comparisons between violent and non-violent sex-offenders on each of the four PCL-R facets. Results show that violent sex-offenders scored significantly higher than non-violent sex-offenders on all facets. It had been

hypothesized that such pattern would be true for all facets except for facet 1, in which non-violent sex-offenders were expected to have higher scores.

Figures 12, 13, 14, & 15 (below) illustrate the four post-hoc comparisons that were conducted in order to describe the pattern of facet scores within each group more precisely.

Planned comparisons revealed that, as it was hypothesized, violent sex-offenders scored significantly higher on facets 2, 3, and 4, than on facet 1. Results from two post-hoc comparisons indicated that they also scored significantly higher on facet 2 ($\underline{M} = 4.25$, $SD = 2.33$) than on both, facet 3 ($\underline{M} = 3.95$, $SD = 2.48$), $t(746) = 3.236$, $SE = .094$, $p = .001$, $d = 0.3052$) and facet 4 ($\underline{M} = 3.91$, $SD = 2.98$), which did not differ significantly from one another, $t(746) = .388$, $SE = .086$, $p = .698$. The effect size of the differences between facet 2 and facets 3 and 4 fell between the small ($d = .2$) and medium ($d = .5$) markers set by convention (Faul & Erdfelder, 1992) (See Graph 4 above for a visual representation of the pattern of facet scores).

Planned comparisons on the non-violent sex-offender group revealed that, like their violent counterparts, they scored significantly higher on facets 2, 3, and 4, than on facet 1. However, two post-hoc comparisons revealed a meaningful difference in their pattern of scores from that of violent sex-offenders. It was revealed that in the non-violent sex-offender group, both facet 2 scores ($\underline{M} = 3.21$, $SD = 2.43$) and facet 3 scores ($\underline{M} = 3.19$, $SD = 2.33$) were significantly higher, with a medium-to-large effect size, than facet 4 scores ($\underline{M} = 2.53$, $SD = 2.53$), $t(773) = 8.383$, $SE = .080$, $p < .0001$, $d = 0.6667$, but facets 2 and 3 did not differ significantly from one another, $t(773) = .210$, $SE = .099$, $p = .834$ (See Graph 4).

Figures 12a & 12b. Paired Samples T-Test (Violent)

Fig. 12a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Violent	facet 2	4.2517	747	2.3302	8.526E-02
	facet 3	3.9465	747	2.4799	9.074E-02

Fig. 12b. T-test (Vio f2 > f3)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	facet 2 > facet 3	.3052	2.5781	9.433E-02	.1200	.4904	3.236	746	.001

Figures 13a & 13b. Paired Samples T-Test (Violent)

Fig. 13a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Violent	facet 3	3.9465	747	2.4799	9.074E-02
	facet 4	3.9130	747	2.9571	.1082

Fig. 13b. T-test (Vio f3 = f4)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Violent	facet 3 = facet 4	3.347E-02	2.3598	8.634E-02	-.1360	.2030	.388	746	.698

Violent sex-offenders obtained the highest scores on facet 2. Facet 2 scores were significantly higher than scores on facet 3 and facet 4, which did not differ significantly from one another. Facet 1 scores were significantly lower than scores on all other facets.

Figures 14a & 14b. Paired Samples T-Test (Non-violent)

Fig. 14a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Non-violent	facet 2	3.2145	774	2.4310	8.738E-02
	facet 3	3.1938	774	2.3268	8.363E-02

Fig. 14b. T-test (N-vio f2 = f3)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	facet 2 = facet 3	2.067E-02	2.7415	9.854E-02	-.1728	.2141	.210	773	.834

Figures 15a & 15b. Paired Samples T-Test (Non-violent)

Fig. 15a. Descriptives

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Non-violent	facet 3	3.1938	774	2.3268	8.363E-02
	facet 4	2.5271	774	2.5267	9.082E-02

Fig. 15b. T-test (N-vio f3 > f4)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Non-violent	facet 3 > facet 4	.6667	2.2125	7.953E-02	.5106	.8228	8.383	773	.000

The pattern of scores in the non-violent group of sex-offenders was subtly yet meaningfully different to the pattern observed in the violent group. As in the violent group of offenders, scores on facets 2, 3, and 4 were significantly higher than facet 1 scores, but the non-violent group had the highest scores on both facets 2 and 3, which,

not differing significantly from one another, were both significantly higher than scores on facet 4.

Phase II

Phase II Method: Analyses

Hypotheses 5 and 6 were tested by correlating PCL-R Factor and facet scores with the total scores of the VRAG, Static-99, and MnSOST-R. This entailed conducting three independent correlations: 1) PCL-R Factor and facet scores with total VRAG score (N = 591), 2) PCL-R Factor and facet scores with total Static-99 score (N = 1305), and 3) PCL-R Factor and facet scores with total MnSOST-R score (N = 1424). The difference in group sizes is statistically irrelevant given that the groups were not being compared with one another.

Once again, given the large size of these three groups, correlations were anticipated to yield statistically significant results regardless of whether they represented clinical significance or practical utility. In order to address this methodological concern, it was necessary to report and interpret the degree of variance accounted for by each variable (r^2). Correlation values were also compared with one another to determine if they were significantly different.

Finally, three different t-tests were conducted to test hypothesis 7 of the investigation, which predicted that the scores in all three risk-assessment measures would be significantly higher for violent sex-offenders than for non-violent sex-offenders.

Phase II Results & Discussion

The correlation matrix below (Figure 16) shows that all three risk-assessment measures (VRAG, Static-99, and MnSOST-R) are significantly related ($p < .0001$) to

both Factors and all facets of the PCL-R. Nevertheless, the proportion of variance values (r^2), along with the intercorrelation comparisons listed in Figure 17, indicate that the degree to which each of the three instruments associates with the different elements of psychopathy differs significantly and meaningfully.

The correlation results are consistent with the anticipated pattern of relative association between the risk measures and the dimensions of the PCL-R. That is, while all three risk measures correlated significantly with every dimension of the PCL-R, they were all predominately associated with Factor 2 and facet 4 in particular. This, of course, confirms the hypothesized emphasis of the content of these measures on the criminal history of the offender, and points out the relative disinterest in the other facets of the offender.

*Fig. 16. Correlations (r) and Proportions of Variance (r^2)***

Correlations (Pearson)						
	Factor 1	Factor 2	Facet 1	Facet 2	Facet 3	Facet 4
VRAG N=591	$r = .511^*$ ----- $r^2 = .261$	$r = .839^*$ ----- $r^2 = .704$	$r = .485^*$ ----- $r^2 = .235$	$r = .442^*$ ----- $r^2 = .195$	$r = .695^*$ ----- $r^2 = .483$	$r = .801^*$ ----- $r^2 = .642$
Static-99 N=1305	$r = .335^*$ ----- $r^2 = .112$	$r = .527^*$ ----- $r^2 = .278$	$r = .305^*$ ----- $r^2 = .093$	$r = .288^*$ ----- $r^2 = .083$	$r = .444^*$ ----- $r^2 = .197$	$r = .505^*$ ----- $r^2 = .255$
MnSOST-R N=1424	$r = .365^*$ ----- $r^2 = .133$	$r = .534^*$ ----- $r^2 = .285$	$r = .358^*$ ----- $r^2 = .128$	$r = .294^*$ ----- $r^2 = .086$	$r = .444^*$ ----- $r^2 = .197$	$r = .516^*$ ----- $r^2 = .266$

* Correlation is significant at the 0.01 level (2-tailed).

** Proportion of variance accounted for (r^2): small = .1, medium = .3, large = .5 (Faul & Erdfelder, 1992).

For each of the three measures, the correlation values were compared with one another to determine if the instrument's degree of association with each of the elements of psychopathy differed significantly. Virtually the same pattern of relatedness was observed in all three measures (see Fig. 17 below). As expected, the association of each instrument with Factor 2 was significantly stronger than with Factor 1 ($p < .0001$). At the facet level, the strongest association of each instrument was with facet 4, followed by

facet 3, then facet 1, and finally facet 2. Note that facet 2 represented the weakest relationship with each of the three risk-assessment instruments⁷. Alarminglly, results from Phase I of this investigation revealed that both violent and non-violent sex-offenders obtained the highest scores precisely on facet 2!

*Fig. 17. Intercorrelation Comparison**

Intercorrelation Comparison				
	Factor 1 < Factor 2	facet 4 > facet 3	facet 3 > facet 1	facet 1 ≥ facet 2
VRAG N=591	z = 11.2087 ----- p < .0001	z = 4.1809 ----- p < .0001	z = 5.6251 ----- p < .0001	z = .9394 ----- p = .1738
Static-99 N=1305	z = 6.0606 ----- p < .0001	z = 2.0104 ----- p = .0222	z = 4.1379 ----- p < .0001	z = .4756 ----- p = .3172
MnSOST-R N=1424	z = 5.6797 ----- p < .0001	z = 2.4968 ----- p = .0063	z = 2.7351 ----- p = .0031	z = 1.9099 ----- p = .0281

* Analysis performed with statistical program of The Chinese University of Hong Kong (<http://department.obg.cuhk.edu.hk/researchsupport/HomoCor.asp>)

Figures 18, 19, and 20 illustrate the three different t-tests that were conducted in order to test hypothesis 7 of the investigation, which predicted that the scores in all three risk-assessment measures would be significantly higher for violent sex-offenders than for non-violent sex-offenders.

Results show that, as anticipated, violent sex-offenders scored significantly higher than non-violent sex-offenders on each of the risk-assessment measures (VRAG: $t = -5.203$, $p < .0001$, $d = 4.5565$; Static-99: $t = -5.894$, $p < .0001$, $d = .6228$; MnSOST-R: $t = -11.844$, $p < .0001$, $d = 3.3005$). Effect sizes for the VRAG and the MnSOST exceed the marker for a large effect, while the Static-99 yielded a medium-to-large effect size.

⁷ In the VRAG and the Static-99, the correlation with facet 2 scores, although numerically the lowest value, did not differ significantly from the next lowest value, facet 1. However, both values were significantly lower than the correlation values of facets 3 and 4.

Figures 18a & 18b. Independent Samples T-Test (VRAG)

Fig. 18a. Descriptives

Group Statistics					
	Degree of Violence	N	Mean	Std. Deviation	Std. Error Mean
VRAG	Non-violent	227	2.4493	10.5256	.6986
	Violent	346	7.0058	10.0690	.5413

Fig. 18b. T-test (Vio > N-vio)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
VRAG	Equal variances assumed	.687	.408	-5.203	571	.000	-4.5564	.8757	-6.2764	-2.8365
	Equal variances not assumed			-5.156	468.268	.000	-4.5564	.8838	-6.2931	-2.8198

Figures 19a & 19b. Independent Samples T-Test (Static-99)

Fig. 19a. Descriptives

Group Statistics					
	Degree of Violence	N	Mean	Std. Deviation	Std. Error Mean
Static-99	Non-violent	647	2.2148	1.7539	6.895E-02
	Violent	628	2.8376	2.0133	8.034E-02

Fig. 19b. T-test (Vio > N-vio)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Static-99	Equal variances assumed	8.035	.005	-5.894	1273	.000	-.6227	.1057	-.8300	-.4155
	Equal variances not assumed			-5.882	1238.617	.000	-.6227	.1059	-.8304	-.4150

Figures 20a & 20b. Independent Samples T-Test (MnSOST-R)

Fig. 20a. Descriptives

Group Statistics					
	Degree of Violence	N	Mean	Std. Deviation	Std. Error Mean
MnSOST-R	Non-violent	691	-.2038	4.8772	.1855
	Violent	693	3.0967	5.4720	.2079

Fig. 20b. T-test (Vio > N-vio)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
MnSOST-R	Equal variances assumed	5.746	.017	-11.844	1382	.000	-3.3004	.2787	-3.8471	-2.7538
	Equal variances not assumed			-11.846	1364.967	.000	-3.3004	.2786	-3.8470	-2.7539

Phase I and II Synopsis

It was found that violent and non-violent sex-offenders can be significantly differentiated by their psychopathic profiles. Consistent with the literature on general offending, violent sex-offenders scored higher than non-violent sex-offenders on both PCL-R Factors and all four facets, suggesting that even within the realm of sexual offending, psychopathy in general is more closely associated with violent behavior.

Not surprisingly, violent sex-offenders were characterized by high scores on facets 3 and 4, or Factor 2, which has of course been repeatedly and convincingly associated with general criminality and violence. However, it was very interesting to find that this group of violent sex-offenders was characterized primarily by high scores on facet 2 (Affective), which of course forms part of Factor 1 of the PCL-R. The relationship with this facet was not as surprising as the fact that it was significantly stronger than the relationship with the usually violence-associated facets 3 and 4. Evidently, the general sense of callousness and lack of empathy represented by facet 2 is more central to the violent sex-offender than his antisocial tendencies (facet 3) and criminal lifestyle (facet 4). As such, it is hereby considered to be a valuable dimension to evaluate when doing a valid assessment of risk.

The pattern of facet scores in the non-violent group of sex-offenders did not reflect the expected dominance of facet 1 (Interpersonal) over the other dimensions of psychopathy. Instead, the group was characterized primarily by high facet 2 and facet 3 scores, indicating general callousness and antisocial tendencies, respectively. Interestingly, these dimensions were more prominent and significant than the offenders'

criminal history (facet 4), which is generally heavily and distinctly weighted by risk-assessment measures.

Results also revealed that the VRAG, Static-99, and MnSOST-R in fact associated primarily with the overtly criminal characteristics of the offender (PCL-R Factor 2), particularly those represented by facet 4, while lacking relative sensitivity to the more characterological dimension of the psychopathic sex-offender (PCL-R Factor 1), and even to facet 3 (Lifestyle). This finding is arguable cause for concern given that both types of sex-offenders, violent and non-violent, were found to be highly associated to these underrepresented dimensions of psychopathy.

Thus, it is argued that mental health and correctional professionals who use these instruments run the risk of missing an entire subtype of sex-offender who may be characterized more so by facets 1, 2, and/or 3 than by facet 4, which was the case for the entire sample of offenders analyzed in this investigation. In fact, this investigation found that the most underrepresented facet of psychopathy in risk-assessment instruments (facet 2; Affective) happens to be precisely the facet that is far and foremost the most characteristic of both violent and non-violent sex-offenders!

Finally, the finding that the three risk-assessment measures yielded higher scores for the violent group than for the non-violent group suggests one of two possibilities. Either the violent sex-offender is in fact at a higher risk to reoffend than the non-violent sex-offender, or the design of these instruments is biased in a way that there is greater affinity to detect risk in violent offenders than in non-violent offenders. Although further research on actual recidivism data is required to clarify this issue, the latter possibility is clear cause for concern.

While the available literature has not provided consistent estimates of overall recidivism rates for sex-offenders, there is general consensus that some offenders appear to be much more likely to reoffend than others. Therefore, it is vital to hone our detection resources so that we can make increasingly judicious decisions that will maintain the public's safety while protecting the fundamental rights of those sex-offenders who no longer pose a risk. These decisions often concern the containment and management of violent and/or dangerous offenders within forensic settings, sentencing options and parameters, and whether or not to grant bail or parole.

GENERAL OVERVIEW & DISCUSSION

The implications of this investigation are of theoretical value as well as of clinical significance. The findings contribute to the understanding of the different elements of criminality, specifically within the construct of psychopathy, that manifest themselves in different types of sex-offending (violent and non-violent). Such understanding is immediately relevant to clinical practice and risk-assessment practices in particular.

There are a few observations of theoretical interest with respect to the multidimensional constitution of violent and non-violent sex-offenders.

Not surprisingly, violent sex-offenders were characterized by the “chronically unstable, antisocial, and socially deviant lifestyle” (Hare, 1991, p. 38) that is reflected by Factor 2. They tend to display the disinhibition and poor judgment that is tapped by facet 3 (Lifestyle), and they possess the socially deviant history and criminal disposition represented by facet 4 (Antisocial). More interestingly, however, was the finding that this group of violent sex-offenders was primarily and most significantly characterized by the shallowness and seeming lack of conscience that is reflected by facet 2 (Affective). It seems then, that the type of sex-offender who is willing and able to utilize physical force in an offense, in addition to being a chronic antisocial, is equipped with a fundamental and distinct affective void. Such callousness, along with their inability to experience empathy or guilt, is likely to facilitate their use of violence as an inconsequential instrument.

Non-violent sex-offenders, on the other hand, were not characterized the way in which it had been expected. It was thought that non-violent sex-offenders (e.g., child molesters) would be better described by their sense of entitlement, manipulateness, and self-serving deceitfulness (facet 1; Interpersonal), than by any of the other facets of psychopathy. This was not the case. As their violent counterparts, this group of non-violent sex-offenders was characterized by the interpersonal facet to the least degree in comparison to all the other facets. They were characterized, primarily and equally so, by the affective detachment addressed in facet 2 and by the impulsive, irresponsible lifestyle described in facet 3. Interestingly, their criminal history and antisocial tendencies (facet 4; Antisocial) were significantly less descriptive of the group. Thus, it appears that sex-offenders who for one reason or another refrain from utilizing violence in their sex-offense(s) suffer from a combination of chronic insensitivity and an antisocial lifestyle, but they do not display the degree of interpersonal deviance that had been theorized.

In summary, it is evident that sexual offenders, regardless of the nature of their offense(s) or the degree of forcefulness that categorizes them, manifest a distinct deficiency in affective capability, and tend to be characterized by a socially deviant lifestyle and antisocial tendencies. These theoretical conclusions of course, have immediate relevance and applicability to clinical practice.

Results from this investigation were consistent with the expectation that risk-assessment tools predominately tap into one dimension of sex-offenders' psychopathic composition (F2, particularly f4), while virtually ignoring different yet evidently crucial dimensions of the offender (F1 and f3). The clinical significance of this finding is that up to date, there is no empirical basis suggesting that Factor 2, and particularly facet 4,

encompass, exclusively and absolutely, the risk factors associated with sexual recidivism. In fact, this investigation revealed that both violent and non-violent sex-offenders, while significantly characterized by Factor 2 (more so than by Factor 1), were characterized to an equal or greater degree by facets 2 and 3, than by facet 4. Thus, it is argued that instruments could be improved by broadening their evaluative scope in order to include these other core elements of the offender that as of yet, are relatively unaccounted for.

There are a few clinical concerns in light of the results from this investigation. The most alarming concern is that, at least with the three risk-assessment instruments utilized in this study, sex-offenders with relatively low Factor 2 scores, particularly on facet 4, may not be deemed *dangerous* or *at risk*, even if they are characterized by markedly high scores on Factor 1 and even facet 3. Again, results from Phase I revealed that both violent and non-violent sex-offenders were characterized more by facets 2 and 3 than by facet 4!

If risk measures address the different dimensions of the sex-offender disproportionately, it is argued that, until clearly indicated otherwise by valid empirical work, the evaluative pattern should correspond to the pattern observed in the multidimensional profile of the sex-offender. That is, if non-violent sex-offenders are characterized primarily by the features represented in facets 2 and 3, followed by the features of facet 4, and least so by the features of facet 1 (see Phase I), it is proposed that the risk-assessment of a non-violent sex-offender should address those characteristics in a manner proportionate to their respective degrees of presence. This practice can continue until it can be established that the risk level associated with non-violent sex-offenders is dependent on a different pattern or set of characteristics. The same rationale can be

applied in the risk-assessment of violent sex-offenders, who were found to be characterized primarily by facet 2, then equally so by facets 3 and 4, and least so by facet 1 (see Phase I).

While the proposed theory might be misguided, and the subsequent concerns alarmist and unfounded, the possibility of its validity and potentially grave implications, renders the issue worthy of, at the very least, academic discussion. In practical terms, the gravest of implications is the possibility that, as a result of a systematic deficiency, a subtype of sexual predator with relatively low Factor 2 and facet 4 scores but markedly high Factor 1 and facet 3 scores may be getting past the screening radar of currently used risk-assessment instruments, putting the general public in potential danger. It is true that future research might establish that so-characterized offenders were properly exempt from the label of *high-risk*, but are we, at this point, empirically and theoretically certain enough to make that call?

A second concern arises from the relatively exclusive focus of risk-assessment measures on the characteristics represented by facet 4 of the PCL-R (i.e. criminal history). It is thought that such conceptual design may help explain the high proportion of false-positive identifications of danger that such measures yield. Initially believed based on theory, and now supported by the empirical findings of this investigation, it is proposed that the number of false-positives might very well be reduced by intensifying the assessment of more personal and dynamic characteristics of the offender, such as those represented by facets 1, 2, and 3 of the PCL-R.

It is argued that while the risk factors reflected by facet 4, which are heavily weighted in risk-assessment instrumentation (see Phase II), are able to identify a large

group of possibly dangerous individuals, a more thorough and balanced assessment of the characteristics represented by facets 1, 2, and 3 can help raise the specificity of the overall evaluation, and thus reduce the proportion of false-positives.

For instance, results from Phase I revealed that in addition to high facet 4 scores, violent sex-offenders tend to be characterized by equally high facet 3 scores and even higher scores on facet 2. Thus, while high facet 4 scores can help identify a very large group of possibly dangerous offenders, a complementary evaluation of their composition on facets 3 and 2 would help reduce the group to a more specific and accurate number of offenders that actually fit the multi-faceted prototype of violent dangerousness. The same approach would apply for non-violent sex-offenders, who, in this investigation, were characterized by higher scores on facets 2 and 3 than on facet 4.

It is acknowledged that assessing every aspect that characterizes the offender may not necessarily be relevant to the accurate appraisal of risk that is represented. Ideally, instruments should focus solely on the risk factors that have been associated with the behavior in question. However, until those risk factors are clearly and exhaustively identified, the statistically conservative and clinically responsible approach is to address all of the features known to characterize the offender. That way the examiner can be confident that the critical risk factors of the offender are being captured, even if a certain amount of superfluous information is also gathered. Controlled studies utilizing recidivism data can then sift through all the offender variables until a clear guideline of the actual risk factors is defined.

SORA clinicians/researchers have recently begun to gather recidivism data from the sex-offenders sampled in this investigation. The recidivism database that will

accumulate in the first 5 to 10 years will be fertile ground for research, and will be rich with vital information about the specific characterological descriptors of those who actually reoffended. Close examination of such data should also reveal the prototypical profile of the recidivists who committed particular types of sex-offenses (e.g. violent, non-violent). At that point, risk-assessment instruments can be revised once again in order to integrate the new findings.

The task of improving our risk-assessment methods is a process that must follow a logical and sequential order. The order proposed here is deductive in nature. It is also cyclical and, as such, never-ending, given that perfect prediction of human behavior is arguably impossible to attain. This investigation attempts to contribute to the ultimate goal of maximizing the accuracy of our risk-assessment resources.

This study borrows the best available clinical construct in forensic psychology, psychopathy, to propose a theoretically supported way in which risk measures could potentially increase both their sensitivity and their specificity to the risk posed by different types of sex-offenders. It is argued that efforts should be made to design and redesign instruments so that their evaluative template matches the general characterological profile of the sex-offenders in question.

It is hoped that the observations, findings, and corresponding conclusions presented here will encourage the development of new risk-assessment measures that take into consideration, in addition to their criminal history, the characterological composition of both violent and non-violent offenders. In addition, it is hoped that these findings serve to advocate the appropriate adjustment of currently used instruments. This

research project is only a stepping stone towards that goal, so others are called to collaborate with empirical investigations of their own.

It is necessary for researchers to continue identifying the risk factors that contribute to sexual recidivism, and also to examine how those factors interact with each other to result in different types of offenses. It is concluded that a multidimensional, integrative approach to sex-offender risk-assessment, that complements actuarial data with more individualized assessments of the offender's interpersonal, affective, and lifestyle characteristics, can prove to be of invaluable clinical utility, and at last provide an empirically supported theoretical framework to this delicate endeavor.

ENDNOTES

1. It is acknowledged that there is a considerable assumption driving part of this investigation. The fact that there are characterological descriptors associated with a particular type of offender does not necessarily mean that they should automatically be considered indicators of risk. It is argued that in light of the still unclear understanding of specific risk factors for sexual recidivism and different types of sex-offending, instruments should be designed to tap into a general network of offender characteristics, but it is acknowledged that the ultimate decision regarding *risk* should be based on the risk factors that remain to be identified by studies that look at actual recidivism data. This investigation brings attention to the network of characteristics that are associated with all violent and non-violent sex-offenders, *risky and not*, and as such it represents an important starting point.

2. It is well documented and generally accepted that the best predictor of future behavior is past behavior. For instance, if an offender's characterization matches that of violent sex-offenders, it is likely that if he were to recidivate sexually it would be violently. It does not say anything, however, about whether or not he will recidivate at all. This brings up an important distinction to keep in mind in the context of this investigation. The general prediction of risk to reoffend is different from, and perhaps independent of, the prediction of the type of offense that is most likely to occur if a reoffense were to occur at all.

REFERENCES

- Amenta, A. E., Guy, L. S., & Edens, J. F. (2003). Sex-offender risk-assessment: A cautionary note regarding measures attempting to quantify violence risk. *Journal of Forensic Psychology Practice*, 3, 39-50.
- Andrews, D. A., & Bonta, J. L. (2003). *The psychology of criminal conduct*. Third Edition. Cincinnati, Ohio: Anderson Publishing.
- Barbaree, H. E., Seto, M. C., Langton, C. M., & Peacock, E. J. (2001). Evaluating the predictive accuracy of six risk-assessment instruments for adult sex-offenders. *Criminal Justice & Behavior*, 28, 490-521.
- Barbaree, H. E., Seto, M. C., Serin, R., Amos, N., & Preston, D. (1994). Comparisons between sexual and nonsexual rapist subtypes: Sexual arousal to rape, offense precursors, and offense characteristics. *Criminal Justice and Behavior*, 21, 95-114.
- Belmore, M. F., & Quinsey, V. L. (1994). Correlates of psychopathy in a noninstitutional sample. *Journal of Interpersonal Violence*, 9, 339-349.
- Birbaumer, N., Veit, R., Lotze, M., Erb, M., Hermann, C., Grodd, W., & Flor, H. (2005). Deficient fear conditioning in psychopathy: A functional magnetic resonance imaging study. *Archives of General Psychiatry*, 62(7), 799-805.
- Brinkley, C. A., Newman, J. P., Widiger, T. A., & Lynam, D. R. (2004). Two approaches to parsing the heterogeneity of psychopathy. *Clinical Psychology: Science & Practice*, 11(1), 69-94.
- Brinkley, C. A., Schmitt, W. A., & Newman, J. P. (2005). Semantic processing in psychopathic offenders. *Personality and Individual Differences*, 38(5), 1047-1056.
- Brittain, R. P. (1970). The sadistic murderer. *Medicine, Science and the Law*, 10, 198-207.
- Brown, S. L., & Forth, A. E. (1997). Psychopathy and sexual assault: Static risk factors, emotional precursors, and rapist subtypes. *Journal of Consulting and Clinical Psychology*, 65, 848-857.

- Buffington-Vollum, J. K., Edens, J. F., Johnson, D. W., & Johnson, J. (2002). Psychopathy as a predictor of institutional misbehavior among sex-offenders: A prospective replication. *Criminal Justice and Behavior*, 29, 497-511.
- Cleckley, H. (1941, 1955, 1976). *The Mask of Sanity*, 1st, 3rd & 5th edition. St. Louis, MO: Mosby.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*, 2nd Ed. Mahwah, NJ: Lawrence Erlbaum Associates.
- Conroy, M. A. (2002). Assessment of sexual offenders. Van Dorsten, Brent (Ed). Forensic psychology: From classroom to courtroom, 219-246.
- Cooke, D. J. & Michie, C. (2001). Refining the construct of Psychopathy: Towards a hierarchical model. *Psychological Assessment*, 13, 171-188.
- Cornell, D. G. (1993). Juvenile homicide: A growing national problem. *Behavioral Sciences and the Law*, 11, 389-396.
- Craig, L. A., Browne, K. D., & Stringer, I. (2003). Risk scales and factors predictive of sexual offence recidivism. *Trauma Violence & Abuse*, 4, 45-69.
- Dempster, R. J., Lyon, D. R., Sullivan, L. E., Hart, S. D., Smiley, W. C., & Mulloy, R. (1996). *Psychopathy and instrumental aggression in violent offenders*. Paper presented at the Annual Meeting of the American Psychological Association, Toronto, Ontario.
- Department of Obstetrics and Gynaecology – The Chinese University of Hong Kong. <http://department.obg.cuhk.edu.hk/researchsupport/HomoCor/asp>
- Epperson, D. L., Kaul, J. D., & Hesselton, D. (1998 September). *Final report on the development of the MnSOST-R-R*. Paper presented at the Association for Treatment of Sexual Abusers, Vancouver, Canada.
- Faul, F. & Erdfelder, E. (1992). GPOWER: A priori, post-hoc, and compromise power analyses for MS-DOS [Computer program]. Bonn, FRG: Bonn University, Dep. of Psychology.
- Firestone, P., Bradford, J. M., Greenberg, D. M., & Serran, G. A. (2000). The relationship of deviant sexual arousal and psychopathy in incest offenders, extrafamilial child molesters, and rapists. *Journal of the American Academy of Psychiatry and the Law*, 28, 303-308.
- Flores, G. T. (2003). Empathy, cognitive distortions, and delinquent behaviors in adolescent male violent sex-offenders and non-sex-offenders. *Dissertation*

- Foreman, M. (1988). *Psychopathy and interpersonal behavior*. Unpublished doctoral dissertation, University of British Columbia, Vancouver, British Columbia, Canada.
- Fowles, D. C. (1980). The three arousal model: Implications of Gray's two-factor learning theory for heart-rate, electrodermal activity, and psychopathy. *Psychophysiology*, 17, 87-104.
- Freedman, D. (2001). False prediction of future dangerousness: Error rates and the PCL-R. *Journal of the American Academy of Psychiatry & the Law*, 29, 89-95.
- Gacono, C. B., & Bodholdt, R. H. (2001). The role of the Psychopathy Checklist-Revised (PCL-R) in violence risk and threat assessment. *Journal of Threat Assessment*, 1, 65-79.
- Gendreau, P., Goggin, C., & Smith, P. (2002). Is the PCL-R really the "unparalleled" measure of offender risk?: A lesson in knowledge cumulation. *Criminal Justice & Behavior*, 29, 397-426.
- Glover, A. J., Nicholson, D. E., Hemmati, T., Bernfeld, G. A., & Quinsey, V. L. (2002). A comparison of predictors of general and violent recidivism among high-risk federal offenders. *Criminal Justice and Behavior*, 29, 235-249.
- Gorenstein, E. E. & Newman, J. P. (1980). Disinhibitory psychopathology: A new perspective and a model for research. *Psychological Review*, 87, 301-315.
- Grann, M., Langstrom, N., Tengstrom, A., & Kullgren, G. (1999). Psychopathy (PCL-R) predicts violent recidivism among criminal offenders with personality disorders in Sweden. *Law and Human Behavior*, 23, 205-217.
- Gray, J. A. (1975). *Elements of a two-process theory of learning*. New York: Academy Press.
- Gray, J. A. (1987a). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality*, 21, 493-509.
- Gray, J. A. (1987b). *The psychology of fear and stress*. 2nd Ed. Cambridge: Cambridge University Press.
- Gretton, H., & Hare, R. D. (2003). *Psychopathy and recidivism in adolescent offenders: A ten year follow up*. Manuscript under review.
- Gretton, H. M., McBride, M., Hare, R. D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex-offenders. *Criminal Justice &*

Behavior, 28, 427-449.

- Grubin, D. (1997). Inferring predictors of risk: Sex-offenders. *International Review of Psychiatry*, 9, 225-231.
- Grubin, D. (1999). Actuarial and clinical assessment of risk in sex-offenders. *Journal of Interpersonal Violence*, 14, 331-343.
- Hall, J. R., Benning, S. D., & Patrick, C. J. (2004). Criterion-related validity of the Three-Factor model of psychopathy: Personality, behavior, and adaptive functioning. *Assessment*, 11(1), 4-16.
- Hall, G. C. & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadrapartite model. *Journal of Consulting and Clinical Psychology*, 59, 662-669.
- Hanson, R. K. (1998). What do we know about sex-offender risk-assessment? *Psychology, Public Policy, & Law*, 4, 50-72.
- Hanson, R. K. (2001). *Age and sexual recidivism: A comparison of rapists and child molesters*. User Report 2001-01. Ottawa: Department of the Solicitor General of Canada.
- Hanson, R. K. (2003). Who is dangerous and when are they safe? Risk-assessment with sexual offenders. Winick, Bruce J. (Ed); La Fond, John Q. (Ed). Protecting society from sexually dangerous offenders: Law, justice, and therapy. *Law and public policy*, 63-74.
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.
- Hanson, R. K., & Thornton, D. (1999). *Static-99: Improving actuarial risk-assessments for sex-offenders*. User Report 99-02. Ottawa: Department of the Solicitor General of Canada.
- Hanson, R. K., & Thornton, D. (2000). Improving risk-assessments for sex-offenders: A comparison of three actuarial scales. *Law and Human Behavior*, 24, 119-136.
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences*, 1, 111-119.
- Hare, R. D. (1991). *Manual for The Hare Psychopathy Checklist-Revised*. Toronto: Multi-Health Systems.

- Hare, R. D. (1996a). Psychopathy: A Clinical Construct Whose Time Has Come. *Criminal Justice and Behavior*, 23, 25-54.
- Hare, R. D. (1996b). Psychopathy and antisocial personality disorder: A case of diagnostic confusion. *Psychiatric Times*, 13, 39-40.
- Hare, R. D. (1999). Psychopathy as a risk factor for violence. *Psychiatric Quarterly*, 70, 181-197.
- Hare, R. D. (2003). *Manual for The Hare Psychopathy Checklist-Revised, 2nd Ed.* Toronto: Multi-Health Systems.
- Hare, R. D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law*, 18, 623-645.
- Hare, R. D., & Forth, A. E. (February, 2002). *Psychopathy*. Paper presented by Sinclair Seminars, San Francisco, CA.
- Hare, R. D., & McPherson, L. M. (1984). Violent and aggressive behavior by criminal psychopaths. *International Journal of Law and Psychiatry*, 7, 35-50.
- Harpur, T. J., Hakstian, A. R., & Hare, R. D. (1988). Factor Structure of the Psychopathy Checklist. *Journal of Consulting and Clinical Psychology*, 56, 5, 741-747.
- Harris, A., Phenix, A., Hanson, R. K., & Thornton, D. (2003). *Static-99 coding rules revised*. User Report 2003. Ottawa: Department of the Solicitor General of Canada.
- Harris, G. T., Rice, M. E., & Cormier, C. A. (1991). Psychopathy and violent recidivism. *Law and Human Behavior*, 14, 625-637.
- Harris, G. T., Rice, M. E., & Cormier, C. A. (2002). Prospective replication of the Violence Risk Appraisal Guide in predicting violent recidivism among forensic patients. *Law and Human Behavior*, 26, 377-394.
- Harris, G. T., Rice, M. E., & Lalumiere, M. (2001). Criminal violence: The roles of psychopathy, neurodevelopmental insults, and antisocial parenting. *Criminal Justice and Behavior*, 28, 402-426.
- Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice & Behavior*, 20, 315-335.
- Harris, G. T., Rice, M., Quinsey, V. L., Lalumiere, M. L., Boer, D., & Lang, C. (2003). A

Multisite Comparison of Actuarial Risk Instruments for Sex-offenders.
Psychological Assessment, 15, 413-425.

Hart, S. D. (1998). Psychopathy and risk for violence. In D. J. Cooke, A. E. Forth, & R. D. Hare (Eds.), *Psychopathy: Theory, Research, and Implications for Society* (pp. 355-373). Dordrecht, The Netherlands: Kluwer Academic Publishing.

Hart, S. D., & Hare, R. D. (1997). The association between psychopathy and narcissism: Theoretical views and empirical evidence. In E. Ronningstam (Ed.), *Disorders of Narcissism – Theoretical, Empirical, and Clinical Implications* (pp. 415-436). Washington, DC: American Psychiatric Press.

Hart, S. D., Kropp, P. R., & Hare, R. D. (1988). Performance of male psychopaths following conditional release from prison. *Journal of Consulting and Clinical Psychology*, 56, 227-232.

Hemphill, J. F. (1992). *Psychopathy and recidivism following release from a therapeutic community treatment program*. Unpublished master's thesis, Department of Psychology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Hemphill, J. F., & Hare, R. D. (2004). Some misconceptions about the Hare PCL-R and risk assessment: A reply to Gendreau, Goggin, and Smith. *Criminal Justice & Behavior*, 31(2), 203-243.

Hemphill, J. F., Hare, R. D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology*, 3, 139-170.

Hildebrand, M., de Ruiter, C., & de Vogel, V. (2004). Psychopathy and sexual deviance in treated rapists: Association with sexual and nonsexual recidivism. *Sexual Abuse: A Journal of Research & Treatment*, 16(1), 1-24.

Howells, K., Day, A., & Wright, S. (2005). Affect, emotions and sex offending. *Psychology, Crime & Law*, 10(2), 179-195.

Hudson, S. M., Ward, T., & McCormack, J. C. (1999). Offense pathways in sexual offenders. *Journal of Interpersonal Violence*, 14, 779-798.

Kansas v. Crane. (2002). 534 U.S. 407.

Kansas v. Hendricks. (1997). 117 S. Ct. 2072.

Karpman, B. (1941). On the need for separating psychopathy into two distinct clinical types: symptomatic and idiopathic. *Journal of Criminology and Psychopathology*, 3, 112-137.

Knight, R. A. (1999). *Unified theory of sexual coercion*. Paper presented at the 18th Annual Research and Treatment Conference of the Association for the Treatment

of Sexual Abusers, Lake Buena Vista, Florida.

- Kosson, D. S., Smith, S. S., & Newman, J. P. (1990). Evaluating the construct validity of psychopathy in Black and White male inmates: Three preliminary studies. *Journal of Abnormal Psychology*, 99, 250-259.
- Kroner, D. G., Forth, A. E., & Mills, J. F. (2005). Endorsement and processing of negative affect among violent psychopathic offenders. *Personality and Individual Differences*, 38(2), 413-423.
- Kroner, D. G., Mills, J. F., & Reddon, J. R. (2002). *A coffee can, factor analysis, and criminal risk prediction: a single construct of "criminality" or various facets?* Manuscript under review.
- Langstrom, N., & Grann, M. (2000). Risk for criminal recidivism among young sex offenders. *Journal of Interpersonal Violence*, 15, 856-872.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review*, 14, 17-38.
- Loza, W., & Dhaliwal, G. K. (1997). Psychometric evaluation of the risk appraisal guide (RAG): A tool for assessing violent recidivism. *Journal of Interpersonal Violence*, 12, 779-793.
- Loza, W., Villeneuve, D. B., & Loza-Fanous, A. (2002). Predictive validity of the Violence Risk Appraisal Guide: A tool for assessing violent offender's recidivism. *International Journal of Law & Psychiatry*, 20, 85-92.
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *Journal of Abnormal & Social Psychology*, 55, 6-10.
- Lykken, D. T. (1995). *The Antisocial Personalities*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- MacCulloch, M. J., Snowden, P. R., Wood, P. J. W., & Mills, H. E. (1983). Sadistic fantasy, sadistic behaviour and offending. *British Journal of Psychiatry*, 143, 20-29.
- Malcolm, P. B., Andrews, D. A., & Quinsey, V. L. (1993). Discriminant and predictive validity of phallometrically measured sexual age and gender preferences. *Journal of Interpersonal Violence*, 8, 486-501.
- Mann, J., & Mann, J. (2003). Sex-offender screening in prison. *American Journal of Forensic Psychology*, 21, 33-51.
- Marshall, P. (1994). *Reconviction of imprisoned sexual offenders* (Research Bulletin 36).

London: Home Office Research and Statistics Department.

McNiel, D. E., Gregory, A. L., Lam, J. N., Binder, R. L., & Sullivan, G. R. (in press). Utility of decision-support tools for assessing acute risk of violence. *Journal of Consulting and Clinical Psychology*, 71.

Meehl, P. (1954). *Clinical versus statistical prediction: A theoretical analysis and a review of the evidence*. Minneapolis: University of Minnesota.

Megan's Law. (1994). Title 2C:7-1 – 7-11.

Molto, J., Poy, R., & Torrubia, R. (2000). Standardization of the Hare Psychopathy Checklist-Revised in a Spanish prison sample. *Journal of Personality Disorders*, 14, 84-96.

Monahan, J., Steadman, H. J., Silver, E., Appelbaum, P. S., Robbins, P. C., Mulvey, E. P., et al. (2001). *Rethinking Risk-assessment: The MacArthur Study of Mental Disorder and Violence*. New York: Oxford University Press.

Newman, J. P. (1987). Reaction to punishment in extroverts and psychopaths: Implications for the impulsive behavior of disinhibited individuals. *Journal of Research in Personality*, 21, 464-480.

Newman, J. P. (1998). Psychopathic behavior: An information processing perspective. In D. J. Cooke, A. E. Forth, & R. D. Hare (Eds.), *Psychopathy: Theory, Research and Implications for Society* (pp. 81-104). Dordrecht, The Netherlands: Kluwer Academic Publishing.

Olver, M., & Wong, S. (2003). *Use of the Psychopathy Checklist-Revised (PCL-R) to predict recidivism in a sex-offender population*. Manuscript in preparation.

Paris, F., Yuille, J. C., Walker, L., & Porter, S. (1999). *Sex-offenders' reasoning on ethical issues: Moral blindness or developmental delay?* Manuscript submitted for publication.

Parker, J., Sitarenios, G., & Hare, R. D. (2003). *Large sample multigroup factor analyses of the Hare Psychopathy Checklist-Revised (PCL-R)*. Manuscript in preparation.

Partridge, G. E. (1930). Current conceptions of psychopathic personality. *American Journal of Psychiatry*, 10, 53-99.

Pham, T. H., Remy, S., Dailliet, A., & Lienard, L. (1997). *Psychopathy and prediction of violent behaviors: An assessment in a security hospital*. Paper presented at the 5th International Congress on the Disorders of Personality, Vancouver, British Columbia.

Pham, T. H., Snyders, J., Claix, A., & Remy, S. (2000). *Assessment of the HCR-20 and*

the PCL-R in a Belgium prison sample. Paper presented at the International Association of Law and Psychiatry, University of Sienna, Italy.

- Phenix, A. (2002). Sex-offender risk-assessment. VandeCreek, Leon (Ed). School of Professional Psychology; et al. *Innovations in clinical practice: A source book*, 20, 269-284.
- Porter, S., Birt, A., & Boer, D. P. (2001). Investigation of the criminal and conditional release profiles of Canadian federal offenders as a function of psychopathy and age. *Law & Human Behavior*, 25, 647-661.
- Porter, S., Campbell, M. A., Woodworth, M., & Birt, A. R. (2002). A new psychological conceptualization of the sexual psychopath. Shohov, S. P. (Ed). *Advances in psychology research*, 15, 51-65.
- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A., & Boer, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27, 216-233.
- Prentky, R. A., & Knight, R. A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clinical Psychology*, 59, 643-661.
- Proulx, J. (2000). *Why subtypes of sexual aggressors of children differ as to their offending process*. Paper presented at the 19th Annual Conference of the Association for the Treatment of Sexual Abusers, San Diego, California.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Book Series Title. *The Law and public policy: Psychology and the social sciences series*, 356pp.
- Quinsey, V. L., Rice, M. E., & Harris, G. T. (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence*, 10, 85-105.
- Rice, M. E., & Harris, G. T. (1997). Cross-validation and extension of the Violence Risk Appraisal Guide for child molesters and rapists. *Law and Human Behavior*, 21, 231-242.
- Rice, M. E., & Harris, G. T. (1995). Psychopathy, schizophrenia, alcohol abuse, and violent recidivism. *International Journal of Law and Psychiatry*, 18, 333-342.
- Roberts, C. F., Doren, D. M., & Thornton, D. (2002). Dimensions associated with assessments of sex-offender recidivism risk. *Criminal Justice & Behavior*, 29, 569-589.

- Rogers, R., Salekin, T. T., Hill, C., Sewell, K. W., Murdock, M. E., & Neumann, C. S. (2000). The Psychopathy Checklist: Screening Version: An examination of criteria and subcriteria in three forensic samples. *Assessment*, 7, 1-15.
- Rush, B. (1812). *Medical inquiries and observations upon the diseases of the mind*. Philadelphia: Kimber & Richardson.
- Salekin, R., Rogers, R., & Sewell, K. (1996). A review and meta-analysis of the Psychopathy Checklist and Psychopathy Checklist-Revised: Predictive validity of dangerousness. *Clinical Psychology: Science and Practice*, 3, 203-215.
- Serin, R. C. (1996). Violent recidivism in criminal psychopaths. *Law and Human Behavior*, 20, 207-217.
- Serin, R. C., & Amos, N. L. (1995). The role of psychopathy in the assessment of dangerousness. *International Journal of Law and Psychiatry*, 18, 231-238.
- Serin, R. C., Malcolm, P. B., Khanna, A., & Barbaree, H. E. (1994). Psychopathy and deviant sexual arousal in incarcerated sexual offenders. *Journal of Interpersonal Violence*, 9, 3-11.
- Serin, R. C., Peters, R. D., & Barbaree, H. E. (1990). Predictors of psychopathy and release outcome in a criminal population. *Psychological Assessment*, 2, 419-422.
- Seto, M., & Barbaree, H. E. (1999). Psychopathy, treatment behavior, and sex-offenders recidivism. *Journal of Interpersonal Violence*, 14, 1235-1248.
- Seto, M., Lalumiere, M. L. (2000). Psychopathy and sexual aggression. In Gacono, Carl B. (Ed). The clinical and forensic assessment of psychopathy: A practitioner's guide. *The LEA series in personality and clinical psychology*, 333-350.
- Shine, J. H., & Hobson, J. A. (2000). Institutional behaviour and time in treatment among psychopaths admitted to a prison-based therapeutic community. *Medicine, Science, and the Law*, 40, 327-335.
- Sjoestedt, G., & Langstroem, N. (2001). Actuarial assessment of sex-offender recidivism risk: A cross-validation of the RRASOR and the Static-99 in Sweden. *Law & Human Behavior*, 25, 629-645.
- Skeem, J. L., Mulvey, E. P., & Grisso, T. (2003). Applicability of traditional and revised models of psychopathy to the Psychopathy Checklist: Screening Version. *Psychological Assessment*, 15, 41-55.

- Stadtland, C., Hollweg, M., Kleindienst, N., Dietl, J., Reich, U., & Nedopil, N. (2005). Risk assessment and prediction of violent and sexual recidivism in sex offenders: Long-term predictive validity of four risk assessment instruments. *Journal of Forensic Psychiatry & Psychology*, 16(1), 92-108.
- Stafford, J. E. (1997). *Psychopathy as a predictor of adolescents at risk for inpatient violence*. Unpublished doctoral dissertation, University of Virginia, Charlottesville, VA.
- StatPages.net – <http://members.aol.com/johnp71/javastat.html>
- Thornton, D., & Travers, R. (1991). *A longitudinal study of the criminal behaviour of convicted sexual offenders*. In Her Majesty's Prison Service Psychology Conference. Conference. London: Her Majesty's Prison Service.
- U.S. Census Bureau. (2000). *U.S. Census 2000, Summary Files*. Retrieved June 1st, 2005, from <http://www.census.gov/main/www/cen2000/html>
- Vitacco, M. J., Neumann, C. S., & Jackson, R. L. (2005). Testing a four-factor model of psychopathy and its association with ethnicity, gender, intelligence, and violence. *Journal of Consulting and Clinical Psychology*, 73(3), 466-476.
- Weaver, C. M., Meyer, R.G., & Tristan, L. (2004; In Press). Competing PCL-R factor models in sex-offender risk-assessments: Comparing fit and concurrent validity.
- Weaver, C. M. (2005). Relative merits of competing factor structures in the Pyschopathy Checklist-Revised. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 65(8-B).
- Williamson, S. E., Hare, R. D., & Wong, S. (1987). Violence: Criminal psychopaths and their victims. *Canadian Journal of Behavioral Science*, 19, 454- 462.
- Witt, P. H. (2003). Assessment of Sexual Offenders Against Children (2nd edition). *Journal of Psychiatry & Law*, 31, 105-106.
- Wong, S. (1984). *The criminal and institutional behaviours of psychopaths*. Ottawa, Canada: Ministry of the Solicitor General.

APPENDIX A

16 Core Characteristics of the Prototypical Psychopath (Cleckley, 1941)

1. Considerable superficial charm and average or above average intelligence.
2. Absence of delusions and other signs of irrational thinking.
3. Absence of anxiety or other “neurotic” symptoms, considerable poise, calmness, and verbal facility.
4. Unreliability, disregard for obligations, no sense of responsibility, in matters of little and great import.
5. Untruthfulness and insincerity.
6. Antisocial behavior which is inadequately motivated and poorly planned, seeming to stem from an inexplicable impulsiveness.
7. Inadequately motivated antisocial behavior.
8. Poor judgment and failure to learn from experience.
9. Pathological egocentricity. Total self-centeredness, incapacity for real love and attachment.
10. General poverty of deep and lasting emotions.
11. Lack of any true insight; inability to see oneself as others do.
12. Ingratitude for any special considerations, kindness, and trust.
13. Fantastic and objectionable behavior, after drinking and sometimes even when not drinking. Vulgarity, rudeness, quick mood shifts, pranks.
14. No history of genuine suicide attempts.
15. An impersonal, trivial, and poorly integrated sex life.
16. Failure to have a life plan and to live in any ordered way, unless it be one promoting self-defeat.

APPENDIX B

2-Factor Model of the PCL-R (Hare, 1991)

Factor 1: Selfish, Callous, and Remorseless Use of Others

1. Glibness/Superficial Charm
2. Grandiose Sense of Self Worth
4. Pathological Lying
5. Conning/Manipulative
6. Lack of Remorse or Guilt
7. Shallow Affect
8. Callous/Lack of Empathy
16. Failure to Accept Responsibility for Own Actions

Factor 2: Chronically Unstable, Antisocial, and Socially Deviant Lifestyle

3. Need for Stimulation/Proneness to Boredom
9. Parasitic Lifestyle
10. Poor Behavioral Controls
12. Early Behavioral Problems
13. Lack of Realistic, Long-Term Goals
14. Impulsivity
15. Irresponsibility
18. Juvenile Delinquency
19. Revocation of Conditional Release

APPENDIX C

3-Factor Hierarchical Model of the PCL-R (Cooke & Michie, 2001)

Factor 1: Arrogant and Deceitful Interpersonal Style

1. Glibness/Superficial Charm
2. Grandiose Sense of Self Worth
4. Pathological Lying
5. Conning/Manipulative

Factor 2: Deficient Affective Experience

7. Shallow Affect
8. Callous/Lack of Empathy
6. Lack of Remorse or Guilt
16. Failure to Accept Responsibility for Own Actions

Factor 3: Impulsive and Irresponsible Behavioral Style

3. Need for Stimulation/Proneness to Boredom
15. Irresponsibility
14. Impulsivity
9. Parasitic Lifestyle
13. Lack of Realistic, Long-Term Goals

APPENDIX D

2-Factor/4-Facet Model of the PCL-R (Hare, 2003)

Factor 1: Interpersonal/Affective

Facet 1: Interpersonal

1. Glibness/Superficial Charm
2. Grandiose Sense of Self Worth
4. Pathological Lying
5. Conning/Manipulative

Facet 2: Affective

6. Lack of Remorse or Guilt
7. Shallow Affect
8. Callous/Lack of Empathy
16. Failure to Accept Responsibility for Own Actions

Factor 2: Social Deviance

Facet 3: Lifestyle

3. Need for Stimulation/Proneness to Boredom
9. Parasitic Lifestyle
13. Lack of Realistic, Long-Term Goals
14. Impulsivity
15. Irresponsibility

Facet 4: Antisocial

10. Poor Behavioral Controls
12. Early Behavioral Problems
18. Juvenile Delinquency
19. Revocation of Conditional Release
20. Criminal Versatility

CURRICULUM VITAE

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Residence: Redlands, CA

Education

University of Louisville 2001 - 2006
Louisville, KY

- Doctoral Student in APA-Accredited Clinical Psychology Program
- Clinical Psychology Intern at Patton State Hospital, Patton, CA 2005-2006
- Ph.D. Candidate for 2006 Graduation
- Master of Arts in Clinical Psychology (Forensic Focus) 2003

Pennsylvania State University 1996 - 2000
State College, PA

- Bachelor of Science in Biology/Vertebrate Physiology with a 3.50 GPA 2000
- Minor in Psychology with a 4.00 GPA 2000

Lincoln High School 1993 - 1996
San Jose, Costa Rica

- Bilingual (Spanish / English)

Publications

Professional Papers

Weaver, C.M., Meyer, R.G., Tristan, L., & VanNort, J. (2003). Relative Merits of Competing Factor Structures in the Psychopathy Checklist – Revised. Paper submitted for publication.

Meyer, R.G., Fintel, T.R., Tristan, L., & Weaver, C.M. (2003). Banishment and Permanent Coma as Alternatives to the Death Penalty: Perspectives from Experts and Non-experts. Paper submitted for publication.

Tristan, L., Weaver, C.M., Meyer, R.G., Matala, K. L. (In Progress). Psychopathy Factors and Degree of Forcefulness in Sex-Offenders: Implications for Current Risk Assessment Practices.

Book Chapters

Tristan, L. (2002). "Post-Traumatic Stress Disorder Case Study", In Case Studies in Abnormal Psychology: Sixth Edition. R.G. Meyer (Author).

Tristan, L., Weaver, C.M., & Meyer, R.G. (2003). "Prisoner's Rights: The Cases of Vitek v. Jones, 1980, and Washington v. Harper, 1990", In Classic and Contemporary Cases in Law & Mental Health. R.G. Meyer & C.M. Weaver (Authors). First edition currently under editorial review by Guilford Press.

Tristan, L., Weaver, C.M., & Meyer, R.G. (2003). "Admission of Expert Testimony & The Eyewitness: The Cases of Daubert v. Merrill Dow, 1993, and Kumho Tire v. Carmichael, 1999", In Classic and Contemporary Cases in Law & Mental Health. R.G. Meyer & C.M. Weaver (Authors). First edition currently under editorial review by Guilford Press.

Professional Presentations

Weaver, C.M., Tristan, L., & Meyer, R.G. (2002). Factor Structure of the PCL-R in Megan's Law Risk Assessments: Confirming Competing Factors. Poster presented at the biennial conference of the American Psychology-Law Society. March, 2002: Austin, Texas.

Fintel, T.R., Meyer, R.G., Tristan, L., & Weaver, C.M. (2003). Banishment and Permanent Coma as Alternatives to the Death Penalty: Perspectives from Experts and Non-experts. Poster presented at the annual meeting of the American Psychological Association. August, 2003: Toronto, Canada.

Tristan, L., Weaver, C.M., Meyer, R.G., Matala, K. L. (2004). Psychopathy Factors and Degree of Forcefulness in Sex-Offenders: Implications for Current Risk Assessment Practices. Poster will be presented at the annual meeting of the American Psychology-Law Society. February, 2005: La Jolla, California.

CLINICAL

Individual Therapy

*Psychological Services Center
University of Louisville
Louisville, KY*

*2002 - 2005
Supervisors: Stanley Murrell, Ph.D.
Rich Lewine, Ph.D.*

Provided 200 hours of individual therapy to adult clients, both male and female, and of diverse sexual orientation, race, ethnicity, and religion. The primary therapeutic approach was interpersonal/interactionist in nature, and focused primarily on Axis II related impairment. Cognitive-behavioral techniques were employed with clients suffering from more severe Axis I psychopathology.

*Corrections Psychiatric Treatment Unit
Kentucky State Reformatory
Louisville, KY*

*2002 - 2005
Supervisor: Phillip W. Johnson, Ph.D., A.B.F.P.*

Provided 100 hours of individual therapy to male, inmate clients ranging in age from 20 to 65, and of diverse sexual orientation, race, ethnicity, and religion. An eclectic therapeutic approach was employed, which integrated cognitive, interpersonal, and psychodynamic techniques in order to address clinical problems including severe psychosis, depression, and personality disorders (especially Antisocial Personality Disorder). Experience with diverse types of offenders, including sex-offenders.

Group Therapy

*Secure Care Unit
Central State Hospital
Louisville, KY*

*2004 - 2005
Supervisor: Larry Curl, Psy.D.*

Leader of a weekly, cognitive-behaviorally based Anger Management Group for patients suffering from different degrees of psychopathology, including psychosis. Most of the patients have been court-ordered to undergo a competency evaluation, or have been involuntarily committed for posing danger to self or others. Most patients have a criminal history and/or a history of hospitalizations.

*Corrections Psychiatric Treatment Unit
Kentucky State Reformatory
Louisville, KY*

*2003 – 2004
Supervisor: Phillip W. Johnson, Ph.D., A.B.F.P.*

Co-leader of a weekly, multi-purpose group for psychiatric inmates suffering from a range of psychiatric conditions. Group sizes varied from week to week due to the instability and fluctuation of the inmates' condition. All group members were treated simultaneously with psychotropic medication.

*Oldham County High School
Louisville, KY*

2002
Supervisor: Joseph F. Aponte, Ph.D.

Co-leader of a weekly, Anger Management Group for 15 adolescent male and female high school students. The focus was on cognitive restructuring, relaxation skills, and behavior modification.

Assessment Practica

*Corrections Psychiatric Treatment Unit
Kentucky State Reformatory
Louisville, KY*

2003 - 2004
Supervisor: Phillip W. Johnson, Ph.D., A.B.F.P.

Completed 10 full diagnostic reports on assessments including customized combinations of the following tests: MMSE-Folstein, SIRS, WAIS-III, WASI, WIMS, WRAT-III, MMPI-2, MCMI-III, PAI, BDI-II, BAI, BSI, BHS, SPS, TAT, Incomplete Sentences, and PCL-R, along with a detailed background and social history section. Testees were psychiatric inmates suffering from different forms and severity of psychopathology.

*Secure Care Unit
Central State Hospital
Louisville, KY*

2004 – 2005
Supervisor: Larry Curl, Psy.D.

Conducted brief and full psychological evaluations, and assisted in court-ordered evaluations of competence (KRS.504) as well as evaluations for involuntary commitment (KRS.202-A) proceedings. Testing experience with measures such as the TOMM, SIRS, and CPS.

*Psychological Services Center
University of Louisville
Louisville, KY*

2003 - 2004
Supervisor: Bernadette Walter, Ph.D.

Completed a total of 25 diagnostic intake interviews and conducted focused assessments on children and adults.

*Neuropsychological Clinic
Pennsylvania State University
State College, PA*

2000
Supervisor: Ruben Echemendia, Ph.D.

Administered over 35 neuropsychological batteries to athletes for research concerning the effects that brain concussions have on cognitive functioning. Trained other lab members on test administration, data entry, and data configuration.

*Department of Psychology
Pennsylvania State University
State College, PA*

*2000
Supervisor: Peter Arnett, Ph.D.*

Assisted in research related to the neuropsychological correlation between depression and multiple sclerosis and the effects on cognitive functioning.
Entered and configured data and reviewed the relevant literature.

Forensic Work Experience

*Secure Care Unit
Central State Hospital
Louisville, KY*

*2004 – 2005
Supervisor: Larry Curl, Psy.D.*

Assisted in court-ordered psychological evaluations regarding competency and involuntary commitment, and had direct exposure to the subsequent hearings and testimony.

*Oldham County Jail
Louisville, KY*

*2002
Supervisor: Phillip W. Johnson, Ph.D., A.B.F.P.*

Served as a Spanish/English translator in a forensic interview conducted by Phillip W. Johnson, Ph.D., A.B.F.P. in preparation for his expert testimony in a murder trial.

Teaching / Supervision Experience

*Department of Psychological and Brain Sciences
University of Louisville
Louisville, KY*

*2003 - 2004
Supervisor: Paul Salmon, Ph.D.*

Supervised students in graduate level training courses on clinical interviewing skills and psychological testing with the WAIS-III, WISC-IV, and MMPI-2.

*Department of Psychological and Brain Sciences
University of Louisville
Louisville, KY*

*2002
Supervisor: Robert G. Meyer, Ph.D., A.B.F.P.*

Teaching assistant of Forensic Psychology, an undergraduate-level course taught by Robert G. Meyer, Ph.D., A.B.F.P.

*Pennsylvania State University
State College, PA*

1996 - 1998

Tutored students in all undergraduate levels of Spanish.

Cross-cultural Experience

Christian Church Refugee Center
Louisville, KY

2002
Supervisor: Suzanne Meeks, Ph.D.

Participated in a lecture on the universality of Major Depression Disorder given by Suzanne Meeks, Ph.D. at a Christian Church Refugee Center in Louisville, KY. Wrote a translation of the lecture from English to Spanish in order to assist the Latin refugees at the center. Other refugees came from the Middle East, Eastern Europe, and Africa.

Volunteer Work

Milton Developmental Services
Milton, PA

1998 – 2000

Worked with mentally handicapped individuals. Spent two summers entertaining, interacting, and looking after over 30 male adults suffering from diverse mental disabilities. Duties included cleaning the patients, feeding them, administering and monitoring their daily medications, taking them to recreational parks and centers, and organizing educational as well as fun daily activities.

Honors and Awards

University of Louisville
Louisville, KY

- Graduate School Fellowship 2001 - 2003

Pennsylvania State University
State College, PA

- University Scholarship -- John W. White Memorial Fund -- for academic achievement in the Liberal Arts 1997
- Gold medal for academic excellence -- based on maintained status in the Dean's List after the first two years of college 1998
- Dean's List 1996 - 2000

Society Affiliations

- American Psychology Association 2000 – 2005
- Golden Key National Honor Society 1998 – 2000
- Psi Chi Honor Society 1998 - 2000

Workshop Series for American Academy of Forensic Psychology

(Charleston, SC; February, 2003)

“Forensic Assessment of Violent Juvenile Offenders”	Thomas Grisso, Ph.D., ABPP
Diplomate in Forensic Psychology
“An Introduction to Forensic Psychology Practice”	Alan M. Goldstein, Ph.D., ABPP
Diplomate in Forensic Psychology
“Comprehensive Child Custody Evaluations”	Marsha Hedrick, Ph.D., ABPP
Diplomate in Forensic Psychology
“Assessing Malingering and Defensiveness”	Randy K. Otto, Ph.D., ABPP
Diplomate in Forensic Psychology

Professional Lectures and Colloquia

(Sponsored by The University of Louisville - Department of Psychological and Brain Sciences: 2001-2004)

04/10/02	“Gay and Lesbian Issues in Psychotherapy”	Kia Kirby
04/18/02	“Psychotherapy with Older Adults”	Bob G. Knight
05/10/02	“Interpersonal Psychotherapy in the Treatment of Late Depression”	Gregory Hinrichsen
10/01/02	“The Development of Anxiety and Its Disorder: Triple Vulnerabilities”	David H. Barlow
Grawemeyer Foundation
02/12/03	“Comorbidity of Dementia and Depression: Implications for Assessment and Treatment”	Benjamin Mast
03/12/03	“The Treatment of Schizophrenia”	Richard Lewine
04/15/03	“Disruptive Behavior Problems: Identifying Neuropsychological and Environmental Correlates”	Tammy Barry
2/11/04	“Diagnosis and Treatment of Pedophilia”	Katherine Peterson
3/10/04	“An Overview of Sex Offender Risk Assessment”	James Van Nort