**Reliability and Validity of the Self-Appraisal Questionnaire in a
Sample of Incarcerated Youth**

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of the requirements for the Masters degree in Psychology.

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Abstract

The current study examined the internal consistency, test-retest reliability and the construct and concurrent validity of a self-report risk assessment instrument, the Self-Appraisal Questionnaire (SAQ; Loza, 1996) in a sample of secure custody youth. Participants were 126 youth (M age = 17.08, SD = 1.04 years). Results indicate that the SAQ (α = .91) and its scales (α s = .36 - .82) were internally consistent and stable over a two week period (r = .92, p < .001). Construct validity and concurrent validity were supported by significant correlations with established risk measures. SAQ scores were also related to the number of youths' prior convictions for general and violent offences. SAQ scores were independent of gender and age. These findings suggest that the SAQ may be a useful and economical measure of juveniles' risk of recidivism. Further research and examination of predictive validity is recommended.

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Reliability and Validity of the Self-Appraisal Questionnaire

In efforts to evaluate an offender's potential for recidivism on release, various methods and theories have been devised. Historically, these methods and theories were idiosyncratic to the evaluator, and based on unstructured clinical judgment. Although attempts were made to standardize risk assessment methods in the 1920s (e.g., Burgess, 1928; Hart, 1923) and again in the 1940s (e.g., Burgess, 1943, Sarbin, 1943, 1944), it has only been in the latter part of the 20th Century that reliable, validated and standardized risk assessment instruments have become widely available (Hoge & Andrews, 1996; Monahan, 1981). Among these instruments is the Self-Appraisal Questionnaire (SAQ; Loza, 1996), a paper and pencil self-report questionnaire designed to assess an offender's risk for general and violent recidivism. The purpose of the current research was to assess the reliability and validity of the SAQ in a sample of youth serving sentences in secure custody. In the way of background, the following areas are reviewed: a) the assessment of juveniles' risk for recidivism; b) current instruments used to assess juveniles' risk for recidivism; c) prior research on using self-report questionnaires with juveniles and d) the advantages of using self-report questionnaires in assessing risk for recidivism.

Recidivism Risk Assessment for Juveniles

In 1923, Hornell Hart demonstrated that certain variables (e.g., prior convictions, unemployment) readily available from an offender's file could be tabulated to result in a value indicating the offender's probability of success on parole. Five years later, Burgess (1928) published a landmark study using experience tables, demonstrating the ability to predict parole outcomes for adult male offenders. One of Burgess's research assistants, Clark Tibbitts (1931) subsequently constructed experience tables based on the parole

outcome of 3,000 youths released from the Illinois State reformatory. Testing the reliability of his classification one year later, Tibbitts (1932) reclassified over 900 of the same offenders. He found that the two classifications had a correlation of only .76 and, after ruling out clerical error, attributed the discrepancies to the difficulty of classification.

Around the same time, Glueck and Glueck (1930) began a comprehensive investigation of the lives of 510 adult male offenders. This work produced a series of parole prediction instruments, the methods of which they later extended to predict the outcomes of a sample of 1,000 juveniles released from correctional institutions (Glueck & Glueck, 1934). The Gluecks subsequently devised another tool to predict behaviour within the institution and while on parole, differentiating outcomes based on whether or not sentencing followed clinical recommendations. This Five Factor parole success prediction tool (Glueck & Glueck, 1959) was comprised of the following variables: birthplace of father, birthplace of mother, discipline by father, discipline by mother, and school misconduct. Results yielded failure probabilities from 36% to 85.6%. Ninety-one percent of the construction sample of 458 offenders were predicted to violate their parole and actually did violate. Nevertheless, the Gluecks' findings have been controversial, with issues of contention including questions about the base rate (e.g., Reiss, 1951; West & Farrington, 1973), participant selection and reliability issues (e.g., Prigmore, 1963).

Four meta-analyses have reviewed selected juvenile delinquency and recidivism prediction studies conducted from 1960 to 2000. In the first meta-analysis, Loeber and Dishion (1983) reviewed 103 studies published between 1962 and 1980 that predicted delinquency, defined as first time offending, or recidivism, defined as having two or more

juvenile arrests.¹ Loeber and Dishion analyzed the studies in terms of true and false positives and negatives. *Positive* refers to the number of participants who were predicted to recidivate, with *true positive* referring to those who actually did and *false positive* referring to those who did not recidivate. Correspondingly, *negative* refers to the participants who were predicted to not recidivate, with *true negatives* referring to those who did not recidivate and *false negatives* referring to those who did reoffend. By putting these values in a two-by-two table, selection ratios and base rates can be derived, as well as any improvement over chance (IOC) in the prediction.

Loeber and Dishion (1983) reported on the ability of nine variables to predict delinquency and recidivism in terms of their relative improvement over chance (RIOC). The median RIOC score and the range of scores were reported for each predictor, itemized separately for the outcomes of delinquency and recidivism. As shown in Table 1, the most accurate predictor of delinquency was the blended variable Composite techniques, Separation from parents, and Socioeconomic status. Of the five predictors of recidivism that were reported, the most accurate was the blended variable Stealing, lying

¹The studies in Loeber and Dishion's (1983) meta-analysis had to satisfy ten criteria for inclusion. These criteria were as follows: 1) Results for each study had to be reported in terms of raw scores. 2) Studies on exclusively female populations were not included. 3) Only studies that used predictors assessed within one year of the outcome were used. 4) Only studies that used objective first hand measures were included. 5) Studies predicting a reduction of delinquency or offset were included as well as the more typical studies predicting a dichotomous outcome. 6) When results were reported in a non-dichotomous format, cutting scores were established to transform the results into a dichotomy. 7) With the exception of traffic and parole violations, official information and self-report based studies were used. 8) Both prospective and retrospective designs were included. 9) Personality tests used as predictors were not included. 10) Where recidivism was reviewed, the base rate had to be compared to that of first time offenders, rather than that of the delinquency rate in general.

Table 1

Relations Between Predictors and Delinquency and Recidivism in Loeber and Dishion's (1983) Meta-Analysis

Predictor	<u>Delinquency</u>		<u>Recidivism</u>	
	<i>RIOC Mdn</i>	Range	<i>RIOC Mdn</i>	Range
Composite measures of parental family management techniques	.50	.31 - .82	-	
Child problem behaviour	.32	.15 - .78	.38	.26 - .56
Stealing, lying, or truancy	.26	.22 - .58	.46	.31 - .60
Criminality or antisocial behaviour of family members	.24	.08 - 1.0	.36	.26 - .45
Poor educational achievement	.23	.11 - .46	-	
Single measures of parental family management techniques	.23	.13 - .23	-	
Separation from parents	.20	.07 - .80	-	
Socioeconomic status	.18	.10 - .31	.14	.12 - .49
Prior delinquency	-		.36	.30 - .60

RIOC is the relative improvement over chance

or truancy, followed by Child behaviour problem, Criminality or antisocial behaviour of family members, Prior delinquency, and Socioeconomic status. The authors pointed out that not all studies included these variables, and that the majority of the studies relied solely on court records as the criterion of delinquency and recidivism. They therefore suggested that prediction research could benefit from the use of multiple criteria, including self-reports and collateral information from sources such as teachers and peers.

In the second meta-analysis, that was conducted to identify gender differences in the correlates of delinquency and recidivism, Simourd and Andrews (1994) analyzed 60 delinquency and recidivism studies published between 1964 and 1984.² Based on the correlates of prediction identified in the existing literature, Simourd and Andrews classified risk factors as pertaining to one of eight domains: Lower social class; Family structure or parental problems (e.g., living in a broken home or having parents with marital problems); Personal distress (e.g., included anxiety, low self-esteem,); Minor personality variables (e.g., empathy, moral reasoning); Poor parent-child relations (e.g., attachment problems, poor supervision); Educational difficulties (e.g., poor grades, dropping out of school); Temperament or misconduct problems (psychopathy, impulsivity, substance use); and Antisocial peers or attitudes.

As displayed in Table 2, the variable with the strongest relation to risk was Antisocial peers or attitudes, followed by Temperament or misconduct problems, Educational difficulties, Poor parent-child relations, and Minor personality variables. There were no gender differences in the extent to which the measures of these eight

² To be included in the meta-analysis, studies were required to present the data separately for each gender.

domains predicted the combined outcome of delinquency and recidivism. Speculating that their selected factors might have excluded other important predictors, Simourd and Andrews (1994) grouped 96 excluded variables into ten new factors (i.e., Victimization, Illegitimate opportunity, Lack of legitimate opportunity, Sexual Behaviour, Lack of hobbies or involvement, Accommodation problems, Self-concept issues, Race, Sex-role orientation and Lack of attachment to convention). As observed in their first analysis, there were no gender differences in the predictive power of these additional risk factors.

Table 2

Correlations Between Risk Factors and the Combined Outcome of Delinquency and Recidivism in Simourd and Andrews' (1994) Meta-Analysis

Factor	<i>n</i>	<u>Males</u>	<u>Females</u>
		<i>r</i>	<i>r</i>
Antisocial peers or attitudes	53	.39	.40
Temperament or misconduct problems	45	.35	.36
Sexual behaviour	3	.35	.26
Educational difficulties	34	.24	.23
Lack of attachment to convention	10	.23	.22
Poor parent-child relations	41	.20	.22
<u>Minor personality variables</u>	9	.18	.22

Note. *n* = the number of correlations contributing to the mean. No probability values were included, however the authors stated that correlations of .15 or larger were of substantive interest.

In addition, only two of these new factors were related to delinquency and recidivism, namely Lack of attachment to convention and Sexual behaviour (see Table 3). However, Simourd and Andrews suggested that some of the observed non-significant factor-outcome relations might have been due to the insufficient number of studies that incorporated these variables

In the third study, Lipsey and Derzon (1998) reviewed 34 published and unpublished studies examining the correlates of serious and violent offending in youth, as part of an ongoing longitudinal meta-analysis. These authors sought to find which predictor variables assessed prior to adolescence demonstrated the strongest empirical associations with later violent or serious delinquency, and to determine if these predictors were sufficient to identify youth at risk, in order to provide preventative intervention. The studies originated in the United States and Great Britain. Most of the participants were from the general community although some studies included correctional samples and the majority of participants were male. Predictor variables were grouped into four construct categories: Antisocial behaviour included prior acts of Aggression, Violence and Substance abuse. Personal characteristics included demographic variables such as Gender, Medical ratings and School attitude/performance. Family characteristics involved parental variables (e.g., Antisocial parents, Abusive parents) and family situation variables (e.g., Family SES). The construct category of Social factors was comprised of two variables, Social ties and Antisocial peers.

Predictor variables had been assessed in youth as early as age six to 14 years, with outcome assessed from ages 15 to 25 years. The outcome criterion variable was the commission (officially detected for most studies) of a serious or violent offence. Mean

effect size correlations were calculated and results were reported for two age groups; six to 11 years and 12 to 15 years. The Q-test for homogeneity reached significance for approximately one half of the predictor categories, demonstrating more variation among aggregate effect sizes than would be expected by sampling error alone (Table 3). Lipsey and Derzon (1998) also calculated the odds ratios, indicating the likelihood of subsequent violent/serious delinquency of the 25% of the sample on the high-risk end of the predictor measures.

For the younger group, the best predictor category was Antisocial behaviour, with General offences and Substance abuse showing the strongest relationship with outcome. For Personal characteristics, Gender and Ethnicity were the highest predictors. Family SES and Antisocial parents were the strongest predictors under the Family characteristics construct group, and Social ties was stronger than Antisocial peers in the Social factors category. The variable with the greatest odds ratio overall was Gender, followed by General offences. These results contrast to those found in the 12 to 14 year old age group, where the both of the Social factors predictors (Social ties and Antisocial peers) exceeded all other variables in prediction. In this group, General offences and Aggression had the highest odds ratio for the Antisocial behaviour construct while Gender, Psychological conditions and School attitude/performance were the strongest predictors under Personal characteristics. Lastly, for Family characteristics, Parent child relations and Antisocial parents were the strongest predictors of the category.

Lipsey and Derzon (1998) pointed out that the majority of the predictors were potentially malleable behaviours, and suggested that disruption of early antisocial behaviour patterns might be an effective intervention for youth.

Table 3

Aggregated Effect Sizes by Predictor Construct in Lipsey and Derzon's (1998) Meta-Analysis

Predictor construct	<u>Mean effect size</u>					
	<u>Ages 6 – 11 years</u>			<u>Ages 12 – 14 years</u>		
	<i>r</i>	<i>Q</i>	<i>Odds</i>	<i>r</i>	<i>Q</i>	<i>Odds</i>
Antisocial behaviour						
Physical violence				.14	22.41***	3.61
Aggression	.21	4.66	4.40	.27	10.61**	3.85
Person crimes				.13	14.12**	2.77
General offences	.34	1.94	16.68	.27	166.63***	6.20
Problem behaviour	.16	8.89*	2.59	.09	11.33*	2.42
Substance use	.35	.27	8.31	.07	21.45***	1.60
Personal characteristics						
Gender	.26	7.13	18.55	.17	25.13***	5.17
Ethnicity	.18	31.58***	4.12	.04	14.22**	1.38
IQ	.11	8.40*	2.42	.19	0	2.26
Medical/physical	.12	16.15*	2.59			
Psychological condition	.22	44.78***	2.96	.28	.42	3.85
School attitude/perform.	.10	.03	2.59	.28	3.89	3.85
Family characteristics						
Antisocial parents	.27	5.00	5.04	.25	1.31	3.16
Abusive parents	.08	11.94*	1.72	.06	6.34	1.98
Broken home	.06	6.00*	1.98	.10	14.18**	2.12
Parent-child relations	.16	7.80*	2.96	.22	6.79	3.85
Family SES	.25	2.64	5.39	.11	28.29***	2.12
Other family characteristics	.15	10.02	2.42	.09	40.35***	1.84
Social factors						
Social ties	.16	.00	2.96	.47	0	18.54
Antisocial peers	.12	4.35*	1.38	.43	10.39*	15.09
Total	.16	364.43***		.15	785.76***	

Note. Odds = Odds ratio indicating relative odds of subsequent violent/serious delinquency for the 25% of the sample on the high-risk end of the predictor measure (except for gender) assuming 8% overall base rate for violent/serious delinquency.

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

In the fourth and most recent meta-analysis, Cottle, Lee and Heilbrun (2001) examined 22 risk assessment studies conducted between 1983 and 2000. Across the 22 studies, the mean sample size was 688 (range = 45 - 9,176) and the mean age of the participants was 14.7 years (range = 6 - 21 years). In the 20 studies that identified gender, 83% of the participants were male. The mean follow-up time was 45.3 months, ranging from one to 192 months. All but one of the studies obtained the recidivism data solely from official records. One study used official records as well as self-report and information from collateral sources. With the outcome variable of recidivism defined as rearrest for any type of offending, the overall base rate for rearrest was 48%.

In their analyses of these data, Cottle et al. (2001) classified 30 predictors as pertaining to one of eight domains: Demographic information consisted of gender, race and socioeconomic status. History included age at first contact with the law, age at first arrest, number of prior commitments, type of crime and length of first incarceration. Family and social factors consisted of having been a victim of physical or sexual abuse, living with a single parent, parent pathology, number of out-of-home placements, family problems, ineffective use of leisure time and having delinquent peers. Educational factors were, history of special education, school attendance and school achievement. Standardized test scores contained achievement scores, verbal IQ, performance IQ, and full scale IQ scores. Substance abuse history was comprised of both substance use and abuse. Clinical factors included severe pathology, conduct problems, nonsevere pathology and history of treatment. Finally, Formal risk assessment was a composite representing all studies that had used a combination of variables to assess risk.

Cottle et al. (2001) analyzed the data for each of the individual predictors within each domain and reported the weighted standardized effect size, Z_r . As shown in Table 4, each of the demographic variables (i.e., gender, race and socioeconomic status) was related to recidivism. However, when socioeconomic status was controlled, race was independent of recidivism. All history variables were related to recidivism, with mean effect sizes ranging from $-.346$ (age at first commitment) to $.187$ (length of first incarceration). Of the seven family and social factors, all but parent pathology were related to outcome, with mean effect sizes ranging from $-.233$ (effective use of leisure time) to $.227$ (family problems). For educational factors, only a history of special education was related to recidivism and, of the intellectual and achievement measures, all but performance IQ were related to recidivism. Although substance use was independent of recidivism, substance abuse was related. Of the clinical factors, conduct problems and nonsevere pathology were correlated with outcome but severe pathology and history of treatment were not. Finally, a composite index of risk assessment instruments demonstrated a mean effect size of $.118$. Like Simourd and Andrews (1994), Cottle et al. suggested that some variables might have had more predictive power if they had been assessed in more studies (e.g., the effective use of leisure time, substance use and severe pathology were assessed in only two studies).

Each of the four meta-analyses presented above considered unique factors such as Separation from parents (Loeber & Dishion, 1983), Sexual behaviour (Simourd & Andrews, 1994), Medical/physical (Lipsey & Derzon, 1998) and Age at first contact with the law (Cottle et al., 2001). Although such heterogeneity in the predictors impedes direct comparisons across studies, there are some similarities. For example, each meta-

Table 4***Predictors of Recidivism in Cottle et al.'s (2001) Meta-Analysis***

Domain	Predictor variable	Mean <i>Zr</i>	<i>k</i>
Demographic information	Gender	.111**	3
	Race	.067**	6
	Socioeconomic status	.065**	3
History	Age at first contact with the law	-.341**	8
	Age at first commitment	-.346**	3
	Number of prior commitments	.058**	7
	Type of crime	.159**	7
	Length of first incarceration	.187**	3
Family and social factors	Having been a victim of abuse	.112**	5
	Living with a single parent	.070**	5
	Parent pathology	<i>ns</i>	3
	Number of out-of-home placements	.184**	2
	Family problems	.227**	5
	Effective use of leisure time	-.233**	2
	Having delinquent peers	.204**	7
Educational factors	History of special education	.130**	2
	School attendance	<i>ns</i>	2
	School achievement	<i>ns</i>	6
Standardized test scores	Achievement scores	-.153**	3
	Verbal IQ	-.111*	4
	Performance IQ	<i>ns</i>	2
	Full scale IQ	-.142**	5
Substance abuse history	Substance use	<i>ns</i>	2
	Substance abuse	.149**	6
Clinical factors	Severe pathology	<i>ns</i>	2
	Conduct problems	.255**	7
	Nonsevere pathology	.305**	7
	History of treatment	<i>ns</i>	7
Formal risk assessment	Composite	.118**	6

** $p < .001$. * $p < .01$. k = number of studies used.

analysis identified an educational component related to delinquency and/or recidivism: Poor educational achievement (Loeber & Dishion); Educational difficulties (Simourd & Andrews); School attitude/performance (Lipsey & Derzon) and History of special education (Cottle et al.). Each meta-analysis also pointed to childhood conduct and behaviour problems as predictors of recidivism: Childhood problem behaviour (Loeber & Dishion); Temperament/misconduct problems (Simourd & Andrews); Problem behaviour (Lipsey & Derzon, 1998) and Conduct problems (Cottle et al.). These similarities underscore the importance of the constructs involved (e.g., education, early behaviour) in assessing risk. Including these constructs in risk assessment instruments might, therefore, improve prediction.

Assessor-Scored Measures of Juveniles' Recidivism Risk

Two instruments are currently used to assess the risk and needs of youth sentenced to a term of 30 days or more in Ontario secure custody youth facilities. These are the Level of Service Inventory-Ontario Revision (LSI-OR; Andrews & Bonta, 1995), used for youth over the age of 15, and the Ministry Risk Needs Assessment Form (MRNAF; Hoge, Andrews, & Leschied, 1994), used for youth between the ages of 12 and 15. The MRNAF is also licensed under the name of the Youth Level of Service/Case Management Inventory (Hoge & Andrews, 1994). In addition to these, the Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2002) is also used by some clinicians on an individual basis to assess psychopathic traits and aid in the assessment of risk.

Level of Service Inventory-Ontario Revised. The Level of Service Inventory-Ontario (LSI-OR; Andrews & Bonta, 1995) is a multidimensional measure designed to

assess the risk and treatment needs of offenders over the age of 15 years. Trained staff score the instrument using information from offender interviews, file reviews and information from collateral sources. Although the LSI-OR assesses eight content areas, only one is used to assess risk, namely *General risk/need factors*. This content area is comprised of 43 variables divided into eight scales: Criminal history, Education/employment, Family/marital, Leisure/recreation, Companions, Procriminal attitude/orientation, Substance abuse and Antisocial pattern. Items are scored if present and a total risk score is derived by summing scale totals, although a clinical override is permitted. Risk is then classified categorically as very low, low, medium, high or very high. An earlier version of the LSI-OR was found to be related to parole failure and revocation (Motiuk, Bonta, & Andrews, 1986).

Youth Level of Service/Case Management Inventory/ Ministry Risk Needs

Assessment Form. The Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 1994) was developed on the basis of its parent instrument, the Level of Service Inventory (LSI; Andrews, 1982), a tool designed to assess adult offenders' risk and criminogenic needs. The first youth version of the LSI, the Youth Level of Service Inventory (YLSI; Andrews, Robinson & Hoge, 1984), demonstrated acceptable psychometric properties (Simourd, Hoge, Andrews, & Leschied, 1994) and a version modified for adolescents was found to be predictive of predatory behaviour (Shields & Simourd, 1991). The current version, the YLS/CMI, is comprised of six parts, although only Part I, the *Assessment of risk and needs*, assesses risk. This part provides an actuarial estimate of risk on the basis of 42 items measuring eight construct scales that have demonstrated a relationship with risk: Prior and current offences/dispositions,

Family circumstances/parenting, Education/employment, Peer relations, Substance abuse, Leisure/recreation, Personality/behavior, and Attitudes/orientation.

Jung and Rawana (1999) assessed the predictive validity of the MRNAF in a sample of 263 male and female young offenders that included an over-representation of Aboriginal Canadians. Offenders were assessed at intake and again six months after release. The base rate for recidivism, defined as rearrest within six months after release, was 29%. Jung and Rawana found that the total and all eight scale scores distinguished between recidivists and nonrecidivists, with the greatest differences evident in Antisocial attitudes, Education and employment, and Peer relationships. Neither race nor gender affected predictive validity.

In a one-year follow-up study of 74 violent juvenile offenders (33 inmates and 41 forensic psychiatric outpatients), Catchpole and Gretton (2003) found that the YLS/CMI scored retrospectively from files was predictive of general and violent reoffending ($AUC^3 = .74$ and $.73$, respectively, $p < .01$). Also scoring only from file information, Marcyk, Heilbrun, Lander and Dematteo (2003) examined the predictive utility of the YLS/CMI in a sample of youth referred for psychological evaluation prior to court disposition. These authors found no relationship between the YLS/CMI and recidivism defined as a new arrest, with the exception of the Prior and current offences/dispositions scale that demonstrated a negative correlation with outcome. This unusual finding might have

³ AUC stands for Area Under the Curve, the curve derived from Receiver Operating Characteristics that plots sensitivity versus specificity for a continuous predictor. An AUC is equal to the probability that a randomly selected recidivist will score higher on a particular instrument than a nonrecidivist. An AUC of .5 indicates no improvement over chance, whereas an AUC of 1 represents perfect prediction.

resulted from limitations in available follow-up information, the short follow-up period, or differential opportunities to recidivate (G. Marczyk, personal communication, Dec. 4, 2003).

Psychopathy Checklist: Youth Version. The Psychopathy Checklist Youth Version (PCL:YV; Forth et al., 2002) is a 20-item instrument designed to assess the presence of behavioural and personality characteristics in youth that have been associated with psychopathy in an adult population. Scoring is done by a professional or paraprofessional and is based on file review, collateral information and an in-depth interview with the youth. Each item is assessed on a 3-point scale, rated as 0 for not present, 1 for maybe present, and 2 for present. Results are expressed in a total score and two factor scores: Factor 1 involves a personal/affective dimension and Factor 2 is comprised of behavioural and lifestyle features.

The development of the PCL:YV was based on the adult version, the Psychopathy Checklist-Revised (Hare, 1991). Not designed as a recidivism predictor per se, the PCL-R has nonetheless, proved itself to be a good risk assessment tool for general and violent recidivism (e.g., Barbaree, Seto, Langdon, & Peacock, 2001; Kroner & Mills, 2001; Salekin, Rogers, & Sewell, 1996; Serin, 1996; Serin & Amos, 1995; Serin, Mailloux, & Malcolm 2001). Examining the PCL-R with juvenile samples, Forth, Hart and Hare (1990) made modifications that included dropping two items that did not apply to youth and changing the scoring of two other items. These authors found that psychopathy scores were related to conduct disorder symptoms ($r = .64, p < .001$), number of prior convictions for violence ($r = .27, p < .01$), number of institutional charges for violent behaviour ($r = .46, p < .01$), and number of charges or convictions for violence after

release ($r = .26, p < .02$). High scores have also been found to be related to criminal activity and prison infractions (Brandt, Kennedy, Patrick & Curtain, 1997). Further refinement of the youth PCL instrument resulted in the PCL:YV.

Although there is debate in the literature about how to assess psychopathy (e.g., Frick, 2002) and whether or not the construct *can* be assessed in youth (e.g., Seagrave & Grisso, 2002), research has demonstrated associations between the PCL:YV and various forms of aggression in juveniles (Edens, Skeem, Cruise, & Cauffman, 2001), antisocial behaviour and substance abuse (Forth & Burke, 1998; Kosson, Cyterski, Steuerwald, Neumann, & Walker-Matthews, 2002; Mailloux, Forth, & Kroner, 1997). It is also predictive of interpersonal behaviours associated with adult psychopathy and the lack of attachment to parents (Kosson et al.). As well, PCL:YV scores have been shown to predict violent and general recidivism (Gretton, 1999; Jack, 2002), although when scored retrospectively from file review, the PCL:YV was not predictive of recidivism in a sample of youth referred for pre-disposition assessment (Marczyk et al., 2003). However, in a one-year follow-up study, Catchpole and Gretton (2003) found that the PCL:YV scored retrospectively was predictive of general and violent reoffending ($AUC = .78$ and $.73$, respectively, $ps < .01$).

Scoring all of the aforementioned instruments in accordance with their manuals involves the use of interview. That some applications show predictive validity based on file information only, speaks to the robustness of the tool. However, authors of these studies suggest that assessment without interview might have been a limitation in their studies. In addition to the use of self-report through interview, a paper and pencil self-report questionnaire designed to assess risk might assist staff with their assessment of the

youth. The following is a brief review of the history of the use of paper and pencil self-report questionnaires in the assessment of delinquency.

Using Self-Report Questionnaires to Assess Delinquency

The first study of juvenile delinquency as self-reported through questionnaires and using an offender construction sample was undertaken by Weeks (1943). He proposed that if parole success rates could be estimated prior to release in adult male samples, as demonstrated by Hart (1923) and Burgess (1928), then the same procedure could possibly be used to indicate the probabilities of delinquency in community samples. Weeks constructed a multi-item inventory of an unspecified number of variables based on the files of all male juveniles between the ages of 14 to 18 who had contact with the Spokane County Juvenile Court (Illinois) in 1937. These questionnaires were then distributed to five public high schools in the area, yielding 5,811 returns. Excluding females, males outside the 14 to 18 years age range, and those who self-identified as having a prior court appearance resulted in a total of 2,105 cases. Randomly selecting 420 offender and 421 student cases, Weeks constructed experience tables based on 14 social factors found to differentiate delinquents from nondelinquents and divided delinquency risk scores into ten probability bins. Although the results were replicated in an additional random sample of 500 students and 500 offenders within the same study, no follow-up was completed. Nevertheless, Weeks proposed that the early identification of potential delinquents would signal the need for treatment designed to "aid them in overcoming their handicaps" (p. 46).

Although Weeks' (1943) purpose was to prevent delinquency through intervention, other researchers were interested in self-reported delinquency as a survey

tool in an attempt to measure the true amount of delinquency in the community. Prior to Weeks' study and the use of self-reports, Robison (1936) had concluded that community delinquency rates could not be assessed accurately. Murphy, Shirley, and Witmer (1946), however, were among the first researchers to use self-report surveys in community samples and compared self-reported delinquency rates with official records. They found that official records under-represented the actual amount of delinquency in the community. Murphy and his colleagues labeled the discrepancy "hidden delinquency" and suggested that the only way of accurately measuring delinquency was through self-report.

Nye and Short (1957) subsequently suggested that a primary obstacle to measuring delinquency stemmed from the fact that "delinquency" had been viewed as a categorical attribute (i.e., delinquent or not delinquent) rather than as a continuous variable (i.e., representing a degree of delinquency). They proposed that "Official statistics provide false dichotomies which do violence to the continuity, distribution, and antecedents of human behavior, while clinical data are often beclouded with doctrinal dogmatism or circular reasoning which casts doubt on their validity" (Short & Nye, 1957, p. 207). Nye and Short therefore developed a 21-item questionnaire of delinquent behaviours and administered it to 2,946 public high school students and 320 training school students.⁴ The frequency with which one engaged in a particular behaviour was sought and the response options varied with the items.

⁴ These numbers include female and male students. Although the authors state they analyzed data for males only, they did not specify the number.

Two scales were developed from the responses. The student sample scale consisted of seven items: Driven a car without a driver's license or permit; Taken little things (worth less than \$2); Drank beer, wine or liquor (including drinking at home); Purposely damaged or destroyed public or private property that did not belong to you; Skipped school without a legitimate excuse; Had sex relations with a person of the opposite sex; and Defied your parents' authority (to their face). The training school scale was similar but included four additional items: Run away from home; Taken things of medium value (between \$2 and \$50); Taken things of large value (more than \$50); and Used or sold narcotics. Nye and Short (1957) confirmed the reliability and validity of the scale through three replications within their study, and concluded that delinquency could be conceptualized as a continuous rather than dichotomous variable.

A proliferation of literature on delinquency questionnaires ensued. To further test the scalability of delinquent behaviours, Scott (1957) constructed a multi-item inventory of delinquent behaviours and ensuring anonymity, administered the questionnaire to male university students over a three-year period. Looking at 100 cases selected at random, preliminary results revealed that many of the items in the original roster failed to scale. When these "misfits" were examined as a unique group, they formed a separate scale. Scott realized that one scale dealt with unknown victims (e.g., stealing from hotels or restaurants) and the other scale referred to acts where the victims were known to the youth (e.g., stealing from parents). He proposed that not only can delinquency be represented as a continuous variable, it could also be considered multi-dimensional. Scott suggested that whether the delinquent knew the victim or not added dimensionality and that there might exist other dimensions.

Extending Nye and Short's work to a younger sample, Dentler and Monroe (1961) adapted the questionnaire to include females and administered the self-report to a sample of 912 junior high school students. They found that even with only five items concerning stealing, a theft scale was psychometrically supported. Expanding the study to examine the correlates of stealing (no theft, some theft, high theft), Dentler and Monroe found that high scorers were most likely to self-report having one or more of the following characteristics: Being male, over the age of 14, not confiding in either parent, being disobedient, have poor self-image, attending local hangouts and spending comparatively little time with family, attending movies frequently and studying very infrequently. In addition, youth with high scores also reported engaging in more vandalism, driving without a license, truancy, gang fighting, running away from home and break and entering than youth with low scores. These authors suggested that scales should be constructed for other common delinquent acts such as truancy and injury to person.

In response to Dentler and Monroe (1961), Arnold (1965) undertook a study to develop scales for attacks against persons and vandalism. He administered a self-report questionnaire of delinquent behaviours to first year high school students from six community schools⁵. The questionnaire included 13 items related to attacks against persons, 13 item relating to vandalism and six relating to theft (that included the five items from Dentler and Monroe's theft scale). Two hundred cases were selected for analysis. Arnold found that vandalism did not scale, primarily due to insufficient

⁵ The number of students surveyed was not specified.

endorsement on three items and a skewed distribution. He did find however, that 11 of the 13 items regarding attacks against persons met scaling criteria.

Using self-report questionnaires, Hindelang (1970) conducted research to examine inter-relationships of a variety of self-reported delinquent behaviours and discover the extent to which the interrelationships vary as a function of age and gender in a sample of lower to middle class youth. Three hundred forty-six males and 474 females participated, resulting in 319 and 444 questionnaires complete enough for use respectively. The questionnaire consisted of 24 items regarding a wide range delinquent acts and participants were asked to report the number of times in the last year they had engaged in the act. Hindelang found that most offences were petty and would likely not result in arrest unless persistent. He was also one of the first to demonstrate that the *rank order* of mean frequencies of delinquent behaviours was nearly identical between genders ($r = .93, p < .001$). This means that females engaged in the same *array* of delinquent acts as did males, although they did so less *frequently*. Hindelang pointed out that this finding had not yet been seen when comparing genders by officially recorded delinquency (e.g., police and court records) in earlier studies. Looking at the relationships between age and each delinquent act for both genders, he found that youth did not specialize with age in regard to types of offences committed (a theory previously held) at least, not within the 14 to 19 year old age range. Hindelang cautioned that the sample used was from parochial, not public schools, and was made up primarily of middle class youth and therefore might not be representative of all youth.

Gibson, Morrison, and West (1970) tested honesty of responding to a questionnaire of delinquent behaviours. They administered a battery of tests and

personally interviewed 405 lower socioeconomic class schoolboys, ages 14 to 15 years. Gibson and his colleagues also had official information on any detected offences committed by the boys, unbeknownst to the boys. Of the 47 participants who had at least one conviction, 83.3% (30) made full admissions on the questionnaire, 8.3 % (3) made partial admissions, and 8.3% (3) made no admissions. This demonstrated that the majority of the participants answered honestly.

As a result of such findings, it was generally believed that respondents had no reason to misrepresent their behaviour because the questionnaires were submitted anonymously. Testing this speculation, several studies re-administered questionnaires under non-anonymous conditions. Clark and Tifft (1966) administered a questionnaire of delinquent behaviours to 40 first year university students and the students provided their own participant number for anonymity. After submitting the questionnaires, students were recalled individually. They were each told that the primary purpose of the study was to examine honesty of responding and were asked to verify their responses through a polygraph test (i.e. lie detector). Prior to the test, they were given the opportunity to review their initial answers and make any required changes. During the polygraph test, they were again given an opportunity to make any desired changes to their responses. This process resulted in three sets of scores: the initial responses, those made as corrections prior to the polygraph, and those made during the polygraph. Looking at the changes made, 58% were made prior to the polygraph and 42% were made during the polygraph. While three-quarters of the changes increased the frequency of admitted delinquency, one-quarter reduced it. Eighty-one and one-half percent of the questionnaire items were answered correctly on the first administration, and this increased to an

accuracy of 92.3% correct prior to the polygraph. These results led Clark and Tifft to conclude that there was substantial empirical evidence to indicate that self-report questionnaires of delinquent behaviours are “extremely valid” (pg. 520).

Further testing honesty of responding, Kulik, Stein, and Sarbin (1986) constructed a checklist of 52 delinquent behaviours and administered it to two groups. One group was comprised of 245 high school boys, ages 14 to 18, the other group was made up of 137 adjudicated youth who were currently incarcerated. Participants were asked to complete the questionnaire under anonymous conditions, then were asked to complete it a second time but add their signature. The participants were unaware that their separate responses would be matched. The groups demonstrated a similar pattern of response changes. Although responses in the non-anonymous condition were modified when compared to those of the anonymous condition, it was the minor delinquent acts not the more serious ones that were changed, and the differences were small. This led Kulik and his colleagues to conclude that "the data permit ... the firm conclusion that the practical importance of anonymity is over-emphasized in research in delinquency" (p. 509).

In their summary of the development of self-report instruments, Hardt and Bodine (1965) stated that tallies of self-reported delinquent behaviour far surpassed official counts, supporting Murphy et al.'s (1946) hidden delinquency proposal. Suggestions that the delinquent behaviours of noninstitutionalized youth were not much different from institutionalized youth also led to multiple theories of detection and selection biases in the official identification and processing of delinquents.

Proposing that if one wished to study rates of delinquency in the community, one should restrict data collection to the community, Clark and Wenninger (1962) undertook

a study to compare rates of self-reported delinquency among diverse communities in Northern Illinois. Participants were 1,154 public school students, ages 14 to 18, from four community types: rural farm, lower urban, industrial city, and upper urban. These authors found that there was no difference in types or frequency of minor delinquency between communities, but that the lower urban youth as a group, were more likely to have committed more serious offences. Clark and Wenninger challenged the proposal that there was little difference in delinquency between incarcerated and non-incarcerated youth, suggesting that most of these studies tended to focus on community groups in lower class urban areas rather than examining a range of social class and socioeconomic status. They further suggested that questionnaires used rarely included the most serious offences such as assault, armed robbery or extortion that would contribute to differentiating community from institutionalized youth.

Hindelang, Hirschi and Weis (1979) stipulated that the discrepancy between self-report and official measures was illusionary, largely because more serious crimes (e.g., murder, rape) were missing from self-reports. Cernkovich, Giorano, and Pugh (1985) further challenged the assumption that there is no difference between institutionalized delinquents and those who manage to avoid contact with the legal system. They proposed that self-reports using community samples did not include chronic serious offenders who were likely to be incarcerated or not in school, or who would have declined the request to complete questionnaires. They contended that "incarcerated youth are institutionalized not merely because they are victims of system bias and differential processing ... but, primarily because they persist in committing serious offences" (p.106). In view of this, Robins (1975) suggested that serious offenders should be studied separately, rather than

as part of the larger community, because they constitute such a rare group. Following this suggestion then, it is proposed that a sample of secure custody incarcerated youth would comprise a sample of serious offenders.

There is a rich history on the validation and utility of pencil and paper self-report questionnaires when used as a measure of delinquency (e.g., Akers, Massey, Clarke, & Lauer, 1983; Clark & Tifft, 1966; Dentler & Monroe, 1961; Elliot, Huizinga, & Morse, 1986; Farrington, 1973; Gibson et al., 1970; Hindelang et al., 1979; Hirschi, 1969; Kulik et al., 1968; Mak, 1993; Short & Nye, 1958). In their extensive review of 110 juvenile recidivism and delinquency studies, Loeber and Dishion (1983) proposed that recidivism prediction could be enhanced by the use of self-report. Additionally, Loeber and Farrington (1998) stress the importance of including self-report in youth assessment. In fact, reporting from their six-wave longitudinal study (National Youth Survey), Elliot, Huizinga, and Menard (1988) stated that self-report questionnaires contribute unique variance to delinquency assessment and prediction. Paper and pencil self-report questionnaires have provided a potent source of information in delinquency assessment and prediction. They have also been used as more global clinical assessment tools that have components used to estimate risk. For example, the Millon Adolescent Clinical Inventory (MACI; Millon, Millon & Davis, 1993) was designed to assess personality, but a subscale related to psychopathy was found to be predictive of general and violent recidivism in a two-year follow up study of convicted youth (Salekin, Ziegler, Larrea, Anthony, & Bennett, 2003). It is proposed that a paper and pencil self-report questionnaire designed to predict youths' risk in an incarcerated population, might make a contribution to the assessment of recidivism.

Using Self-Report Questionnaires in Risk Assessment for Juveniles

In Ontario youth correctional facilities, any youth sentenced to a term of 30 days or more is assessed using the MRNAF or LSI-OR. Youth sentenced to shorter terms are usually not assessed, regardless of the number or length of prior custodial sentences. A risk assessment tool requiring minimal resources to administer and score might offer risk identification that might otherwise not be identified or addressed for short-term incarcerates. Such an instrument might also assist as a triage device, permitting the early identification of youth at high risk for reoffending.

A useful self-report questionnaire might also add new information to the interview, file and collateral-based information gathering methods currently used. For example, answers to questionnaire items regarding hypothetical situations that target specific attitudes (e.g., “I would shake hands with a probation or correctional worker.”) or beliefs (e.g., “You have to be a crook in order to get ahead.”) might alert an assessor to antisocial attitudes and beliefs, thereby serving as an early identification of problem areas.

There are, however, at least two possible concerns associated with the use of self-reports, specifically literacy difficulties and falsification. In regard to literacy, a youth self-report should be geared to an intermediate grade reading level, avoiding double negatives (e.g., *I don't want to not do crime*) and technical terms (e.g., *prior breach of recognizance*). If file information indicates illiteracy, the questionnaire items could be read by staff, with the participant indicating his or her response choice. In regard to falsification, youth self-report delinquency studies have found that falsification is not generally a problem because most respondents tell the truth (Clark & Tifft, 1966; Dentler & Monroe 1961; Elliot et al., 1986; Kulik, et al., 1968, Short & Nye 1957). Nonetheless,

scales have been embedded in various measures to detect socially desirable responding in delinquency self-reports (e.g. Farrington 1973; Mak, 1993).

Examining socially desirable responding in achievement scales, Heilbrun (1962) found that controlling for such responding did not increase the validity of the instrument. He concluded "Far too little cognizance has been taken of the possibility that the social value imposed upon questionnaire alternatives is not a suppression variable but, at least under certain conditions, may contribute to predictive validity" (p. 385). At this date, there are no data regarding the extent to which young offenders might engage in socially desirable responding in a risk assessment questionnaire. However, the inclusion of a measure of socially desirable responding might identify those who fake their responses. In addition, if the questionnaire had easily checked validity measures, valid and invalid responding could be assessed as a possible indicator of a youth's co-operation or literacy.

In regard to an adult sample, Motiuk, Motiuk and Bonta (1992) developed the paper and pencil Self-Report Inventory (SRI), a self-report version of the LSI. The SRI used the same items as the LSI, but rephrased as self-referent statements. Ninety-seven provincially incarcerated male inmates ranging in age from 16 to 57 years ($M = 25.1$, $SD = 8.6$) participated in this study. The SRI was completed with a battery of concurrent measures, and the LSI was completed by correctional staff as part of their regular procedure. Motiuk et al. found that the correlation between the SRI and the LSI total scores was .78 ($p < .001$), with an overall reliability coefficient of .76. In addition, the SRI was significantly predictive of future misconduct ($\chi^2 = 11.60$, $p < .001$) whereas the LSI was not; both were predictive of assaults within the institution ($\chi^2 = 6.26$, $p < .05$; $\chi^2 = 8.51$, $p < .01$, respectively); and both were predictive of reincarceration ($\chi^2 = 4.91$, $p < .05$).

.05; $\chi^2 = 6.24$, $p < .05$, respectively). For the prediction of reincarceration, the RIOC for the RSI and LSI were .34 and .38, respectively. The LSI did not add incremental validity relative to the SRI for these outcomes. This study suggests that paper and pencil self-report might be useful in combination with traditional assessment methods. More recently, another paper and pencil self-report instrument was designed to assess the likelihood of general and violent recidivism; the Self-Appraisal Questionnaire (SAQ; Loza, 1996).

Self-Appraisal Questionnaire. The SAQ was conceptualized and developed based on a general personality and social psychology model of criminal activity. Guided by this model, the SAQ evolved over four stages. Six constructs chosen for their relation to recidivism were selected for the questionnaire, specifically Criminal tendencies, Antisocial personality problems, Conduct problems, Criminal history, Alcohol and drug abuse, and Antisocial associates. The Criminal tendencies scale is comprised of antisocial attitudes, beliefs and behaviours and are central to recidivism assessment. For example, in a meta-analysis of 131 studies, Gendreau, Little and Goggin (1996) found that attitudes, values and behaviours that support a criminal lifestyle were among the best individual indicators of risk. Bonta (1997) proposed that antisocial attitudes and values are primary dynamic risk factors, and Andrews and Bonta (1998) considered antisocial attitudes to be one of the "big four"⁶ risk factors of criminal behaviour.

The SAQ scale of Alcohol/drug abuse reflects the relationship between substance abuse and crime (Lightfoot & Hodgins, 1988; Loza, 1993), and its contribution as a

⁶ The other three major factors are associates, history and personality.

predictor of recidivism (e.g., Gendreau et al., 1996). The inclusion of a Criminal history scale was based on the strength of association between past criminal behaviour and recidivism (e.g., Bonta, 1997, Gendreau et al., 1996). The scale of Conduct problems refers to childhood behavioural problems (e.g., early arrest or police involvement). Prior research has shown that conduct problems are among the best predictors of delinquency and criminal behaviour (e.g., Farrington, 1973; Gendreau et al., 1996). The Associates scale assesses antisocial associates, a construct that has been found to be strongly related to recidivism (e.g., Gendreau et al.). The Antisocial personality problems scale envelopes characteristics similar to those used to diagnose Antisocial Personality Disorder. Quinsey, Khanna, and Malcolm (1998) found that self-reported antisocial personality characteristics are predictive of violent recidivism, and Bonta (1997) proposed that antisocial personality disorders are a prime factor of the dynamic predictors of recidivism. An additional scale, Anger, is not included in the total SAQ score, but is assessed on its own for program delivery purposes. With adult populations, anger itself has been shown to have no relationship with recidivism and is therefore not a component of the total prediction score.

One hundred items were developed for the SAQ using findings from preliminary research and recommendations from the literature. The second stage involved consultations with offender treatment providers that resulted in item modification and some deletions. In the third stage, the questionnaire was administered to an offender group. Items not strongly correlated with their own scale were dropped and items eliciting low (< 15%) or high (> 85%) endorsement were removed. In the fourth stage the SAQ's content validity was evaluated by having forensic psychologists, case management

staff and program delivery officers place each SAQ item into one of the six construct categories. Items without at least 75% consensus were dropped, resulting in 72 items.

Examining the psychometric properties of the SAQ in a sample of 303 adult male federal inmates, Loza, Dhaliwal, Kroner and Loza-Fanous (2000) found that the coefficient alphas for the SAQ scales ranged from .42 to .87 and the one-week test-retest reliability was .95. In addition, the correlations between the scales were from .52 to .87. Submitting the data to a principal component analysis, Loza et al. found that all of the scales had a one factor solution, with the exception of Criminal tendencies that was represented by three factors (general antisocial attitude; perceptions of being treated unfairly by the criminal justice system; and attribution/rationalization for criminal conduct).

Loza et al. (2000) also confirmed the SAQ's construct validity by examining its correlations with construct-relevant items/scales from the LSI-R, the Violence Risk Appraisal Guide (VRAG; Harris, Rice & Quinsey, 1993) and the PCL-R, that ranged from .28 to .65. Concurrent validity was also evaluated in two ways. First, Loza and his colleagues examined the correlations between the SAQ scores and instruments already used to assess risk in the Correctional System of Canada, namely the Statistical Information on Recidivism-Revised (SIR-R; Correctional Service Canada), LSI-R, VRAG and PCL-R. As expected, the SAQ was reasonably correlated with these measures (SIR-R = -.61; LSI-R = .70; VRAG = .67; and PCL-R = .54). The second method of assessing concurrent validity involved examining the relations between participants' SAQ scores and their offending history. These analyses revealed that participants who had committed nine or more offences ($n = 144$, $M = 30.00$, $SD = 10.25$) had significantly

higher SAQ scores than participants who had perpetrated fewer past offences ($n = 159$, $M = 21.30$, $SD = 10.50$). Similarly, participants who had been convicted of least one violent offence ($n = 158$, $M = 29.10$, $SD = 10.52$) had higher SAQ scores than those who had not ($n = 133$, $M = 21.98$, $SD = 10.83$). The correlations between SAQ total and scale scores with total past offences and total number of violent offences were significant, with the exception of the nonsignificant correlation between Criminal tendencies scores and violent offences.

The SAQ's predictive validity has been demonstrated by strong correlations with various criterion measures, including parole violation ($r = .44$, $n = 153$; Loza & Loza-Fanous, 2000), recidivism ($r = .59$, $n = 68$; Loza & Loza-Fanous, 2001) and violent recidivism ($r = .34$, $n = 305$; Loza & Loza-Fanous, 2003) and cross-validation has been demonstrated with a Canadian maximum-security psychiatric sample (Villeneuve, Oliver & Loza, 2003), a sample of American offenders in a North Carolina State prison (Loza, Conley, & Warren, 2004), and a sample of British inmates (Evans, 2002).

Extending his research to a young offender population, Loza constructed a modified version of the SAQ (Loza, 2001) for juveniles. The juvenile version has six scales similar to those of the original SAQ, but Loza had made two important changes: The SAQ scale Antisocial personality problems was incorporated into Conduct problems to produce one scale. In addition, it was decided to examine the contribution of the Anger scale as a component of the total score. Loza later collaborated with another psychologist to modify a portion of the item wording as a development version of the SAQ for juveniles (Loza & Girard, 2001). The same 72 items were used, with slight modifications to some items (see Appendix A).

Summarizing the SAQ scales, Criminal tendencies represent antisocial attitudes, beliefs, feelings and behaviours. Alcohol/drug abuse covers past and current substance use. Criminal history is comprised of criminal acts, both official (e.g., convictions) and hidden (self-reported but without documentation). Conduct problems are childhood behaviour problems such as alcohol use or fighting and Associates represents a measure of antisocial peers and their influence. Anger is the representation of a lack of control and explosive behaviour. As noted above, several studies have demonstrated the reliability and validity of the adult SAQ (Evans, 2002; Kroner & Loza, 2001; Loza, Conley & Warren, 2003; Loza et al., 2000; Loza & Green, 2003; Loza & Loza-Fanous, 2000, 2001, 2003) and its predictive validity in two (Loza et al., 2000; Kroner & Loza, 2001) and five-year (Loza & Loza-Fanous, 2003) follow-up studies.

There are multiple advantages associated with using the SAQ to assess risk. The first involves time as it takes only fifteen minutes to complete in either pencil and paper or computer presentation form. Second, the SAQ is economical in that it can be administered to a group and because it has the properties of an actuarial instrument it does not require specially trained personnel for administration or scoring. As Sarbin (1943) proposed, and Meehl (1954) demonstrated, nonclinical staff can use actuarial methods to make state of the art predictions. Third, because the SAQ is a self-report, results are not subject to the reliability threat of inter-rater discrepancies. Fourth, the SAQ is not exposed to the difficulties associated with clinical judgments such as subjectivity (Sarbin, 1944), error discrepancies (Einhorn 1986), illusory correlation (Chapman & Chapman 1967, 1969) and the neglect of base rate information (Kahneman & Tversky 1973; Nisbett & Borgida, 1975).

In regard to literacy concerns, the SAQ was designed to require only a grade five reading level. If this level is not met the items can be read aloud by the administrator and the offender could circle or otherwise indicate their response choice. In regard to truthfulness in responding, the SAQ contains critical items (e.g., “I have been convicted of assault.”) that can easily be checked for veracity without reliance on a secondary test.

Examining the effects of socially desirable responding on the predictive validity of the SAQ with a sample of 124 adult male inmates, Mills, Loza and Kroner (2003) used the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994) to assess impression management and self-deception in responding. Mills and his colleagues found that both components of socially desirable responding, self-deception and impression management were significantly and negatively associated with violent recidivism ($r = -.28, p < .05$ and $r = -.31, p < .01$ respectively) although not general recidivism. They demonstrated that these components also contributed unique variance over a risk assessment instrument in the prediction of violent recidivism, and that the higher risk offenders had the lower impression management scores. These authors suggested that impression management could be considered a characterological variable in offender samples and should not be partialled-out when examining the contribution of self-report to risk assessment. This is a similar conclusion to that of Heilbrun (1962) cited above in regard to youth responses to achievement scales.

The current version of the BIDR is the Paulhus Deception Scale (PDS; Paulhus, 1994). Although it was designed for use with participants 16 years of age and older, it might serve as an estimate of socially desirable responding in a sample containing younger individuals. Because the adult SAQ is not adversely affected by socially

desirable responding (Mills et al, 2003), it is expected that the youth version will likewise not be adversely affected.

Based on the results of studies using the SAQ with adults, it seems possible that the SAQ will be a reliable and valid instrument for assessing juveniles' risk of general and violent recidivism. The purpose of the proposed study, then, is to assess the reliability and validity of the SAQ in a sample of young offenders in secure custody.

Method

Participants

Of the 130 incarcerated youth invited to participate in a study of the reliability and validity of the Self-Appraisal Questionnaire (modified), three declined without explanation and one was called away and unable to return. Thus, the participants consisted of 126 youth (10 of whom were females) aged 12 to 20 years ($M = 17.09$, $SD = 1.04$ years) from six different secure custody facilities in Ontario. These youth were serving sentences from 6 to 1,785 days ($M = 226.2$, $SD = 246.5$ days), that included a secure custody portion of 4 to 873 days ($M = 149.8$, $SD = 160.9$ days), and they had no further matters before the court. Most of the participants were Caucasian ($n = 91$, 72.3%), although there were a number with African American ($n = 13$, 10.3%), Native American ($n = 12$, 9.5%) and other racial backgrounds ($n = 10$, 7.9%).

Materials

Self-Appraisal Questionnaire (Modified). Participants completed a version of the SAQ modified for juveniles. In this modified version, the adult SAQ Antisocial personality problems scale was combined with the Conduct problems scale to produce one scale and the Anger scale was included as a component of the total score. Thus, the juvenile SAQ provides scores on six scales, namely the Criminal tendencies scale, that reflects antisocial attitudes, beliefs, feelings and behaviours; the Alcohol/drug abuse scale, that covers past and current substance use; the Criminal history scale, that is comprised of items assessing both official (e.g., convictions) and hidden criminal acts (self-reported but without documentation); the Conduct problems scale, that refers to childhood behaviour problems such as alcohol use or fighting; the Associates scale, that

measures antisocial peers and their influence; and the Anger scale, that involves a lack of control and explosive behaviour. As shown in Table 5, these scales assess constructs documented by meta-analyses as being related to youth delinquency and recidivism (Cottle et al., 2001; Loeber & Dishion, 1983; Lipsey & Derzon, 1998; Simourd & Andrews, 1994). In addition to the scale combination change from the adult version, some of the SAQ items were modified. Slight changes were made to the wording of some of the items (Loza & Girard, 2001) in attempts to make them more applicable to youth (e.g., “I was a hyperactive child” was changed to “I am a hyperactive child”).

Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 1994). Consistent with prior research (e.g. Catchpole & Gretton, 2003; Jung & Rawana, 1999) only Part I, *Assessment of risk and needs* was rated for use as a measure of the concurrent validity of the juvenile SAQ. It is made up of 42 items categorized into eight construct scales that have been demonstrated to be related to risk: Prior and current offences/dispositions; Family circumstances/parenting, Education/employment, Peer relations, Substance abuse, Leisure/recreation, Personality/behavior, and Attitudes/orientation. As noted earlier, prior research has shown that the YLS/CMI is predictive of both general and violent recidivism (Catchpole & Gretton, 2003).

Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2002). The PCL:YV is a 20-item instrument designed to assess personality characteristics in youth that have been associated with psychopathy in an adult population. Scoring is done by a professional or paraprofessional and is based on file review, collateral information and an in-depth interview with the youth. Each item is

Table 5***SAQ Scales and Constructs Related to Delinquency and Recidivism in Four Meta-Analyses***

<u>Meta-analysis</u>			
SAQ scale	Loeber & Dishion (1983)	Simourd & Andrews (1994)	Lipsey & Derzon (1998)
			Cottle et al. (2001)
Criminal tendencies	Stealing, lying or truancy	Antisocial attitudes	
Alcohol/drug abuse			Substance use Substance abuse history
Criminal history	Prior delinquency		General offences Offence history
Conduct problems	Child problem behaviour	Misconduct problems	Problem behaviour
Associates		Antisocial peers	Antisocial peers
Anger		Temperament problems	

assessed on a 3-point scale, rated as 0 for not present, 1 for maybe present, and 2 for present. Results are expressed in a total score and two factor scores: Factor 1 involves a personal/affective dimension and Factor 2 is comprised of behavioural and lifestyle features. Prior research has demonstrated the psychometric and predictive properties of the PCL:YV (e.g., Catchpole & Gretton, 2003; Jack, 2002).

Pride in Delinquency Scale (PID; Shields & Whitehall, 1991). The PID, shown in Appendix B, was included to assess the construct validity of the SAQ Criminal tendencies scale. In this measure participants used five-point scales ranging from *feeling very ashamed* to *feeling very proud* to rate how they would feel after committing each of 10 specified criminal acts (e.g., “escaping from police after a high-speed chase”).⁷ In adult samples, the PID has been found to be internally consistent ($\alpha = .76$, Simourd & Van De Ven, 1999) and related to both rearrest and reincarceration ($r_s = .27$ and $.23$, $p_s < .01$ and $.05$, respectively; Loza et al., 2000).

Paulhus Deception Scale (PDS; Paulhus, 1999). The PID is a 40-item self-report inventory that measures Self-Deception Enhancement (SDE) and Impression Management (IM). SDE refers to the extent to which respondents answer honestly, even though their answers may be affected by self-deception. IM, in contrast, refers to deliberate distortions of one’s self-presentation so as to appear more (or less) desirable or appealing. An earlier version of the PDS, the Balanced Inventory of Desirable Responding (Paulhus, 1994) has been used extensively in adult male federal offender samples (Kroner & Weekes, 1996a, b; Mills et al., 2003). Although the PDS was

⁷ The original response scale of the PID ranged from 1 to 10. Consistent with recent research with adult offenders, the scale was modified to range from 1 to 5.

designed for use with those at least 16 years of age, it was administered to all participants in the study after deleting an item (number 18) concerning intimate acts that may be considered inappropriate in a questionnaire given to juveniles.

Conduct Problems Checklist. Five of the SAQ Conduct problems items were selected based on the likelihood that relevant information would be recorded in participants' files (e.g., "I have been suspended or expelled from school") and made into a checklist that was scored from file review. Items were scored as *1* when a file referred to the behaviour as present and as *0* when a file described the behaviour as absent. In cases where the item was not referenced as present or absent, it was not scored. This checklist was included to act as a construct comparator for the SAQ scale Conduct problems.

SAQ Validity Scale Index Checklist. Items from the SAQ validity index (e.g., "I have been convicted of assault") were made into a checklist to verify honesty of responding. Only file information was used to complete the checklist. A score of *1* indicates that the file refers to the behaviour as present, *0* indicates that the file refers to the behaviour as absent. In cases where the item was not referenced as present or absent, it was not scored.

Criminal History Variables. Criminal history information was requested for all participants through the Canadian Police Information Centre Finger Print Service (CPIC FPS). The total numbers of criminal convictions for nonviolent and violent offences were calculated.

Procedure

All participants signed a consent form (Appendix B) detailing the nature and purpose of the study. Volunteers were screened for English reading comprehension by asking them to self-report any difficulties, and by consulting with the facility's school guidance department or teaching staff. Only offenders with at least a grade five reading level completed the questionnaires in a group. Two youth who had literacy challenges received verbal questionnaire administration in private. The participants completed the pencil and paper questionnaires while supervised by the researcher individually or in small groups in compliance with standard operating procedure of the institution. Privacy of responding and responses was maintained. Within a few days after questionnaire completion, each youth was interviewed individually. When participants were finished, they were individually thanked and given a copy of the debriefing form (Appendix B).

According to file information, some youth had been assessed with the MRNAF or LSI-OR. Because the two instruments are not interchangeable, not all youth had been assessed, and to ensure standardization, the YLS/CMI (Hoge & Andrews, 1994) was scored by the researcher based on interview and file information. The PCL:YV was also scored based on the interview and the youth's file. Twelve cases were selected at random for estimating inter-rater reliability on the YLS/CMI and scored by a psychologist with several years of experience in a secure custody youth facility. A separate subset of 12 cases was selected at random to estimate the inter-rater reliability of the PCL:YV by a psychologist with many years of experience in secure custody facilities. Two weeks after the initial participation date, the SAQ was readministered to 32 participants to assess test-retest reliability.

Results

Reliability Estimates

Analyses were conducted to assess the internal consistency and test-retest reliability of SAQ modified for juveniles, and its scales, as well as the inter-rater reliability for scoring the YLS/CMI and PCL:YV.

Internal consistency. Item analyses were conducted to examine the homogeneity of the SAQ scale scores. As shown in Table 6, the value of Chronbach's α for the SAQ scales ranged from a low of .36 for the Associates scale to a high of .82 for the Conduct problems scale. Of note, the Criminal tendencies item "My crime(s) are not as bad as those of others" was unrelated to total Criminal tendencies, and the Conduct problems item "I have a fraud charge on my record" was unrelated to total Conduct problems. Chronbach's α for the total score was .91.

As shown in Table 7, scores on each of the SAQ scales were correlated with total SAQ scores, with these correlations ranging from .47, $p < .001$, for the Associates scale to .89, $p < .001$, for the Conduct problems scale. The SAQ scale scores were also interrelated, with correlations ranging from .21, $p < .05$, between Anger and Alcohol/drug use to .61, $p < .001$, between Criminal history and Conduct problems.

Test-retest reliability. Thirty-two participants were available for re-administration of the SAQ two weeks after the initial test. Table 8 shows that the correlation between SAQ total scores at Time 1 and Time 2 was .92, $p < .001$. The test-retest correlations for the subscale scores were also high, ranging from .69 for the Associates scale to .92 for the Conduct problems scale. The SAQ scores for retest were regressed onto the scores for the initial test and an examination of the residuals revealed that they were normally

Table 6*Internal Consistency of SAQ Scales*

	Number of of items	α	<i>M</i> inter-item correlation
Criminal tendencies	27	.80	.15
Alcohol/drugs	8	.73	.24
Criminal history	6	.59	.20
Conduct problems	23	.82	.17
Associates	3	.36	.16
Anger	5	.78	.37
Total SAQ	72	.91	.12

Table 7
SAQ Descriptive Statistics and Interscale Correlations

SAQ scale	Range	Mean (SD)	1	2	3	4	5	6
1. Criminal tendencies	2 – 23	12.4 (4.89)						
2. Alcohol/drugs	0 – 8	4.31 (2.17)	.37***					
3. Criminal history	0 – 6	3.88 (1.44)	.42***	.35***				
4. Conduct problems	4 – 22	14.66 (4.42)	.59***	.56***	.61***			
5. Associates	0 – 3	1.76 (.91)	.23**	.37***	.32***	.42***		
6. Anger	0 – 5	2.25 (1.80)	.47***	.21*	.26**	.41***	.25***	
7. SAQ Total	12 – 62	39.25 (11.85)	.84***	.65***	.65***	.89***	.47***	.59***

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

Table 8***Two-Week Test-Retest Reliability of the SAQ***

Scale	<u>Time 1</u>		<u>Time 2</u>		<i>r</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	
Criminal tendencies	13.19	(5.33)	12.75	(5.27)	.81***
Alcohol/drugs	3.94	(2.24)	4.28	(2.19)	.78***
Criminal history	3.81	(1.71)	3.88	(1.54)	.70***
Conduct problems	14.50	(5.35)	14.16	(4.82)	.92***
Associates	1.75	(.95)	1.78	(1.04)	.69***
Anger	2.50	(1.74)	2.69	(1.75)	.79***
Total	39.69	(14.44)	39.53	(13.04)	.92***

*** $p < .001$.

distributed and uncorrelated with either test. Thus it appears that participation in the first administration did not have a directional effect on the participants' responses to the second test (scores on retest were not uniformly higher or lower than the original test scores for the group).

Inter-rater reliability. The inter-rater correlation for the YLS/CMI scoring was .94. For the PCL:YV scoring, the inter-rater correlations were .89, .99 and .95 for Factors 1, 2, and the total scores, respectively.

Validity Estimates

Analyses were conducted to evaluate the construct validity, concurrent validity and response validity of the SAQ.

Construct Validity. As shown in Table 9, the SAQ scale scores were correlated with other established measures of the same constructs. The lowest correlation was between SAQ Criminal tendencies and YLS/CMI Attitudes/orientation scores ($r = .25, p < .05$). A stronger correlation was achieved between SAQ Criminal tendencies and Pride in Delinquency scores ($r = .67, p < .001$). The highest correlation was .79, $p < .001$, between SAQ Conduct problems and Conduct problems checklist scores. SAQ scores reflecting Alcohol/drug abuse, Criminal history, and Associates were also correlated with the YLS/CMI measures of these constructs, with correlations ranging from .41 to .70, $ps < .001$. In addition, SAQ Criminal history scores were moderately correlated with CPIC FPS records for criminal convictions.

To estimate divergent validity, the mean of the correlations between the SAQ scale and YLS/CMI scales *not used as a convergent association* was calculated for each SAQ scale listed.

Table 9***Correlations Between SAQ Scales and Measures of Convergent and Divergent******Constructs***

SAQ scale	<i>n</i>	Construct measure	Convergent <i>r</i>	Mean divergent <i>r</i>
Criminal tendencies	104	YLS/CMI: Attitudes/orientation	.25*	.26*
	87	Pride in Delinquency Scale	.67***	
Alcohol/drug abuse	104	YLS/CMI: Substance abuse	.64***	.17
Criminal history	104	YLS/CMI prior offences	.64***	.33**
	116	CPIC FPS criminal history	.38***	
Conduct problems	75	File information comparison	.79***	.34**
Associates	104	YLS/CMI: Peer relations	.41***	.23*

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

Note. Mean divergent validity was the mean correlation between the SAQ scale and seven alternate construct scales of the YLS/CMI. For SAQ Conduct problems, the mean for all eight YLS/CMI scale – Conduct problems correlations was used.

Concurrent Validity. As shown in Table 10, which displays the correlations of all of the instruments used in this study with SAQ scores, as well as their alpha values and descriptive statistics, total SAQ scores were moderately correlated with the other measures of risk, namely the YLS/CMI, $r = .55, p < .001$, and PCL:YV, $r = .32, p < .01$.

Concurrent validity was also assessed by comparing the SAQ scores of participants with less versus more than the median (6.5) number of prior convictions and those who had a prior conviction for violence versus those without a prior conviction for violence. Because it was proposed that higher SAQ scores are related to higher risk, these t -tests were one-tailed. As shown in Table 11, participants with more prior convictions ($n = 58$) had significantly higher total SAQ scores, as well as higher Criminal history and Conduct problems scores relative to participants with fewer prior convictions ($n = 58$). Relative to participants without a violent conviction ($n = 42$), those with a conviction for a violent offence ($n = 74$) had higher scores on the total SAQ and all SAQ scales with the exception of Alcohol/drugs.

Concurrent Criterion Validity. As shown in Table 12, the SAQ was correlated with prior conviction groups, and violence conviction groups ($r = .18, p < .05$ and $.37 p < .001$ respectively). The YLS/CMI and PCL:YV were also significantly related to both sets of convictions groups.

Item validity check. To assess the accuracy of participants' responses, their responses to the eight items of the SAQ Validity scale were compared with relevant information in participants' files. Table 13 lists the number of cases in which the file information agreed or disagreed with participants' responses. Although results were congruent for most items, two items dealing with worsening criminal behaviour and

Table 10

Correlations Between SAQ Scales and YLS/CMI, PCL:YV, PID and PDS.

Scale	Mean	SD	α	SAQ Scales and Total						
				Criminal tendenc.	Alcohol/ drugs	Criminal history	Conduct problems	Associates	Anger	SAQ Total
YLS/CMI (<i>n</i> = 104)										
Offences/dispositions	3.50	15.32	.78	.16	.22*	.64***	.43***	.23*	.08	.37***
Family/parenting	4.39	1.57	.72	.10	.19	.26**	.29**	.32**	.12	.25**
Education/employment	5.26	1.51	.57	.26**	.15	.38**	.30**	.23*	.20*	.34**
Peer relations	3.58	.87	.72	.42***	.37***	.46***	.43***	.41***	.26**	.52***
Substance abuse	4.11	1.50	.83	.31**	.64***	.33**	.42***	.26**	.20*	.48***
Leisure/recreation	2.45	.70	.39	.27**	.18	.18	.25**	.20*	.21*	.30**
Personality/behaviour	4.80	1.74	.67	.28**	0	.37***	.31**	.18	.22*	.32**
Attitudes/orientation	3.91	1.29	.56	.25*	.07	.33**	.29**	.19*	.17	.30**
Total YLS/CMI	31.97	6.74	.87	.38***	.34***	.59***	.54***	.38***	.28**	.55***
PCL: YV (<i>n</i> = 102)										
Factor 1	9.08	3.66	.84	.10	-.09	.22*	.03	0	.11	.08
Factor 2	13.94	3.57	.81	.27**	.23*	.55***	.42***	.37***	.30***	.44***
Total PCL: YV	25.85	7.41	.89	.23*	.09	.46***	.28***	.22*	.22*	.32**
PID (<i>n</i> = 87)										
	15.71	7.34	.85	.67***	.30**	.40***	.51***	.13	.37***	.63***
PDS (<i>n</i> = 119)										
Self-deception	3.70	2.79	.66	.05	-.15	.06	-.05	-.15	0	-.03
Impression management	4.07	2.80	.62	-.28**	-.36***	-.27**	-.49***	-.20*	-.18*	-.44***
Total PDS	7.81	4.27	.67	-.15	-.33***	-.14	-.35	-.24**	-.12	-.31**

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

Table 11
Effects of Prior Convictions and Violence on SAQ Scores

SAQ scale	<u>Prior convictions</u>				<u>Prior violence</u>			
	<u>Low</u>		<u>High</u>		<u>Nonviolent</u>		<u>Violent</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>t</i> (114)
Criminal tendencies	11.97	4.56	12.81	5.02	11.12	4.67	13.11	4.82 -2.16*
Alcohol/drugs	4.24	2.24	4.41	2.20	4.05	2.39	4.09	2.10 -1.03
Criminal history	3.33	1.70	4.41	0.92	2.86	1.68	4.45	0.94 -6.56***
Conduct problems	13.66	4.51	15.66	4.16	12.36	4.78	15.96	3.67 -4.55***
Associates	1.79	0.99	1.81	0.85	1.52	0.86	1.96	0.91 -2.52**
Anger	2.16	1.81	2.22	1.78	1.62	1.67	2.51	1.82 -2.66**
Total SAQ	37.14	11.89	41.33	11.53	33.52	12.26	42.47	10.36 -4.18***

* $p < .05$. ** $p < .01$. *** $p < .001$. One-tailed.

Table 12*Correlations of SAQ, YLS/CMI, and PCL:YV with Prior Conviction Groups*

Scale	Prior convictions Low vs. High	Prior convictions for violence Nonviolent vs. Violent
SAQ	.18*	.37***
YLS/CMI	.41***	.52***
PCL:YV	.34***	.47***

* $p < .05$. *** $p < .001$. one tailed.

Table 13

Comparisons of Responses to SAQ Validity Scale Items with File Information

SAQ item	N of cases with available file information			N of cases with unavailable file information		
	Self-report endorsed, file denied	Self-report and file agree	Self-report denied, file endorsed	Total	Endorsed	Not endorsed
	Total	Endorsed	Not endorsed	Total	Endorsed	Not endorsed
Prior assault	7	97	6	110	12	4
Release failure	0	33	59	92	6	28
Prior custody	1	107	0	108	13	5
Prior convictions	3	91	13	107	11	8
Worsening criminality	0	12	7	19	53	54
Substance offences	0	36	4	40	37	49
Different crimes	1	101	5	107	15	4
Any fraud	11	92	2	105	0	21
Total	23	569	96	688	147	173
						320

substance related offences could not be determined well from the files. Of the 688 responses that could be determined from the files, 569 (82.7%) were consistent with file information. Ninety-six (14.0%) of the 688 responses involved participants' denial of behaviours endorsed in their files. The number of such denials ranged from 0 for the SAQ item referring to prior custody to 59 for the SAQ item referring to release failure. In addition, there were 23 (3.3%) endorsements of behaviours that were denied in participants' files, including 11 endorsements of fraud. Taken together, the number of over- and under-endorsements accounted for 17.3% of the verifiable responses.

File information was unavailable to assess the accuracy of 320 responses, most notably the responses to the SAQ items inquiring about worsening criminal behaviour (107 or 33.4% of the 320 responses) and substance offences (86 or 26.9% of the 320 responses). The responses for which file information was unavailable were almost equally likely to have been denied (54.1%) as endorsed (45.9%) by the participant.

Socially Desirable Responding.

The SAQ total score was significantly related to the Paulhus Deception Scale ($r = -.31, p < .01$) and the Impression Management scale ($r = -.44, p < .001$) but had no relationship with the Self-Deception scale ($r = -.03, ns$).

Associations with Gender and Age

Although male participants had consistently higher mean scores on all but the Associates scale of the SAQ, two-tailed t -tests revealed no gender differences in SAQ scores (see Table 14). Similarly, participants' age was independent of all of their SAQ scores, with correlations ranging from $-.17$ to $.01$.

Table 14***Effects of Gender on SAQ Scores***

SAQ-J Scale	Males <i>n</i> = 116	Females <i>n</i> = 10	<i>t</i> 124 <i>df</i>	Combined <i>n</i> = 126
Total SAQ				
Range	12 - 62	18 - 49	.85	12 - 62
Mean (<i>SD</i>)	39.52 (12.05)	36.20 (9.05)		39.25 (11.85)
Criminal Tendencies				
Range	2 - 23	6 - 16	.94	2 - 23
Mean (<i>SD</i>)	12.52 (4.99)	11.00 (3.65)		12.40 (4.89)
Alcohol/Drugs				
Range	0 - 8	0 - 8	1.86	0 - 8
Mean (<i>SD</i>)	4.41 (2.11)	3.10 (2.60)		4.31 (2.17)
Criminal History				
Range	0 - 6	0 - 6	.19	0 - 6
Mean (<i>SD</i>)	3.89 (1.43)	3.80 (1.62)		3.88 (1.44)
Conduct Problems				
Range	4 - 22	8 - 18	.49	4 - 22
Mean (<i>SD</i>)	14.72 (4.52)	14.00 (3.10)		14.66 (4.42)
Associates				
Range	0 - 3	1 - 3	-1.23	0 - 3
Mean (<i>SD</i>)	1.73 (.91)	2.10 (.88)		1.76 (.91)
Anger				
Range	0 - 5	0 - 5	.08	0 - 5
Mean (<i>SD</i>)	2.25 (1.80)	2.20 (1.81)		2.25 (1.80)

Discussion

The data provided by the 126 young offenders in this study provided useful information regarding the psychometric characteristics of the SAQ as modified for use with juveniles, including information about the SAQ's internal consistency, reliability and validity.

The internal consistency of the items comprising the modified SAQ was equivalent to that observed by Loza et al. (2000) in their normative sample of adult offenders. Although the values of alpha associated with the SAQ Criminal history and Associates scales were relatively low, the mean inter-item correlations for these scales were not substantially different from those for the other SAQ scales. This, and the fact that the value of alpha is partially dependent on the number of items, suggests that the low alpha values associated with the Criminal history and Associates scales might have stemmed from the relatively few items in these scales (i.e., only five and three items, respectively). Also noteworthy is that participants' responses to the Criminal tendencies item, "My crime(s) are not as bad as those of others," and the Conduct problems item, "I have a fraud charge on my record," were not related to their relevant scale scores. These items might therefore be usefully deleted from the SAQ scale, particularly given that the Criminal tendencies and Conduct problems scales have the largest number of items (i.e., 27 and 23, respectively).

All of the SAQ scales were highly correlated with each other, with the magnitude of these correlations comparable to that reported by Loza (2004), suggesting that a common core underlies the scales. That the scale-total SAQ correlations in a youth sample are similar to those found in adult samples also suggests that the relations between

the constructs assessed by these scales might be enduring and robust to sample and age effects. Finally, the two week test-retest stability of the modified SAQ also compares favourably with the one week stability observed in the SAQ's normative adult sample (Loza, et al., 2000).

Examining construct validity, the SAQ scale Criminal tendencies maps onto the same construct as the YLS/CMI scale of Attitudes/orientation. Both indices are comprised of items relating to antisocial attitudes, beliefs and behaviours. The correlation between these two scales is significant, but is weaker than the divergent correlation calculated from the mean of the other YLS/CMI scale – SAQ Criminal tendencies correlations. This suggests that the two scales are not assessing the same construct exclusively. In addition, the convergent correlation here is not as strong as the relationship between SAQ Criminal tendencies and the PID. The reason for the stronger PID association might be due to the more specific nature of the PID items. For example, in the YLS/CMI, items are scored based on the assessor's overview of the youth's characteristics, whereas the SAQ and PID are comprised of a collection of concrete items pertaining to specific antisocial beliefs such as thinking that success is based on criminality, or acts such as assault.

As expected, the SAQ Alcohol/drug abuse scale was correlated with the YLS/CMI Substance abuse measure. Both of these scales contain items specific to abuse of substances and items targeting a link between substance abuse and criminal activity. The mean divergent correlation was not significant. The SAQ scale Criminal history was moderately correlated with the YLS/CMI scale of Prior offences. Both indices are based on a quantification of the youth's criminal record. This SAQ's scale was not as strongly

correlated with the CPIC FPS Criminal history although the relationship was still significant. It is possible that some of the youth's offences had not yet been entered into the FPS system and were therefore were not tallied, resulting in a reduced strength of the association. The mean divergent correlation was weaker than that of either convergent comparator.

The SAQ scale Conduct problems was correlated with a file tally of the same items. Comparing the two sources of the same construct revealed that the youth endorsed more conduct problems than were evidenced in their files. Although it might be that some youth "faked bad" on this scale, it is more likely that the file information did not include sufficient references to these particular items, therefore endorsements for some items on the file tally had to be omitted. In addition, there is evidence in the literature on self-reported delinquency that individuals generally do not attempt to over-report, but base their responses on their personal life experiences (e.g., Clark & Tifft, 1966; Elliot et al., 1988; Hindelang et al., 1979). Although still significant, the mean of the correlations between SAQ Conduct problems and all YLS/CMI scales was substantially less than the convergent correlation.

As expected, the SAQ Associates scale was related to the YLS/CMI Peer relations scale. Although these two scales apply to the same construct, their sets of items approach the construct in different ways: the YLS/CMI is based on a quantification of delinquent acquaintances and friends (some, or few), whereas the SAQ focuses on the delinquent behaviour of those around the individual (attributing one's criminal behaviour to friends' influence). The mean divergent correlation showed a reduced but still significant relationship between the SAQ Associates scale and other YLS/CMI scales. There was no

comparison measure for the SAQ Anger scale, however it appears that the other scales have met construct validity criteria by their relationships to other validated measures.

The results of a number of analyses speak to the concurrent validity of the modified SAQ. The SAQ and the YLS/CMI are not composed of identical constructs but do share four similar scales. These are measures of criminal history, substance abuse, criminal tendencies/attitudes and associates. The instruments are each based on multidimensional measures of constructs that have demonstrated relationships with risk (e.g., Andrews & Bonta, 1998; Hoge & Andrews, 1996). Given the well-established reliability and validity of the LSI measures of risk in youth (e.g., Catchpole & Gretton, 2003; Jung & Rawana, 1999; Shields & Simourd, 1991; Simourd, Hoge, Andrews, & Leschied, 1994) and adults (e.g., Kroner & Mills, 2001; Mills, Kroner & Hemmati, in press; Motiuk, Bonta, & Andrews, 1986), the observed correlation between total SAQ and YLS/CMI scores suggests that the SAQ has utility for assessing risk in a youth sample.

The PCL:YV was not designed as a risk assessment tool, but nonetheless has a strong relationship with the SAQ. The strength of this correlation is imbedded in Factor 2, with Factor 1 showing no association with the SAQ. Factor 1 represents the interpersonal/affective dimension of psychopathy and multiple studies with youth have revealed no relationship between Factor 1 and risk. Factor 2 however, is the socially deviant lifestyle component of psychopathy and has consistently demonstrated a strong relationship with risk in youth (e.g., Catchpole & Gretton, 2003; Edens, Skeem, Cruise, & Cauffman, 2001; Forth & Burke, 1998; Gretton, 1999; Jack, 2002; Koson, Cyterski, Steuerwald, Neumann, & Walker-Matthews, 2002; Mailloux, Forth, & Kroner, 1997) and

adult studies (e.g., Barbaree, Seto, Langdon, & Peacock, 2001; Kroner & Mills, 2001; Salekin, Rogers, & Sewell, 1996; Serin, 1996; Serin & Amos, 1995; Serin, Mailloux, & Malcolm 2001). The correlation between the SAQ and the PCL:YV in the current study is weaker than, but still compares to those found in prior research using the SAQ and PCL-R in adult samples (Loza et al., 2000; Summers & Loza, in press).

Other findings provide evidence for the concurrent validity of the modified SAQ. For example, participants with more prior convictions had higher total SAQ scores relative to those with fewer prior convictions, a finding stemming primarily from significant differences in SAQ Criminal history and Conduct problems scores. The effect of number of convictions on SAQ Criminal history scores is not surprising because individuals with more convictions would be expected to have engaged in more criminal activity. The effect of number of convictions on SAQ Conduct problems scores is also reasonable given the known relations between conduct problems, criminal behaviour and delinquency/recidivism (Cottle et al., 2001; Lipsey & Derson, 1998; Loeber & Dishion, 1983; Simourd & Andrews, 1994). That comparable effects due to the number of prior convictions were not apparent on participants' SAQ Criminal tendencies, Alcohol/drug abuse, Associates and Anger scores is, however, unexpected, particularly given that such differences were documented in Loza et al.'s (2000) research with adult offenders. This discrepancy may be worthy of additional investigation.

In the second comparison, youth were divided into two groups based on having or not having a prior conviction for violence. Here, all of the SAQ scales with the exception of Alcohol/drug problems demonstrated significantly higher means for the Violent group. Prior research has demonstrated a link between substance abuse and violent crime, but

substance abuse is also strongly linked to general offending (e.g., Bushman & Cooper, 1990; Cookson, 1992; Pernanen, 1991). Therefore it was not surprising that the Alcohol/drug abuse scale did not differentiate Violent from Nonviolent groups in the current study. Once again, the Criminal history scale had the largest difference in the comparison, suggesting that those with high Criminal history scores are more likely to have committed a violent offence. Loeber, Farrington and Waschbush (1998) illustrated the overlap between chronic juvenile offenders (those with at least five juvenile court referrals) and violent offenders in longitudinal American studies of adjudicated youth. Approximately one-third (33%) of the chronic offenders were also violent offenders, whereas one-half of the violent offenders were also chronic offenders. Such is not the case in the current study, where more than three-quarters (82.4%) of the youth with five or more prior convictions had also committed a violent offence, and (by the same criteria of chronicity) more than three quarters (82.4%) of the participants who had a history of violent offending were also chronic offenders⁸. This illustrates a larger overlap between violence and chronicity of offending in the current sample.

The second-greatest difference between Nonviolent and Violent groups was the SAQ scale Conduct problems. The meta-analyses discussed earlier did not differentiate violent from nonviolent outcome measures, but other studies have investigated the relationship between conduct problems and violence. Farrington (1991) identified a link between early antisocial behaviours (e.g., aggression, temper tantrums, negative moods) and later violent offending. Wasserman and Miller (1998) stated that the best predictor of

⁸ That the figures for both sub-samples are equal does not mean that the same participants were in both sub-samples, but rather these figures were the same by coincidence.

adolescent antisocial behaviour is early conduct problems and that most serious violent offenders have a history of conduct problems. These authors proposed that the predictive conduct problems include, but are not limited to, physical aggression, disruptive behaviours, covert behaviours, oppositional and defiant behaviours.

The SAQ scale Anger demonstrated the next-largest difference between violence groups. As cited above, Wasserman and Miller (1998) found that physical aggression was one of the best correlates of later violent offending. The same continuity from early aggression to violent crime later in life has been found by other researchers as well (e.g., Loeber, 1996). The SAQ does not include a developmental component in the Anger scale. The construct here targets degree (explosive anger, uncontrollable rage, and blackouts), however, it is possible that the participants' current anger behaviour is the product of developmental influences.

The SAQ Associates scale differentiated violence groups. An association between violence and antisocial associates is a well-documented finding in the literature. For example, in their review of the predictors of violent offending for juveniles, Hawkins, Herrenkohl, Farrington, Brewer, Catalano, and Harachi (1998) illustrated a link between association with delinquent peers and self-reported violence. In Elliot et al.'s (1988) longitudinal study, antisocial associates was one of the best predictive factors for violent offending. Thornberry (1998) also suggested that gang membership adds unique variance over and above peer influence measures when predicting violence in youth. Although self-identification as a gang member was not a response item in the current study, it is possible that there were more gang members in the violent group than in the non-violent group.

Violence groups were also differentiated by the SAQ Criminal tendencies scale. Although antisocial attitudes, beliefs and feelings have been identified as predictive of delinquency and general offending (e.g., meta-analyses reviewed above), they have also been found to be more strongly associated with violence. In their review of prediction studies, Hawkins et al. (1998) cite nine longitudinal studies that found antisocial attitudes and beliefs were predictors of future violence (self-reported violence including sexual violence, officially reported violence and convictions for violent crimes).

The mean total SAQ score was considerably higher for the Violent group when compared to the Nonviolent group. This was expected due to the relationships between the SAQ and other risk assessment instruments (PCL:YV and YLS/CMI) that have shown a relationship to violence (e.g., Catchpole & Getton, 2003).

In addition to being reliable and demonstrating construct and concurrent validity, the modified SAQ also appears to elicit honest and accurate responses. Discrepancies identified by the validity check could be due to interpretation problems or response errors, inaccurate or incomplete file information, or errors in interpreting or transcribing the information in participants' files. There were, however, three notable findings from the validity check. Specifically, 59 individuals identified as having a prior probation/parole violation failed to endorse the item regarding prior release failure. Conceivably, the wording of this item is too specific in regard to release, reoffence and re-incarceration. If so, including a term dealing with probation/parole violation might improve the accuracy of participants' responses. The item assessing whether participants' perceived their criminal involvement as getting worse was also problematic because it was difficult to check objectively. Part of this difficulty might have stemmed from the fact that some

youth had not been convicted of new offences since the index offence, which for some was several months to two years ago. In addition, some individuals denied that their criminal involvement was worsening because they had been in jail "recently" and unable to engage in criminal behaviour. The wording of this item might therefore be improved by referring to time in the community prior to the index offence. The final item identified as problematic in the validity check pertained to the drug or alcohol related nature of the respondents' convictions. There was insufficient file information to accurately check the responses of 86 individuals, in part because the reason for some crimes was not mentioned. Had there been an indication that an offence was committed for the purpose of acquiring drug money, it could be counted as drug related. If a crime was committed while drunk, it could be counted as alcohol related. Such explanations were infrequently provided in the participants' files. It is therefore suggested that this item be expanded from "I have been convicted of drug or alcohol related charges" to include "or committed a crime when drunk or stoned."

Examination of the correlations between the SAQ and the Paulhus Deception Scale revealed that there was no relationship between the SAQ and the Self-Deception component. There was, however, a strong relationship between the SAQ and Impression Management scale, a relationship that was also found in an adult male inmate sample (Mills et al. 2003). An earlier example of the low-Impression Management high-risk (aggression) finding comes from Kroner and Weekes (1996) who assessed Impression Management in a sample of incarcerated adult male rapists. They found that high Impression Management scores were related to lower degrees of victim harm, whereas

rapists who had inflicted the most harm on their victims had low Impression Management scores.

The process or mechanism behind the inverse Impression Management and risk relationship is not clear. Paulhus (2001) proposed that Impression Management is associated with a *moralistic bias* and that individuals who score high in Impression Management have overly positive self-perceptions on such traits as agreeableness, dutifulness, and restraint and tend to deny socially-deviant impulses. As speculation, if high Impression Management scores are reflective of an understanding of morals, perhaps individuals who have low Impression Management scores do not have an understanding of morals, or simply lack morals and cannot compensate through impression management. Whatever the reason(s) might be, it is clear that as a group, the higher risk inmates do not attempt to enhance their responses through Impression Management. In addition, there is no relationship between Self-Deception and SAQ scores in the current study. These results suggest that the responses from youth in the current study were not affected by socially desirable responding.

Two additional findings merit comment. The finding that there were no gender differences in male versus female mean scores on the SAQ measures was not unexpected. Using self-report questionnaires over 30 years ago, Hindelang (1970) found that female high school students did not differ from their male counterparts in scope of delinquent acts, but they engaged in these acts less frequently than did the males. Similar findings have been reported in more recent studies. For example, working with a sample of 388 male and 122 female American probationers, Funk (1999) showed similar patterns of offences between genders. The SAQ response options are dichotomous choices on

whether the youth has or has not engaged in an activity (e.g., assault) but there is no response to gauge the *frequency* of the activity.

Age is negatively related to risk in adult samples (e.g., Andrews & Bonta, 1998; Nuffield, 1982). Andrews and Bonta (1998) point out that when crime is plotted as a function of age, the curve increases, peaks around age 20, then diminishes. Contrary to this pattern, however, participants' age was independent of their SAQ scores in the current sample.

Conclusions

In sum, the current findings suggest that the modified SAQ is an internally consistent, reliable and valid method of assessing secure custody youth for risk of general and violent recidivism. In addition, the SAQ does not appear to be adversely affected by socially desirable responding. In fact, participants admit to more delinquent and criminal behaviour than is accounted for officially. Clinically, the value of this added information could translate into improved need and risk identification. These conclusions, however, must be tempered by the limitations of the present research, limitations that pertain to the validity and generalizability of the findings.

In regard to validity, two omissions are noteworthy. The first pertains to the omission of measures that could be used to assess the discriminant validity of the SAQ.

In this regard Campbell and Fiske (1959) make it clear that both discriminant and convergent validity are necessary to establish construct validity.⁹ Thus, future research might endeavour to address this shortcoming by including pencil and paper self-report measures of constructs unrelated to risk and using these measures to make same-method different-trait comparisons. The second omission relevant to validity involves the lack of measures that could be used to assess the predictive validity of the modified SAQ. Although institutional misconduct might have been used as an outcome measure for this purpose, administrative reasons precluded this possibility. Longitudinal research using measures of release failure or criminal behaviour should be conducted to assess the predictive validity of the SAQ.

In regard to external validity, the findings are limited to youth detained in secure custody facilities and may not generalize to other youth who have committed an offence, such as probationers or youth serving time in open custody facilities. In addition, because female participants were under-represented in this sample, the generalizability of the present findings to female youth remains an open question.

Given the promising findings presented in the current study, research designed to overcome these limitations to validity and generalizability is merited. This is especially true given the potential benefits of the SAQ. These benefits include the identification of risk/needs information that would otherwise be unavailable for youth serving short

⁹ This was termed Multi-trait, Multi-method, whereby the correlations between test measures and outcome are assessed by two different methods and compared (multi-method) plus, the same method of measurement is applied to an alternate constructs (multi-trait). In order for the test to demonstrate construct validity, the correlations for the multi-method same-trait measures must be greater than the corresponding same-method multi-trait correlations.

sentences, and the administrative economy of the SAQ (e.g., the SAQ takes only 15 minutes, can be administered to a group and does not require specially trained personnel for administration or scoring). It is not recommended that the SAQ be considered a replacement for the more comprehensive and more predictive YLS/CMI, but rather that the SAQ fills a gap for individuals who would otherwise not be assessed and may act as a supplement to offer case management staff new information.

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Appendix A
SAQ Item Modifications

Modifications of SAQ Wording (Loza & Girard, 2001)

Item	SAQ Wording	SAQ-Modified Wording
4	I was told that I was a difficult child to raise.	I <i>am</i> told that I <i>am</i> a difficult child to raise.
9	I have done time before in either the state/provincial or federal system.	I have time before in secure or in <i>open custody</i> .
10	On the street I often experienced shakes or blackouts.	I have experienced <i>physical discomfort because of my substance abuse</i> .
15	Alcohol or drugs make me do time easier.	Alcohol or drugs make me <i>spend</i> time easier.
17	Prisons offer bogus programs.	The programs in prison are <i>phony</i> .
21	I would shake hands with a correctional officer or a police officer.	I would shake hands with a <i>probation</i> or correctional <i>worker</i> .
25	I would not have served time if it were not for my alcohol or drug habit.	I would not <i>be in custody</i> if it were not for my alcohol or drug habit.
27	Cops and guards are pigs.	<i>Cops, probation officers or correctional workers</i> are pigs.
30	I was arrested twice or more before the age of 18.	I was <i>questioned by police</i> or arrested <i>at least once</i> before the age of 13.
31	I have been raised in an environment where violence was common.	<i>In my home</i> violence was common
34	I try not to think or worry about the victims of my crimes.	I <i>do</i> not think or worry about the victims of my crimes.
35	My parents were very harsh in their discipline of me.	My parents <i>are</i> very harsh in their discipline of me.
36	On the street, I often lost track of time because of my alcohol or drug use.	<i>I have</i> lost track of time because of my alcohol or drug use.
27	I was a hyperactive child an/or given Ritalin.	I <i>am</i> a hyperactive child and/or <i>take</i> Ritalin.
39	I am doing more time than I really deserve.	I am doing more time <i>or community hours or probation</i> than I really deserve.
44	In jail, I have to side with my buddy even if he is wrong.	In jail, I have to side with my buddies even if <i>they</i> are wrong.
47	I am doing time for bogus charges.	I am doing time for <i>phony</i> charges.
48	I have spent time at a group home, a juvenile facility/training school/reformatory.	I have spent time at a group home, a juvenile facility <i>or a residential treatment unit</i> .
49	Alcohol or drugs caused me health problems.	Alcohol or drug use caused <i>me to have hangovers or</i> health problems.

52	I feel that I have been dealt with unjustly by police, court or prison.	I feel that I have been dealt with unjustly by police, court or <i>custody</i> .
57	I used alcohol or drugs before the age of 15.	I used alcohol or drugs before the age of <i>12</i> .
60	Before the age of 15, I threatened, initiated a fight, or used a weapon.	<i>In the past</i> , I threatened, initiated a fight, or used a weapon.
61	Before the age of 15, I was mean to people or animals.	I was <i>cruel</i> to people or animals.
72	Since the age of 15, I have been involved in some physical fights.	Since the age of 15, I have been involved in <i>a few</i> physical fights.

Appendix B

Research Materials

Consent Form

You are being asked to participate in a research study designed to look at a new way of asking Young Offenders about their needs and to assess risk. This is the Self-Appraisal Questionnaire. The time involved will be approximately one to one and a half hours. To participate, you would read questionnaires and fill in your answer with a pencil by marking true or false, or indicating a number. There will also be an interview, where you will be asked questions. The questions in the interview and questionnaires will be about your past and current situation, and include questions on family, school or work, offending and your opinions about crime and society. Participation is completely voluntary. If you agree to do this, you may change your mind at any time with no penalty. There are no bonuses for saying yes and no penalties for saying no. Your status or involvement with programs and your file will not be affected in any way. Participation is confidential except if you talk about harm to a child, or serious harm to others that has not been dealt with through the courts; if you reveal plans to breach the security of the institution or if you indicate that you are at current risk of harm to yourself, you will be referred to a staff person at this Institution who can help you.

You will be identified only by a research number, and no one but the researcher will know which number is for your answers. The information is not given to anyone in the Institution or the courts and it will not be kept here. Some information will be checked with file information to see if the questionnaire really is measuring what we think it is measuring.

There are no known risks to participating. You might however, feel sad when being asked to think about the past or your current situation. If this does happen and you wish to discuss it, you will be referred to a staff person at this Institution who can help you.

This research is being carried out as part of a graduate program in Psychology by the researcher Toni Hemmati (613) 536-6340 under the supervision of Professor Connie Kristiansen (613) 520-2600 ext. 2674 Carleton University and Dr. Wagdy Loza (613) 536-6686. If you have any questions about the study, you may ask the researcher or call the supervisors. If you have any ethical concerns, you may contact the Chair of the Psychology Ethics Committee, Dr. Mary Gick (613) 520-2600 ext. 2664 or the Chair of the Department of Psychology, Dr. Kim Matheson (613) 520-2600 ext. 2648.

I understand that the information I give in relation to this study will not identify me in any way and all information is confidential with the following exceptions: If, during the course of the interview, I divulge an intent to harm myself or others, or should I divulge acts of child abuse and/or criminal activities previously unknown to authorities, the researcher is bound to report such information to the appropriate authorities. I also understand that participation is completely voluntary and will not affect my case in any way.

Participant

Date _____

Witness

Date _____

PID

Location: _____ Date: _____ Research ID Number _____

Age: _____

You may or may not have done some of these things in the past. Either way, please try to imagine that you actually just did these things. Think about how you would feel afterward, and circle the number that best represents your feelings. By choosing 1, you would be very ashamed of the behaviour, and by choosing 5 would be very proud of the behaviour. Remember - there are no right or wrong answers.

Very ashamed	Somewhat ashamed	No feelings either way	Somewhat proud	Very proud	
1	2	3	4	5	
1. Beating up a child molester.....	1	2	3	4	5
2. Committing sexual assault.	1	2	3	4	5
3. Breaking into a family's home when no one is in and stealing jewellery and electronics.	1	2	3	4	5
4. Seeing a store being robbed and not calling the police.....	1	2	3	4	5
5. Driving home after a party when you've had a lot to drink.....	1	2	3	4	5
6. Striking someone who insults you.....	1	2	3	4	5
7. Selling cocaine.....	1	2	3	4	5
8. Carrying a concealed weapon.....	1	2	3	4	5
9. Pointing a weapon at a store clerk your own age and telling him/her to hand over all the money in the till.	1	2	3	4	5
10. Getting away from the police after a high- speed chase.....	1	2	3	4	5

File Information Comparison for SAQ Scale Conduct Problems

SAQ Item #	Item	Present =1 Absent = 0
30	I was questioned by police or arrested at least once before the age of 13.	
48	I have spent time at a group home, a juvenile facility or a residential treatment unit.	
53	I have been suspended or expelled from school.	
57	I used alcohol or drugs before the age of 12.	
71	I have been involved in some physical fights	
	Total	

File Checklist for SAQ Validity Scale

SAQ Item #	Item	Present =1 Absent = 0
2	I have been convicted for assault	
5	One of my releases has been suspended, revoked or terminated.	
9	I have spent time before in secure or in open custody.	
12	I have at least a couple of convictions prior to the one(s) I am doing time for now.	
14	My criminal involvement has been getting worse.	
20	I have been convicted for drug or alcohol related charges.	
24	I have committed a few different types of crimes.	
43	I have a fraud charge on my record.	
	Total	

Debriefing Form

Thank you very much for agreeing to take part in this project. This research is being carried out as part of a graduate program in Psychology by the researcher Toni Hemmati (613) 536-6340 under the supervision of Professor Connie Kristiansen (613) 520-2600 ext. 2674, Carleton University and Dr. Wagdy Loza (613) 536-6686. If you have any questions about the study, you may ask the researcher in person or by phone or call the supervisors. If you have any ethical concerns, you may contact the Chair of the Psychology Ethics Committee, Dr. Mary Gick (613) 520-2600 ext. 2664 or the Chair of the Department of Psychology, Dr. Kim Matheson (613) 520-2600 ext. 2648.

The purpose of this research study was to see if a new questionnaire filled out by Young Offenders would be a good way of finding out about Young Offender needs and risk. Past research in the federal correctional system has shown that offender self-report is as good as some measures that psychologists or other staff members fill out. This measure is a Young Offender version of the Self-appraisal Questionnaire and focuses on things that we believe are associated with the likelihood that a person would commit an offence. These things include information on past and current situations, such as family history, education and employment, and your opinions about crime and society. These things (variables) will be compared with other types of information in your file to see if the new questionnaire is as good as or better than other types of tools to assess needs and risk.

Your status, involvement with any programs, and your file will not be affected in any way by participation in this research. If you would like to discuss your feelings about participation in this research, you can be referred to a staff member at this Institution who can help you.

Again, thank you very much for agreeing to help in this research study. Your participation is very much appreciated.