

Validation of the Psychopathy Checklist: Youth Version on Children in Conflict with the Law in India

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ABSTRACT

The assessment and prediction of psychopathy are a concern in the determination of risk for offending in Children in Conflict with the Law in India. The Demographic Questionnaire, the Psychopathy Checklist: Youth Version (PCL: YV), the HEXACO Personality Inventory, and Past Antisocial Behaviour Variables were completed with n=108 male adolescent offenders in the present study. The study is a cross-sectional study which includes Children in Conflict with the Law incarcerated in various Observation Homes and places of safety in Delhi NCR, between December 2025 and April 2026. Descriptive statistics, reliability analysis, normality test, Spearman's correlation and Receiver Operating Characteristic (ROC) analysis were performed. The PCL:YV showed adequate internal consistency ($\alpha = .94$) with subscale reliabilities between .75 and .90 which is an indicator of high reliability. Normality analyses indicated that most of the study variables were approximately normally distributed and therefore parametric statistical procedures were used. The PCL:YV factors and total score were significantly positively intercorrelated, providing evidence for the internal coherence of the instrument. ROC analyses indicated discriminative accuracy of the PCL:YV total and factor scores across past anti-social personality behavioural risk indicators, partially supporting the predictive utility of the instrument. There were positive relationships between past antisocial personality variables, particularly previous offending, previous violent offending and age of first drug use, indicating a high level of overlap across these risk factors. The results give preliminary evidence for the reliability and construct validity of the PCL:YV among juveniles. The work adds to the growing literature on the assessment of juvenile psychopathy and underscores the necessity for longitudinal research to explore further its predictive usefulness within Indian forensic contexts.

Keywords: PC:YV, Children in Conflict with the Law, Antisocial Behaviour Variables, HEXACO

Introduction

Psychopathy is regarded widely as a personality disorder (Hare, 1991, 2003; Hart & Hare, 1997). Despite the ongoing controversy about the theoretical validity of this construct in explaining antisocial behaviour and crime, especially violent crime, psychopathy has become increasingly considered in criminal justice systems for making release decisions (Zinger & Forth, 1998). The Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003) in particular has high predictive validity for both general and violent recidivism (see, e.g., Hemphill, Hare, & Wong, 1998; Salekin, Rogers, & Sewell, 1996). Given the persistent and widespread public and political focus on preventing violence, the PCL has gained support across various criminal justice agencies as a key risk-prediction instrument to be used on an individual case basis at the sentencing, treatment assessment, or parole stage.

Until recently, use of the PCL was limited to adults; however, the controversy has increasingly shifted to its applicability for young offenders. The Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003) was designed to assess psychopathic traits in youth that are considered to be associated with adolescent risk and treatment amenability. Three essential questions require further examination regarding youth psychopathy, in general, and the PCL:YV specifically. First, what is the predictive accuracy of the PCL:YV in prospective examinations of violence and general recidivism? Second, what is the predictive accuracy of the three-factor model of the PCL:YV (replicated from Cooke and Michie (2001) PCL-R model)? Finally, how theoretically relevant is psychopathy in explaining youth violence?

Addressing these empirical questions is essential to determining whether the PCL:YV can and/or should be used as a violence risk prediction tool by criminal justice agencies and other decision-makers, as its adult predecessor (PCL-R) is. While each of these questions generated considerable controversy with the introduction of the PCL (Blackburn, 2000), these issues are likely to generate even greater debate when considering the PCL:YV because of the inherent dangers it poses for young offenders who are subjected to its use in criminal justice systems (Edens, Skeem, Cruise, & Cauffman, 2001; Hart, Watt, & Vincent, 2002; Lyon & Ogloff, 2000; Seagrave & Grisso, 2002).

Predictive Validity of the Psychopathy Checklist: Youth Version

The PCL: YV (Forth et al., 2003), a psychological tool for assessing psychopathic traits in youth 12–18 years of age, was developed with these theoretical and treatment goals in mind. There is a growing literature investigating the association between the PCL:YV and criminal patterns in adolescents that, for the most part, is consistent with the adult offender literature. Criminal activity appears to be most frequent among adolescents scoring high on the PCL:YV. Specifically, Factor 2 scores are strongly and positively related to the number of prior convictions (see Forth & Mailloux, 2000, for a review), and Factor 1 scores are related to prior violent convictions (Forth, unpublished report). The commission of violent crimes appears to increase from early adolescence to early adulthood (ages 19–21) for high-scoring adolescents, but decreases for low-scoring adolescents (Forth & Burke, 1998; Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001).

Adolescents with psychopathic traits have more severe offending patterns, are more likely to exhibit violence at an early age, have histories of violent offenses, commit acts of institutional violence (see, e.g., Brandt, Wallace, Patrick, & Curtin, 1997; Stafford & Cornell, 1997), and engage in instrumental violence (Stafford & Cornell, 1997). There are few prospective or retrospective studies of recidivism in youth (see Edens et al., 2001, for a review). Fourth, Hart, and Hare (1990) found that total scores from a PCL-R modified for youth were predictive of violence and the frequency of reoffending over a two-year period. In a ten year “follow-back” study, Gretton et al. (2001) found that high PCL: YV scorers were four times more likely to recidivate and three times more likely to commit violent recidivism than low PCL:YV scorers. Only two studies report on the imminence of future criminal offenses. Brandt et al. (1997) found that high PCL:YV scorers recidivated more quickly than offenders with low PCL:YV scores, and Gretton et al. (2001) concluded that high scorers were charged with violent, as well as general and sexual, offenses earlier. The PCL:YV also adds incremental validity to crude indicators of risk (Gretton et al., 2001; Ridenour, Marchange, & Dean, 2001) and to other measures of conduct problems (Brandt et al., 1997).

Though this review is promising for the utility of the PCL:YV in risk assessments, several limitations may limit its generalizability. Only a handful of published recidivism studies utilized prospective designs (Brandt et al., 1997; Forth et al., 1990; Ridenour et al., 2001; Toupin, Mercier, De'ry, Co'te', & Hodgins, 1996). All these studies had short-term follow-up periods of one to two years and used a modified youth version of the PCL-R (see Forth et al., 1990) rather than PCL:YV test versions that

underwent more age-appropriate modifications. The only prospective study to investigate both imminence and incremental validity relied exclusively on file reviews (Brandt et al., 1997). Moreover, studies have generally used only PCL:YV total scores that include items related to criminal activity, thereby raising the issue of tautology in their association with past and future criminality.

The present Study

The present study was designed to examine the interrater reliability and internal reliability (item homogeneity and internal consistency) of the Dutch-language version of the Psychopathy Checklist: Youth Version (Psychopathie Checklist: Jeugdversie; PCL:JV; De Ruiter et al., 2002) in male adolescents. The construct validity of PCL:YV scores will be explored by relating them to scores on the Hindi version of the HEXACO

In addition, PCL:YV scores will be related to Antisocial Behavioural variables.

A research question of the present study is whether these findings can be generalised to the present sample of male adolescents in juvenile justice

The present study aimed to use a data-driven person-centred approach to provide novel insights into the patterns and predictors of ASB (Antisocial Behaviour) in youth aged 13–18 years. The study aimed to provide insight into how ASBs occur at an early stage of adolescence among individuals who may not yet have interacted with the legal system, and to identify those most at risk. We used a measure that also captures less serious (and non-criminal) behaviours which are more likely to be observed among the population, to examine whether classes of ASB differ not only in frequency or seriousness, but also in nature (e.g. classes where behaviours are predominantly instrumental, such as cheating or lying for personal advancement, vs. classes where behaviours are predominantly physical and victim-focused, such as violence; Barnes et al., 2012). This also allows us to identify how relatively minor ASBs may cluster with more serious ASBs. We then sought to understand the relative importance of both environmental and psychological factors in predicting class membership, incorporating a wide range of factors highlighted in prior theories and research within a single analysis. This aimed to reveal where preventative approaches may be best focused by highlighting potential risk and protective factors, which are necessary to inform effective interventions (Gubbels et al., 2024), and to advance understanding of the relative specificity of associations between cognitive skills and ASB. The current study, therefore, had interlinked research questions that aimed to provide insight into (i) the presence of ASB in a community sample of early adolescents, (ii) who would be most likely to benefit from targeted interventions, and (iii) which factors may serve as effective targets for preventative policies or interventions. Specifically, we asked the following: 1. Using a person-centred analysis approach, what latent classes of early adolescent ASB can be identified, and what is the socio-demographic composition of each?

2. What is the relative contribution of environmental and psychological factors to predicting membership of each class?

METHOD

Participants

The participants in this cross-sectional study were Children in Conflict with the Law incarcerated in various Observation Homes and places of safety in Delhi NCR, between December 2025 and April 2026. A total of N=115 young offenders (108 males and 07 females) were interviewed. Given the need for further validation of the PCL: YV in girls, all 07 female participants were excluded from this study. The final sample composition for retrospective analyses comprised n=108 boys aged 13 to 18 years ($M = 16.70$, $SD = 1.23$), 52% Hindu, 37% Islamic, and 11% other religious group. Most of the juveniles were from a low socio-economic background and had broken families, and lived with their biological parents. Maximum children were charged with murder, 27%, followed by attempt to murder 18%, POCSO 14%, Robbery 13%, Hurt/Grievous Hurt 10%, Theft 9%, and other crime 9%.

Measures

The following measures were used in the present study.

Demographic Measures

Measures of sex, age, ethno-racial category and household income were obtained from the Demographics survey (Barch et al., 2018). Participant sex was reported as Male or Female, and age was reported in months. Ethno-racial categories described in Barch et al. (2021) were representative of religion and community identities of preadolescents in the Delhi NCR reported as: Hindu (regardless of any other racial or ethnic identity reported), Islamic follower, Christian, Sikh and other minority communities. Annual household income was reported as equal to or under INR50,000-1,00,000, INR1,10,000-1,90,900, equal to or over INR2,00,000, or chose not to report.

Psychopathy Checklist: Youth Version

The PCL:YV is a downward extension of the PCL-R used to provide a dimensional assessment of the “prototypical” psychopath. The version of the PCL:YV (Forth, unpublished report)³ used in this study was essentially the PCL-R with nine items modified to be age-appropriate. Most modifications involved minor changes to item descriptions (e.g., youth did not have to be charming to obtain high scores on Glibness/Superficiality), while four items underwent major coding. Like its predecessor, the PCL:YV is a symptom rating scale comprising 20 items scored on a three-point scale (0 = item does not apply; 1 = item applies somewhat; 2 = item definitely applies) based on the symptom’s pervasiveness, severity, and chronicity. Total and factor scores were prorated when a specified number of items was omitted. No cut-off scores have been established to make categorical classifications (psychopaths versus non-psychopaths) with the PCL: YV.

HEXACO-60

(Ashton & Lee, 2009) The HEXACO Personality Inventory–Revised (HEXACO-60; Ashton & Lee, 2009) is a 60-item self-report questionnaire measuring six personality dimensions: Honesty–Humility (HH), Emotionality (EM), Extraversion (EX), Agreeableness (AG), Conscientiousness (CT), and Openness to Experience (OE). Each dimension is assessed using 10 items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Higher scores on each dimension reflect greater trait expression. The HEXACO-60 has demonstrated sound psychometric properties: Cronbach’s alpha coefficients range from .70 to .80 across dimensions in community and forensic samples (Ashton & Lee, 2009). The instrument is freely available online and has been validated for use with adolescent populations. In the present study, the questionnaire was translated into [Hindi/language] as needed and administered under the researcher’s supervision.

Past Antisocial Behaviour Variables

Five variables were measured to operationalise past antisocial behaviour patterns: three related to criminal histories and two to the onset of other conduct problems. With respect to criminal history variables, self-report criminal offences were used to record the age at first offence, the number of prior offences, and the number of prior violent offences. Variables for other conduct problems related to school behaviours and drug use. The onset of misconduct at school was coded from self-reports of the earliest age at which any misconduct occurred, such as trouble with teachers, truancy, suspensions, and detention. Age of first drug use (not including alcohol) was also obtained from self-reports. Self-report has been identified as one of the most accurate methods for measuring past antisocial behaviours (Lahey et al., 1998; Silverthorn, Frick, & Reynolds, 2001).

Ethical Considerations

This study was conducted in strict accordance with established ethical principles. Informed consent was treated as a fixed requirement; before each session, every participant was briefed clearly on the purpose of the study, their rights as participants (including the right to withdraw at any time), and the entirely voluntary nature of their involvement. Written consent was formally obtained before any

data collection commenced. Confidentiality and anonymity were thoroughly upheld throughout the research process: participants were identified solely through anonymous codes, all personally identifiable information was removed from the data, and all recorded responses were stored securely. Approval was obtained from the institutional ethics committee before the commencement of the study.

Procedures

PCL: YV training and interview procedures for this study with youth who were most recently incarcerated in one of six observation homes and places of safety were identified and approached by two of four PCL: YV trained researchers. These youths were informed of the benefits and risks of the research, as well as the voluntary nature of their participation. With relatively few exceptions, researchers first reviewed the institutional files of consenting adolescents to probe and challenge (or clarify) inconsistent interview reports. Questions pertinent to scoring the PCL: YV were covered in the course of a larger research interview lasting, on average, from 30 minutes to 45 minutes.

Statistical Analysis

Preliminary Analysis: Descriptive Statistics and Normality Testing

Descriptive statistics, including means, standard deviations, minimum and maximum values, skewness, and kurtosis, were computed for all study variables ($n=108$). These preliminary analyses were conducted to characterise the sample profile and to examine the distributional properties of the data before inferential testing. To formally assess the assumption of normality, both the Kolmogorov-Smirnov test (with Lilliefors correction) and the Shapiro-Wilk test were applied to all study variables. The Shapiro-Wilk test was used as the primary criterion for evaluating normality, as it has superior statistical power for small samples ($N < 70$) compared with the Kolmogorov-Smirnov test (Razali & Wah, 2011). Variables were considered to satisfy the normality assumption if their absolute skewness and kurtosis values were below 2 and 7, respectively, in accordance with the guidelines proposed by George and Mallery (2010) and Tabachnick and Fidell (2013).

The first analysis involved confirming the reliability of the PCL: YV scales using Cronbach's alpha. Retrospective validity was checked by using the ROC curve. All analyses were conducted through IBM SPSS Statistics 23.

Results

Descriptive Statistics

Descriptive statistics and reliability of the PCL:YV

As shown in Table 1, the average score on the PCL: YV was 20.02 ($SD = 9.9$, range 0–40). Based on the 25 and 75 percentiles, youths were classified as low (scores 1–11), moderate (scores 12–27) and high (scores 28–40) in psychopathy. Fourteen youths in the 285th group (18.6% of the sample) reached or even surpassed the traditional cut-off score for adults (30). Based on the four-factor structure of the PCL:YV, the lowest mean score was that for Factor 1 (Interpersonal), followed by Factors 4 (Antisocial), 2 (Affective) and 3 (Lifestyle).

Regarding the HEXACO dimensions, Conscientiousness yielded the highest mean score ($M = 32.63$, $SD = 3.03$), while Openness to Experience yielded the lowest ($M = 26.50$, $SD = 6.18$). The relatively high variability in Openness to Experience ($SD = 6.18$, range = 12–37) compared to the other HEXACO dimensions suggests that this trait was particularly heterogeneous in the sample. This is noteworthy because Openness to Experience has historically shown weaker and less consistent relationships with psychopathic traits than dimensions such as Honesty/Humility or Conscientiousness, and the large within-sample variability on this dimension may have contributed to the non-significant correlations observed in subsequent analyses. Conversely, the relatively restricted range and lower variability on Conscientiousness ($SD = 3.03$) may have limited the statistical power to detect associations between this dimension and psychopathy, even if a true relationship exists in the population. Taken together, the descriptive profile of the sample is consistent with expectations for a forensic youth population:

moderate to high psychopathy scores, variability across all measured constructs, and no obvious floor or ceiling effects that would compromise the validity of subsequent parametric analyses.

Table 1. Descriptive statistics for the PCL:YV.

Factors	Mean (SD)	Range	Cronbach's α
PCL:YV Interpersonal	2.24 (1.79)	0–8	.75
PCL:YV Affective	5.07 (2.60)	0–8	.90
PCL:YV Lifestyle	5.49 (3.10)	0–10	.90
PCL:YV Antisocial	4.90 (2.92)	0–10	.81
PCL:YV Total score	20.02 (9.9)	0–40	.94

Tests of Normality

The normality analyses yielded a largely reassuring picture for the conduct of parametric statistical tests. The Shapiro-Wilk test — the preferred method for small samples ($N < 70$) due to its superior sensitivity relative to the Kolmogorov-Smirnov test (Razali & Wah, 2011) — indicated that only PCL-Y Factor 2 showed a statistically significant departure from normality ($W = .938$, $p = .035$). All remaining variables, including PCL-Y Factor 1, the PCL-Y Total Score, and all six HEXACO dimensions, were consistent with the assumption of normality on the Shapiro-Wilk test. The significant Kolmogorov-Smirnov result for Conscientiousness ($p = .013$) is noted but should be interpreted with caution, as this test is known to be overly conservative with the Lilliefors correction applied and tends to be particularly sensitive to minor deviations in larger subsamples. Crucially, the Shapiro-Wilk test for Conscientiousness was non-significant ($W = .967$, $p = .324$), corroborating the inference that this variable's distribution is sufficiently normal for parametric use.

Table 2. Descriptive Statistics for all Study Variables ($n=108$)

Variable	M	SD	Min	Max	Skew	Kurt
Factor 1 (PCL-Y Facet 1)	8.71	3.62	1.00	15.00	-.42	-.73
Factor 2 (PCL-Y Facet 2)	11.13	4.48	1.00	18.00	-.57	-.67
PCL-Y Total Score	19.84	7.72	2.00	31.00	-.57	-.52
Honesty/Humility	31.53	3.54	24.00	39.00	-.12	-.58
Emotionality	30.39	4.01	22.00	38.00	-.08	-.60
Extraversion	32.05	3.77	22.00	40.00	-.21	.53
Agreeableness	31.63	3.51	24.00	38.00	.20	-.27
Conscientiousness	32.63	3.03	26.00	39.00	-.08	.04
Openness to Experience	26.50	6.18	12.00	37.00	-.21	-.64

Note. PCL-Y = Psychopathy Checklist: Youth Version; M = Mean; SD = Standard Deviation; Skew = Skewness; Kurt = Kurtosis.

The mild non-normality of PCL-Y Factor 2 is not surprising given the distributional properties of psychopathy scores in clinical and forensic samples. Psychopathy scores, particularly those reflecting behavioural features, often exhibit slight negative skewness in justice-involved samples due to floor

effects at the lower end of the distribution being less pronounced than in community samples. Importantly, the absolute skewness ($-.57$) and kurtosis ($-.67$) values for Factor 2 remained well within the acceptable thresholds of $|\text{skewness}| < 2$ and $|\text{kurtosis}| < 7$ (George & Mallery, 2010; Tabachnick & Fidell, 2013). Furthermore, the parametric tests employed in subsequent analyses particularly the t -test and Pearson correlation are considered robust to moderate violations of normality, particularly when sample sizes are approximately equal and the Central Limit Theorem applies at this sample size (Field, 2018). The decision to retain parametric analyses is therefore well-justified and consistent with standard practice in psychological research. To assess the distributional properties of the data, both the Kolmogorov-Smirnov test (with the Lilliefors correction) and the Shapiro-Wilk test of normality were applied to all study variables. The Shapiro-Wilk test indicated that most variables were normally distributed. Significant departures from normality were observed only for Factor 2 on the Shapiro-Wilk test ($W = .938, p = .035$). Given the robustness of the parametric tests employed and the near-normal distributions evidenced by the descriptive statistics, parametric analyses were deemed appropriate and were retained throughout.

Spearman's Correlation between PCLYV, HEXACO personality factors and Past Anti-Social Behaviour

Table 3 presents the Spearman's correlation coefficients between the psychopathy dimensions (PCLYV factors and total score), HEXACO personality factors and anti-social personality indicators. The psychopathy dimensions were shown to have high positive intercorrelations. Specifically, PCL Factor 1 showed a substantial positive connection with PCL Factor 2 ($r = .746, p < .01$), PCL Factor 3 ($r = .575, p < .01$), and PCL Factor 4 ($r = .435, p < .01$). Likewise, the total PCL score was highly positively correlated with each of the four factors ($r = .594$ to $r = .912, p < .01$), demonstrating good internal consistency of the psychopathy factors.

In terms of personality traits, Honesty-Humility revealed insignificant and non-significant associations with all psychopathy dimensions, indicating that this attribute was not meaningfully related to psychopathic tendencies in the present group. Emotionality was likewise weakly and non-significantly correlated with the characteristics of psychopathy.

However, extraversion was significantly positively correlated with Emotionality ($r = .228, p < .05$), Honesty-Humility ($r = .301, p < .01$), Agreeableness ($r = .324, p < .01$) and Openness to Experience ($r = .216, p < .05$). Extraversion was also significantly correlated with previous violent offence ($r = .222, p < .05$) and Trouble with the teachers ($r = .215, p < .05$), indicating that higher levels of extraversion were associated with greater behavioural and conduct problems. Agreeableness was significantly positively correlated with Honesty-Humility ($r = .298, p < .01$), while Conscientiousness was adversely correlated with Extraversion ($r = -.277, p < .01$). No significant correlations were found between psychopathy scores and Agreeableness, Conscientiousness or Openness to Experience.

Age at first offence was positively and strongly associated with prior offence ($r = .710, p < .01$) and prior violent offence ($r = .653, p < .01$) among the Antisocial personality indicators. Past offence was also strongly positively correlated with past violent offence ($r = .755, p < .01$). In addition, age of first drug use was positively connected with age at first offence ($r = .549, p < .01$), prior offence ($r = .481, p < .01$) and prior violent offence ($r = .246, p < .05$).

A large negative correlation was found between trouble with the teachers and age of first drug use ($r = -.448, p < .01$), showing that those who had had more disciplinary problems in school tended to start using drugs at an earlier age.

Overall, results indicate that the psychopathy dimensions were highly linked, but showed no connection with HEXACO personality characteristics and Anti-social personality indicators in this population. In contrast, behavioural history variables such as prior offending and age-related delinquency indicators were highly interrelated.

Bivariate Associations: Pearson Product-Moment Correlations

Pearson product-moment correlation coefficients were computed to examine the bivariate associations among the six HEXACO personality dimensions and the PCL-YV Factor 1 score, Factor 2

score, and total score. Pearson's correlation was selected as the appropriate measure of association, given that all variables approximated normal distributions and were measured on continuous scales (Pallant, 2020). Correlation magnitudes were interpreted using Cohen's (1988) conventional benchmarks: $r = .10$ indicates a small effect, $r = .30$ a medium effect, and $r = .50$ a large effect. The direction of each correlation positive or negative — was interpreted in relation to the theoretical expectations derived from the HEXACO model and the existing personality-psychopathy literature

In summary, descriptive and normality analyses confirmed the suitability of the data for parametric testing, with most variables approximating normality. Second, gender comparisons revealed that boys scored significantly higher than girls on both PCL-Y factors, the total PCL-Y score, and Extraversion, with large effect sizes. Third, bivariate correlations identified Emotionality as the only HEXACO dimension significantly correlated with psychopathic traits at the factor level. Fourth, multiple regression analyses indicated that the HEXACO dimensions collectively and significantly predicted PCL-Y Factor 1, with Honesty/Humility and Emotionality serving as significant individual predictors. By contrast, the regression model for Factor 2 was non-significant, suggesting that lifestyle and antisocial features of psychopathy may be less amenable to prediction from normal-range personality traits as operationalised by the HEXACO model in this sample.

Concurrent validity

Past Antisocial behaviour

The PCL:YV total scores correlated negatively and significantly with age of onset of antisocial behaviour and age at first arrest, regardless of the model and factor structure examined, as shown in the table. We found significant positive correlations between total psychopathy score and number of violent offences, the strongest of which was with the PCL: YV (interpersonal) factor. While PCL:YV total score showed a significant negative correlation with age at first arrest/antisocial behaviour, the correlations were most notable for interpersonal and lifestyle factors.

Table 3: Spearman's Correlation between PCLYV, HEXACO personality factors and Past Anti-social Behaviour

Note. $^{*}p<0.01$, $^{**}p<0.05$

	PCL Factor 1	PCL Factor 2	PCL Factor 3	PCL Factor 4	PCL Total	Hexaco- Honesty/ Humility	Emotion- ality	Extraver- sion	Agreeable- ness	Conscienti- ousness	Open- ness	Age at First Offe- nce	Prior Offe- nce	Prior Viol- ent Offe- nce	Trou- ble with the teach- er	Ag- e of the first ar- rest
PCL Factor 1	1															
PCL Factor 2	.746 ^{**}	1														
PCL Factor 3	.375 ^{**}	.645 ^{**}	1													
PCL Factor 4	.425 ^{**}	.427 ^{**}	.425 ^{**}	1												
PCL Total	.912 ^{**}	.886 ^{**}	.734 ^{**}	.894 ^{**}	1											
Honesty/ Humility	.223 ^{**}	.234 ^{**}	.235 ^{**}	.242 ^{**}	.21 [*]	1										
Emotionality	-.296 ^{**}	.223 ^{**}	-.207 ^{**}	.210 ^{**}	.24 ^{**}	-.118 [*]	1									
Extraversion	.201 ^{**}	.231 ^{**}	.208 ^{**}	.210 ^{**}	.21 [*]	.301 ^{**}	.228 ^{**}	1								
Agreeableness	.180 ^{**}	.106 [*]	.243 ^{**}	.242 ^{**}	.24 ^{**}	-.143 [*]	.324 ^{**}	-.143 [*]	1							
Conscientiousness	.137 ^{**}	.117 ^{**}	.290 ^{**}	.243 ^{**}	.20 ^{**}	.282 ^{**}	.083 [*]	.277 ^{**}	.131 [*]	1						
Openness	.274 ^{**}	.275 ^{**}	.119 ^{**}	.287 ^{**}	.20 ^{**}	.018 [*]	-.113 [*]	.216 ^{**}	.098 [*]	-.080 [*]	1					
Age at first offence	.275 ^{**}	.230 ^{**}	.201 ^{**}	.205 ^{**}	.25 ^{**}	.028 [*]	.241 ^{**}	.289 ^{**}	.217 ^{**}	.239 ^{**}	.242 ^{**}	1				
Prior Offences	.261 ^{**}	-.223 ^{**}	.228 ^{**}	.23 ^{**}	.264 ^{**}	.216 ^{**}	.287 ^{**}	.215 ^{**}	.235 ^{**}	.223 ^{**}	.712 ^{**}	-.712 ^{**}	1			
Prior violent offences	.232 ^{**}	.200 ^{**}	.206 ^{**}	.207 ^{**}	.242 ^{**}	.243 ^{**}	.222 ^{**}	.247 ^{**}	.203 ^{**}	.204 ^{**}	.683 ^{**}	.758 ^{**}	-.683 ^{**}	1		
Trouble with the teacher	.117 ^{**}	.235 ^{**}	.281 ^{**}	.211 ^{**}	.254 ^{**}	.201 ^{**}	.219 ^{**}	.212 ^{**}	.227 ^{**}	.249 ^{**}	.274 ^{**}	.243 ^{**}	.356 ^{**}	-.274 ^{**}	1	
Age of the first drug use	.114 ^{**}	.258 ^{**}	.249 ^{**}	.219 ^{**}	.258 ^{**}	.228 ^{**}	.202 ^{**}	.229 ^{**}	.203 ^{**}	.245 ^{**}	.249 ^{**}	.245 ^{**}	.245 ^{**}	.245 ^{**}	.245 ^{**}	1

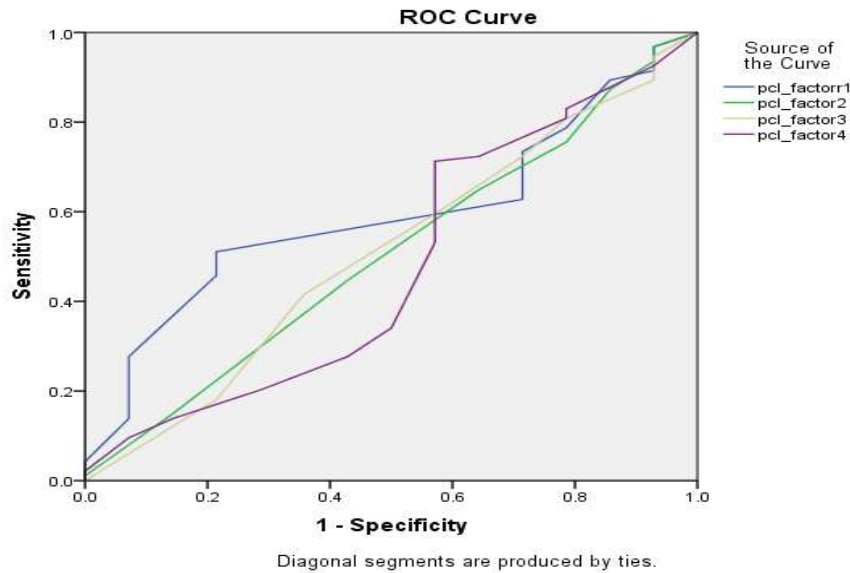
Predictive Validity of Recidivism

ROC analysis included 108 participants, who were classified into two age groups, where the first age group (0–7 years) had 14 (13.0%) participants, and the other age group (8–15 years) had 94 (87.0%) participants.

Table 1: ROC Case Processing Summary of the Age of the Juveniles at their first offence.

Groups	Valid N (list wise)
8-15 years	94
0-7 years	14

Figure 1: ROC curve of the Four PCL Factors and the two Age groups (first offence) of the Juveniles



The ROC curves for the four PCL facets were close to the reference diagonal line, suggesting limited ability to discriminate between the two age groups. The curve for PCL Factor 1 was slightly higher than the others, indicating a relatively superior but modest discriminative performance.

Table 2: Area under the Curve of the Four PCL Factors and the two Age groups (first offence) of the Juveniles

Factor	AUC	Std. Error
Factor 1	.593	.070
Factor 2	.507	.083
Factor 3	.510	.084
Factor 4	.479	.090

*p>0.5

PCL Factor 1 showed 59.3% accuracy in distinguishing individuals across the two age groups (0-7 years and 8-15 years), although this difference was not statistically significant (AUC = .593, SE = .070). Factors 2 and 3 exhibited probabilities approximating chance levels (50.7% and 51.0%, respectively),

PCL: YV and Past Antisocial Behaviour

One indicator of the validity of psychopathy assessments with youth is whether test scores are associated with past antisocial behaviour patterns. With respect to the sample's criminal history, these young offenders had been convicted an average of 4.5 (range 0–17, SD 3.86) times in the past, but rarely for violent offences (range 0–5 violent conviction dates, M 0.77, SD 0.94). The mean age of first offence was 14.6 years (13–17 years, SD 1.5). The median age of first drug use among the 93 participants who had tried drugs was 12 years old (SD 2.38 years). Among the 87 participants who engaged in conduct problems in school, the median age of onset was 10 years old (SD 3.02 years).

DISCUSSION

The present study aimed to investigate the psychometric qualities of the Psychopathy Checklist: Youth Version (PCL:YV) among Children in Conflict with the Law (CCL) in India and to analyze its association with personality characteristics and behavioural history variables. Specifically we explored the internal consistency and construct validity of the PCL:YV, the relationships between psychopathic characteristics and HEXACO personality factors, and the utility of the instrument to differentiate juveniles based on signs of antisocial conduct.

Distributional Characteristics and Normality

The distributional properties of the data were examined prior to conducting the inferential analyses. Results showed that most variables had a normal distribution and only Factor 2 had a statistically significant deviation from normalcy. All variables showed acceptable values of skewness and kurtosis. These results indicate that the sample was a good representation of variability commonly observed in forensic populations and that the data were suitable for further statistical studies.

The near-normal distributions obtained in the present study may reflect the heterogeneity of psychopathic tendencies in juveniles. Developmental processes in adolescence lead to more variability in psychopathy scores than is found in adult forensic samples, where scores tend to cluster at higher levels. These findings thus further support the utility of dimensional vs categorical conceptualization of psychopathy in youth.

Reliability of PCL: YV

One of the main aims of the study was to examine the reliability of the PCL:YV in an Indian sample of juvenile offenders. Results showed high internal consistency for the total PCL:YV score ($\alpha = .94$) and satisfactory to excellent reliability coefficients for the four facets, ranging from .75 to .90. These findings show that the items of each dimension were reliable measures of the underlying notion of psychopathy. The findings are consistent with prior international research that has revealed high internal consistency estimates for the PCL:YV in samples of juvenile offenders (Forth et al., 2003; Gretton et al., 2001). The high reliability seen in the present study implies that the PCL: YV is a stable and internally consistent tool for the assessment of psychopathic tendencies among Indian juveniles.

The high intercorrelations among the four PCL:YV factors and between each factor and the total score further support the internal structure of the instrument. These findings imply that although the measures assess unique components of psychopathy, they jointly contribute to a broader psychopathy construct. This trend is congruent with Hare's conceptualisation of psychopathy as a multifaceted personality syndrome which includes interpersonal, affective, lifestyle and past antisocial personality indicators.

Construct Validity of the PCL: YV

Construct validity was evaluated by examining correlations among the PCL: YV variables and their relationships with theoretically relevant personality traits. The high positive correlations between the psychopathy factors indicate that the measure taps a single construct. All factors, Factor 1 (Interpersonal), Factor 2 (Affective), Factor 3 (Lifestyle), and Factor 4 (Antisocial), were substantially

associated with the total psychopathy score, which supports the multidimensional structure as described by Hare and colleagues.

These results align with previous validation studies showing substantial overlap among the categories of psychopathy, and also support their conceptual differences. Thus, the results offer preliminary support for the application of the four-factor structure of the PCL:YV in an Indian juvenile group.

Relationship between Psychopathy and HEXACO Personality Traits

The study was mainly aimed to examine the relation between psychopathic traits and personality traits measured by HEXACO model. In contradiction with predictions, the majority of HEXACO traits were weakly and non-significantly related to psychopathy scores. PCL Factor 1 was weakly but positively related to Agreeableness.

We found no strong associations for several reasons. Psychopathy is a personality aberration that may not be fully accounted for by normative personality theories. Secondly, the institutional environment of observation homes may change self-reported personality traits, which might reduce the variability in the responses. Third, cultural influences may lead to different expressions of personality traits and psychopathic traits in Indian communities compared to Western samples.

Previous studies have frequently found negative correlations between psychopathy and personality traits such as Honesty-Humility and Agreeableness. However, there is little evidence to suggest that these findings can be replicated in cross-cultural or forensic settings. The weak associations that have been found in recent studies indicate that psychopathy may function relatively independently of normative personality traits in juveniles in India.

Psychopathy and Past Anti-social Personality Behaviour

The present study also investigated the relationship between psychopathy and past anti-social personality behaviour, including age of first offence, prior offending, prior violent offending, school disciplinary problems and age of first drug use. In contrast to a large body of literature, psychopathy scores were not strongly related to these variables.

It has been repeatedly shown in previous research that adolescents who score highly on psychopathy are more likely to begin offending at an earlier age, to engage in more persistent criminal behaviour and to have higher rates of violent offending. While trends were descriptively similar in the current study, these relationships were not statistically significant. There are a number of possible explanations for this finding.

First, the sample was exclusively composed of institutionalised juveniles, which could result in relatively homogeneous offending histories and arguably less variability. Second, the relatively small sample size may have limited statistical power to detect weaker associations; Third, psychopathic traits may be more influential than retrospective behavioural indicators in shaping future offending trajectories.

The behavioural variables were significantly inter-related, although they did not relate directly to psychopathy. Prior offending was strongly associated with prior violent offending. Age at first offence was significantly associated with prior offending and prior violent offending. Likewise, age of first drug use was related to multiple offending variables. These findings are consistent with developmental criminology theories that suggested early behavioural problems often co-occur and contribute to later antisocial outcomes.

Predictive Utility of the PCL:YV

Receiver Operating Characteristic (ROC) analyses were conducted to examine the PCL:YV's ability to discriminate between juveniles on several different behavioural risk indicators. The results showed low levels of classification accuracy for the behavioural variables studied. The overall ability to discriminate was modest, although several AUC values were above chance.

These findings are not necessarily to be seen as evidence against the utility of the PCL:YV. Rather, they argue that, for the purposes of classification of juveniles on the basis of isolated behavioural indicators, scores on psychopathy scales may not be sufficient in themselves. Juvenile offending is shaped by a combination of individual, family, social and environmental factors. Thus, psychopathy is a single component in a broader risk assessment paradigm.

The limited predictive utility found in the current study supports current views that advocate structured professional judgement approaches rather than reliance on single risk indicators. Future longitudinal studies on the actual recidivism outcomes may be able to better evaluate the predictive validity of the PCL:YV in Indian forensic settings.

Implications for Forensic Assessment and Intervention

The findings have several important implications for forensic practice in India. The good reliability and adequate construct validity of the PCL:YV supports its use as a psychological assessment instrument with juvenile offenders. The assessment may aid doctors, psychologists and correctional professionals to detect youngsters with high psychopathic tendencies that may require specific intervention methods.

Second, the findings highlight the need to consider psychopathy in a broader developmental and ecological context. Psychopathic traits are not deterministic predictors of future criminal activity, but rather one of multiple risk factors that lead to behavioral problems.

Third, the substantial associations among the behavioral history variables suggest the necessity for early detection and intervention. Substance use and school misbehaviour and early offending programs may help prevent progression to more serious and chronic delinquency. The findings have significant ramifications for forensic practice in India. The good reliability and adequate construct validity of the PCL:YV justify its use as a psychological assessment instrument with juvenile offenders.

Limitations

The sample was restricted to male juveniles admitted to observation homes and places of safety in Delhi NCR and so limits generalisability to female offenders and community demographics. Behavioural history variables were partially based on self-report data, which may be subject to recall bias or underreporting. Sample size was sufficient for first validation but may have restricted identification of smaller effect sizes.

Future Directions

Future study should assess the predictive value of PCL:YV concerning recidivism and institutional misconduct in juvenile observation homes utilizing the longitudinal designs. Female juveniles should be included for a bigger and more heterogeneous samples which would improve generalizability. Also further investigation into the cultural adaptations of psychopathy assessments and the impact of environmental risk factors may enhance the understanding of the juvenile psychopathy in India.

Conclusion

The present study provides preliminary evidence on the reliability and construct validity of the PCL:YV among Children in Conflict with the Law in India. The instrument showed good internal consistency and high coherence between its factors. Psychopathy scores were poorly related to HEXACO personality traits and behavioral history markers, although strong correlations were found between behavioural risk variables. Overall, the findings add to the burgeoning literature on the assessment of juvenile psychopathy and provide support for cautious use of the PCL:YV in Indian forensic and penal contexts.

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