The validity of the Personality Diagnostic Questionnaire-Revised (PDQ-R) was examined. The PDQ-R and the Crowne-Marlowe Social Desirability Scale (SD) were administered in the spring of 1989 to 45 undergraduates (26 females and 19 males) at Gettysburg College in Pennsylvania. One month later, the Hopkins Symptom Check List (SCL-90) was administered. Results support the validity of the PDQ-R in that 11 PDQ-R scales predicted subsequent SCL-90 scores. Results also indicate that PDQ-R validity may be problematic: four PDQ-R scales failed to predict subsequent psychopathology scores consistently, and several PDQ-R scales were correlated with either the SD or PDQ-R validity scales. One table displays correlations between the PDQ-R and the SCL-90.

(Author/SLD)
Psychometric Properties of the Personality Diagnostic Questionnaire-Revised

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Abstract

This research examined the validity of the Personality Diagnostic Questionnaire-Revised (PDQ-R; Hyler et al., 1988). The PDQ-R and Crowne-Marlowe Social Desirability Scale (SD; Crowne & Marlowe, 1964) were administered at time 1, and the Hopkins Symptom Check List (SCL-90; Derogatis, Lipman & Covi, 1973) was administered one month later. Results indicated support for the validity of the PDQ-R, in that eleven PDQ-R scales predicted subsequent SCL-90 scores. However, results also indicated that PDQ-R validity may be problematic, in that four PDQ-R scales failed to consistently predict subsequent psychopathology scores and several PDQ-R scales were correlated with either the SD or PDQ-R validity scales.
Because Axis II disorders are associated with several forms of Axis I psychopathology (e.g., major depression, substance use disorders; Millon, 1981), and with increased risk for suicide and other forms of self-destructive behavior (Bornstein, Klein, Mallon & Slater, 1988), early identification of individuals manifesting clinically significant Axis II disorders is of considerable interest to the clinician. In recent years, several measures of specific Axis II disorders have been developed (e.g., The Schedule for Schizotypal Personalities; Baron, Asnis & Gruen, 1981). The purpose of this paper is to assess the construct validity of a relatively brief, comprehensive measure of Axis II disorders: The Personality Diagnostic Questionnaire-Revised (PDQ-R; Hyler, Reider, Williams, Spitzer, Hendler & Lyons, 1988).

Preliminary information regarding the construct validity of the PDQ-R was provided by Hyler et al. (1988), who investigated the relationship of PDQ-R scores to clinicians’ diagnoses in a large clinical sample. More recently, Hyler, Reider, Williams, Spitzer, Lyons & Hendler (1989) assessed the discriminant validity of the PDQ-R in members of a clinical population. However, no studies have assessed the relationship of PDQ-R scores to other psychopathology measures, or to measures of response set. In this study, we assessed the relationship of PDQ-R scores to: (1) Scores on the SCL-90, a self-report measure of Axis I psychopathology (Derogatis, Lipman & Covi, 1973); and (2) Scores on the Crowne-Marlowe (1964) Social Desirability (SD) scale, to further assess the construct validity of the PDQ-R as a measure of Axis II disorders.

Specifically, the present research addressed the following questions: (1) Do individual PDQ-R personality disorder scale scores and/or composite PDQ-R personality disorder scores predict subsequent psychopathology scores one month later?; (2) Do the individual PDQ-R personality disorder scales demonstrate adequate discriminant validity?; and (3) Are the validities of the PDQ-R scales threatened by the
tendencies of some individuals to answer questionnaires in a socially desirable or otherwise questionable manner?

Method

Subjects

Forty-five Gettysburg College undergraduate students (26 females and 19 males) participated in this study.

Measures

Personality disorders were measured with the Personality Diagnostic Questionnaire-Revised (PDQ-R; Hyler et al., 1988), a 163-item true/false questionnaire that assesses overall level of personality disorder, in addition to yielding specific measures of: (1) The eleven axis II personality disorders that are specified in the Diagnostic and Statistical Manual of Mental Disorders, Revised (DSM-III-R; APA, 1987); and (2) Two additional hypothesized personality disorders (i.e. "self-defeating" and "sadistic" personality disorders). 151 of the PDQ-R items comprise the 13 personality disorder scales. The PDQ-R also includes an overall impairment/distress scale and two validity scales: The "too good" (TG) and "suspect questionnaire" (SQ) scales.

Psychopathology was measured with the Hopkins Symptom Check List (SCL-90; Derogatis et al., 1973; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). The tendency of individuals to answer questionnaires in a socially desirable manner was measured with the Crowne-Marlowe Social Desirability Scale (SD; Crowne & Marlowe, 1964).
Procedure

Questionnaires were completed by subjects in two group testing sessions, separated by a one month interval, that were conducted in spring, 1989. The PDQ-R and SD were administered at time 1, while the SCL-90 was administered at time 2.

Results

Relationships between PDQ-R scores and Axis I psychopathology scores

As Table 1 indicates, the PDQ-R personality disorder scales varied substantially in the extent to which they predicted subsequent psychopathology scores. For example, the passive-aggressive personality disorder scale predicted scores on all eleven SCL-90 psychopathology scales, and both composite psychopathology measures. In contrast, the schizoid personality disorder scale was unrelated to scores on all psychopathology measures. Ten personality disorder scales predicted scores on at least three psychopathology scales, as well as on both composite psychopathology measures. The PDQ-R index of overall personality disorder predicted scores on all SCL-90 psychopathology measures. The PDQ-R impairment/dysfunction scale predicted subsequent scores on only one of the two composite psychopathology scales, and this scale was correlated with scores on only three individual psychopathology scales.

Interrelationships among PDQ-R subscales

The thirteen PDQ-R personality disorder scales varied substantially in the degrees to which they were intercorrelated. On one extreme, the schizoid personality
disorder scale was only significantly correlated with one other personality disorder
scale, whereas, on the other extreme, the narcissistic and self-defeating personality
disorder scales were significantly correlated with nine other personality disorder
scales. Correlation coefficients varied in magnitude from .00 to .44. Thus, in no case
did any two of these scales share more than 20% of their variances in common.

**Relationship of PDQ-R scores to social desirability and response set**

Six PDQ-R personality disorder scales were significantly correlated with SD
scores. Two PDQ-R personality disorder scales were significantly correlated with PDQ-
R TG scale scores, and five PDQ-R personality disorder scales were significantly
 correlated with PDQ-R SQ scale scores. Thus, 13 of the 39 correlation coefficients
between PDQ-R personality disorder scales and the three validity scales used in the
present research were statistically significant. However, these statistically significant
correlations were all in the low or low-moderate ranges, and never accounted for more
than 16% of the variance in any personality disorder scale score.

**Discussion**

Several important findings emerged from the present research. First, ten PDQ-R
personality disorder scales predicted subsequent scores on both composite
psychopathology scales and on at least three specific psychopathology scales obtained
on the SCL-90 after one month. The PDQ-R composite measure of overall personality
disorder predicted subsequent scores on all psychopathology scales. The present results
therefore provide support for the construct validity of the PDQ-R, since the construct of
"personality disorder" refers to a condition that predisposes individuals to the onset of psychopathology (APA, 1987).

Second, the intercorrelation of PDQ-R personality disorder scales varied from .00 to .44. In no case did any two of these scales share more than 20% of their variances in common. However, because 52% of the intercorrelations obtained between the PDQ-R scales were significant, the present findings appear to indicate that the discriminant validity of the PDQ-R personality disorder scales may be problematic.

Third, several personality disorder scales were significantly correlated with either the Crowne-Mariowe Social SD scale or the PDQ-R TG or SQ scales, indicating that the tendency of individuals to answer questionnaires in a socially desirable or otherwise suspect manner might present a problem for the PDQ-R. Nevertheless, all of these correlations were relatively low in magnitude, never accounting for more than 16% of the variance in any personality disorder scale. Individuals using the PDQ-R should interpret scale scores carefully within the context of an individual's scores on the TG and SQ scales. PDQ-R scores for individuals scoring highly on these indexes should be scrutinized and interpreted with caution.

While the present findings provide support for the construct validity of the PDQ-R, some caveats should be noted. First, four PDQ-R scales—the schizoid, paranoid, and antisocial personality disorder scales and the impairment/dysfunction scale—failed to predict subsequent scores on either of the composite psychopathology scales, and also failed to predict subsequent psychopathology scores on more than three SCL-90 scales. Second, some unexpected correlations were obtained between the personality disorder scales and the psychopathology scales. Several outstanding illustrations are particularly noteworthy: (1) The SCL-90 psychoticism scale was significantly correlated with 10 different personality disorder scales; (2) The SCL-90 paranoia scale
was significantly correlated with 9 different personality disorder scales; (3) The PDQ-R paranoid personality disorder scale failed to predict subsequent scores on the SCL-90 paranoia scale; and (4) The PDQ-R histrionic personality disorder scale predicted subsequent scores on the SCL-90 obsessive-compulsive scale. Such findings appear to indicate that the predictive and discriminant validity of the PDQ-R may be somewhat limited. However, in response to both of the above caveats, it should be noted that the present findings are not definitive, particularly in view of the fact that the present research was conducted with a nonclinical sample of undergraduate students. Further research with clinical samples will be needed in order both to ascertain whether or not all of the PDQ-R scales are valid, and to ascertain the degree to which the thirteen personality disorder scales are specific predictors of particular forms of psychopathology, as opposed to being generalized predictors of all forms of psychopathology.
References


Table 1

Correlations between PDQ-R scales, measured at time 1 and the SCL-90, measured at time 2.

|                         | pdq-r personality disorder subscales: |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|-------------------------|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                         | sch | sty | par | avd | dptn | obc | pag | std | his | nrc | brd | anti | sdc | pdqtot | im/dys |
| SCL-90 scales:          |     |     |     |     |      |     |     |     |     |     |     |      |     |         |         |
| somatization            | .01 | .36** | -.11 | .04 | .24 | .09 | .34* | .29* | .33* | .40** | .44** | .50*** | .44** | .54*** | .28 |
| obs.-comp.              | -.03 | .30* | .20 | .30* | .37** | .47** | .32* | .25* | .47** | .38** | .17 | .05 | .18 | .46** | .11 |
| inter-sens.             | .00 | .44** | .36** | .54*** | .67*** | .37*** | .31* | .39** | .34* | .50*** | .23 | -.09 | .09 | .54*** | .23 |
| depression              | .20 | .31 | .20 | .35** | .46** | .48*** | .39** | .48*** | .45** | .36** | .33* | .13 | .16 | .59*** | .15 |
| anxiety                 | .09 | .34* | .24 | .33* | .32* | .50*** | .36** | .43** | .54*** | .37** | .28* | .20 | .20 | .58*** | .08 |
| hostility               | .03 | .28* | .19 | .20 | .29* | .33* | .34* | .13 | .60*** | .47** | .37** | .19 | .39** | .56*** | .04 |
| phobia                  | .24 | .22 | .26* | .31* | .35** | .33* | .47*** | .44** | .30* | .25* | .26* | .23 | .06 | .48*** | .02 |
| paranoia                | .18 | .28* | .23 | .27* | .33* | .48*** | .54*** | .47** | .41** | .47*** | .36** | .12 | .23 | .65*** | .32* |
| psychotism              | .11 | .30* | .14 | .25* | .36** | .43** | .50*** | .53*** | .34* | .35** | .42** | .33* | .10 | .61*** | .34* |
| eating disorder         | .06 | .05 | .03 | .03 | .10 | .43** | .25* | .11 | .13 | .20 | .21 | -.04 | .10 | .27* | .00 |
| sleep disorder          | .05 | .26* | .14 | .03 | .34* | .09 | .48** | .13 | .23 | .30* | .34* | .26* | .50*** | .49*** | .17 |
| GSI                     | .10 | .37** | .23 | .35** | .45** | .47** | .46** | .44** | .53*** | .49*** | .38* | .21 | .25* | .67*** | .20 |
| PST                     | .01 | .43** | .16 | .31* | .44** | .45** | .46** | .44** | .48*** | .55*** | .38* | .10 | .26* | .64*** | .25* |

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

GSI = general symptom index; PST = positive symptom total; sch=schizoid personality disorder; sty=schizotypal personality disorder; par=paranoid personality disorder; avd=avoidant personality disorder; dep=dependent personality disorder; obc=obsessive-compulsive personality disorder; pag=passive-aggressive personality disorder; sfd=self-defeating personality disorder; his=histrionic personality disorder; nrc=narcissistic personality disorder; brd=borderline personality disorder; anti=antisocial personality disorder; sdc=sadistic personality disorder; pdqtot=composite measure of overall personality disorder; im/dys=impairment/dysfunction scale