Structure and Validity of the Self-Report Psychopathy Scale-III in Normal Populations

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ABSTRACT

Recent research on clinical psychopathy has uncovered four facets in the standard measuring device, namely, the PCL-R (Antisocial Behavior, Impulsive Thrill-Seeking, Interpersonal Manipulation, Cold Affect). The current version of the Self Report Psychopathy scale (SRP-II) cannot fully represent that structure. To augment the instrument, we factored a large set of psychopathy-related items, resulting in the third version (SRP-III). Confirmatory factor analysis supported the four-facet structure of the new scale. Both the factors and the total score of the SRP-III exhibit sound psychometric qualities. All reliabilities were acceptable and the concurrent and predictive validity were supported by its pattern of correlates. Specifically, psychopathy correlates negatively with Agreeableness and Conscientiousness and positively with narcissism, Machiavellianism, and other self-report psychopathy measures. Correlations with delinquent behavior and antisocial entertainment preferences showed coherent pattern across the four factors. In sum, the SRP-III is a reliable and valid measure of subclincal psychopathy that parallels the constcut measured by the PCL-R.

INTRODUCTION

Psychopathy, a personality construct associated with a cold personality and antisocial behavior, has a long and substantial history in the context of forensic and clinical psychology (Cleckley, 1946; Hare, 1980, 1985, 2003). The construct has recently garnered interest in subclinical domains as well (Forth, Brown, Hart & Hare, 1996; Lilienfeld & Andrews, 1996; Lynam, Whiteside, & Jones, 1996; Paulhus & Williams, 2002; Salekin, Trobst, & Krioukova, 2001). Much of the psychopathy research has relied on the Psychopathy Checklist-Revised (PCL-R; Hare, 2003) and its self-report counterpart, the Self-Report Psychopathy Scale-II (Hare, 1985).

The PCL-R is traditionally scored as two correlated factors: *social deviance* and *deficient emotionality* (Harpur, Hare, & Hakstian, 1989). Recently, Hare (2003) expanded the factor structure of the PCL-R to include four lower-order facets: *Antisocial Behavior, Impulsive Thrill-Seeking, Interpersonal Manipulation,* and *Cold Affect.* The current self-report measure (SRP-II) was designed to capture the initial two-factor structure and has not yet been updated to capture the four-facet structure.

Preliminary analyses by Williams and Paulhus (2003) have suggested the nature of the required updating of the SRP-II. Specifically, they determined that the Antisocial Behavior facet was virtually absent and the other three facets required more items to attain sufficient reliabilities. To rectify this problem, we first added a large set of psychopathy-related items to the item pool. We then used half of a large sample to select items for the four facets of the PCL-R. Next, we used the second half of the sample to perform a confirmatory factor analysis (CFA) to determine the degree to which the four facets were replicable. Finally, we assessed the validity of the SRP-III via correlations with various measures of personality and behavior.

PROCEDURE

Participants. 274 undergraduate students (82 male, 192 female) enrolled in a first-year introductory psychology class at a large western Canadian University participated in the study for course credit.

Materials. Along with our large pool of psychopathy-related items, we included a variety of self-report scales selected for relevance and reputable psychometric properties. Three different self-report psychopathy

scales were used as convergent validity measures. The Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995) was designed to measure primary and secondary psychopathy. The Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) is a broad-ranging measure with an eight-factor conceptualization. Finally, we included the Psychoticism subscale of the Eysenck Personality Questionnaire (PEN; Eysenck & Eysenck, 1985), a large set of items related to poor socialization: Although few researchers now believe that it captures psychoticism, it may well subsume psychopathy.

Because of their alleged overlap with psychopathy, measures of Machiavellianism and narcissism were also included. The Mach-IV Scale (Christie & Geis, 1970) was used to measure Machiavellianism, a construct defined by extreme cynicism and manipulative behavior. The Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) was used to measure narcissism, a trait associated with grandiosity, self-absorption, and an unrealistically positive self-image.

The Big Five personality traits (Extraversion, Agreeableness, Conscientiousness, Emotional Stability, Openness to Experience) are considered the fundamental traits of personality and are, therefore, useful for framing any personality construct. Psychopathy tends to be negatively correlated with Agreeableness and Conscientiousness (e.g. Paulhus & Williams, 2002). The Big Five Inventory (John & Srivastava, 1999) was used to measure these traits. In our sample, the alpha reliabilities of these personality scales were all respectable, ranging from .71 (PPI) to .87 (NPI; Extraversion).

Self-report misbehavior. The Entertainment Preferences Scale-II (EPS-II) is a self-report measure that asks participants to rate how much they enjoy various genres of several types of entertainment. Participants rate the 65 items on a 1 (do not enjoy at all) to 5 (enjoy extremely) Likert scale. Previous factor analyses (e.g. Williams, McAndrew, Learn, Harms, & Paulhus, 2001) have suggested that the various types of entertainment can each be described by two main factors: prosocial and antisocial. The types of entertainment include music, sports, video games, movies, and internet. These types are then combined to form composite prosocial and antisocial entertainment preference scores.

Elliott and Ageton's (1980) Self-Report Delinquency (SRD) inventory was used to assess misbehavior. Previous factor analyses of the SRD (e.g. Williams et al., 2001) have suggested that the inventory can be

subdivided into five subscales: Bullying, Drugs, Driving, General Crime, and Anti-Authority. Each subject was given a score on each of these subscales, along with an overall delinquency score.

RESULTS

Bolstering the SRP-II. New items were selected to bolster the three existing factors by examining their correlations with the current factors. The items added to the Impulsive Thrill-Seeking, Interpersonal Manipulation, and Cold Affect subscales are illustrated in Table 1. The addition of these items formed the SRP-III, with each of its four subscales balanced at 10 items each. The alpha reliabilities for the four subscales are sound, (Antisocial Behavior = .91, Interpersonal Manipulation = .76, Cold Affect = .74, Impulsive Thrill-Seeking .67) with an overall scale reliability of .88.

Confirmatory factor analysis. The path diagram for the four-facet model is displayed in Figure 1, with the correlations between the factors displayed in Table 4. Many of the fit statistics produced in the analysis suggested an acceptable fit for the model. The Root Mean Square Error of Approximation was .085, and the Comparative Fit Index and Incremental Fit Index were both .90. With respect to item parameters, the item parameter estimates were generally strong, with 37 of the 40 estimates falling above .20. Error variances (leftmost column) for each item are also listed in Figure 1. R^2 values for each item can be calculated by subracting its error variance from 1.00.

Personality correlates. Correlations between the SRP-III and the other personality scales are displayed in Table 2. The SRP-III correlated positively with each all the other self-report psychopathy scales. The correlation was strongest with the LSRP and EPQ-P (r = .62 for each, p < .01), followed by the PPI (r = .34, p < .01). Correlations with the NPI and Mach-IV were .46 and .58, respectively. The SRP-III also correlated negatively with the Agreeableness (r = -.46, p < .01) and Conscientiousness (r = -.23, p < .01) subscales of the BFI. None of the other SRP-III correlations reached significance at the p < .05 level.

Misbehavior correlates. Correlations with self-report behavior are listed in Table 3. The SRP-III correlated positively with antisocial entertainment preferences (r = .36, p < .01). There was also a trend towards a dislike of prosocial entertainment, but the correlation did not reach statistical significance (r = -.11, p = .21). The

SRP-III also correlated positively and significantly with each of the SRD factors of misbehavior, ranging from r = .24 (Drug-related Crime) to r = .37 (Bullying). The correlation between the SRP-III and the composite misbehavior score was the highest of all of the self-report behaviors (r = .47, p < .01).

DISCUSSION

The SRP-III shows good internal consistency, especially as demonstrated by the overall scale alpha of .91. The confirmatory factor analysis revealed that the SRP-III is capturing the four-facet model of psychopathy, as displayed by the various fit indices. For the most part, the parameter estimates, R^2 values, and standard errors were all of respectable sizes. In other words, the latent psychopathy facets are explaining the bulk of the variance observed in the SRP-III items. Together, these results suggest that the SRP-III is adequately measuring the four facets of psychopathy.

In addition, the correlations with external personality scales provide strong evidence that the SRP-III is a valid measure of subclinical psychopathy. As one would predict, the SRP-III correlated most strongly with other measures of psychopathy, namely the EPQ-P and the LSRP. The correlation between the SRP-III and the PPI was noticeably smaller in comparison to the other psychopathy scales, but was still significantly large. Although these correlations are strong, they do not appear to be large enough to suggest that the SRP-III is an exact duplicate of any of the other psychopathy scales. Furthermore, the conceptualization and factor structure of psychopathy as measured by the SRP-III is quite different from the other three scales.

The correlations with the NPI and the Mach-IV were similar to previous results (e.g. Paulhus & Williams, 2002), quantifying the expected amount of overlap between the constructs. Correlations with the BFI capture the essential features of psychopathy with respect to fundamental personality traits: psychopaths are disagreeable and unconscientious. The SRP-III also does not correlate with Big Five Neuroticism, which seems to satisfy Hare's (2003) assessment of the role of anxiety in psychopathy.

Correlations with self-report behavior also replicate previous research (e.g. Williams et al., 2001). Psychopathy is associated with a general predilection towards violent, aggressive, and antisocial media. Individuals high in psychopathy also engage in a wide range of delinquent activity, which is perhaps the defining

behavioral characteristic of psychopathy in forensic populations (e.g. Hare, 2003; Hare, McPherson, & Forth, 1988; Hemphill, Hare, & Wong, 1998). Each of the factors is linked to some aspect of misbehavior and the total score is linked to all aspects of misbehavior. In sum, a large amount of empirical evidence suggests that the SRP-III is a valid measure of psychopathy in subclinical populations and to date, is the only measure that captures the four-facet model of the PCL-R.

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Table 1. Items selected for addition to the Self-Report Psychopathy Scale-III with associated subscale correlations.

	ITS	IPM	CA	ASB
Impulsive Thrill-seeking (ITS)				
I'm a rebellious person	**.29**	.23	.16	.09
Interpersonal Manipulation (IPM)				
I don't think of myself as tricky or sly (R)	.21	**.39**	.19	.02
I find it easy to manipulate people	.27	**.38**	.26	.21
I am always impressed by a clever fraud	.38	**.38**	.17	.15
Cold Affect (CA)				
I like to hurt those close to me	.27	.30	**.49**	.12
I try not to be rude to others (R)	.29	.29	**.39**	.32
I'm a soft-hearted person (R)	.07	.32	**.34**	.17
I'm not afraid to step on other people to get what I want	.00	.20	**.33**	.14
On average my friends would probably say I am a kind person (R)	.11	.17	**.32**	.27

Note: N = 137. Correlations of at least .18 are significant at $p < .05$, correlations of at least .21 are significant at $p < .01$ (two-tailed).
ASB = Antisocial behavior, ITS = Impulsive Thrill-seeking, IPM = Interpersonal Manipulation, CA = Cold Affect.

Table 2. Correlations between the Self Report Psychopathy Scale-III and other personality scales.

	Self Report Psychopathy Scale-III Subscales				
	Antisocial Behavior	Impulsive Thrill-Seeking	Interpersonal Manipulation	Cold Affect	Total Score
Self-report psychopathy					
Levenson Self-Report Psychopathy Scale	**.30**	**.38**	**.54**	**.59**	**.62**
Eysenck Personality Questionnaire – Psychoticism	**.37**	**.37**	**.40**	**.67**	**.62**
Psychopathic Personality Inventory	.11	**.45**	**.30**	**.12**	**.34**
Dark Triad					
Narcissistic Personality Inventory	.13	**.47**	**.43**	**.28**	**.46**
Mach-IV	**.21**	**.38**	**.58**	**.51**	**.58**
Big Five					
Extraversion	-.02	**.23**	.04	-.12	.05
Agreeableness	**-.22**	**-.14**	**-.36**	**-.62**	**-.46**
Conscientiousness	-.11	-.10	**-.19**	**-.26**	**-.23**
Emotional Stability	-.01	.09	.12	-.05	.05
Openness to Experience	.00	.12	.12	-.11	.05

Note: N = 274. Correlations in bold are significant at $p < .05$ (two-tailed).

Table 3. Correlations between the SRP-III and self-reported behavior.

	Self Report Psychopathy Scale-III Subscales				
	Antisocial Behavior	Impulsive Thrill-Seeking	Interpersonal Manipulation	Cold Affect	Total Score
Entertainment					
Antisocial	.09	**.44**	**.36**	.12	**.36**
Prosocial	-.04	.01	-.12	-.16	-.11
Misbehavior					
Bullying	.15	**.23**	**.31**	**.39**	**.37**
Drugs	**.18**	**.34**	.13	.06	**.24**
Driving	.06	**.36**	**.30**	.07	**.27**
Crime	**.27**	**.34**	.16	.01	**.27**
Anti-authority	.12	**.31**	**.24**	**.19**	**.29**
Overall misbehavior	**.26**	**.52**	**.36**	**.23**	**.47**

Note: N = 274. Correlations in bold are significant at $p < .05$ (two-tailed).

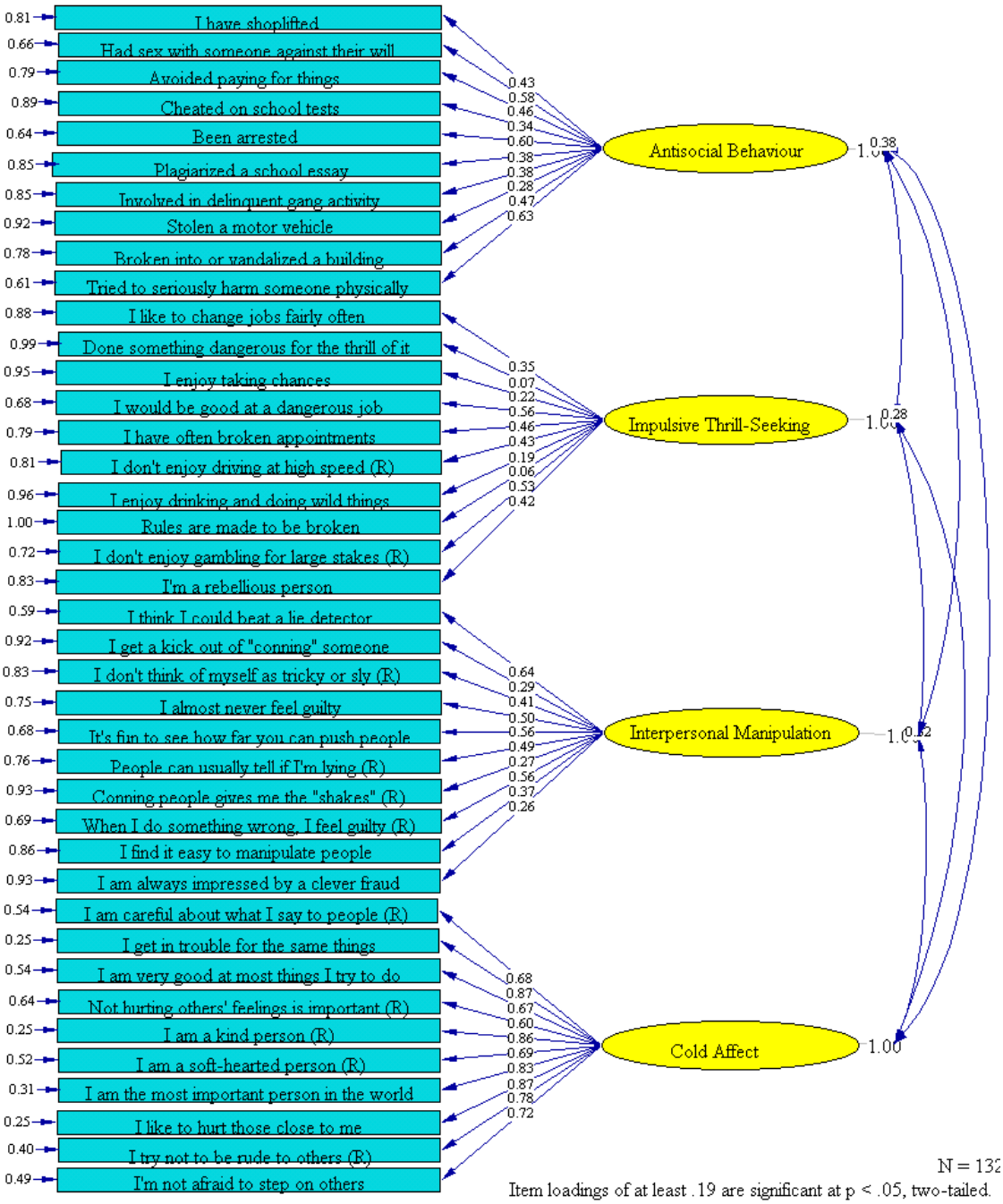
Table 4. Correlations between SRP-III facets derived from confirmatory factor analysis.

	Antisocial Behaviour	**Impulsive Thrill-Seeking**	**Interpersonal Manipulation**	**Cold Affect**
Antisocial Behaviour	--	.35	.38	.57
Impulsive Thrill-Seeking		--	.49	.28
Interpersonal Manipulation			--	.52
Cold Affect				--

Note: N = 132. All correlations significant at $p < .01$.

Figure 1.

Path diagram for confirmatory factor analysis of Self-Report Psychopathy Scale-III (four-factor solution).



Item loadings of at least .19 are significant at $p < .05$, two-tailed.