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The Psychopathy Q-Sort

Construct Validity Evidence in a Nonclinical Sample

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Scant research has examined the validity of instruments that permit observer ratings of psychopathy. Using a nonclinical (undergraduate) sample, the authors examined the associations between both self- and observer ratings on a psychopathy prototype (Psychopathy Q-Sort, PQS) and widely used measures of psychopathy, antisocial behavior, and negative emotionality. Self- and observer prototype correlations generally displayed predicted patterns of convergent and discriminant validity for the PQS. Future research using the PQS should focus on potential domains of incremental validity of peer-rated psychopathy beyond self-reported psychopathy.

Keywords: psychopathy; personality assessment, peer reports

The assessment of psychopathy has long been embroiled in controversy (Lilienfeld & Fowler, 2006). One major limitation in this literature has been the paucity of measures to permit the detection of psychopathy by observers (Lilienfeld, 1998; Lilienfeld & Fowler, 2006). Observers may possess access to important information regarding individuals' psychopathic traits that is missed by self-report measures or interviews. In this way, they may be able to fill in the "blind spots" ostensibly generated by psychopathic individuals' lack of awareness of their own shortcomings (Grove & Tellegen, 1991).

Indeed, in his classic clinical description of psychopathy, Cleckley (1941/1988) listed "specific loss of insight" as a core feature of the construct, supporting the argument that exclusive reliance on self-reports may result in an incomplete picture of this condition. According to Cleckley, the psychopath possesses "no capacity to see himself as others see him" (p. 350). Gough's (1960) role-taking theory of psychopathy adds to this the implication that psychopaths have a difficult time placing adopting the perspectives of others. Moreover, psychopathic individuals' propensities toward narcissism and externalization of blame may sharply constrain their capacity to report validly on their undesirable attributes (Lilienfeld, 1994). The paucity of research on the assessment of psychopathic traits by observers is therefore surprising.

In an effort to fill this void, Reise and Oliver (1994) developed a Q-sort measure (the Psychopathy Q-Sort, or PQS) to permit the assessment of psychopathy by observers. They asked seven judges with expertise in psychopathy to sort the 100 items of the California Q-set (CAQ; Block, 1961) according to their conceptualization of a prototypical psychopath. In contrast to other commonly used measures of psychopathy, the PQS was designed explicitly to permit completion by both observers and target participants. As a consequence, it permits a direct examination of the incremental validity of observer reports beyond self-reports of psychopathy, and vice-versa, that is not confounded by measure. In addition, by forcing observers to sort items into the same quasi-normal distribution, the PQS eliminates certain response biases, such as a tendency to provide extreme item ratings.

Reliability of the PQS prototype aggregated over seven judges was .90, and it correlated $r = .51$ ($p < .01$) with a CAQ narcissism prototype but only $r = .16$ (*ns*) with a CAQ hysteria prototype (Reise & Oliver, 1994). In a community sample ($N = 350$), Reise and Wink (1995) found that the PQS was positively associated with features

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of Cluster B personality disorders (e.g., antisocial, borderline), negligibly or negatively associated with features of other personality disorders, and negatively associated with scores on the California Psychological Inventory Socialization (So) Scale (Gough, 1994). Although the So scale is sometimes scored in reverse as a measure of psychopathy, most studies indicate that it is primarily an indicator of nonspecific behavioral deviance rather than the core affective and interpersonal traits of psychopathy (Harpur, Hare, & Hasktian, 1989). There is no further published evidence concerning the construct validity of the PQS.

Several recent studies have addressed the potential value of peer reports in the assessment of personality disorder (PD) features. Across studies, self-reported *DSM-IV* PD traits exhibit low-to-moderate correlations with peer-reported PD traits (median $r = .36$; Klonsky, Oltmanns, & Turkheimer, 2002). In addition, peer reports of PD features predict unique variance beyond self-reports for such outcomes as military job functioning, active duty status (Fiedler, Oltmanns, & Turkheimer, 2002), interpersonal problems (Clifton, Turkheimer, & Oltmanns, 2004), and long-term global adaptive functioning (Klein, 2003). Recent findings also have revealed that peer reports exhibit significant incremental validity beyond self-reports in predicting expert-rated, five factor model, antisocial personality disorder prototype scores ($\Delta R^2 = .12$; Miller, Pilkonis, & Morse, 2004). Nevertheless, there are scant data concerning the construct validity of peer reports in the assessment of psychopathy (cf. Cale & Lilienfeld, 2002).

In a recent study using taxometric analyses to examine the latent structure of the self-report Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996), Marcus, John, and Edens (2004) found that psychopathy appears to be underpinned by a dimension (i.e., continuum) rather than a taxon, namely, a category existing in nature (see Edens, Marcus, Lilienfeld, & Poythress, 2006, for similar findings using the Psychopathy Checklist–Revised [Hare, 2003], a semi-structured interview measure of psychopathy). These findings raise the possibility that psychopathic traits can profitably be studied in nonclinical (e.g., student) samples. Moreover, an emerging body of research demonstrates that self-report and interview-based measures of psychopathy possess adequate construct validity in nonclinical samples (Lilienfeld & Andrews, 1996; see Lilienfeld, 1998, for a review).

The primary goal of this project is to provide further information concerning the construct validity of the PQS by examining its convergent and discriminant relations with self and peer measures of psychopathy, self-reported antisocial behavior, and global distress in an undergraduate sample.

METHOD

Participants

The sample of target participants ($N = 65$, 75% women) was drawn from the undergraduate psychology research pool at a midsize private university in the Southeast. Their ages ranged from 18 to 26, with a mean of 18.9 ($SD = 1.4$). Participants were 76.6% Caucasian, 7.8% African American, 10.9% Asian, and 4.7 % other ethnicities.

A total of $N = 60$ (68% women) peers nominated by target subjects participated. For 21 target participants, 2 peers completed the task while 1 peer participated for 18 others. Peers ranged in age from 18 to 22, with a mean of 19.3 ($SD = 1.4$), and were 60% Caucasian, 3% African American, 15% Asian, and 15% other ethnicities. Peers' length of acquaintance with target participants ranged from less than a month to 13 years, with a mean of 1.3 years and a median of 9.6 months ($SD = .79$).

Measures and Procedure

Target participants first completed a card-sorting task consisting of 100 descriptive statements about personality (the CAQ; Block, 1961) sorted into a forced quasi-normal distribution of nine categories, from *most uncharacteristic* to *most characteristic*. Although the CAQ contains some items that are psychodynamically oriented, it can be comfortably used by raters of any theoretical orientation. Next, they were administered (a) two self-report psychopathy measures, the short form of the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996; see Lilienfeld & Hess, 2001, for psychometric information regarding the PPI short form), which yields both a global score and scores on eight subscales (e.g., Social Potency, Coldheartedness, Fearlessness) and the Levenson Primary and Secondary Psychopathy Scales (LPSP; Levenson, Kiehl, & Fitzpatrick, 1995); (b) a measure of antisocial personality disorder (ASPD) symptoms, the Personality Diagnostic Questionnaire-4+ ASPD scale (PDQ-4+ ASPD; Hyler & Rieder, 1994); and (c) a measure of global distress, the Negative Emotionality-30 (NEM-30; Waller, Tellegen, McDonald, & Lykken, 1996; see Table 1 for *M*s and *SD*s of all measures within this sample). The mean scores and standard deviations in this sample closely resemble those found in college samples in prior research. For example, Lilienfeld and Hess (2001) found comparable estimates for LPSP scores, 28.72 (7.18), primary psychopathy, 20.34 (4.27), secondary psychopathy; PPI total scores, 118.99 (16.32); PPI 1 and 2, 78.08 (13.44), 40.71 (7.97); and NEM-30 total scores, 10.71 (5.46). We administered the NEM-30 to provide a discriminant validity target for the PQS because we

TABLE 1
Means and Standard Deviations of Scales and Subscales

Measure	M	SD
Levenson primary and secondary psychopathy total	48.34	10.50
Levenson primary psychopthy	28.35	7.78
Levenson secondary psychopathy	19.98	4.28
Psychopathic Personality Inventory (PPI) total	122.78	14.51
PPI Machiavellian egocentricity	14.64	3.76
PPI Social potency	19.48	4.34
PPI Coldheartedness	13.00	3.17
PPI Carefree nonplanfulness	13.35	2.66
PPI Fearlessness	15.83	4.65
PPI Blame externalization	12.59	4.48
PPI Impulsive nonconformity	15.06	4.15
PPI Social introversion	18.92	3.42
Negative emotionality total	9.05	4.79
Antisocial behavior total (PDQ-4+ ASPD)	1.92	2.04
Peer Q-correlation aggregated	–0.14	0.15
Self Q-correlation	–0.19	0.15

NOTE: PDQ-4+ ASPD = Personality Diagnostic Questionnaire, Antisocial Personality Disorder scale.

wanted to exclude the hypothesis that this instrument is merely a measure of generalized emotional maladjustment. All of these measures have been found to possess good reliability and construct validity in previous studies.

Peers were instructed to complete the CAQ by describing the target participant by whom they were nominated. In cases in which two peers completed the CAQ, their PQS scores were averaged.

In the analyses reported here, the target and peer Q-sorts derived from the CAQ were correlated with the PQS prototype, and these correlations (i.e., Q-correlations) were themselves used in correlational analyses.

RESULTS

We first computed correlations between the PQS and other measures separately in men and women. Because these correlations were extremely similar, we present only combined analyses here. The correlation between peer and self Q-correlations was moderate and statistically significant (r = .32).[1] Mean peer and self Q-correlations (r = –.14, r = –.19) did not differ significantly (z = .24, p = .80). Self Q-correlations correlated moderately and significantly with LPSP primary, secondary, and total psychopathy scores; PPI total scores; and several PPI subscales (viz., Machiavellian Egocentricity, Social Potency, Coldheartedness, Fearlessness, Impulsive Nonconformity, and Stress Immunity; see Table 2). Self Q-correlations correlated moderately and significantly with self-reported ASPD symptoms but were virtually uncorrelated with the NEM-30.

Peer Q-correlations correlated significantly and moderately with PPI total scores, PPI Fearlessness, and self-reported ASPD symptoms. In contrast, the correlations with the LPSP scales and the other PPI subscales were nonsignificant. Peer Q-correlations also correlated nonsignificantly with the NEM-30.

DISCUSSION

The results of this study offer preliminary but generally promising support for the convergent and discriminant validity of the PQS as completed by both target participants and observers. These results suggest that the PQS, although derived from items intended for clinical raters, can be used validly by lay observers. Self and peer Q-correlations correlated significantly with the PPI total score and antisocial behavior self-ratings, and were negligibly correlated with a measure of negative emotionality. These findings contribute to a small but emerging body of evidence (e.g., Reise & Oliver, 1994; Reise & Wink, 1995) that the PQS is a construct valid measure and are the first to demonstrate its convergence with well-validated psychopathy measures. In addition, our findings provide evidence for the PQS's discriminant validity by demonstrating its independence from global distress.

Our study was marked by two major methodological limitations. First, statistical power was limited due to a lower than anticipated peer response rate. Second, most peers have been acquainted with target subjects for less than a year. Self- and peer ratings tend to correlate more highly in older samples, possibly due to length of acquaintance (Klonsky et al., 2002). Nevertheless, subsidiary moderator analyses not reported here revealed no significant associations between observers' length of acquaintance with participants and self-peer correlations.

TABLE 2
Correlations Among Self PQS Scores, Peer PQS Scores, Self-Report Measures of Psychopathy, Antisocial Behavior, and Negative Emotionality

Measure	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
1. Self PQS	—															
2. Peer PQS	.32*	—														
3. Levenson total	.57*	.27	—													
4. LPPS	.55*	.25	.93*	—												
5. LSPS	.42*	.22	.76*	.47*	—											
6. PPI total	.67*	.38*	.42*	.35*	.40*	—										
7. PPI ME	.48*	.22	.75*	.74*	.50*	.53*	—									
8. PPI SP	.31*	.13	–.25*	–.21	–.23	.30*	–.14	—								
9. PPI COLD	.38*	.16	.29*	.32*	.14	.40*	.17	–.06	—							
10. PPI CN	.17	.24	.52*	.40*	.57*	.34*	.37*	.34*	.19	—						
11. PPI FEAR	.31*	.38*	.13	.11	.13	.68*	.36*	.11	.05	.18	—					
12. PPI BE	.12	–.05	.14	–.01	.37*	.37*	.08	–.06	.08	.05	–.06	—				
13. PPI IN	.44*	.26	.26*	.17	.32*	.74*	.30*	–.02	.22	.20	.62*	.29*	—			
14. PPI SI	.31*	.14	–.11	–.02	–.23	.39*	–.06	.39*	.10	–.09	.19	–.13	.10	—		
15. NEM-30	.05	–.15	.36*	.21	.49*	.09	.34*	–.30*	.06	.06	–.05	.43*	.25	–.46*	—	
16. PDQ-4+ ASPD	.50*	.36*	.43*	.36*	.41*	.53*	.45*	.02	.07	.38*	.47*	.22	.34*	.04	.18	—

NOTE: Self PQS = Self Q-correlations with psychopathy prototype; Peer PQS = Aggregated peer Q-correlations with psychopathy prototype; LPPS = Levenson primary psychopathy scale; LSPS = Levenson secondary psychopathy scale; PPI Tot = Psychopathic Personality Inventory total score; PPI ME = PPI Machiavellian Egocentricity; PPI SP = PPI Social Potency; PPI COLD = PPI Coldheartedness; PPI CN = PPI Carefree Nonplanfulness; PPI FEAR = PPI Fearlessness; PPI BE = PPI Blame Externalization; PPI IN = PPI Impulsive Nonconformity; PPI SI = PPI Stress Immunity; NEM-30 = Negative Emotionality-30; PDQ-4+ ASPD = Personality Diagnostic Questionnaire, Antisocial Personality Disorder scale. Internal consistency estimates (Cronbach's αs) are on the diagonal. *N*s = 65 (target participants) and 60 (aggregated peer scores).
*$p \leq .05$.

Although our findings provide preliminary support for the construct validity of the PQS with self- and peer reporters, further research employing a larger sample is needed. Low power was a significant limitation in this study: With an *N* of 65 target subjects, correlations less than $r = .25$ could not be detected as significant, and with only $N = 60$ peer reporters, correlations less than $r = .40$ could not be detected as significant. In addition, it will be important to determine whether these findings generalize to samples presumably marked by higher levels of psychopathic traits, including prison and substance abuse samples. Finally, data from participants who are better acquainted with their peers could reveal important pockets of incremental validity of observer reports beyond self-reports.

Although not presented here, we conducted subsidiary multiple regression analyses to examine possible areas of incremental validity of peer reports beyond self-reports. Such analyses are particularly stringent because they do not confound mode of assessment (i.e., self vs. other) with measure. These results provided suggestive (i.e., marginally significant at $p = .05$) evidence for the incremental validity of observer reports beyond self-reports for only one measure, namely, PPI Fearlessness, but these largely negative findings are difficult to interpret in light of the low statistical power of our investigation. Future research efforts should focus on the examination of incremental validity of peer and self-reports of psychopathy beyond one another in larger samples as well as on the selection of new criterion variables (e.g., laboratory measures of passive avoidance; see Hiatt & Newman, 2006), preferably those free of the method variance limitations imposed by reliance on self-reports.

NOTE

1. Peer Q-correlations correlated at $r = .20$ (*ns*, $N = 21$). The small sample must be borne in mind when interpreting this correlation because correlations less than $r = .50$ cannot be detected as significant with a sample of this size.

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