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PSYCHOPATHY AND THE
LEVEL OF SUPERVISION
INVENTORY

NO. 1987-25

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**PSYCHOPATHY AND THE
LEVEL OF SUPERVISION
INVENTORY**

NO. 1987-25

This working paper was prepared in 1987 for the Research Division, Ministry of the Solicitor General of Canada and is made available as submitted to the Ministry. The views expressed are those of the authors and are not necessarily those of the Ministry of the Solicitor General of Canada.

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ABSTRACT

This paper investigates the degree to which the concept of psychopathy is incorporated in the Level of Supervision Inventory (LSI-VI). The LSI is a needs/risk assessment device that is used extensively in Ontario probation and adult corrections. Sixty-one offenders with a mean age of 25.7 (SD=7.3) were chosen from three offender groups: federal (n=20), provincial (n=21), and probation (n=20). To determine the relationship between the construct of psychopathy and the LSI-VI scale, each subject was assessed with Andrews (1983) Level of Supervision of Inventory, and with two measures of psychopathy, Hare's (1980) Psychopathy Checklist and the diagnosis of Antisocial Personality Disorder (301.7) as defined in the Diagnostic and Statistical Manual, Third Edition (DSM III; APA, 1980), each of which adopts a different approach to the construct of psychopathy. The multiple correlation between the LSI total score and the two measures of psychopathy was $R = .89$ ($p < .001$, one tailed). Hence, the two measures of psychopathy accounted for 78 percent of LSI total score variance. The Hare and DSM measures of psychopathy were highly correlated with and accounted for significant proportions of the following LSI subsections: Criminal History ($r = .80$ and $.64$, respectively), Employment/Education ($r = .57$ and $.39$, respectively), Alcohol/Drugs ($r = .54$ and $.29$, respectively). Oneway analyses of variance showed that offenders assigned to levels of risk according

the LSI were significantly different ($P < .001$) on both measures of psychopathy. As well, the probation offender group differed from both groups of incarcerates on the LSI-VI and both measures of psychopathy. However, there were no differences between federal and provincial inmates on these measures. The results suggest that psychopathy is the principal psychological construct that is measured by the LSI assessment device.

The Level of Supervision Inventory (LSI-VI) is a standardized interview schedule designed to classify adult probationers on the basis of personal and situational risk/need factors. This classification instrument is presently being used by the Probation Services of the Ontario Ministry of Correctional Services and it has proven to be a valid and reliable predictor of recidivism (Andrews et al. 1985). One personality construct that has also contributed reliably to predictions of criminal behaviour is the psychopathic personality. This raises the question as to whether the latter is incorporated in the LSI's prediction of recidivism. However, no studies have examined psychopathy as an underlying theoretical variable in the LSI's risk/needs assessment.

The purpose of this study was to examine the degree to which the psychopathic personality accounts for the variability of ones' scores on the Level of Supervision Inventory (LSI-VI) risk/needs assessment. Specifically, this study was undertaken to investigate the relationship between the LSI and two measures of psychopathy, the Psychopathy Checklist (Hare 1980) and the Diagnostic and Statistical Manual Third Edition (DSM-III) classification of Antisocial Personality Disorder (301.7). It is hypothesized that high risk offenders as scored on the

LSI (in comparison to low risk offenders) will score significantly higher on the Psychopathy Checklist as well as be more likely to fulfill the criteria for the DSM-III Antisocial Personality Diagnosis. Secondly, it is hypothesized that certain subcategories of the LSI will correlate highly with the Psychopathy Checklist and the criteria associated with the Antisocial Personality Disorder. The results of this analysis will enable researchers and correctional officials to understand more fully the construct validity of the LSI. In doing so, they may revise or add additional items to the scale that might serve to increase the predictive validity of this measure.

The Personality-Crime Link

Before one considers the relationship between the LSI and psychopathy, one should be aware of the historical positions concerning the link between personality and crime. Historical analysis reveals that the criminal personality was largely disregarded by North American criminologists due to the findings of researchers like Scheussler and Cressey (1950). These investigators argued that only 42 percent of 113 studies indicated a personality-crime link (Andrews, Wormith, and Kiessling, 1985). However, this finding has been criticized in two ways. Firstly, Quay (1965) reported

that only 4 of 30 assessment instruments used in those studies fulfilled modern psychometric qualifications. Secondly, Tennebaum (1977) and Waldo and Denitz (1967) reviewed these studies and found that 80 percent of these reports supported a personality-crime link (Andrews, Wormith and Kiessling, 1985). The results of systematic empirical studies have brought this link back into focus.

Personality and the Level of Supervision Inventory

Several studies have examined the relationship between personality attributes and the Level of Supervision Inventory. Andrews et al. (1984) found that total LSI scores were most strongly associated with measures of generalized rule violations (Socialization, Psychopathy, Sensation Seeking) as well as emotional/personal disturbances and skill deficits. They stated that the "generalized trouble factor" accounted for 75 to 80 percent of the variance in an LSI subtotal intercorrelation matrix. Measures of Psychopathy, Socialization and Neuroticism were found to correlate highly with LSI scores, suggesting an antisocial personality syndrome. Other studies have indirectly examined the personality-crime link between psychopathy and the LSI. Andrews et al. (1986) revealed that the Peterson, Quay and Cameron (1957) measurement of psychopathy correlated $r = .40$ with the Emotional/Personal subcategory

of the LSI. This finding was consistent with Hanson et al. (1983), who found that a paper-and-pencil measurement of psychopathic personality had significant incremental validity within a probation sample. Andrews et al. (1986) revealed that a stepwise multiple regression, using recidivism as the dependent variable, selected psychopathy as the third factor to enter the prediction formula, yielding a partial $r=0.16$ and a zero order $r=0.31$. Psychopathy also was found to produce a partial correlation of $r=0.20$ when entered into a multiple correlation between recidivism and the LSI subtotals and paper and pencil measures. Andrews, Wormith and Kiessling (1985) supported these findings by stating that the Criminal Personality was the second strongest correlation of the interview measures accounting for 40 percent of the shared variance. The Criminal Personality was also found to be among the top two correlates of criminality, regardless of how criminality was defined. This construct, in combination with criminal sentiments, was found to be a dominant predictor of official recidivism with controls for age and criminal history. They concluded that psychopathy (which accounts for one of the dimensions of the criminal personality) was among 3 other predictors that made independent contributions to the prediction of recidivism (Andrews, Wormith and Kiessling, 1985).

Andrews et al. (1986) summarized these findings in the following way: "scores on psychopathy, were among the strongest correlates of propensity for deviance, regardless of the population sampled". Therefore, this evidence suggests that the psychopathic personality may be one of the dominant predictors of recidivism.

The Level of Supervision Inventory

The Level of Supervision Inventory has also been shown to be a valid and reliable predictor of recidivism as well as an effective case classification instrument. The LSI was developed in the Ottawa Probation and Parole offices as an attempt to assist probation officers in the classification of their clients into groups requiring minimum, moderate and intensive levels of supervision. The LSI-VI is used to efficiently distribute probation services to clients on the basis of their level of risk to society (risk factors) and their need for service (need factors) (Andrews and Bonta, 1985). The risk factors refer to "those aspects of a person's history, behavior, attitudes and circumstances which are associated positively with the chances of recidivism" (Andrews et al. 1986). The need factors refer to "those dynamic risk factors that when changed are associated with subsequent shifts in the chances of criminal behavior" (Andrews et al. 1986). Risk/needs assessments improve the efficiency

of Probation Services by reducing the amount of supervision or service offered those offenders who comply with the Conditions-of-Probation and do not pose a risk or present clear needs for service (Andrews and Bonta, 1985). Risk/Needs assessment also delivers supervision to subgroups who are likely responsible for a measurable amount of criminal activity in the community as a whole (Andrews and Bonta, 1985).

The Level of Supervision Inventory (LSI-VI) consists of a 58 item quantitative survey of the offenders' attributes and situations (Andrews 1982). Scoring of the LSI-VI is completed on the basis of reviews of official records and interviews with the subject and collaterals. Each item is scored in a "0-1" format and the total LSI score is the simple sum of checked items (Andrews 1982). The LSI-VI consists of the following 11 subcategories. The number of items in each subcategory is presented in brackets:

- Criminal History (10)
- Education/Employment (10)
- Financial (2)
- Family/Marital (4)
- Accommodation (3)
- Leisure-Recreation (2)
- Companions (5)

Alcohol/Drug Problems (9)

Emotional/Personal (5)

Probation/Parole Conditions (4)

Attitudes/Orientations (4)

The LSI has been shown to be a very reliable and valid instrument. Bonta et al. (1986) found that the intercorrelations among LSI subcomponents in addition to the correlations between the subcomponents and the LSI total scores yielded a standardized alpha coefficient of .82 in a sample of 152 male offenders. Andrews (1982) found that three intra-rater and three inter-rater short term temporal stability estimates ranged from .87 to .89 in a sample of 97 probationers. Grant (1984) supported this finding by reporting that the inter-rater reliability was established by a pair of trained raters until agreement reached 87 percent. Andrews (1984) found that the LSI's internal consistency displayed alpha in the .70s in both prison (N=152) and probation (N=598) samples. Andrews et al. (1986) found that the overall convergent validity of the LSI subtotals was .41 in a sample of 192 adult probationers.

The LSI has been shown to possess moderate to strong degrees of predictive criterion validity within several different correctional institutions. Andrews et al. (1984) revealed that intake LSI scores were positively correlated

with indices of official levels of supervision in both prison (n=152) and probation samples (n=598). Andrews et al. (1984) stated that among prisoners, the higher the LSI scores, the greater the probability of assignment to higher security institutions (r=.90), the greater number of contacts with mental health professionals (r=.40), and the lower the chances of release by means other than regular termination of sentence (r=.30). Andrews et al. (1984) also found that the probation groups' LSI scores were associated with initial level of supervision assigned (r=.34), number of contacts with the probation officer (r=.25) and the chances of an early termination or closure (r=.43). Predictive correlations were also shown with a variety of indices of rule violations including: performance ratings completed by correctional staff (probationers r=.35, n=119; prisoners r=.25, n=119) misconduct rates within prison (probationers r=.38, n=561; prisoners r=.36, n=119, group home r=.52, n=75) and recidivism upon followup (probationers r=.43, n=561; group home r=.40, n=75) (Andrews et al., 1984). Andrews et al. (1984) state that within the prison sample, 84 percent of the total days spent in segregation were served by the very high risk inmates (LSI scores of 24 or greater). Within the probation sample, 94 percent of those recidivists who were incarcerated upon reconviction

and 90 percent of the multiple reconviction cases fell in the high or very high risk groups (Andrews et al. 1984). Andrews et al. (1984) note how the magnitude of the traditional validity estimates break the traditional .40 barrier (Monahan 1981).

The LSI has also displayed a significant Relative Improvement Over Chance (RIOC) (Loeber and Dishion 1983). In three probation samples (Andrews, Kiessling, Mickus and Robinson 1985) and two prison samples (Andrews et al. 1985; Motiuk, Bonta and Andrews 1986), the RIOC in the prediction of recidivism has varied from 45 to 90 percent (median of eight estimates=67%) Andrews et al. 1986).

In comparison to other risk assessment scales, the validity of the LSI slightly exceeded that of the Wisconsin Risk Scale (Biard, Heinz and Benis, 1979) and the Hoffman and Stone Meierhefer (1979) Salient Factors Score (Andrews et al. 1985). Andrews et al. (1985) found that the presentence LSIs' of 87 probationers were positively correlated with level of institutional custody ($r=.40$), with regular rather than early release ($r=.21$) and negatively associated with transfers to community-based residential centres ($r=-.22$). Andrews et al. (1985) state that the Salient Factors correlated $-.38$ with the level of institutional custody, $-.17$ with regular release, and $.21$ for community transfers. The

corresponding correlations involving the Wisconsin Risk Scale was .35, .17 and -.17. Finally, Motiuk, Bonta and Andrews (1986) compared the LSI with an MMPI based classification instrument (Megargee & Bohn, 1979) in the identification of incarcerated offenders for correctional halfway houses. The LSI consistently outperformed the MMPI in the prediction of program success and reincarceration, yielding chi squares of 9.19 ($p < .01$), and 13.10 ($p < .001$) respectively in comparison to the chi squares of 3.14 (ns) and 2.14 (ns) for the M-MMPI based instrument. In summary, the Level of Supervision Inventory (LSI-VI) is a reliable, valid and effective prediction instrument.

Characteristics of the Psychopath

The possibility of psychopathy operating as an underlying theoretical variable of the LSI can be understood only if one is familiar with the characteristics of the psychopathic personality, as well as the instruments that measure such an attribute.

In the publication, Mask of Insanity, Cleckley (1964) described the characteristics that differentiate the psychopath from the nonpsychopath in terms of the following actions and apparent intentions:

- Superficial charm and good intelligence;
- absence of delusions and other signs of

- irrational thinking;
- absence of nervousness or psychoneurotic manifestations;
- unreliability;
- untruthfulness and insincerity;
- lack of remorse or shame;
- inadequately motivated antisocial behaviour;
- poor judgment and failure to learn by experience;
- pathogenic egocentricity and incapacity for love;
- general poverty in insight;
- unresponsiveness in general interpersonal relations;
- fantastic and uninviting behaviour with drink and sometimes without;
- suicide rarely carried out;
- sex life impersonal, trivial and poorly integrated;
- failure to follow life plan.

(pp.362-3)

Karpman (1966) characterized the psychopath as an individual who displays immaturity and callousness, and is lacking in total emotional depth (Wong, 1984). The psychopath cannot delay the gratification of his immediate need, and the contingencies of behaviour have very little effect. Karpman states that the psychopath

can either be of the aggressive predatory or the passive parasitic type. The former tends to use violence as a means to satisfy his needs, while the latter appears to be more manipulative and appeals to others by displaying scenes of helplessness. McCord and McCord (1964) concluded that the psychopath possesses two dominant traits, lovelessness and guiltlessness. Other investigators like Fould (1965) and Buss (1966) identified egocentricity and lack of empathy as the two major characteristics that account for the psychopath's antisocial behaviour. Recent evidence suggests that the psychopath may be best viewed as a specific construction of four interrelated clusters of traits: emotional attachment, superficial relationships; egocentricity/duplicity and impulsivity (Raine 1985).

Incidence of Psychopathy

Hare (1980) estimates that 25 to 30 percent of the offenders, within selected samples from provincial and federal institutions in Canada, are psychopathic. Guze (1976) utilized the DSM-III Antisocial Personality diagnosis (301.7) and estimated that 40 to 78 percent of various Canadian prison populations were psychopathic. Wong (1984) concluded that 20 percent of the inmate population in the Correctional Service of Canada could be considered psychopathic. He found that the proportion

was significantly higher in the maximum security penitentiaries (30%) compared to 15 percent in the medium ones.

Criminal History of the Psychopath

Psychopaths have also been shown to possess much more extensive criminal histories than nonpsychopaths (Wong 1984). Hare (1980) found that psychopaths were convicted of significantly more thefts, robberies and assaults. Psychopaths were also shown to have committed more violent offences (e.g., assaults, possession of a weapon) than were nonpsychopaths (Hare and McPherson in press). Wong (1984) replicated these findings as he found that psychopaths as a group committed more offences per year while free in the community, had trouble with the law at an earlier age and spent more time in prison as a consequence.

Assessment of Psychopathy

Hare and Cox (1978) used Cleckley's (1964) criteria in a 7-point Global Rating Scale. This instrument ranked an individual according to the extent to which his behaviours and personality over a long period of time were consistent with Cleckley's criteria. However, there were serious practical problems associated with this scale. Hare (1985) argued that this instrument required the raters to be familiar with Cleckley's criteria and to

integrate extensive interview and case history data. Other shortcomings included the considerable amount of confusion surrounding Cleckley's criteria and the difficulties involved in interpreting a particular score. Raine (1985) discussed several self-report questionnaires such as the Personal Opinion Study (Quay & Parsons, 1971), the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), the SPY (Sociopathic Scale: Spielberger et al, 1978), the Socialization Scale (Levander et al, 1980), the MMPI (Hathaway & McKinley, 1967), and less frequently behavioural rating scales such as the Sociopathic Behavior Rating Scale (Ziskind et al, 1971), and the Correctional Adjustment Checklist (Quay, 1971) in the assessment of psychopathy. Raine (1985) suggested that self-report questionnaires provided faulty assessments of psychopathy because they assume honesty on the part of the respondents, when psychopaths are thought to be pathological liars. He stated that behaviour rating scales overcome this problem, yet they lack the interview-derived subjective clinical impressions deemed necessary for psychiatric assessment (Raine 1985).

The Psychopathy Checklist

Hare (1980) developed an instrument called the Psychopathy Checklist which emphasizes a more objective approach by making use of case history data as well as

including a semi-structured interview which retains the clinical element (Raine, 1985). The Psychopathy Checklist consists of 22 items that were statistically derived from over 100 characteristics associated with psychopathy. It is scored on a 3-point ordinal scale (0, 1, or 2), with the total score ranging from 0 to 44. A score of "2" indicates that the item applies to the individual and/or that the individual's behaviour is generally consistent with the flavor and intent of the item (Hare, 1985). A score of "1" indicates that the item applies to a certain extent but not to the degree required; the item matches the behaviour in some respects but with too many exceptions or doubts to warrant a score of 2. A score of 1 indicates that the item does not apply to the individual because he does not exhibit the trait or behaviour in question, or he exhibits characteristics that are the opposite of, or inconsistent with, the intent of the item, (Hare 1985). The items are listed below:

1. Early Behavioural Problems
2. Juvenile Delinquency
3. Multiple Offenses
4. Poor Probation or Parole Risk
5. Drug Alcohol Abuse
6. Boredom

7. Lack of Realistic Long-term Goals
8. Egocentricity/Grandiose Sense of Self-Worth
9. Parasitic Lifestyle
10. Frequent Marital Relationships
11. Promiscuous Sexual Behaviour
12. Irresponsible Behaviour as Parent
13. Glibness/Superficial Charm
14. Conning/Lack of Sincerity
15. Pathological Lying and Deception
16. Impulsiveness
17. Short Temper
18. Lack of Effect or Emotional Depth
19. Lack of Empathy/Callous Disregard for the
Feelings of Others
20. Lack of Remorse or Guilt
21. Failure to Accept Responsibility for Actions
22. Previous Psychiatric/Psychological History

The Psychopathy Checklist assessment takes approximately one hour to complete. Information used to complete the Psychopathy Checklist is obtained from a semi-structured interview and from institutional files. (Hare, 1985). Hare (1985) reports that the Psychopathy Checklist should not be completed without access to reasonably detailed file information. Criminal histories, family and community assessments by social workers and

probation officers, reports of institutional behaviour, official police reports and case histories by classification personnel, parole officers and psychologists are all reported to be particularly useful. Hare (1985) recommends that two investigators independently complete the Psychopathy Checklist for each individual so that a measure of inter-rater reliability may be computed. The Psychopathy Checklist should be restricted to samples that do not contain inmates who are psychotic, mentally retarded or clearly brain-damaged.

The overall reliability, inter-rater reliability and test-retest reliability of this checklist yielded the following coefficients: .88, .93, .92, respectively (Hare, 1985). The total scores of this assessment and the 7-point Global Rating Scale of Psychopathy (Hare & Cox, 1978) were compared showing a linear and highly significant correlation of $r=.83$. Hare (1985) also pointed out that this instrument could be utilized by inexperienced raters. He found that the correlation between inexperienced raters using the checklist and experienced raters using the Global Rating Scale was $r=.84$. Moreover, Raine (1985) has shown that the Psychopathy Checklist can be extended from a Canadian to an English Prison population. In summary, the Hare (1980) Psychopathy Checklist provided a valid and reliable

assessment of the psychopathic personality.

The Antisocial Personality Disorder

The Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III), which is published by the American Psychiatric Association (APA), offers an alternative diagnosis of the psychopathic personality. The APA refers to the psychopath as an individual with an "Antisocial Personality Disorder" (section 301.7). The major characteristics include a history of chronic antisocial behaviour beginning before the age of 15 and continuing into adulthood through stealing, fighting, truancy, irresponsible relationships with family, friends and sexual partners and the inability to sustain lasting close relationships. Research has shown that the DSM-III diagnosis of Antisocial Personality Disorder highly correlates with other assessments of psychopathy. Hare (1985) demonstrated that the Kappa coefficient (Cohen, 1960) for agreement between Antisocial Personality Disorder and Global rating scales was 0.70. Hare (1985) stated that when the Antisocial Personality Disorder was treated as a dichotomous variable, a significant correlation (Biserial $r=0.61$ $df=169$, $p<.001$) with global ratings of psychopathy was found (Wong, 1984). Hare (1985) revealed that the DSM-III diagnosis correlated $r=.67$ with the Hare Psychopathy Checklist in

a sample of 199 inmates. Hare (1985) also examined the extent to which the DSM-III diagnosis agreed with the psychopathy checklist in the classification of inmates into high, medium or low levels of psychopathy. His results showed that the Kappa coefficient for diagnostic agreement between these two assessments was 0.78. Wong (1984) found a highly significant association between a high psychopathy rating and the diagnosis of Antisocial Personality Disorder ($\chi^2=11.47$ $df=2$, $p<.001$). The highly significant relation between these different measures provides construct validity to the attribute of psychopathy, and affords greater confidence to the Hare (1985) Psychopathy Checklist and the DSM-III diagnosis of Antisocial Personality Disorder (301.7)(APA).

Method

Subjects

A sample of 83 male adult offenders drawn from the Correctional Services of Canada, the Ontario Ministry of Correctional Services and the Ontario Probation and Parole system, were asked to participate in the study. Fifteen subjects refused participation, while 7 subjects were rejected for reasons discussed later in the study, leaving a sample of 20 federal offenders, 21 provincial offenders and 20 probationers. The participating subjects ranged in age from 18 to 45 years ($M=25.7$,

SD=7.2) with 46 percent having completed their grade 10 and 25 percent having completed their grade 12.

Setting

Subjects from the Correctional Services of Canada, and the Ontario Ministry of Correctional Services were being held in the Ontario Ministry of Correctional Services' Ottawa-Carleton Detention Centre. The federal offenders (n=20) were interviewed in the maximum security wing of the detention centre. The provincial offenders, who were secured in the minimum security area (n=12), were interviewed in one of the four interview rooms within the psychology department. The remaining provincial offenders (n=9) were assessed in the maximum security area. Subjects from the Ontario Probation and Parole system (n=20) were interviewed at the Ottawa-Central Probation and Parole office.

All interviews within each setting were conducted in total privacy. Both settings provided ready access to subject files and records. Space availability within each of these institutions allowed for only one researcher to interview subjects.

Groups

Sixty-one subjects were divided into 3 groups (federal, provincial and probation) on the basis of their current sentencing status. The federal group consisted

of 20 federal offenders serving a sentence of incarceration for a period of 2 years and over. The provincial group consisted of 21 provincial offenders who received sentences of incarceration ranging from one day to 2 years less a day between November 1986 and January 1987. The probation group consisted of 20 offenders who were sentenced to a probation term within the last two years. The groups were constructed in such a way that the relation between LSI scores and 2 different measures of psychopathy could be analyzed across 3 different levels of risk. It was predicted that federal, provincial and probation groups would produce high, medium and low LSI scores respectively.

Thirty Federal offenders were asked to participate, of which seven refused because they were ambivalent about disclosing their personal files to the researcher. Three subjects were rejected from the federal sample because one individual was having his sentence appealed, while the remaining two subjects could not speak English. The remaining federal participants (n=20) ranged in age from 21 to 38 years (M=27.3, SD=5.2). Ninety percent of the federal offenders' criminal histories contained an assaultive and/or violent offence. Thirteen offenders within this group were incarcerated for violations of their parole, while the remaining seven subjects were

awaiting transfer to a federal penitentiary. Eighty percent of this sample had completed less than a grade 12 education.

Of the 31 provincial offenders asked to participate, seven refused. Three subjects were rejected from the provincial sample; one subject was suffering from a serious mental disorder, while the remaining two subjects were functioning at the mentally retarded level. These rejections were warranted on the grounds that Hare's (1980) Psychopathy Checklist, and DSM-III's Antisocial Personality diagnosis exclude such subjects from their assessments. The remaining provincial participants (n=21) ranged in age from 18 to 45 years (M=27, SD=9.5). Eighty-six percent of the provincial offenders' criminal histories contained an assaultive or violent offence. Eighty-five percent of this group had completed their grade 12.

The probation group consisted of 20 offenders who ranged in age from 18 to 41 years (M=22.7, SD=5.4). Forty-five percent of this group had committed an assaultive and/or violent offense during their criminal past, while 60 percent had not completed their grade 12. There are no statistics available concerning the number of clients who refused participation. One subject was rejected at the interview stage because he was

functioning at the mentally retarded level.

Interview Protocol

Each interview was guided by an Interview Format (see Appendix A). The Interview Format combined the items within the Level of Supervision Inventory (Andrews 1983), the Psychopathy Checklist (Hare 1980) and the Diagnostic and Statistical Manuals Third Edition, Antisocial Personality Disorder (301.7) (APA), into a single interview protocol.

The first part of the Interview Format contained a combination of the items within the Hare (1980) Psychopathy Checklist and the Andrews (1983) Level of Supervision Inventory (LSI-VI). LSI subsection Probation/Parole (items 51 through 54) were omitted from the Interview Format because they were designed for probation subjects and therefore could not be used on the incarcerated federal and provincial offenders. LSI item 50 (psychological assessment indicated) was also omitted because a limited amount of background information did not allow one to properly assess this item. Similar items within the LSI-VI and the Psychopathy Checklist were grouped together so as to avoid repetition and maintain interview continuity. Some of the Psychopathy Checklist items contained questions that were used in Serin's (1986) Psychopathy Interview Format, while others were

taken directly out of the Hare (1985) Psychopathy Checklist. Most of the questions relating to the LSI-VI were taken from Andrews (1982) Level of Supervision Inventory, Interview and Scoring Guide.

The second section of the interview format contained a direct reproduction of the Diagnostic and Statistical Manuals's (3rd Ed.) (DSM-III) Antisocial Personality Disorders (301.7), utilizing diagnostic criteria B, C and D (refer to appendix B). Diagnostic criteria A (current age at least 18) and E (antisocial behaviour is not due to either severe mental retardation, schizophrenia or manic episodes) were not scored because the entire subject pool included individuals who were 18 years of age or older, with no evidence of mental retardation, schizophrenia or manic episodes.

The final interview section contained a brief, organized summary of the Level of Supervision Inventory, the Psychopathy Checklist and the DSM-III diagnosis Antisocial Personality. The summary sheets organized the information from each assessment onto a single sheet, without any transformation of the data. The first summary sheet consisted of an LSI-VI 58 item checklist. Additional spaces were provided for each of the ten LSI-VI subsection totals (refer to appendix C). The second summary sheet listed the 22 items of Hare's (1980)

Psychopathy Checklist, with an additional space provided for the total score (refer to appendix D). The final summary sheet listed the diagnostic criteria for the DSM-III diagnosis of Antisocial Personality Disorder (301.7). Subsections B (onset before age of 15) and C (Manifestation of the disorder since age of 18) were subtotalled: subsection D (pattern of continuous antisocial behaviour ... with no intervening period of at least five years between age 15 and present) was not subtotalled because it consisted of only one item (refer to appendix E). Each subject's diagnosis was indicated at the bottom of the summary sheet by a score of 0 to 3. A score of 3 would indicate that the subject fulfilled all of the diagnostic criteria for Antisocial Personality Disorder (B, C, D); a score of 2 would indicate that the subject fulfilled only 2 of the 3 diagnostic criteria; a score of 1 or 0 would indicate that the subject fulfilled only one or none of the diagnostic criteria, respectively.

Each interview format contained a title page and consent form. The title page listed in order the subject's name, institutional client number, date of birth and sample. The consent form outlined that the research project had been explained to the client, that the client would be asked some confidential questions, that his file would be reviewed for background information and that his

participation in the study was in addition to the Ministry's rules and regulations (refer to Appendix F). The probation sample consent form differed from the other groups in that it stated that each subject would receive a \$5.00 reward for participating.

The amount of background information was consistent across all three groups. Ontario Ministry of Correctional Services' Offender files were used to verify the federal and provincial subjects' background information and current sentencing status. Offender files provided information concerning the offenders' age, next of kin, present charges and dispositions. The probation subjects' background information was verified by the use of the Ontario Probation and Parole Systems' Client Information Cards which contained similar information to the offender files.

Procedure

The offenders within the federal and provincial groups were selected randomly by choosing names alphabetically from institutional files. Probation subjects were chosen and referred to the study by their probation officers during March and April of 1987. Each probation officer was asked to refer only those clients who fit the following criteria; male, over 18 years of age and showing no signs of serious mental disorders or

mental retardation.

Federal and provincial offenders were contacted by institutional staff and sent to one of the interview rooms. The researcher would identify himself as a Carleton University Criminology Honours student who was undertaking a study called the "Offender Assessment Program". To avoid experimental bias, each subject was told that the study examined the needs of offenders from three different groups (federal, provincial and probation) so that institutional programs could better service these needs. The subject was advised that all information was confidential. The subject was then asked to participate. If he refused, institutional staff were notified, and the subject was sent back to his cell. If the subject accepted, he was asked to read the consent form and sign it.

The probation group differed from the previous groups in that the probation officer would briefly outline the study to the client and ask the client if they wished to participate. If the client refused, nothing more was said. No records were kept concerning the number of probation subject refusals. Those clients who accepted the offer were referred to the researcher where the study was explained in full and the consent form was read and signed. The probation subjects were offered a five

dollar incentive at the end of the interview for their transportation costs to the probation office.

All subjects were assessed on the basis of information obtained in the interview, on the Level of Supervision Inventory (Andrews 1983) and two different measures of psychopathy; the Psychopathy Checklist (Hare 1980) and the DSM-III diagnosis Antisocial Personality Disorder (301.7). The aforementioned assessments were undertaken in two parts. The first set of questions in the interview format determined the subject's LSI score and Psychopathy Checklist score. LSI-VI item 50, and LSI-VI subsection Probation/Parole were not scored. LSI-VI items were scored in a 0-1 fashion. All of the Hare (1980) Psychopathy Checklist items were scored on a 0-2 point ordinal scale. The second part of the Interview Format contained a copy of the DSM-III Antisocial Personality Disorder (301.7) (APA). Each of the items within diagnostic criteria B, C, and D of this disorder were scored in a 0-1 fashion. The total DSM-III score ranged from 0-3. A score of 3 indicated that the subject fulfilled diagnostic criteria B (a history of 3 or more behavioural problems before age 15), C (at least 4 behavioural disorders after the age of 18) and D (continuous pattern of antisocial behaviour since age 15). A score of 2 indicated that the subject fulfilled any two

of these criteria; while a score of 1 or 0 indicated that the subject fulfilled only one or none of the diagnostic criteria, respectively. Each interview was followed by an examination of the subject's file (offender files or Client Information Cards) to verify background information and current sentencing status. The total and subtotal scores of the LSI-VI, the Psychopathy Checklist and the DSM-III diagnosis Antisocial Personality were not computed by the interviewer. Each subject was assessed on these measures by the same interviewer.

To reduce the possibility of experimenter bias, each completed Interview Format was submitted to a research assistant who was not familiar with the purpose of the study or the specific assessments. The research assistant transferred the information gathered during the interview (encoded upon sections 1 and 2 of the Interview Format) onto the 3 summary sheets in section 3 of the Interview Format. The data were not transformed in any way. The subtotals and totals of each assessment were computed by the research assistant. A reliability check was performed by the researcher on the subtotal and total scores of 20 randomly selected interview formats.

Results

Norms

LSI total scores for the 61 offenders ranged from 1 to 43, with a mean score of 25.6, (SD=9.9). The Hare

(1980) Psychopathy Checklist assessments produced scores that ranged from 1 to 39, with a mean score of 23.4 (SD=9.0). The DSM-III Antisocial Personality Disorder (301.7)(APA) yielded a range of total scores from 0 to 3, with a mean score of 2.1 (SD=1.1).

General Psychometric Properties of the Assessments

The intercorrelations among the LSI subsections in addition to the correlations between the LSI subsections and total scores are presented in Table 1. The average inter-subsection correlation was .26 and the average part-whole correlation was .96. The means and standard deviations for each section are presented near the bottom of the table.

Table 2 presents the alpha reliability coefficients for LSI subsection scores, LSI total scores, Psychopathy Checklist scores and DSM-III Antisocial Personality total scores. The alpha coefficients for LSI subsections Family (.28), Accommodation (.38) and Attitudes/Orientation (.45) were low in comparison to the other variables. LSI total scores and Psychopathy Checklist total scores produced alpha coefficients above the .85 level.

A varimax rotated factor analysis, (using alpha extraction techniques), was performed on the Psychopathy Checklist items without limits set as to the number of factors chosen. This analysis yielded the seven factors

labelled as follows; disregard for others, acting out behaviour, irresponsible to family, superficial engaging, boredom, substance abuse and impulsiveness (see Table 3). The first factor accounted for 25 percent of the total score variance, while the remaining factors accounted for less than 7 percent of the total score variance. All factors loading above the .40 level were underscored. A similar factor analysis of the 10 LSI subsections produced three factors labelled as follows: antisocial, financial/emotional resources and subcultural affiliation. The first factor labelled 'antisocial' accounted for 30 percent of the total score variance, while the remaining factors (financial/emotional resources, and subcultural affiliations) accounted for 10.0 and 7.1 percent of the total score variance, respectively (see Table 4).

Group Norms

Using the Andrews (1983) Level of Supervision Inventory (LSI-VI), mean LSI total scores of 29.65 (SD=6.1), 28.19 (SD=10.4) and 18.75 (SD=9.1) were obtained for the federal, provincial, and probation offender groups, respectively. The Hare (1980) Psychopathy Checklist yielded mean total scores of 28.95 (SD=5.9), 26.43 (SD=6.8) and 14.75 (SD=7.2) for the federal, provincial and probation offender groups, respectively. Mean total scores of 2.45 (SD=.82), 2.38

(SD=1.07) and 1.3 (SD=1.13) were obtained on the DSM-III Antisocial Personality Disorder (301.7) (APA) for the federal, provincial and probation offender groups, respectively.

Group Differences

Sixteen one-way analyses of variance procedures were used to investigate the differences between offender groups on Andrews (1983) LSI-VI, Hare (1980) Psychopathy Checklist and DSM-III Antisocial Personality Disorder (301.7) (APA). Scheffe post hoc analyses were used to identify pairs of offender groups significantly different at the $p < .05$ level. Table 5 displays the F values, probability levels and the pairs of groups significantly different at the .05 level. Anovas revealed group differences on the following variables; LSI total scores $F(2,58)=9.23$, $p < .001$, LSI Subsection Attitudes/Orientations $F(2,58)=4.4$, $p < .02$, LSI subsection Criminal History $F(2,58)=16.23$, $p < .001$, LSI subsection Alcohol/Drugs $F(2,58)=4.67$, $p < .02$, Psychopathy Checklist total score $F(2,58)=26.11$, $p < .001$, DSM-III total score $F(2,58)=3.39$, $p < .05$, and DSM-III diagnostic criteria C (Manifestation of Antisocial Personality since age 18) $F(2,58)=8.08$, $p < .001$. Results from the Scheffe tests indicated that probationers scored less than both federal and provincial inmates on the following variables; LSI

subsection Criminal History, LSI total score, Psychopathy Checklist score, DSM-III criteria C (Persistence Beyond Age 18) and DSM-III total Score. Probationers were found to score less than federal inmates on LSI subsection Attitudes/Orientations. Probationers scored less than provincial offenders on LSI subsection Alcohol/Drugs.

The Relationship between Two Measures of Psychopathy

The significant correlations observed between the Hare (1980) Psychopathy Checklist and the DSM-III Antisocial Personality Disorder may be interpreted as an indication of their convergent validity. Correlation coefficients of .58 ($p < .01$, one tailed), .75 ($p < .001$ one tailed) and .77 ($p < .001$, one tailed) were obtained between the Psychopathy Checklist scores and the Antisocial Personality total scores for the federal, provincial and probation groups respectively. A correlation coefficient of .78 ($p < .001$, one tailed) was found between the aforementioned measures of psychopathy when all groups were combined ($n=61$).

The Relationship Between Psychopathy and the LSI

Pearson product moment correlation coefficients were computed to determine the relation between Andrews (1983) LSI-VI total scores and two different measures of psychopathy; the Hare (1980) Psychopathy Checklist total and the DSM-III Antisocial Personality Disorder (301.7)

(APA) total Scores. Table 6 displays the Pearson R correlation coefficients between LSI scores and the two aforementioned assessments of psychopathy for each offender group (federal, provincial and probation) and for all three offender groups combined (n=61).

Significant correlations were found between LSI total scores and Psychopathy Checklist total scores, ranging from .78 for federal offenders to .87 for provincial offenders (all p 's $< .001$, one tailed). Significant correlations were also observed between LSI-VI total scores and DSM-III Antisocial Personality, ranging from .68 for federal offenders to .80 for provincial offenders (all p 's $< .001$, one tailed). Provincial offenders produced the highest correlations between psychopathy assessments (Psychopathy Checklist .87 and DSM-III .80; all p 's $< .001$, one tailed) and LSI-VI total scores. In comparison, federal offenders produced the lowest correlations between LSI-VI scores and measures of psychopathy (Psychopathy Checklist .78 and DSM-III .68; all p 's $< .001$, one tailed).

The correlation between DSM-III total scores and LSI-VI total scores for all three groups combined (n=61) was slightly lower (.81) than the correlation between Psychopathy Checklist scores and the LSI-VI total score (.86)(all p 's $< .001$, one tailed).

LSI subsections were also found to be highly correlated with Psychopathy Checklist scores and DSM-III total scores. All LSI subsections (with the exception of Accommodation) significantly correlated with DSM-III total scores when all three groups were combined ($n=61$); ranging from .25 (Leisure) to .74 (Criminal History) (all p 's $< .05$, one tailed). Psychopathy Checklist scores were found to correlate even higher with all LSI subsections (with the exception of Accommodation) when all 3 groups were combined ($n=61$). Coefficients ranged from .31 (Leisure) to .76 (Criminal History) (all p 's $< .01$, one tailed).

Consistency of the Relation Between Psychopathy and the LSI

The consistency of the LSI-Psychopathy relation was examined between offender groups so that one could determine if the aforementioned relation significantly differed. All Pearson R 's from Table 6 were transformed into Fisher Z coefficients. A Z test was used to examine the differences between federal, provincial and probation offender groups' LSI-psychopathy correlation coefficients. Correlations between Psychopathy Checklist scores and LSI-VI total scores did not significantly differ between the following pairs of offender groups; federal with probation ($Z=.15$), provincial with probation ($Z=.68$), or federal with provincial ($Z=.83$) (all p 's $> .05$, two tailed). Correlations between DSM-III total scores and LSI total scores did not differ significantly between the following

pairs of groups; federal with probation ($Z=.35$), federal with provincial ($Z=.80$) or provincial with probation ($Z=.44$) (all p 's $>.05$, two tailed).

The consistency of the LSI-psychopathy correlation was also found within LSI subsections across offender groups. Correlations between DSM-III total scores and all LSI subsection scores (with the exception of Accommodation, Leisure and Emotional/Personal) did not differ significantly between offender groups (all p 's $>.05$, two tailed). Similarly, correlations between Psychopathy Checklist scores and all LSI subsection scores (with the exception of Alcohol/Drug) did not significantly differ between offender groups (all p 's $>.05$, two tailed).

Relation between Psychopathy and Low, Medium and High LSI Scores

The relation between psychopathy and 3 levels of LSI risk scores was investigated independent of offender groups (see Table 7). LSI total scores were categorized into the following levels of risk by LSI total scores; low (LSI score 0-11), medium (LSI score 12-23) and high (LSI score 24⁺). A one-way analysis of variance was performed using the levels of risk (low, medium and high) as the independent variable, and the psychopathy assessment instruments, Hare's (1980) Psychopathy Checklist, and DSM-III Antisocial Personality as the dependent variables.

Significant F values were observed on the Psychopathy Checklist scores ($F(2,58)=32.13$; $p<.001$) and the DSM-III Antisocial Personality Disorder total scores ($F(2,58)=36.77$, $p<.001$). A Scheffe post-hoc procedure revealed both dependent measures (Psychopathy Checklist scores and DSM-III scores) significantly differed ($p<.05$) between all pairs of risk groups (low, medium and high).

Percent of LSI Variance Accounted For

A stepwise multiple Regression analysis was used to investigate the degree to which psychopathy accounts for subject variability on LSI subsection scores and LSI total scores (see Table 8). All three offender groups were combined ($n=61$), with LSI total scores being predicted variables. Psychopathy Checklist scores and DSM-III total scores formed the predictor variables. The regression analyses revealed that two predictor variables correlated $R=.89$ with the dependent LSI total scores. Therefore, the R squared value indicated that 78 percent of LSI total score variability could be accounted for by Psychopathy Checklist scores and DSM-III total scores. The stepwise multiple regression entered Psychopathy Checklist scores on step number one, with a beta of .58, followed by DSM-III total scores with a beta of .36. The prediction equation is as follows: $LSI\ total\ score = .64 (Psychopathy\ Checklist\ score) + 3.09(DSM-III\ total\ score) + 4.34$, with

a significance of $F(2,58)=105.56$, $p<.001$. Measures of psychopathy were found to account for significant proportions of LSI subsection score variance ($n=61$). Psychopathy Checklist scores accounted for 33, 25, 23, and 29 percent of the following LSI subsection score variances; Education, Companions, Attitudes and Emotional, respectively. DSM-III assessments accounted for 39 percent of LSI subsection Alcohol/Drugs score variability. Both measures of psychopathy accounted for 64 percent of LSI subsection Criminal History score variability.

Several other stepwise multiple regression analyses were performed to investigate the degree to which psychopathy accounts for LSI total score variance and LSI subsection variance by offender group. Table 9 displays the predictor variable(s), R Square value(s) and standardized Beta coefficient(s) for predictor variables LSI subsection and LSI total score for each offender group separately (federal, provincial and probation). When LSI total scores formed the predicted variable, Psychopathy Checklist scores accounted for 61 and 63 percent of LSI total score variability with the federal and probation offender groups, respectively (all p 's $<.001$). The corresponding beta coefficients were .78 and .80. The provincial group offenders' Psychopathy Checklist scores and DSM-III total scores accounted for .79 and .83 of LSI

total score variability respectively (all p 's $< .001$).

The corresponding beta coefficients were .64 and .32.

Psychopathy measures made significant contributions to the prediction of the following LSI subsection variables: Criminal History, Education, Employment, Financial, Alcohol/Drugs and Emotional/Personal. DSM-III total scores accounted for 48, 42 and 43 percent of the variability within LSI subsection Criminal History scores for the federal, provincial and probation offender groups respectively (all p 's $< .001$). Psychopathy Checklist scores accounted for 57 percent of the variance within LSI subsections Education/Employment scores for the provincial offender group while DSM-III scores accounted for 47 percent in the probation offender group (all p 's $< .001$). DSM-III scores accounted for 48 and 57 percent of the variability within LSI subsections Financial and Emotional/Personal for the provincial offender group (p 's $< .001$) respectively. The Psychopathy Checklist score accounted for 60 percent of the variability within LSI subsection Alcohol/Drugs for the provincial offender group.

Summary of the Results

Reliability measures on the items of the LSI and of the Psychopathy Checklist produced coefficients in the .70 and .80 range. LSI subsection intercorrelations were also presented.

Varimax rotated factor analyses were performed on the Psychopathy Checklist items and the LSI subsections. The 22 items of the Psychopathy Checklist were reduced to 7 factors, with the first factor labelled as "Disregard for Others" accounting for 25 percent of the total score variance. The 10 LSI subsections analyzed in this study were reduced to 3 factors, with the first factor labelled as 'Antisocial', accounting for 30.3 percent of LSI total score variance.

One way analysis of variance procedures showed that measures of psychopathy significantly differed across all three levels of risk scores (high, medium and low) as well as between probation offender group LSI scores and the two remaining offender groups' LSI scores (federal and provincial).

Correlational analyses revealed that both measures of psychopathy highly correlated with LSI total and certain LSI subsection scores within each offender group and all offender groups combined (n=61). The relation between LSI scores and measures of psychopathy was found to be consistent across all three offender groups.

Several stepwise multiple regression analyses were consistent with the aforementioned correlation analyses in that measures of psychopathy accounted for the majority of LSI total score variance within each offender group and within the three offender groups combined. Regression

analyses also revealed that measures of psychopathy made significant contributions to the predictions of certain LSI subsections.

Discussion

Recent research has indicated that both LSI risk/needs assessments and measures of psychopathy have been reliable predictors of criminal behavior (Andrews et al, 1985). Other research has shown that various measures of what might be termed an "antisocial syndrome" are correlated highly with LSI total scores (Andrews et al, 1984). The purpose of this study was to investigate the possibility of psychopathy operating as an underlying theoretical variable of the Andrews (1983) Level of Supervision Inventory.

The first hypothesis predicted that high risk offenders as scored on the LSI (in comparison to low risk offenders) would score significantly higher on the Hare (1980) Psychopathy Checklist, as well as be more likely to fulfill the criteria for the DSM-III diagnosis Antisocial Personality Disorder (301.7) (APA). Secondly, it was hypothesized that certain subcategories of the LSI-VI would correlate highly with the aforementioned measures of psychopathy.

The results of this study suggest that psychopathy is an important underlying theoretical variable of the LSI.

The Relation Between Psychopathy and the LSI

The results of a stepwise multiple regression analysis revealed that the Psychopathy Checklist and the DSM-III assessments accounted for 78 percent of LSI total score variability. It was also observed that the aforementioned measures of psychopathy accounted for 61, 83, and 63 percent of the LSI total score variability in the federal, provincial and probation offender groups, respectively. An interpretation of the magnitude of accountable LSI total score variance suggests that psychopathy scores possess a high degree of convergent validity with LSI total scores. It also suggests that psychopathy may operate as a dominant underlying theoretical variable of LSI assessments.

Several correlational analyses between measures of psychopathy and LSI total scores supported the multiple regression results by showing that psychopathy scores are highly related to LSI assessments. The results indicated that both measures of psychopathy yielded correlation coefficients between .68 and .87 with LSI total scores across three offender groups and with all offender groups combined (n=61) (see table 6).

However, an inspection of the LSI-psychopathy relation between offender groups may suggest that the LSI is more highly related to psychopathy within the

provincial prisoner sample, in comparison to the probation and federal samples (see table 6). However, the relation between measures of psychopathy and LSI total and subsection scores were consistent across all three offender groups. This suggests that the relation between psychopathy and the LSI is not restricted to any one specific offender group, but that it is present within all offender groups (federal, provincial and probation). One can conclude that the LSI-psychopathy relation exists, independent of the offender sample.

The results of a one way analysis of variance confirmed the first hypotheses since both measures of psychopathy differed significantly across the three levels of risk scores. A practical interpretation of this finding would suggest that low risk offenders would possess lower psychopathic assessment scores in comparison to medium or high risk offenders. In support of this finding, the results of a second one way anova indicated that significant differences were found on LSI total scores, followed by significant differences on Psychopathy scores and DSM-III total scores, between the probation offender groups and the two remaining offender groups (federal and provincial).

It is interesting to note that the federal and provincial offender groups did not differ significantly

on any of the three aforementioned assessments. This was an unexpected result since the federal offenders (who were all serving sentences of at least two years, usually for very serious criminal offenses) were expected to have significantly higher LSI scores and correspondingly higher psychopathy scores than the provincial offenders' scores. A possible explanation is that 65 percent of the federal offender sample at the detention centre were incarcerated on a breach of parole and therefore did not represent the complete inmate population. However, a *t* test analysis revealed that there were no significant differences between the federal parolees' LSI scores and the remaining federal inmates' LSI scores ($t(18) = .54, p < .01$).

A factor analysis on the LSI subsections revealed that a factor labelled "Antisocial" (consisting of LSI subsections Attitudes, Criminal History, Employment and Leisure) accounted for 30.3 percent of the LSI total score variance (see table 4). Comparable results were found by Andrews et al. (1984) as they reported that a 'generalized trouble factor' or possible 'Antisocial Syndrome' accounted for 75 to 80 percent of the variance in an LSI subsection intercorrelation matrix. It is interesting to note that a similar factor labelled

'Disregard for Others' was displayed in a factor analysis of the Psychopathy Checklists' 22 items, which accounted for 25 percent of the total score variance (see table 3). The LSI subsection factor labelled 'Antisocial' is very similar in theory to the Psychopathy Checklist factor labelled 'Disregard for Others' in that they both reflect a generalized lack of caring for the needs and rights of others. The similarity between the LSI subsection factor labelled 'Antisocial' and the Psychopathy Checklist factor labelled 'Disregard for Others' adds confidence to the idea that some sort of 'antisocial' or 'psychopathic' dimension underlies LSI assessments.

Yet other approaches have discounted the idea that a pathology perspective underlies LSI assessments on the grounds that measures of socialization, psychopathy and neuroticism could just as easily be interpreted from a broad social learning perspective (Andrews et al. 1984). This response may apply to the present study because the items within the Psychopathy Checklist and the DSM-III assessment could be interpreted from a social learning perspective and, therefore, not necessarily reflect an underlying 'antisocial' pathology.

The Relation Between Psychopathy and LSI Subsections

In response to the second hypothesis, the results indicate that LSI subsections Criminal History, Education, Alcohol/Drugs and Emotional are highly related to measures of psychopathy. Stepwise multiple regression analyses of the combined groups (n=61) revealed that the two measures of psychopathy accounted for a high percentage of the following LSI subsection scores: Criminal History (64%), Education (83%), Companions (25%), Alcohol/Drugs (39%), Attitudes (28%) and Emotional (29%) (see table 8). Similar results were obtained when stepwise multiple regression procedures were performed on each offender group. Measures of psychopathy significantly contributed to the following LSI subsection scores; Criminal History, Education, Financial, Alcohol/Drugs, and Emotional (see table 9). These findings were consistent with several correlational analyses between measures of psychopathy and LSI subsections. Correlational results also confirmed that LSI subsections Criminal History, Education, Alcohol/Drugs and Emotional were highly correlated to both measures of psychopathy across all offender groups.

Measures of Psychopathy

The significant correlation observed between the

Psychopathy Checklist and the DSM-III assessment ($r=.78$) may be interpreted as an indication of their convergent validity. Comparable correlations were found by Hare (1985), where he reported that the DSM-III diagnosis correlated $r=.67$ with the Psychopathy Checklist in a sample of 199 inmates. The correlation between the aforementioned measures of psychopathy may be higher in this study because the sampling procedure involved three offender groups, with varying degrees of conflicts with the law (a more heterogenous offender sample).

However, the obtained results indicate that the Psychopathy Checklist possessed a greater amount of convergent validity with LSI total scores than the DSM-III assessments. The Psychopathy Checklist accounted for 74 percent of the LSI total score variability ($n=61$), with the DSM-III assessment adding only four percent to the R-squared value. A similar result was obtained within the provincial offender group, where Psychopathy Checklist scores accounted for 79 percent of LSI total score variability, with the DSM-III assessment contributing only four percent to the R-squared value.

Group Norms

The results indicated that the obtained mean LSI scores from the probation and provincial offender groups were higher than expected. Bonta and Motiuk (1986)

reported a mean LSI score of 18.9 on a sample of 152 provincial offenders, compared to a mean LSI score of 28.9 in this study. Andrews et al.(1984) obtained a mean LSI score of 11.29 on 598 probationers, compared to a mean score of 18 in this study. A number of factors may have influenced these findings. Firstly, it is believed that many subjects released personal information to the student interviewer that would not have been acquired if the interviewer was affiliated with either the institution or the probation office. Most subjects who consented to participate were confident that all information would be kept totally confidential. Another factor may have been that the limited amount of background information did not allow the interviewer to properly verify each subject's responses.

Yet these mean scores may still be considered high due to the fact that LSI subsection Probation/Parole (consisting of 4 items) and LSI item 50 (Psychological Assessment Indicated) were not scored in this study.

The mean Psychopathy Checklist score within the federal offender group ($m=28.9$) was similar to that of Wong (1984), who reported that a sample of 293 federal offenders yielded a mean psychopathy score of 25.1.

The alpha reliability coefficients for the total scores of each of the three assessments were satisfactory

as they registered above the .90 levels.

Limitation of the Results

It has been suggested that the results of this study support the proposition that psychopathy serves as a dominant underlying theoretical variable of the LSI. However, the results must be considered in light of the fact that the same interviewer assessed each subject on all three assessments. In defense of the study's conclusion, it is pointed out that steps were taken to control this source of bias. First, the interviewer followed a semi-structured interview format (see Appendix A) and had been trained in the systematic, objective recording of offender responses. The second step was to arrange the items of the Psychopathy Checklist and the LSI in such a manner that the sum of each assessment could not be calculated by the interviewer during the interview. Finally, the sums of each assessment were calculated by a research assistant who was not familiar with the instruments or the purposes of the study.

Another weakness of the study was that no steps were taken to examine the consistency of the LSI-psychopathy relation over time. It is possible that the obtained results within this study may not be found if the same individuals are assessed on the same instruments at some future point.

Followup Research

A followup study should examine the degree to which scores on the Andrews (1983) Level of Supervision Inventory, the Hare (1980) Psychopathy Checklist and the DSM-III Antisocial Personality Diagnosis (301.7)(APA) predict future criminal behaviour. This study may be undertaken by comparing each of the subject's present scores on the three aforementioned assessments to their respective official records of criminal behaviour two years from now. This type of investigation would demonstrate in a practical sense the assessment device that offers the greatest predictive validity for future criminal behaviour.

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Table 1

Means, Standard Deviations and Intercorrelations
for LSI Subsections (n=61)

LSI Subsections	LSI Subsections									
	A	B	C	D	E	F	G	H	I	J
A. Criminal History										
B. Employment/Education	.43*									
C. Financial	.21	.24*								
D. Family/Marital	.34*	.14	.26*							
E. Accommodation	.07	.25*	.44*	.31*						
F. Leisure	.23*	.20	.03	.06	-.03					
G. Companions	.42*	.45*	.12	.23*	.25*	.19				
H. Alcohol/Drugs	.42*	.43*	.38*	.29*	.27*	.24*	.40*			
I. Emotional	.39*	.31*	.50*	.30*	.15	.07	.02	.32*		
J. Attitudes	.51*	.51*	.21	.12	.10	.33*	.27*	.06	.25*	
	A	B	C	D	E	F	G	H	I	J
Mean	5.8	4.2	1.5	1.7	1.2	.97	2.2	4.3	1.9	1.4
Standard Deviation	2.8	2.0	0.7	1.1	.95	.84	1.8	2.6	1.4	1.1
Total Score	.79*	.72*	.48*	.48*	.38*	.36*	.63*	.73*	.53*	.54*

*p < .05

Table 2

Alpha Reliability Coefficients for the
LSI, Psychopathy and DSM-III Assessments

Assessments	Number of Items	Alpha
<u>LSI Subsections</u>		
Criminal History	10	.82
Employment/Education	10	.56
Financial/Marital	2	.55
Family	4	.28
Accommodation	3	.38
Leisure/Recreation	2	.59
Companions	5	.78
Alcohol/Drugs	9	.80
Emotional/Personal	5	.70
Attitude/Orientations	4	.45
<u>LSI Total Score</u>		
Total Score	55	.90
<u>Psychopathy Checklist</u>		
Total Score	22	.86
<u>DSM-III Antisocial Personality</u>		
Onset Before Age 15	12	.83
Persistence Beyond Age 18	9	.50

Note - All assessments were conducted on n=61 subjects.

- DSM-III items 'Antisocial Pattern of Life' and 'DSM-III' Total Scores were omitted because they consisted of one item only

Table 3

Factor Analysis on Psychopathy Checklist Items

Psychopathy Checklist Items	Rotated Factor Matrix						
	F1	F2	F3	F4	F5	F6	F7
Lack of Empathy	<u>.73</u>	.27	.17	-.10	.17	.14	.02
Lack of Remorse	<u>.72</u>	.20	-.02	-.01	.19	.12	.21
Parasitic Lifestyle	<u>.64</u>	.06	.00	-.05	-.07	-.06	.21
Irresponsible for Actions	<u>.49</u>	.06	-.12	.36	.12	.23	.22
Pathological Lying	<u>.44</u>	.20	.37	.21	.01	-.05	.22
Conning/Lack of Sincerity	.27	<u>.63</u>	.22	.08	.21	-.20	.09
Early Behavioral Problems	.08	<u>.63</u>	.01	.05	.04	.13	.14
Multiple Offences	.29	<u>.58</u>	.34	.10	.28	.27	.10
Psychiatric History	.14	<u>.58</u>	.11	.05	-.05	.14	.15
Promiscuous Sexual Behavior	.08	<u>.49</u>	.22	-.01	.29	.06	-.01
Irresponsible Parent	-.14	.20	<u>.68</u>	-.08	.04	.03	.09
Frequent Marital Affairs	.08	.03	<u>.54</u>	.06	.08	.05	.06
Lack of Realistic Goals	.25	.15	<u>.32</u>	.18	.16	.10	.06
Superficial Charm	.11	.28	.30	<u>.85</u>	-.07	-.12	.07
Lack of Affect	.24	.14	.19	<u>-.48</u>	-.12	.00	.06
Egocentricity	.30	.24	.12	<u>.31</u>	.11	.10	.04
Boredom	.13	.14	.10	.14	<u>.81</u>	-.06	.14
Poor Probation Risk	.17	.23	.24	-.18	<u>.38</u>	.28	-.12
Drug/Alcohol Abuse	.02	.27	.50	-.01	.00	<u>.60</u>	.27
Juvenile Delinquency	.26	.46	.00	-.05	-.05	<u>.53</u>	-.20
Impulsiveness	.20	.22	.00	-.07	.06	-.03	<u>.76</u>
Short Temper	.24	.06	.24	.03	.14	.22	<u>.31</u>

Table 3 continued

	F1	F2	F3	F4	F5	F6	F7
Percent of Variance	25.0	6.7	6.1	3.9	3.9	3.9	3.9

Note - Factor Analysis involved Alpha Factor Extraction Technique and Varimax Rotation

- Factors are labelled as follows:

F1 refers to 'Disregard for Others'

F2 refers to 'Acting Out Behavior'

F3 refers to 'Irresponsible to Family'

F4 refers to 'Superficial Engaging'

F5 refers to 'Boredom'

F6 refers to 'Substance Abuse'

F7 refers to 'Impulsiveness'

Table 4
Factor Analysis on LSI Subsections

LSI Subsections	Rotated Factor Matrix		
	Factor 1 Antisocial	Factor 2 Financial/Emotional Resources	Factor 3 Subcultural Affiliation
Attitudes/ Orientation	<u>.71</u>	.14	.04
Criminal History	<u>.64</u>	.23	.21
Employment/ Education	<u>.51</u>	.24	.40
Leisure/Recreation	<u>.41</u>	-.03	.09
Financial	.02	<u>.77</u>	.28
Emotional/ Personal	.29	<u>.67</u>	.03
Companions	.37	-.09	<u>.68</u>
Alcohol/Drugs	.29	.29	<u>.49</u>
Accommodation	-.09	.35	<u>.45</u>
	Factor 1	Factor 2	Factor 3
Percent of Variance	30.3	10.0	7.1

Note - Factor Analysis involved Alpha Factor Extraction
Technique and Varimax Rotation.

Table 5

Oneway Analysis of Variance of LSI, Psychopathy Checklist
and DSM-III Antisocial Personality by Offender Group

Variables	F Value	Pairs of Groups Significantly Different at the .05 Level
LSI-VI Assessments		
Criminal History	16.23***	Prob.< (Prov. and Fed.)
Education/Employment	.73	
Financial	1.02	
Family/Marital	2.40	
Accommodation	.81	
Leisure	1.62	
Companions	2.24	
Alcohol/Drugs	4.67*	Prob.< Prov.
Emotional/Personal	2.96	
Attitudes/Orientation	4.41*	Prob.< Fed.
Total Score	9.23***	Prob.< (Prov. and Fed.)
DSM-III Assessment		
Onset Before Age 15	1.42	
Persistence Beyond Age 18	12.38***	Prob.< (Prov. and Fed.)
Antisocial Pattern of Life	3.39*	
DSM-III Total Score	8.08***	Prob.< (Prov. and Fed.)
Psychopathy Checklist Assessment		
Total Score	26.11***	Prob.< (Prov. and Fed.)

*p < .05 **p < .01 ***p < .001

Note - Degrees of Freedom for each variable (2.58)

'Prob.' refers to 'Probation Offender Group'

'Prov.' refers to 'Provincial Offender Group'

'Fed.' refers to 'Federal Offender Group'

Table 6

Correlations Between the LSI and Two Measures of Psychopathy
on Three Offender Samples

LSI-VI Subsections	Psychopathy Checklist Total Score				Antisocial Personality Diagnosis			
	Comb. (n=61)	Fed. (n=20)	Prov. (n=21)	Prob. (n=20)	Comb. (n=61)	Fed. (n=20)	Prov. (n=21)	Prob. (n=20)
Criminal/ History	.76***	.56***	.64***	.61**	.74***	.69***	.65***	.66**
Education/ Employment	.57***	.49*	.75***	.67**	.53***	.29	.53**	.67**
Financial	.34**	.17	.56***	.45*	.40**	.07	.60***	.41*
Accommodation	.18	.11	.48*	.30	.11	-.19	.50*	.15
Family/ Marital	.36**	-.16	.37*	.36	.27*	.04	.28	.13
Leisure	.31**	.37	.48*	.08	.25*	.38*	.46*	-.21
Companions	.50***	.42*	.49*	.65**	.50***	.34	.42*	.61**
Alcohol/Drug	.57***	.16	.77***	.48*	.62***	.39*	.70***	.55**
Emotional/ Personal	.54***	.26	.64***	.53**	.47***	.07	.75***	.43*
Attitudes/ Orientations	.53***	.46*	.47*	.33	.39*	.10	.37*	.34
Total LSI	.86***	.78***	.87***	.80***	.81***	.68***	.80***	.74***

*p < .05 **p < .01 ***p < .001.

Note - 'Comb.' refers to the combination of the samples (n=61)
 - 'Fed.' refers to the federal sample (n=20)
 - 'Prov.' refers to the provincial sample (n=21)
 - 'Prob.' refers to the probation sample (n=20)

Table 7

One way Analysis of Variance of Psychopathy Checklist Scores and
DSM-III Total Scores by LSI Risk Groups (Low,Medium,High) (n=61).

Dependent Variables	Independent Variable LSI Risk Groups			F Value	Pairs of Groups Significantly Different at the .05 Level
	Low	Med.	High		
<u>Psychopathy Checklist</u>					
No. of Subjects	7.0	13.0	41.0		
Mean Score	9.0	18.0	26.7		
Standard Deviation	6.0	6.3	6.4	32.13*	Low < Medium Low < High Medium < High
<u>DSM-III Total Score</u>					
No. of Subjects	7.0	13.0	41.0		
Mean Score	.14	1.4	2.6		
Standard Deviation	.38	1.04	.71	36.77*	Low < Medium Low < High Medium < High

* $p < .001$

Note - Degrees of Freedom for each variable (2,58)

Table 8

Multiple Regression of Psychopathy Checklist Scores and DSM-III
Total Scores on LSI Subsection Scores and LSI Total Scores (n=61)

Predicted Variable	Predictor Variable	MR	R Sq.	Con	B	Beta	F
<u>LSI Subsections</u>							
Criminal History	Psych	.80	.64	.49	.15	.47	51.2*
	DSM				.94	.38	
Employment	Psych	.57	.33	1.14	.13	.57	29.0*
Financial	DSM	.40	.16	1.01	.25	.40	11.0
Family	Psych	.36	.13	.65	.02	.36	8.9
Companions	Psych	.50	.25	-.11	.10	.50	19.9*
Alcohol/Drugs	DSM	.62	.39	1.37	1.42	.62	37.3*
Attitudes	Psych	.53	.28	-.11	.06	.53	22.9*
Leisure	Psych	.31	.09	.30	.03	.31	6.2
Accommodation	nve	-	-	-	-	-	-
Emotional	Psych	.54	.29	.02	.08	.54	23.7*
<u>LSI Total Score</u>							
Total Score	Psych	.89	.78	4.34	.64	.58	105.6*
	DSM				3.09	.36	

* $p < .001$

- Notes - 'Psych' refers to 'Psychopathy Checklist Scores'
 - 'DSM' refers to 'DSM-III Antisocial Personality Total Scores'
 - 'MR' refers to 'Multiple R Correlation Coefficient'
 - 'R Sq' refers to 'R Square Value'
 - 'Con' refers to 'Multiple Regression Equation Constant'
 - 'B' refers to 'Multiple Regression Equation Coefficients'
 - 'Beta' refers to 'Standardized Regression Coefficients'
 - 'F' refers to 'F Value'
 - 'nve' refers to 'No Variable Entered'

Table 9

Multiple Regression of Psychopathy Checklist Scores and DSM-III Total Scores on LSI Subsections and LSI Total Scores by Offender Group

Dependent Variable	Fed (n=20)			Prov (n=21)			Prob (n=20)		
<u>LSI Subsection</u>	Var	R Sq	Beta	Var	R Sq	Beta	Var	R Sq	Beta
Criminal History	DSM	.48***	.69	DSM	.42***	.65	DSM	.43***	.66
Education/ Employment	Psy	.24*	.49	Psy	.57***	.75	DSM	.44***	.67
Financial	nve	-	-	DSM	.48***	.69	Psy	.20*	.45
Accommodation	nve	-	-	DSM	.25**	.50	nve	-	-
Family/ Marital	nve	-	-	nve	-	-	nve	-	-
Leisure/ Recreation	nve	-	-	Psy	.23*	.48	nve	-	-
Companions	nve	-	-	Psy	.24*	.49	Psy	.42**	.64
Alcohol/ Drugs	nve	-	-	Psy	.60***	.77	DSM	.30**	.55
Emotional/ Personal	nve	-	-	DSM	.57***	.75	Psy	.28**	.53
Attitudes	Psy	.21	.46	Psy	.22*	.50	nve	-	-
<u>LSI Total</u>									
Total Score	Psy	.61***	.78	Psy	.79***	.64	Psy	.63***	.80
				DSM	.83***	.32			

Note - 'Var refers to 'Predictor Variable'

- 'R Sq' refers to 'R Square Value'

- 'Beta' refers to 'Standardized Regression Coefficients'

- 'Fed' refers to 'Federal Group Offenders'

- 'Prov' refers to 'Provincial Group Offenders'

- 'Prob' refers to 'Probation Group Offenders'

- 'DSM' refers to 'DSM-III Antisocial Personality Disorder'

- 'Psy' refers to 'Psychopathy Checklist'

- 'nve' refers to 'No variable entered in the regression formula'

- * denotes significance of F for predictor variable(s)

*p < .05 **p < .01 ***p < .001

Appendix A
Section 1

Interview Format

Surname Given

Client Number _____

Date of Birth ____ / ____

Sample

Appendix A continuedSection 1.

INTERVIEW FORMAT

Score

1) Early Behavioral Problems.

As a child, did you ever have any major difficulties at home or at school? (prior to age 12)

Were you removed from home as a result of these problems (C.A.S., group home, training school)?

Were you seen by a doctor or counsellor for these problems (i.e. lying, cheating, robbery, substance-use, drugs, violence, bully, sex)?

2) Juvenile Delinquency.

Prior to age 15, were you ever in trouble with the law?

Did you go to juvenile court?

What were your charges?

If not before 15, how old at first arrest?

What were your charges?

serious offense - 2
minor offense - 1

3) Multiple Offenses.

What types of offenses have you engaged in?

Theft, B & E	Sex offense	Income Tax
Robbery	Fraud	Minor charges
Drugs	Possession	Weapons Offenses
Assault	Kidnapping	Escape
Murder	Arson	

(score, 2 for 6 or more
1 for 4-5
0 for 1-3)

Criminal History, Presented as a summary to confirm and gain more information.

4) Any prior convictions
adult/number ()5) Two or more prior convictions
i.e. two or more sets of convictions

6) Three or more prior convictions

7) Three or more present offenses
number ()

8) Arrested under age 16

9) Have you ever been put in jail upon conviction
of an offense?

Section 1.

- 10) Have you ever escaped or attempted to escape from an institution? _____
- 11) Have you ever been punished for institutional misconduct? _____
- 12) Have charges been laid or parole suspended during community supervision orders? _____
- 13) Have you ever been charged with any prior or present assaultive/violent offenses? _____

Poor Probation or Parole Risk.

- 14) Getting back to parole, have you ever received a probation, parole or temporary absence?
Did you honor them?
Have you ever been charged with "fail to appear" "breach of recognizance" or "jumping bail"?
(score 2 - 1 or more revocations for conditional release, failure to meet conditions of bail
1 - 1 or more violations of release, minor failures to meet judicial obligation) _____

- 15) Improvement indicated?
Is more of an effort to comply with a condition required? _____

Specific conditions of improvement are:

- 16) _____
- 17) _____
- 18) _____

Drug/Alcohol Abuse

- 19) Were you using drugs or alcohol "excessively" prior to the time you first got into serious trouble?
Was your drug/alcohol usage a large factor in your getting into trouble?
Describe your usual 1) drug use
2) alcohol use _____

- 20) So, in summary, you had an alcohol problem at one time? _____
- 21) Are you having a problem with alcohol now? _____
- 22) So, in summary, you had a drug problem at one time? _____

Section 1.

- 23) Are you having a problem with drugs now? _____
- 24) Has the use of drugs or alcohol contributed to your violations of the law _____
- 25) Has the use of drugs or alcohol contributed to problems with your marital or family situation, or other people that know you have complained about your usage? _____
- 26) Has the use of drugs contributed to problems with school or employment? _____
- 27) Has the use of drugs/alcohol contributed to physical complaints, or has the doctor warned you that continued substance-use would be harmful? _____
- 28) Do you use drugs or alcohol frequently and in high quantity of consumption; for example, do you pass out, can't resist more drinks, use it first thing in the morning, sneak drinks at work, use it to avoid hangover? _____

Education/Employment

- 29) Were you unemployed before you came here? _____
- 30) Have you been employed less than 6 months in the past year? _____
- 31) Have you ever been employed for a full year? _____
- 32) Have you ever been fired? _____
- 33) When you were in school, did you complete your grade 10? _____
- 34) Did you complete your grade 12? _____
- 35) Were you ever suspended or expelled? _____
- 36) When you were working, or in school, did you express a strong interest in it, did you take pride in your accomplishments, receive praise from the boss/teacher, attend regularly and on time, work extra hard () _____
- 37) Did you get along with your fellow workers or students, talk together, take breaks, spend time together outside work or school, help each other in school or work, and/or were you cooperative, friendly () _____
- 38) Did you respect your boss/teacher, would you talk to this person about personal matters or non-job matters, would you follow orders willingly () _____

Appendix A continuedSection 1.

39) Boredom

As a child, did you like going to school?

Did you find it boring?

What types of work experience have you had?

Do you ever get the feeling that you have itchy feet, or need to travel or always be on the go?

Are you able to work at something for a long time or do you tend to jump from one thing to another?

Leisure/Recreation

40) Have you participated or been involved in any organized activities like: union, service clubs, sports club, or teams, church?

41) What you do with your spare time, i.e. stamp collecting, weight lifting, judo, car repairs ()

42) Lack of Realistic Long term Goals

How do you feel about your life's accomplishments so far?

What kind of job would you like to pursue?

How do you expect to attain this position?

Do you tend to plan your time, or do you live day by day?

(inability and unwillingness to carry out realistic long term plans).

43) Egocentricity/Grandiose

What are your feelings toward the future, are things likely to work out for you?

Are you concerned that your criminal history will prevent you from accomplishing your goals? (is he self-assured, cocky?)

Financial

44) Source of incomes - estimate of total income for household?
 - does anyone receive welfare, UIC?
 - do you or household members complain about the amount of money earned or how it is spent?

Appendix A continuedSection 1.

Do you have a bank account, ever had a cheque bounce? _____

Credit card - do you have one? _____

- have you ever been denied credit? _____

Budget, do you have one, and do you follow it? _____

Have you ever declared bankruptcy or had your wages garnisheed? _____

- 45) Do you rely on social assistance? _____
If yes, for how long? _____

- 46) Parasitic Lifestyle _____

When you are on the street, how do you support yourself? _____

Does anyone else assist you in terms of lodging, food or money? _____

(note - does he appear helpless and deserving of sympathy?) _____

Accommodation

- 47) Do you have a fixed address? _____

If so, are you satisfied with your accommodation situation? _____

Would you like to stay there, or would you like to move as soon as something else comes up? _____

Do you take pride in your place, yard and/or neighborhood? () _____

- 48) Where have you stayed within the last year? (over 3, a check is warranted) _____

- 49) Do you live in a high crime neighborhood? _____

Family/Marital

- 50) Are you satisfied with your marital or single situation? i.e. highly rewarding caring relationship ()? _____

- 51) Are your parents alive? _____
If so, do you write them often, hug or kiss them when greeting them? Do you care about what your parents think, expect or feel? () _____

- 52) Do you have a positive relationship with your relatives? _____

Appendix A continuedSection 1.

53) Does anyone in your family have a criminal record? _____

54) Frequent Marital Relationships.

Were you married?

If so, for how long?

Were you ever married to anyone else?

Score - 3 or more = 2
2 = 1

55) Promiscuous Sexual Behavior _____

Apart from your marriages, have you had affairs with other women? How many?

Did you ever have more than one girl or relationship at a time?

Have you been involved in different sexual behaviors, i.e. bisexuality, incest, kinky behavior? _____

56) Irresponsible behavior as a parent.

Do you and your wife have any children?

If yes, names and ages?

How much contact do you normally have with them?

Do you financially support your children?

To the best of your knowledge, have you fathered any other children?

If yes, describe any contact/support arrangements? _____

Companions

57) Do you find it difficult to meet new people, keep friends or get along with others? _____

58) Do you associate with individuals who are not close friends, but are involved in criminal activity or have a record? _____

59) Do you have close friends who are involved in criminal activity? _____

60) Do you have very few acquaintances who are not involved in crime? _____

61) Do you have very few friends who are not involved in criminal activities? _____

Section 1.Personality Attributes62) Glibness/Superficial Charm

Are you familiar with sociology, law, psychiatry, philosophy, law or art?

Note - he is able to tell convincing stories that put him in good light?

- he has the gift of gab

- appears very much at ease, not embarrassed

63) Conning/Lack of Sincerity

Have other people ever described you as a hustler or manipulator?

What do you think of people who are gullible enough to be cheated?

64) Pathological Lying and Deception

Have you ever been convicted for fraud, forgery, false pretences, impersonation, perjury?

If yes, how many?

Would you find it easy or difficult to tell a lie when it is in your own best interests?

(Note - confront his stories)

65) Impulsiveness

Do you tend to plan things, or do them on the spur of the moment?

Have you quit jobs in the past without another job to go to, or have you moved without telling anyone?

Have your criminal offenses been premeditated or spontaneous?

66) Short Temper

Do you tend to take offense easily? For instance, do you get very angry for very little things?

Do you take things personally?

As an adult, have you ever been so angry that you have "blown up"?

If yes - describe.

Have other people told you that you have a short fuse?

Appendix A continuedSection 1.

8.

67) Lack of affect or emotional depth.

Do you tend to care much about what other people think or feel about what you are doing?

Do you sometimes put on a show of feelings because other people expect it, even though you do not feel that way?

If a family member became sick, how would you feel?

How often do you feel angry, sad, happy, lonely, confident, anxious, guilty?

68) Lack of empathy/callous disregard for the feelings of others.

How do you think the problems in your life have affected your parents, spouse or family?

What are your feelings toward the victims of the crimes you committed?

Do you feel sorry, sad, or do you feel that it was very unfortunate, nothing you can do about it now, you can't worry about it?

69) Lack of Remorse of Guilt

Do you feel a sense of guilt or a sorrow for what you have done?

If sorry, have you ever apologized or done something to show that you were sorry?

Do you feel that your sentence is a fair one?

70) Failure to accept responsibility for actions

In general, what factors do you feel have been responsible for your own involvement in criminal behavior?

What factors would help keep you out of trouble in the future?

i.e. look for excesses, rationalizations.

Psychiatric/Psychological History71) Previous Diagnosis

Have you ever seen a psychiatrist or psychologist for the assessment or treatment of emotional problems?

What was the diagnosis?

Section 1.

9.

Emotional/Personal

- 72) Moderate interference _____
- 73) Severe interference. _____
 Have you ever been admitted or committed to a psychiatric facility?
 Have you ever attempted suicide? _____
- 74) Psychiatric treatment in past _____
- 75) Psychiatric treatment present _____
- 76) Psychological assessment indicated _____

Attitudes/Orientations

- 77) Do you think the criminal justice system is doing a good job?
 (Note, rationalizations, denial of responsibility) _____
- 78) Unfavorable toward convention _____
- 79) Was your sentence fair or just? _____
- 80) Poor toward supervision _____

SCORE TOTALS:

- 1) Psychopathy checklist _____
- 2) Level of Supervision Inventory _____

Appendix BSection 2DSM-III Diagnosis Antisocial Personality Disorder

- B. Onset before age 15 as indicated by a history of three or more of the following before that age?
- (1) truancy (positive if it amounted to at least five days per year for at least two years, not including the last year of school) _____
 - (2) expulsion or suspension from school for misbehavior _____
 - (3) delinquency (arrested or referred to juvenile court because of behavior) _____
 - (4) running away from home overnight at least twice while living in parental or parental surrogate home _____
 - (5) persistent lying _____
 - (6) repeated sexual intercourse in a casual relationship _____
 - (7) repeated drunkenness or substance abuse _____
 - (8) thefts _____
 - (9) vandalism _____
 - (10) school grades markedly below expectations in relation to estimated or known IQ (may have resulted in repeating a year) _____
 - (11) chronic violations of rules at home and/or school (other than truancy) _____
 - (12) initiation of fights _____

- C. At least four of the following manifestations of the disorder since age 18:

(1) inability to sustain consistent work behavior, as indicated by any of the following: (a) too frequent job changes (e.g. three or more jobs in five years not accounted for by nature of job or economic or seasonal fluctuation), (b) significant unemployment (e.g. six months or more in five years when expected to work), (c) serious absenteeism from work (e.g. average three days or more of lateness or absence per month, (d) walking off several jobs without other jobs in sight (Note: similar behavior in an academic setting during the last few years of school may substitute for this criterion in individuals who by reason of their age or circumstances have not had an opportunity to demonstrate occupational adjustment) _____

(2) lack of ability to function as a responsible parent as evidenced by one or more of the following:

Section 2.

2.

(a) child's malnutrition, (b) child's illness resulting from lack of minimal hygiene standards, (c) failure to obtain medical care for a seriously ill child, (d) child's dependence on neighbors or nonresident relatives for food or shelter, (e) failure to arrange for a caretaker for a child under six when parent is away from home, (f) repeated squandering, on personal items, of money required for household necessities

(3) failure to accept social norms with respect to lawful behavior as indicated by any of the following: repeated thefts, illegal occupation (pimping, prostitution, fencing, selling drugs), multiple arrests, a felony conviction

(4) inability to maintain enduring attachment to a sexual partner as indicated by two or more divorces and/or separations (whether legally married or not), desertion of spouse, promiscuity (ten or more sexual partners within one year)

(5) irritability and aggressiveness as indicated by repeated physical fights or assault (not required by one's job or to defend someone or oneself), including spouse or child beating

(6) failure to honor financial obligations as indicated by repeated defaulting on debts, failure to provide child support, failure to support other dependents on a regular basis

(7) failure to plan ahead, or impulsivity as indicated by traveling from place to place without a prearranged job or clear goal for the period of travel or clear idea about when the travel would terminate, or lack of a fixed address for a month or more

(8) disregard for the truth as indicated by repeated lying, use of aliases, "conning" others for personal profit

(9) recklessness as indicated by driving while intoxicated or recurrent speeding

- D. A pattern of continuous antisocial behavior in which the rights of others are violated, with no intervening period of at least five years without antisocial behavior between age 15 and the present time.

Appendix C

Section 3, Summary Sheets
Level of Supervision Inventory (LSI-VI)

CRIMINAL HISTORY

- 1 Any prior convictions, adult/number
- 2 Two or more prior convictions
- 3 Three or more prior convictions
- 4 Three or more present offences/number
- 5 Arrested under age 16
- 6 Ever incarcerated upon conviction
- 7 Escape history - institution
- 8 Ever punished for institutional misconduct/number
- 9 Charge laid or parole suspended during prior community supervision
- 10 Official record of assault/violence

EDUCATION/EMPLOYMENT

When in labour market:

- 11 Currently unemployed
 - 12 Frequently unemployed
 - 13 Never employed for full year
 - 14 Ever fired
- School or when in school:
- 15 Less than grade 10
 - 16 Less than regular grade 12
 - 17 Suspended or expelled at least once

Homemaker, pensioner: 18 only
 School, work, unemployed:
 18, 19, 20

- 18 Participation/Performance ()
- 19 Peer interactions ()
- 20 Authority interactions ()

FINANCIAL

- 21 Problems ()
- 22 Reliance upon social assistance

FAMILY/MARITAL

- 23 Dissatisfaction with marital or equivalent situation ()
- 24 Nonrewarding, parental ()
- 25 Nonrewarding, other relatives ()
- 26 Criminal - Family/Spouse

ACCOMMODATION

- 27 Unsatisfactory ()
- 28 3 or more address changes last year/number
- 29 High crime neighbourhood

LEISURE/RECREATION

- 30 No recent participation in an organized activity
- 31 Could make better use of time ()

COMPANIONS

- 32 A social isolate
- 33 Some criminal acquaintances
- 34 Some criminal friends
- 35 Few anti-criminal acquaintances
- 36 Few anti-criminal friends

ALCOHOL/DRUG PROBLEMS

- 37 Alcohol problem, ever
- 38 Drug problem, ever
- 39 Alcohol problem, currently ()
- 40 Drug problem, currently ()
Specify drug _____

- 41 Law violations
- 42 Marital/Family
- 43 School/Work
- 44 Medical
- 45 Other clinical indicators - Specify:

EMOTIONAL/PERSONAL

- 46 Moderate interference
- 47 Severe interference
- 48 Psychiatric treatment, past
- 49 Psychiatric treatment, current
- 50 Psychological assessment indicated
Area _____

PROBATION/PAROLE CONDITIONS

- 51 Improvement indicated
Specify conditions:

- 52 _____
- 53 _____
- 54 _____

ATTITUDES/ORIENTATION

- 55 Supportive of crime
- 56 Unfavourable toward convention
- 57 Poor, toward sentence
- 58 Poor, toward supervision

TOTAL LSI SCORE _____

- 59 _____
- 60 _____
- 61 _____
- 62 _____
- 63 _____

Negative/Positive circumstances not given sufficient attention in the LSI

Note LSI Subsection Probation/Parole Conditions and LSI item 50 were not scored.

Appendix D

Section 3, Summary Sheets

Hare Psychopathy Checklist Score

- 1. Early Behavioral Problems _____
- 2. Juvenile Delinquency _____
- 3. Multiple Offenses _____
- 4. Poor Probation or Parole Risk _____
- 5. Drug/Alcohol Abuse _____
- 6. Boredom _____
- 7. Lack of Realistic Long Term Goals _____
- 8. Egocentricity/Grandiose Sense of Self Worth _____
- 9. Parasitic Lifestyle _____
- 10. Frequent Marital Relationships _____
- 11. Promiscuous Sexual Behavior _____
- 12. Irresponsible Behavior as Parent _____
- 13. Glibness/Superficial Charm _____
- 14. Conning/Lack of Sincerity _____
- 15. Pathological Lying and Deception _____
- 16. Impulsiveness _____
- 17. Short Temper _____
- 18. Lack of Affect or Emotional Depth _____
- 19. Lack of Empathy/Callous Disregard for the
Feeling of Others _____
- 20. Lack of Remorse or Guilt _____
- 21. Failure to Accept Responsibility for Actions _____
- 22. Previous Psychiatric/Psychological History _____
- Psychopathy Checklist Score _____

Appendix E

Section 3, Summary Sheets

DSM-III Diagnostic Criteria for Antisocial Personality Disorder

- A - Current age of at least 18: (not scored)
- B - Onset before age 15 as indicated by a history of 3 or more of the following before that age:
- | | |
|---|-------|
| 1. Truancy | _____ |
| 2. Expulsion or Suspension from school | _____ |
| 3. Delinquency | _____ |
| 4. Running away from home | _____ |
| 5. Persistent lying | _____ |
| 6. Repeated sexual intercourse | _____ |
| 7. Thefts | _____ |
| 8. Vandalism | _____ |
| 9. School grades low | _____ |
| 10. Repeated drunkenness or substance abuse | _____ |
| 11. Chronic violations at home or school | _____ |
| 12. Initiation of fights | _____ |
| Diagnostic Criteria B Subtotal | _____ |
- C - At least 4 of the following manifestations of the disorder since age 18:
- | | |
|---|-------|
| 1. Inability to sustain consistent work behavior | _____ |
| 2. Lack of ability to function as a responsible parent | _____ |
| 3. Failure to accept social norms with respect to lawful behavior | _____ |
| 4. Inability to maintain enduring attachment to a sexual partner | _____ |
| 5. Irritability and aggressiveness | _____ |
| 6. Failure to honor financial obligations | _____ |
| 7. Failure to plan ahead or impulsivity | _____ |
| 8. Disregard for the truth | _____ |
| 9. Recklessness | _____ |
| Diagnostic Criteria C Subtotal | _____ |
- D - Continuous antisocial behavior without an intervening period of at least five years:
- E - Antisocial behavior is not due to either severe mental retardation, schizophrenia or manic episodes: (not scored)
- TOTAL DSM-III SCORE - - - 0 (), 1 (), 2 (), 3 ().

Appendix FOffender Consent FormOFFENDER ASSESSMENT PROGRAM

THIS IS TO NOTE THAT THE OFFENDER ASSESSMENT PROGRAM HAS BEEN EXPLAINED TO ME. I UNDERSTAND THAT I WILL BE ASKED SOME CONFIDENTIAL INFORMATION AND TO HAVE MY FILE REVIEWED FOR BACKGROUND INFORMATION. I AGREE TO THESE CONDITIONS. I ALSO RECOGNIZE THAT PARTICIPATING IN THE RESEARCH IS NOT A CONDITION OF SENTENCE AND THAT MY PARTICIPATION IN THE RESEARCH PROJECT IS IN ADDITION TO THE REQUIREMENTS OF THE MINISTRYS' RULES AND REGULATIONS.

SIGNATURE OF PROBATIONER

SIGNATURE OF RESEARCHER

DATE: _____

