
An Empirical Investigation of Psychopathy in a Noninstitutionalized and Noncriminal Sample

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This study examined the construct of psychopathy using the Psychopathy Checklist—Revised (PCL-R) in 54 participants from the general population. To obtain a sample of community participants with psychopathic characteristics, participants were recruited using advertisements for a “personality study” that incorporated the characteristics of psychopathy in a nonpejorative manner. The methodology successfully recruited community participants with moderately elevated PCL-R scores. Participants exhibited the personality features of psychopathy (Factor 1) to a greater extent than the behavioral features (Factor 2), which is consistent with the results obtained with the PCL-R normative samples. Roughly 40% of the sample reported no history of involvement with the criminal justice system, yet these participants exhibited moderately elevated PCL-R scores. Moreover, a sizeable portion of the noncriminal participants reported a substantial history of violent behavior. Comparisons of PCL-R scores between participants with and without a criminal history suggest that these two groups differ in ways unrelated to criminal justice system involvement. Copyright © 2006 John Wiley & Sons, Ltd.

The development of the Psychopathy Checklist—Revised (PCL-R; Hare, 1991, 2003) provided researchers and clinicians with a valid and reliable tool for measuring psychopathy in correctional and forensic psychiatric populations. The PCL-R yields a Total score, which represents the extent to which an individual matches the prototypical description of the psychopath as initially conceptualized by Cleckley

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(1941), and scores on two factor-analytically derived dimensions representing the interpersonal/affective features (Factor 1) and behavioral features (Factor 2) of psychopathy (Hare, 1991; Farrington, 1991; Harpur, Hare, & Hakstian, 1989). The PCL-R is widely regarded as the most empirically validated instrument for measuring psychopathy in correctional and forensic psychiatric populations (Hare, 2003; Rice, 1997).

In the past 15 years, researchers have conducted extensive empirical research with the PCL-R (and its forerunner, the PCL) among incarcerated and institutionalized samples. These studies support the predictive utility of the PCL-R with respect to several outcome variables that are of significant interest to clinicians, legal decision-makers, and policy-makers. For example, research suggests that psychopathy is related to violent and aggressive behavior (Serin, 1991; Skeem & Mulvey, 2001), poor treatment outcome (Ogloff, Wong, & Greenwood, 1990; Rice, Harris, & Cormier, 1992; Serin, 1995), general criminal recidivism (Barbaree, Seto, Langton, & Peacock, 2001; Hemphill, Hare, & Wong, 1998), violent criminal recidivism (Harris, Rice, & Cormier, 1991; Serin, 1996), and institutional misconduct (Heilbrun *et al.*, 1998; Hildebrand, de Ruiter, & Nijman, 2004; Hill, Rogers, & Bickford, 1996; Walters, 2003). Accordingly, the accurate identification of psychopathic individuals has become an important concern in a variety of clinical and institutional contexts.

Although researchers have conducted considerable research with the PCL-R, the vast majority of these studies have involved incarcerated or institutionalized samples in correctional, forensic, and psychiatric facilities. Given the virtual absence of systematic research examining psychopathy among community samples, we know very little about the psychopaths who have avoided contact with the criminal justice and forensic mental health systems. Clinicians and researchers have long speculated that psychopaths exist in the general population, but empirical evidence for that proposition has largely been absent (Kirkman, 2002).

Several researchers have measured psychopathy among noninstitutionalized samples, but most of these studies drew their participants from a student or adolescent population, in which the base rate of psychopathy is expected to be low (see, e.g., Forth, Brown, Hart, & Hare, 1996; Frick, Bodin, & Barry, 2000; Levenson, Kiehl, & Fitzpatrick, 1995; Ross & Rausch, 2001; Skilling, Quinsey, & Craig, 2001; Trevethan & Walker, 1989). For example, Trevethan and Walker (1989) measured psychopathy in a sample of 15 high school students, Levenson *et al.* (1995) measured psychopathy in a sample of 487 college students, Forth *et al.* (1996) measured psychopathy in a sample of 150 college students, Frick *et al.* (2000) measured psychopathy in 1,136 elementary school children, and Skilling *et al.* (2001) measured psychopathy in 1,111 school-aged boys from a community sample. In all of these studies, as expected, rates of psychopathy were relatively low, which made it difficult to study the construct of psychopathy. Moreover, these studies tell us little about psychopathy in non-adolescents and non-students.

A few clinicians, most notably Cleckley (1941, 1946), and a few researchers have examined psychopathy among community samples, but methodological limitations (e.g. not using a valid psychopathy assessment tool) or biased sampling procedures (e.g. studying individuals released from psychiatric or correctional facilities) limit the conclusions that can be drawn about psychopathy among noninstitutionalized and noncriminal individuals. Widom (1977), for example, conducted perhaps the

first study of psychopathy among a community sample. Widom used Robins' (1966) criteria for sociopathy to measure psychopathic traits in a sample of 28 participants recruited from the community through a newspaper advertisement that incorporated the characteristics of psychopathy in a nonpejorative manner. Widom concluded that the sample met a range of criteria frequently associated with psychopathy, such as heavy alcohol use, substance abuse, and persistent criminal behavior. Although Widom's study provided valuable information regarding psychopathy in the general population, it was conducted prior to the development of a reliable and valid psychopathy measure, such as the PCL-R.

In a later study, Belmore and Quinsey (1994) interviewed 30 community participants who responded to advertisements for any adult males who wished to participate in a personality study or who had been suspended or expelled from school and/or left home before age 16. The interview consisted of eight items relating to childhood and adolescent behavior problems and eight items from the PCL-R. Based on the results of the interview, participants were placed in either a low psychopathy group or high psychopathy group. Not surprisingly, Belmore and Quinsey successfully located psychopathic participants from the community. However, because 93% of their high psychopathy group had previously been incarcerated, their study provided very little information on noncriminal psychopaths.

The MacArthur Violence Risk Assessment Study (Monahan et al., 2001) also provided valuable information regarding psychopathy in a community sample. Monahan and colleagues studied over 1,100 admissions to acute inpatient psychiatric facilities in three different cities, and then conducted follow-up interviews every 10 weeks for 1 year after discharge. Out of the 134 risk factors assessed in the study, psychopathy (as measured by the screening version of the PCL-R) was more strongly associated with violence in the community than any other risk factor. Despite the clear importance of the MacArthur Violence Risk Assessment Study in terms of violence among individuals recently released from psychiatric facilities, it was not intended to provide information about psychopathy in the general population.

A review of the existing literature reveals a dearth of empirically derived information regarding psychopathy among community samples. Yet, researchers have recognized the importance of studying noninstitutionalized psychopaths to determine whether they differ from their institutionalized counterparts and to identify factors that prevent psychopaths from developing criminal lifestyles (Forth et al., 1996; Lilienfeld, 1994; see Ishikawa, Raine, Lencz, Bihrlé, & Lacasse, 2001). Therefore, this study examined the construct of psychopathy using the PCL-R in a sample of noninstitutionalized participants. To obtain participants with psychopathic characteristics, we used a recruitment strategy designed to attract individuals who show evidence of psychopathy. This study also sought to examine psychopathy among individuals who have had no involvement with the criminal justice system. To this end, a noncriminal subset of the sample was identified and compared to participants with a history of arrests. Finally, this study examined whether the present sample exhibited the same pattern of psychopathic personality features (Factor 1) and behavioral features (Factor 2) typically seen in institutionalized samples. Accordingly, we used the PCL-R normative data for comparison purposes.

Researchers have suggested that noninstitutionalized psychopaths manifest psychopathy primarily in terms of personality features (Factor 1) rather than behavioral

features (Factor 2) (Levenson, 1992; Lilienfeld, 1994). Therefore, we hypothesized that the present sample of noninstitutionalized participants would have significantly higher Factor 1 scores than Factor 2 scores. It is also reasonable to assume that a noninstitutionalized sample is likely less severe in terms of psychopathy than an institutionalized sample. Therefore, we hypothesized that the present sample would have lower PCL-R scores than the PCL-R normative samples. Although we could not inferentially compare the present data to the PCL-R normative data, we believed that descriptively comparing these samples would provide information regarding the patterns of psychopathic characteristics among institutionalized and noninstitutionalized samples.

METHOD

Participants

The participants were 54 adult males recruited from the general population of the greater Philadelphia metropolitan area. All participants were male and at least 18 years of age. With a moderate effect size (0.5) and an alpha level of 0.05, a minimum of 50 participants was needed to obtain adequate power (0.80) for the within-group and between-group analyses (Cohen, 1977). The participants were recruited for a “personality study” by newspaper advertisements and posted fliers that incorporated the characteristics of psychopathy in a nonpejorative manner (see Widom, 1977). The advertisement was run in a Philadelphia newspaper for 8 weeks, and the fliers were posted concurrently at a major university in Philadelphia. The advertisement and fliers were worded as follows:

PAID PERSONALITY STUDY

Are you charming, intelligent, adventurous, aggressive, and impulsive? Do you get bored easily and like to live life on the edge? If you would like to make some easy money (\$25.00) by participating in a confidential 2-hour interview at XXX University, please call xxx-xxx-xxxx to set up an appointment. You must be male and at least 18 years of age to participate.

We received 207 responses during the 8-week recruitment period, and made appointments with 104 responders who met inclusion criteria (i.e. male, 18+ years old, capable of providing informed consent, able to provide a collateral contact). Of the 103 responders who did not meet inclusion criteria, 72 were excluded because they refused or were unable to provide a collateral contact, 29 were excluded because they were female, and 2 were excluded because they were under age 18. We completed 73 of the 104 scheduled interviews (31 of the 104 were no-shows). Of the 73 participants we interviewed, 19 were subsequently excluded because repeated attempts to interview the collateral were not successful and we were therefore unable to score the PCL-R. Our final sample consisted of 54 participants—41 (76%) recruited by newspaper advertisements, 8 (15%) recruited by “word of mouth,” and 5 (9%) recruited by fliers.

Of the 54 participants, 33 (61%) were African-American, 19 (35%) were Caucasian, 1 (2%) was Hispanic, and 1 (2%) was biracial. The participants ranged in age from 19 to 52 years, with a mean age of 34.1 years ($SD = 8.9$). Thirty-nine participants (72%) were employed (part-time or full-time). With respect to education, 3 (6%) had not finished high school, 29 (54%) had completed high school (or GED), 10 (18%) had completed some college, 6 (11%) had completed college, 2 (4%) were enrolled in graduate school (Master's level), and 4 (7%) had completed graduate school (3 MA and 1 MBA). The number of arrests (combined misdemeanor and felony) ranged from 0 to 24, with a mean of 2.4 ($SD = 4.4$).

Procedure

Participants were assessed with the Psychopathy Checklist—Revised (PCL-R; Hare, 1991) by research assistants (advanced Ph.D. students in clinical psychology) who were trained on the PCL-R by a Ph.D.-level psychologist (following Hare's (1991) recommended training protocol). Each of the 20 items on the PCL-R is scored on a three-point ordinal scale (0, 1, or 2) based on the degree to which the characteristics of the individual match the description of each item provided in the PCL-R manual (Hare, 1991). The PCL-R yields scores on two factors—Factor 1 (interpersonal/affective features) and Factor 2 (behavioral features)—and a Total score. Because a PCL-R cannot be completed without collateral information, all 54 participants provided contact information for a collateral contact (relative, friend, or employer) who knew the participant well. Contact information for collaterals was obtained when participants made their initial appointments. In each case, collaterals were interviewed after participant interviews were completed. Collateral interviews were conducted using the semi-structured interview approach recommended by Hare (1991, 2003), which obtains information across several psychosocial domains. All but four of the collateral interviews took place over the phone; in the other four cases, the collateral attended the interview with the participant and was interviewed separately.

Participants were classified into groups based on their PCL-R Total scores using two classification approaches. Under the first approach, participants were divided into groups based on whether their PCL-R Total score was above a predetermined cut-off score (see, e.g., Hare, 1996; Harris, Rice, & Quinsey, 1994). Because the established PCL-R cut-off score of 30 for classification as a psychopath was developed through research conducted with institutionalized samples, it was not used as the sole basis for classification in this study. There is precedent for using lower PCL-R cut-off scores, such as 29 (Serin, 1996), 28 (Serin, 1991), and 25 (Harris et al., 1991; Harris, Rice, & Quinsey, 1993; Rice et al., 1992). We selected PCL-R cut-off scores of 25 and 20. We chose the second cut-off score of 20 using the rationale that these participants would have lower scores than individuals from institutionalized samples; we used each cut-off to split the sample into groups for comparison purposes, not for diagnostic purposes. The second approach involved using a median split to form a Low Psychopathic Group and a High Psychopathic

Group. This approach has been used in prior studies to facilitate within-group and between-group analyses (Hare, 1985; Rutherford, Cacciola, Alterman, & McKay, 1996; Salekin, Rogers, & Sewell, 1996).

We used these classification approaches for two reasons. First, we hoped the classification schemes would provide valuable information about differences in the number of arrests based on PCL-R score (25 versus 20; high versus low). Second, the relevant literature provides little guidance on best practices for dividing up PCL-R data from community participants, so we hoped this study would provide some information about potential ways of dividing up this type of data.

Because we believed that a portion of our sample would likely have a history of incarceration, we recognized that the label “noninstitutionalized” might be misleading. For example, it is possible that some of our participants were incarcerated and recently released, thereby making the label “noninstitutionalized” somewhat meaningless. Therefore, in an attempt to study psychopathy among a pure noninstitutionalized *and noncriminal* sample, we isolated a subset of our sample that had no history of involvement with the criminal justice system and then compared them with the participants who reported a criminal history.

RESULTS

Psychopathy Ratings With the PCL-R

The PCL-R Total scores ranged from 4 to 27, with a mean of 14.0 (SD = 6.6), Factor 1 scores ranged from 0 to 12, with a mean of 5.2 (SD = 3.3), and Factor 2 scores ranged from 1 to 16, with a mean of 7.1 (SD = 3.7). Univariate analyses revealed that the PCL-R Total scores, Factor 1 scores, and Factor 2 scores followed normal distributions, Kolmogorov–Smirnov $\chi^2(54) = 0.82$, $p = 0.52$, $\chi^2(54) = 0.89$, $p = 0.41$, and $\chi^2(54) = 0.75$, $p = 0.62$, respectively. To examine the inter-rater reliability of PCL-R Total scores, 10 randomly selected participants were jointly scored by two raters, and an intraclass correlation coefficient (ICC) was calculated. An ICC of 0.88 was obtained, indicating that the research assistants achieved adequate inter-rater reliability.

PCL-R Total Scores of 25+

Six participants had PCL-R Total scores of 25 or higher. The PCL-R Total scores ranged from 25 to 27, with a mean of 25.7 (SD = 1.0), Factor 1 scores ranged from 5 to 12, with a mean of 8.0 (SD = 2.5), and Factor 2 scores ranged from 9 to 16, with a mean of 13.2 (SD = 2.6). These participants had a mean age of 39.7 years (SD = 7.4; range = 25–45). The number of arrests ranged from 4 to 24, with a mean of 12.7 (SD = 6.6).

PCL-R Total Scores of 20+

Twelve participants had PCL-R Total scores of 20 or higher. The PCL-R Total scores ranged from 20 to 27, with a mean of 23.6 (SD = 2.5), Factor 1 scores ranged

from 5 to 12, with a mean of 8.7 ($SD = 2.1$), and Factor 2 scores ranged from 7.9 to 16, with a mean of 11.7 ($SD = 2.7$). These participants had a mean age of 34.7 years ($SD = 9.2$; range = 21–45). The number of arrests ranged from 1 to 24, with a mean of 7.4 ($SD = 7.2$).

High Psychopathic Group

The High Psychopathic Group consisted of 27 participants, which was the top half of the distribution of PCL-R Total scores. The PCL-R Total scores ranged from 15 to 27, with a mean of 19.6 ($SD = 4.2$), Factor 1 scores ranged from 2 to 12, with a mean of 7.6 ($SD = 2.2$), and Factor 2 scores ranged from 4 to 16, with a mean of 9.4 ($SD = 3.2$). These participants had a mean age of 35.9 years ($SD = 9.5$; range = 19–52). The number of arrests ranged from 0 to 24, with a mean of 4.2 ($SD = 5.7$).

Low Psychopathic Group

The Low Psychopathic Group consisted of 27 participants, which was the bottom half of the distribution of PCL-R Total scores. The PCL-R Total scores ranged from 4 to 14, with a mean of 8.5 ($SD = 3.0$), Factor 1 scores ranged from 0 to 7, with a mean of 2.7 ($SD = 2.1$), and Factor 2 scores ranged from 1 to 9, with a mean of 4.7 ($SD = 2.4$). These participants had a mean age of 32.3 years ($SD = 8.1$; range = 19–49). The number of arrests ranged from 0 to 5, with a mean of 0.7 ($SD = 1.2$).

Comparison Between the Present Sample and PCL-R Normative Data

The PCL-R normative data were gathered from 5,048 male prisoners and 1,246 male forensic psychiatric patients (Hare, 2003). The present sample cannot be categorized as either a prison sample or a forensic psychiatric sample, so we compared it to both normative samples. Because it is not statistically appropriate to inferentially compare the present sample to the normative samples, only a descriptive comparison is presented (see Table 1). As Table 1 indicates, the PCL-R Total, Factor 1, and Factor 2 scores for the present sample are considerably lower than the scores for the normative samples. However, there is noticeably less difference between the PCL-R scores of the High Psychopathic Group and the normative samples.

We conducted a within-group comparison between the mean Factor 1 and Factor 2 scores for our sample as a whole and for the High Psychopathic Group in

Table 1. Comparison between present data and PCL-R normative data (Hare, 2003)

	Present sample	High psychopathic group	Forensic norms	Prison norms
Total score	14.0	19.6	21.5	22.1
Factor 1 score	5.2	7.6	8.0	8.5
Factor 2 score	7.1	9.4	11.9	11.6

particular. Because each factor has a different range of points—Factor 1 ranges from 0 to 16 and Factor 2 ranges from 0 to 18—we divided each factor score by its maximum score and then compared the resulting scores using a paired-sample *t*-test. For the entire sample, there was a significant difference between factor scores ($t(53) = -2.31, p < 0.05$), with Factor 1 being significantly higher than Factor 2, and a significant positive correlation between factor scores ($r = 0.42, p < 0.05$). For the High Psychopathic Group, there was no significant difference between factor scores ($t(26) = -.93, p = ns$), and no significant correlation between factor scores ($r = -.25, p = ns$).

Comparison of Criminal and Noncriminal Subsets

To isolate a noninstitutionalized and noncriminal subset of our sample, we identified participants with no history of criminal arrests. Twenty-two of the 54 participants (41% of the sample) reported no history of arrests, and were thus referred to as the noncriminal subset; the remaining 32 participants (59% of the sample) reported a history of arrests, and were thus referred to as the criminal subset. Out of the 22 noncriminal participants, 14 (64%) were African-American, 7 (32%) were Caucasian, and 1 (4%) was bi-racial. The noncriminal subset had a mean age of 34.6 years ($SD = 9.9$; range = 19–52). Out of the 32 criminal participants, 19 (59%) were African-American, 12 (38%) were Caucasian, and 1 (3%) was Hispanic. The criminal subset had a mean age of 33.8 years ($SD = 8.3$; range = 19–51). There were no significant differences in terms of age or race between the criminal and noncriminal subsets.

For the noncriminal subset, PCL-R Total scores ranged from 4 to 19, with a mean of 9.7 ($SD = 4.6$), Factor 1 scores ranged from 0 to 9, with a mean of 3.6 ($SD = 3.0$), and Factor 2 scores ranged from 1 to 9, with a mean of 4.8 ($SD = 2.6$). For the criminal subset, PCL-R Total scores ranged from 4.2 to 27, with a mean of 17.0 ($SD = 6.2$), Factor 1 scores ranged from 0 to 12, with a mean of 6.2 ($SD = 3.1$), and Factor 2 scores ranged from 3 to 16, with a mean of 8.6 ($SD = 3.6$). To avoid the auto-correlation problem that would result from comparing the PCL-R scores of the criminal and noncriminal subsets, we redacted the PCL-R items that are coded based on formal criminal justice processing (items 18–20) and prorated the scores according to established procedures (S. D. Hart, personal communication, March 11, 2004). Table 2 provides a comparison of the PCL-R Total, Factor 1, and Factor 2 scores (after being prorated) for the criminal and noncriminal subsets. As can be seen, the noncriminal subset had significantly lower PCL-R Total ($p < 0.001$), Factor 1 ($p < 0.001$), and Factor 2 ($p < 0.001$) scores.

Table 2. Comparison between criminal and noncriminal subsets

	Noncriminal ($n = 22$)	Criminal ($n = 32$)
Total score	11.1 ^a	18.6 ^a
Factor 1 score	3.6 ^b	6.2 ^b
Factor 2 score	5.9 ^c	9.6 ^c

^a $p < 0.001$.

^b $p < 0.001$.

^c $p < 0.001$.

DISCUSSION

This study examined the construct of psychopathy using the PCL-R in a sample of noninstitutionalized participants recruited from the general population. The recruitment strategy was designed to attract individuals with psychopathic characteristics, which enabled us to obtain important descriptive information about psychopathy among a community sample. In addition, by isolating a noncriminal subset of the sample, we were able to examine the construct of psychopathy among a pure noninstitutionalized and noncriminal community sample.

The results provide some empirical support for the previously anecdotal assertions of some researchers and clinicians that individuals with elevated levels of psychopathic characteristics can be found in the general population. Although it is likely that no one would dispute the assertion that individuals with elevated levels of psychopathic characteristics exist in the general population, this study empirically examined the existence of psychopathy in a community sample. This study does not answer epidemiological questions regarding the prevalence of psychopathy or the distribution of PCL-R scores in the general population, but it does provide important descriptive information about psychopathy in a sample of community participants who were specifically recruited based on the presence of psychopathic characteristics.

Although no participants would be classified as psychopaths using the established PCL-R cut-off score of 30, this study examined noninstitutionalized participants, who would be expected to have considerably lower PCL-R scores. Nevertheless, a sizeable portion of participants had PCL-R scores beyond the cut-off scores of 25 and 20, and half of the participants had PCL-R scores of 15 or higher. These results indicate that a substantial portion of the sample exhibited elevated levels of psychopathic characteristics, even when compared with correctional and forensic psychiatric populations.

Because the PCL-R has rarely been used with noninstitutionalized samples, there are few studies with which the results of this study can be compared. However, our mean PCL-R Total scores of 14.0 for the entire sample and 9.7 for the noncriminal subset are considerably higher than the mean scores reported in the handful of studies that have used either the PCL or PCL-R with noninstitutionalized samples (e.g. Auf Klinteberg, Schalling, & Humble, unpublished manuscript; Forth et al., 1996; Trevethan & Walker, 1989). For example, Trevethan and Walker (1989) obtained a mean PCL Total score of 8.5 in a sample of 15 high school students, Forth et al. (1996) obtained mean PCL-R Total scores of 6.4 (males) and 2.7 (females) in a sample of 150 college students, and Auf Klinteberg et al. (unpublished manuscript) obtained a mean PCL Total score of 5.4 in their control group of 66 Swedish males with no criminal history. The present sample exhibited considerably higher levels of psychopathic characteristics than the noninstitutionalized samples from these previous studies, which is likely attributable to the recruitment approach employed in this study. In contrast to prior studies involving noninstitutionalized samples, our participants were recruited through advertisements and fliers that specifically sought individuals with elevated levels of psychopathic characteristics. (The exception is Widom (1977), who used a similar recruiting method, which provided a model for our approach.) Given the PCL-R scores of the present sample, it seems that the methodology was effective in locating and

recruiting individuals from the general population with moderately elevated levels of psychopathic characteristics.

The results supported our first hypothesis, which predicted that participants would have significantly higher PCL-R Factor 1 scores than PCL-R Factor 2 scores. Participants exhibited the core personality features of psychopathy (Factor 1) to a greater extent than the core behavioral features of psychopathy (Factor 2). This finding may be helpful in explaining why many of the study participants, despite having elevated levels of psychopathic characteristics, have had no prior involvement with the criminal justice system. In other words, it is plausible that their psychopathic characteristics, which appear to be manifested primarily in terms of personality features as opposed to behavioral features (or at least not *criminal* behavioral features), do not result in as much contact with the criminal justice system.

These findings suggest that the participants are similar to the noninstitutionalized psychopaths described by Cleckley (1941), the primary psychopaths described by Karpman (1946, 1948), and the psychopathic subtype delineated by Levenson *et al.* (1995), who generally manifest psychopathy through personality features rather than antisocial behavior. Therefore, this study provides some empirical support for those who define psychopathy primarily in terms of interpersonal and affective characteristics (e.g. Cleckley, 1941, 1946; Jenkins, 1960; Karpman, 1946, 1948; Levenson *et al.*, 1995; see Baird, 2002; Lilienfeld, 1994). It is also worth noting that the difference in factor scores described in this study is consistent with the PCL-R normative studies, in which the mean Factor 1 scores are higher than the mean Factor 2 scores (based on a comparison of the corresponding percentile ranks for each factor score) (Hare, 1991). Although additional research is clearly needed, these findings suggest that the PCL-R has promise for measuring psychopathy in community as well as institutionalized cohorts.

The results also revealed that the present sample, as predicted, had lower PCL-R scores (Total, Factor 1, and Factor 2) than the PCL-R normative samples. These results make intuitive sense. Involvement with the criminal justice system elevates a PCL-R score, so it makes sense that a noninstitutionalized sample, even if recruited based on psychopathic characteristics, would have lower PCL-R scores than institutionalized samples. It is interesting to note, however, that there was relatively little difference between the High Psychopathic Group and the forensic psychiatric normative samples. The recruitment strategy appears to have identified individuals from the general population with elevated levels of psychopathic characteristics, lower in mean PCL-R scores than individuals typically found in correctional settings, but not considerably different from those found in forensic psychiatric facilities. This suggests that the severity of psychopathy in the High Psychopathic Group, despite being lower than that displayed by typical correctional samples, likely places them at risk for engaging in future criminal behavior.

This study also identified a subset of noninstitutionalized participants who reported no history of arrests, but who nonetheless had moderately elevated levels of psychopathic characteristics (compared to prior studies that examined psychopathy among noninstitutionalized and noncriminal samples, such as adolescents and college students). As might be expected, the PCL-R scores of the noncriminal subset were significantly lower than the PCL-R scores of the criminal subset.

Importantly, even after controlling for the influence of formal criminal justice processing on PCL-R scores, the PCL-R scores of the noncriminal subset were significantly lower than the PCL-R scores of the criminal subset. This suggests that the two groups are not differentiated simply based on involvement with the criminal justice system. To the contrary, there appear to be clear differences between these two groups that are not merely the result of their formal criminal histories. Future research is needed to help elucidate the differences between criminal and non-criminal psychopaths.

It is not yet clear why or how the noncriminal participants have avoided contact with the criminal justice system, but there are several potential explanations. It is possible that the noncriminal participants are simply not committing criminal offenses, or at least not committing serious offenses that are more likely to result in arrests. Although moderately elevated, the PCL-R scores for the noncriminal participants were still relatively low in comparison to the criminal participants, which puts them at reduced risk for criminal behavior, particularly violent behavior. Moreover, the low Factor 2 scores of the noncriminal participants may not simply reflect an absence of criminal behavior. Research suggests that Factor 2 is correlated with impulsivity and sensation-seeking/risk-taking (see, e.g., Blackburn & Coid, 1998), so it makes sense that Factor 2 scores would be lower among those who have avoided contact with the criminal justice system.

It is clear, however, that not all of the noncriminal participants have avoided criminal behavior. In fact, roughly one-third of the noncriminal participants reported a history of violent behavior. There are at least two possible explanations for how these individuals have avoided arrests. First, research suggests that “successful” and “unsuccessful” psychopaths differ in terms of psychophysiological and neuropsychological deficits (Ishikawa et al., 2001). Ishikawa et al. (2001) found that psychopaths with no history of arrests exhibited stronger executive functioning and less autonomic nervous system deficits than psychopaths who have been arrested. They suggested that the autonomic and executive function differences may not necessarily be associated with reduced criminal behavior, but instead may make some psychopaths better able to avoid arrests and convictions. Accordingly, it is possible that the noncriminal participants in this study have more intact functioning, which may allow them to avoid being arrested for their criminal acts. Unfortunately, the results of this study do not permit us to draw any conclusions regarding the psychophysiological and neuropsychological functioning of the participants.

Second, research suggests that the presence of protective factors (i.e. influences that may keep individuals who are otherwise at high risk for engaging in antisocial behavior from coming into contact with the criminal justice system) may explain why some individuals with psychopathic characteristics can avoid being arrested (DeMatteo, Heilbrun, & Marczyk, 2002). For community participants with moderately elevated PCL-R scores, research has demonstrated a significant negative relationship between PCL-R scores and the number of protective factors (DeMatteo, 2002). Therefore, despite having moderately elevated levels of psychopathic characteristics, it may be that the presence of protective factors—such as strong family relations, involvement in organized religion, and positive role models—helps them to avoid contact with the criminal justice system. Clearly this is an area that further research would help to clarify.

The results of this study should be considered in light of its limitations. There are three limitations regarding the use of the PCL-R. First, the PCL-R was not designed for use with a noninstitutionalized sample. Hare (1991) noted, however, that “there is no reason why it cannot be used for research with noncriminals, providing that the investigator has access to enough information to score items with a reasonable degree of confidence” (p. 64). Second, there were not two independent PCL-R ratings for every participant. It is likely, however, that this had little impact on the results because of the raters’ demonstrated consistency in PCL-R scores. Third, obtaining accurate collateral information was challenging; without an independent record, it was often difficult to judge the accuracy of the collateral information. Given the sample being studied, we had to rely on information obtained from family members, co-workers, or friends of the participants. This may be an unavoidable limitation with a community sample, particularly when many of the participants have had no contact with the criminal justice system. For these participants, there is no trail of records, so it is more difficult to obtain collateral information.

Several other limitations also exist. Although there was adequate power for the statistical analyses, the small sample size (and the smaller sizes of the PCL-R classification groups) limited the types of statistical analysis that we could conduct. The potential lack of generalizability of these results is another limitation. Because our sample only included adult males from the greater Philadelphia metropolitan area, the results obtained with this sample cannot necessarily be generalized to other noninstitutionalized samples.

There are several areas in which future research is clearly indicated. This study’s findings must be replicated with other noninstitutionalized samples. Further, conducting longitudinal studies with noninstitutionalized samples would yield valuable information regarding the course and stability of psychopathy in this under-studied population. Future researchers may benefit from analyzing the results of similar studies using the recently developed three- and four-factor approaches to psychopathy (Cooke & Michie, 2001; Hall, Benning, & Patrick, 2004; Herve & Hare, 2002; Johansson, Andershed, Kerr, & Levander, 2002; see Hemphill & Hart, 2002), which would provide useful information about the robustness of these factors in diverse populations. Finally, researchers studying noninstitutionalized samples may benefit from using multiple measures of psychopathy, including the PCL: Screening Version (PCL:SV) (Hart, Cox, & Hare, 1995) and the Psychopathic Personality Inventory (Lilienfeld & Andrews, 1996), to examine the convergent validity of the data obtained from the noninstitutionalized sample. The PCL:SV may be particularly appropriate for use with a noninstitutionalized sample because it was designed to be administered without reference to collateral information.

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