

The Personality Beliefs Questionnaire-Short-Form: Relationship of Personality Disorders Schemata with Entitlement and Dysfunctional Thoughts

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Abstract The Personality Beliefs Questionnaire-Short Form (PBQ-SF), designed to assess dysfunctional beliefs based on Beck et al.'s (1990) cognitive formulations of personality disorders, has received little attention in research. The present study assessed the construct validity of the PBQ-SF by exploring its relations with conceptually relevant scales—the Psychological Entitlement Scale and the Warpy Thoughts Entitlement, Relationship, and Achievement subscales. Participants were 228 college students. Analyses using ipsatized scores indicated that dysfunctional entitlement beliefs were highly characteristic of individuals who endorsed antisocial and narcissistic beliefs, but minimally characteristic of individuals endorsing dependent beliefs. Dysfunctional relationship beliefs were least characteristic of individuals who endorsed narcissistic and schizoid beliefs, but most characteristic of those who endorsed borderline beliefs. Dysfunctional achievement schemata were most characteristic of individuals who endorsed obsessive-compulsive beliefs. Consistent with Butler et al.'s findings, our results support the convergent validity of PBQ-SF average score as a measure of general dysfunctional beliefs.

Keywords Personality disorders · Entitlement · Narcissism · Dysfunctional thinking

Beck et al. (1990) conceptualized the various Axis II disorders in terms of dysfunctional cognitive schemas (beliefs, rules, assumptions, & strategies), making it possible to treat personality disorders using cognitive therapy. The proposed schemas eventually became the basis of their Personality Beliefs Questionnaire with 126 items (PBQ, Beck and Beck 1991; see also Beck et al. 2001). Butler et al. (2007) created a short form

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PBQ-SF with 65 items to assess the dysfunctional thinking patterns associated with the following 9 personality disorders: Avoidant, Dependent, Passive-Aggressive, Obsessive Compulsive, Antisocial, Narcissistic, Histrionic, Schizoid, and Paranoid. Later, Butler, Brown, Beck, and Grisham (2002; see also Bhar et al. 2008) identified a set of 7 items (1 Avoidant scale item, 4 Dependent scale items, and 2 Paranoid scale items) to assess beliefs associated with Borderline Personality Disorder. Surprisingly, despite its potential use in cognitive therapy, there have been very few studies on evaluating the psychometric characteristics of the PBQ or the PBQ-SF. Thus, the present study was designed to extend previous work on the validity of the PBQ-SF.

Studies with both college students (Trull et al. 1993) and psychiatric patients (Beck et al. 2001) reported acceptable internal consistency and test-retest reliability for the PBQ scales. However, Trull, et al. reported weak convergent and discriminant validity for the PBQ with college students, whereas Beck et al. reported that the beliefs endorsed by patients with Avoidant, Dependent, Obsessive-compulsive, Narcissistic, and Paranoid Personality Disorders were consistent with their schematic characterizations. However, the validity of the scales for Histrionic, Antisocial, and Schizoid, and Schizotypal diagnoses could not be ascertained because of their inadequate numbers in the sample. However, noting the “moderate to strong” inter-correlations among the 9 subscales, Beck et al. observed: “Some of the belief sets may not be as conceptually distinct as proposed by cognitive theory. Alternatively, some shared variance between the belief sets may be due to a *general distress* factor” (p. 1222; Italics in original).

Butler et al. (2007) reported Cronbach α reliability values between .79 and .91 for the 9 subscales for the PBQ-SF (i.e., excluding the Borderline Personality Disorder subscale) in a sample of 920 psychiatric patients. As was expected, patients scored higher on those subscales containing schemata consistent with their diagnoses, more so than patients on an alternative or no personality disorder diagnosis. In a second study, they found not only a large number of significant correlations among the PBQ-SF subscales, but also between them and several other scales: the Beck’s Depression Inventory-II, Beck’s Anxiety Scale, Dysfunctional Attitude Scale, Rosenberg Self-Esteem, Perceived Social Support Scale, Progress Evaluation Scale (a measure of psychosocial functioning), and Neuroticism Scale of the NEO Five Factor Inventory. Consequently, they concluded, as it had been earlier by Beck et al. (2001), that the “PBQ-SF scales are assessing a general distress factor” (p. 366).

To control for the general distress factor, Butler et al. (2007) computed ipsative scores (obtained by subtracting the mean of the 9 subscales from the individual subscale scores) and re-computed the correlations and found that the number of significant correlations reduced dramatically and the direction of correlations reversed for a number of cases, particularly for Antisocial and Narcissistic subscales. Thus, the ipsatized scores yielded a pattern of correlations consistent with the theoretical characterizations of personality disorders. The Avoidant, Dependent, and Obsessive-Compulsive subscales (the ‘anxious-fearful’ cluster) correlated positively with measures of anxiety, and depression or depression proneness, whereas the Antisocial and Narcissistic subscales (externalizing and self-aggrandizing individuals) had significant negative correlations with the same variables. Furthermore, since the untransformed PBQ-SF subscale scores correlated significantly with Neuroticism scores and none of the ipsative scores did, they suggested that higher overall scores maybe “associated with a general distress factor” and the ipsatized scores “associated with disorder specific factors” (p. 368).

While the term “distress” may be appropriate for most personality disorders, it may not be applicable to the individuals with Narcissistic and Antisocial Beliefs, given that most PBQ items are not measures of distress or suffering, rather they are measures of particular cognitive beliefs. Thus, perhaps the terms “general dysfunctional beliefs” may be more appropriate for the total PBQ-Score and “disorder specific dysfunctional beliefs” for the PBQ subscale scores.

The Present Study

The PBQ-SF is a unique instrument that might have clinical utility, but there have been few published studies assessing it. This study was undertaken to extend extant work on the construct validity of the PBQ-SF by examining its correlation with other established measures of dysfunctional thinking about entitlement, relationships, and achievement. Sex differences in the validity of the PBQ-SF were also explored because men are more often diagnosed with Paranoid, Schizoid, Schizotypal, Antisocial, Narcissistic, and Obsessive-Compulsive Personality Disorders, and women are more often diagnosed with Borderline, Dependent, and Histrionic Personality Disorders (see Millon et al. 2000). However, it is to be noted that Butler et al. (2007) found no evidence of sex differences on the longer PBQ subscales but they did not examine sex differences on the PBQ-SF Total and the ipsative subscale scores.

Although inflated entitlement is commonly assumed to be characteristic of narcissistic personality, it has also been implicated in Antisocial and Paranoid Personality disorders. Histrionic personality disorder may also be associated with entitlement because of its attention seeking features (see Millon et al. 2000). Thus, it was expected that the PBQ-SF Narcissistic and Histrionic Personality subscales would be positively correlated with two entitlement belief scales—Psychological Entitlement Scale (Campbell et al. 2004) and the Warty Thoughts Scale (WTS; Parslow et al. 2006). The Borderline and Dependent Personality subscales were not expected to correlate with entitlement because individuals with these disorders probably have little concern for entitlement. The WTS scale has two other subscales WTS-Relationships and WTS-Achievement, which are also of interest to this study.

Given that individuals with Antisocial and Schizoid Personality disorders are characterized to have low sensitivity for criticisms and low approval needs in relationships, we expected the corresponding PBQ-SF subscales to correlate negatively with the WTS dysfunctional relationship beliefs subscale. According to Atlas and Them (2008), in the psychoanalytic literature, narcissism is characterized by feelings of confidence and security, yet fragility and insecurity. The empirical literature, on the other hand, suggests narcissism is characterized by feelings of grandiosity, arrogance, lack of empathy, entitlement, disregarding of others views, and low sensitivity to criticism. Atlas and Them differentiated between overt and covert narcissism. The overt types have high sense of superiority, grandiosity and recognition seeking, and, thus are less likely to be concerned about opinions of others. The covert types, on the other hand are more concerned about the ways in which they are not getting recognition or admiration, and, thus are more likely to be sensitive to criticisms. They found results consistent with their expectations that while overt narcissism had negative correlation with sensitivity to criticism, covert narcissism had positive correlation.

An examination of the PBQ items suggest that they mostly tap overt narcissism, that is “high sense of superiority”; thus, given Atlas and Them’s (2008) findings, we expected that the PBQ Narcissism subscale would correlate negatively with the Warpy Thoughts dysfunctional relationship scale reflecting little concern about what others think. It is also possible that Narcissism will correlate negatively with the dysfunctional relationship scale because narcissistic individuals do not see themselves as dysfunctional in relationships.

Individuals with Dependent, Histrionic, and Borderline Personality Disorders are characterized to be sensitive to criticisms and to have excessive approval and attention needs, we expected the corresponding PBQ-SF subscales to correlate positively with the WTS dysfunctional relationship beliefs subscale. Only the Obsessive-Compulsive subscale was expected to correlate positively with the WTS-Achievement subscale, given the diligent, conscientious, and perfectionistic nature of individuals with the Obsessive-Compulsive Personality Disorder (Millon et al. 2000).

Finally, the PBQ-SF Average score of 9 raw subscale scores, which Butler et al. (2007) identified as a general distress factor, was expected to correlate with the WTS-Total Score and its subscales inasmuch as they all measure aspects of dysfunctional thinking.

Method

Participants

West Chester University of Pennsylvania students ($n=228$, 139 females and 87 males, 2 unspecified; Age $M=19.67$, $SD=0.95$; 74 % White Americans, 18 % African Americans, and 8 % Asians, Hispanics/Latinos, and Native Americans) from various Introduction to Psychology classes participated in the study. Students received credit toward fulfilling their research requirement for their classes. Nevertheless, participation was voluntary and students were free to terminate without penalty at any time. Participants were tested in groups of 50–60 students.

Instruments

Personality Beliefs Questionnaire-Short Form (PBQ-SF Butler et al. 2007): The PBQ-SF (Butler et al. 2007) is a 65-item measure rated on 0–4 scale to measure dysfunctional thinking associated with the following nine personality disorders: Avoidant (e.g., “I should avoid unpleasant situations at all cost”); Dependent (e.g., “I am needy and weak”); Passive-Aggressive (e.g., “I have to resist the domination of authorities but at the same time maintain, their approval and acceptance”); Obsessive Compulsive (e.g., “If I don’t have systems, everything will fall apart”); Antisocial (e.g., “Force or cunning is the best way to get things done”); Narcissistic (e.g., “Only people as brilliant as I am understand me”); Histrionic (“I should be the center of attention”); Schizoid (e.g., “In many situations, I am better off to be left alone”); and Paranoid (e.g., “I have to be on guard at all times”). A score for Borderline Personality Disorder can be derived by combining certain items from several other scales, for example: “The worst possible thing would be to be abandoned” (Dependent Subscale) and “Other people should

recognize how special I am” (Narcissistic Subscale) (Butler et al. 2002; see also Bhar et al. 2008). Each scale consists of 7 items.

Ipsative PBQ-SF subscale scores (Butler et al. 2007) were used for analysis in this study and were derived by computing the average of nine PBQ subscales (excluding the Borderline subscale since it is composed of items from three other subscales) for each participant and subtracting the mean from each of the subscale scores. Higher scores on the subscales reflect greater endorsement of dysfunctional beliefs. Additionally, the PBQ-average score (average of nine PBQ-SF subscales raw scores) was used as an overall measure of dysfunctional beliefs.

In our study, the Cronbach α reliability for the scores were PBQ-SF Total score .95; Avoidant .62; Dependent .78, Passive Aggressive .74; Obsessive Compulsive .79; Antisocial .78; Narcissism .77; Histrionic .78; Schizoid .71; Paranoid .81; and, Borderline .81.

Psychological Entitlement Scale (PES Campbell, et al., 2007): The PES is a 7-item measure (e.g., “Great things should come to me”) rated on a 7-point scale (Strong Agreement to Strong Disagreement). Campbell et al. reported a reliability coefficient of .87 for PES with college students and documented its validity via several investigations. Their study showed that the PES scores were positively correlated with the Narcissism and Entitlement subscales of the Narcissistic Personality Inventory, negatively correlated with agreeableness and neuroticism (emotional stability), reports of deserving more salary than peers, taking more pieces of candy, and making competitive and selfish choices in a commons dilemma. In our study, the Cronbach α reliability for PES was .83. For convenience of data collection on scantron sheets, a 5-point scale was used in this study. Higher scores reflect higher self-reported need for entitlement.

Warpy Thoughts Scale (WTS Parslow et al. 2006). The WTS is a 20-item instrument rated on a 5-point scale (Strongly Disagree to Strongly Agree) to measure dysfunctional attitudes. Higher WTS-Total scores reflect greater warpy or dysfunctional thinking. Parslow et al. reported the WTS-Total score to correlate moderately with depressive ($r=.39$) and anxiety symptoms ($r=.40$), measured using scales by Goldberg, Bridges, Duncan-Jones, and Grayson (1988).

Based on factor analysis of 4545 participants, Parslow et al. reported three correlated factors (Relationships, Achievement, and Entitlement) and a higher order factor “Warpy Thoughts” (P. 113) with α coefficients of .94, .90, and .86, respectively. We refer to these first order factors as subscales with higher scores on each subscale indicating more dysfunctional attitudes. In our study the Cronbach α reliability values were WTS-Total .81; WTS-Relationship .77; WTS-Achievement and .57; WTS-Entitlement .58.

1. *Warpy Thoughts subscale-Relationships* (WTS-Relationships): The WTS-Relationships is a 10-item measured concerned with approval needs, love needs, sensitivity to criticisms, self-blame and feelings of inadequacy (e.g., “If people criticize me, I am not a worthwhile person,” “Other people’s approval is important to me.”

2. *Warpy Thoughts subscale- Achievement* (WTS-Achievement). The WTS-Achievement is 5-item measure concerning a high need to succeed and maintain high standards (e.g., “I can’t feel equal to others unless I’m really good at something,” “Without success in life, it is impossible to be happy.”)
3. *Warpy Thoughts Subscale-Entitlement* (WTS-Entitlement). The WTS-Entitlement is a 5-item measure concerning the need to have good things in life and expecting that people would oblige when needed (e.g., “I can only be happy if I have the good things in life,” “Things should always go right for me.”)

Results

Sex Differences: PBQ-SF

Table 1 summarizes the results on sex differences on the PBQ-SF average score and the ipsative subscale scores. The PBQ-SF average score was significantly higher for males than females ($F [1,215]=6.62, p=.011$, effect size $\eta^2=.03$).

Given that there were 10 subscales, a multivariate analysis of variance was first conducted followed by univariate analysis of variance to examine sex differences. Greer and Dunlap (1997) found that analysis of variance “worked quite well with ipsative data” preserving type 1 error and showing no differences in power compared with nonipsative data. The overall multivariate analysis of variance on the ipsative subscales scores of the 10 PBQ-SF subscales was significant (mult $F [9, 207]=2.54, p=.009$). Further univariate analysis of

Table 1 Sex Differences on PBQ-SF Ipsative Scores

PBQ-SF	Female <i>M</i> <i>n</i> =136	<i>SD</i>	Male <i>M</i> <i>n</i> =81	<i>SD</i>	<i>F</i>	<i>p</i>	η^2
PBQ-SF Av	9.27	3.66	10.58	3.57	6.62	.011	.030
AVO	0.73	2.59	0.13	3.19	2.24	.136	.010
DEP	-1.33	3.68	-3.27	4.00	13.23	.000*	.058
PAS	-0.36	2.89	0.68	2.78	6.74	.010	.030
OBS	1.27	3.85	0.75	3.77	0.95	.333	.004
ANT	-2.40	3.06	-1.34	3.30	5.79	.017	.026
NAR	-4.62	2.88	-3.44	3.09	8.15	.005*	.037
HIS	-1.60	3.34	-1.97	3.19	0.64	.425	.003
SCH	1.29	3.85	1.02	4.61	0.22	.643	.001
PAR	0.02	3.79	0.43	4.22	0.54	.462	.003
BOR	-2.21	3.49	-3.55	3.29	7.39	.007	.035

(Mult $F (9, 207)=2.54, p=.009$ for the 10 PBQ-SF variables; Levene’s test of homogeneity, not significant ($p>.05$ on all variables). Using Bonferroni $p=.005$ * showed significant sex differences. AVO=Avoidant; DEP=Dependent; PAS=Passive Aggressive; OBS=Obsessive-Compulsive; ANT=Antisocial; NAR=Narcissism; HIS=Histrionic; SCH=Schizoid; BOR=Borderline

variance tests showed significance (using Bonferroni $p=.005$ for an overall $\alpha=.05$) on the Dependent ($p=.000$, $\eta^2=.058$) and Narcissism subscales ($p=.005$; $\eta^2=.037$) and marginal significance on the Borderline subscale ($p=.007$; $\eta^2=.03$). The males scored higher on the Narcissism subscale, but lower on Dependent and Borderline subscales, than females.

Personality Disorders Schemata and Entitlement and Warty Thoughts

The PBQ-SF Average and ipsative subscale scores were correlated with the PES and WTS-Total scale and subscale scores separately for males and females. Since no significant sex differences were found (assuming Bonferroni $p=.001$, for an overall $\alpha=.055$ for 55 comparisons using Z test for independent correlations; Preacher 2002), only the correlations computed over all participants are shown in Table 2.

The correlations in Table 2 were evaluated at Bonferroni $p=.001$ level for an overall $\alpha=.055$ for 55 correlations. As expected, significant positive correlations were found between the PBF-SF Average scores and the PES and WTS-Total and subscale scores. Entitlement as measured by PES had a significant negative correlation with the Dependent subscale (-.26), but significant positive correlations with the Antisocial (.29) and Narcissism (.34) subscales. However, the WTS-Entitlement subscale had a significant positive correlation only with the Antisocial subscale (.22).

As expected, the WTS-Relationship subscale had a significant positive correlation with the Borderline (.23) subscale and negative significant correlations with the Narcissism (-.22), and Schizoid (-.22) subscales. The WTS-Achievement subscale

Table 2 Correlations between PBQ-SF Average and Subscale Ipsative Scores with PES and WTS-Total and Subscales ($n=219$)

PBQ-SF	PES		WTS ENT		WTS REL		WTS ACH		WTS Total	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
PBQ-SF Av	.42	.000	.41	.000	.38	.000	.33	.000	.48	.000
AVO	-.18	.008	-.09	.185	.05	.480	-.04	.532	-.01	.839
DEP	-.26	.000	-.10	.146	.20	.003	-.03	.709	.09	.207
PAS	.03	.664	.00	.971	-.13	.049	-.16	.015	-.14	.046
OBS	-.13	.064	-.13	.064	.11	.092	.22	.001	.10	.138
ANT	.29	.000	.22	.001	-.20	.003	-.04	.593	-.06	.348
NAR	.34	.000	.16	.016	-.22	.001	-.18	.007	-.14	.034
HIS	.05	.438	.15	.032	.21	.002	.08	.246	.21	.002
SCH	-.05	.488	-.14	.038	-.22	.001	-.09	.173	-.21	.001
PAR	-.01	.932	.01	.914	.14	.042	.16	.017	.14	.038
BOR	-.18	.007	-.10	.131	.23	.001	.05	.447	.13	.063

PBQ-SF Av=PBQ-SF Average; PES=Psychological Entitlement Scale; WTS ENT=Warty Thoughts Entitlement Scale; WTS REL=Warty Thoughts Relationship scale; WTS ACH=Warty Thoughts Achievement Scale, and WTS Total=Warty Thoughts Total score

had a significant positive correlation (.22) with the Obsessive-Compulsive subscale. The WTS-Total scale score had a significant negative correlation (−.21) with the Schizoid subscale score.

Discussion

Sex Differences on PBQ-SF scores and its Correlations With Other Instruments

Males reported higher level of overall dysfunctional thinking than females as reflected in their significantly ($p=.011$) higher PBQ-SF average scores. Although males scored higher ($p=.005$) on the Passive Aggressive and Narcissism subscales, the females scored higher on the Dependent and Borderline subscales. However these effect sizes were rather small (lower than .058 in all cases, see Sheskin 2004) to be considered useful for theoretical or clinical purposes. Sex differences in correlations between the ipsative PBQ-SF subscale scores and the PES and WTS scores were mostly not significant.

Personality Disorders Schemata and Entitlement and Warpy Thoughts

The results generally support the convergent validity of the PBQ-SF average or total score as a measure of general dysfunctional beliefs because it had positive significant correlations with the PES and WTS-Total scale and subscales scores. Furthermore, there was evidence for both convergent and discriminant validity for PBQ-SF subscale scores using ipsative scores, in this sample of college students. Dysfunctional entitlement schemata appear to be most characteristic of individuals who endorse antisocial and narcissistic beliefs, and least characteristic of individuals endorsing dependent beliefs. Dysfunctional relationship schemata appear to be least characteristic of individuals endorsing narcissistic and schizoid beliefs, but most characteristic of borderline beliefs; however, it is possible the negative correlation found between dysfunctional relationships beliefs and narcissistic and schizoid beliefs may reflect denial or lack of insight into their relationship difficulties. It is also possible those individuals prone to schizoid attitudes avoid relationships, and therefore, experience few problems with them. Dysfunctional achievement schemata appear to be most characteristic of individuals endorsing obsessive-compulsive beliefs.

Several limitations of the study are to be noted. First, the use of the college students and not clinical patients limits the external validity of the results. Second, the convergent validity of the PBQ-SF was based on correlations with other self-report instruments and not behavioral indices. Finally, the reliabilities of the PBQ-SF Avoidant subscale, WTS Achievement and Entitlement subscales were low, possibly limiting the magnitude of the obtained correlations coefficients with these subscales. It was interesting that the PBQ-Narcissism was significantly correlated with PES correlated ($r = .34, p = .000$), but only marginally so with WTS-Entitlement ($r = .16, p = .016$). This difference in the magnitude of r was possibly due to the low internal consistency reliability of the both the WTS-Entitlement (Cronbach $\alpha = .58$) and PBQ-Narcissism scales (Cronbach $\alpha = .77$). Correcting for reliability attenuation does increase the correlation between PBQ-Narcissism and WTS-Entitlement to .24, significant at $p = .000$ level, with $n = 217$. Furthermore, the correlation between PES and WTS-

Entitlement scales, although significant ($r = .33, p = .000$), was rather low for two instruments putatively measuring the same construct. An examination of the items in the two scales suggested some differences in item content. Two of the 5 WTS-Entitlement items included an affective component (e.g., “I can be only be happy if I have the good things in life”; Paslow, et al., 2006, p. 112); in contrast, none of the 9 PES items included affective words and 5 of the items included the word “deserve” or “deserving” (e.g., “I honestly feel I’m just more deserving than others”; Campbell, et al., 2004, p. 45). Thus, it seems that the two scales address slightly different aspects of entitlement with WTS including an affective component and PES measuring more specifically the “I deserve more” aspect.

Nevertheless, the PBQ-SF and the WTS have potential application in clinical work inasmuch as the endorsed items provide a basis for discussions concerning possible cognitive distortions in entitlement, relationship, and achievement issues with patients.

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References

- Atlas, G. D., & Them, M. A. (2008). Narcissism and sensitivity to criticism: A preliminary investigation. *Current Psychology, 27*, 62–76. doi:10.1007/s12144-008-9023-0.
- Beck, A. T., & Beck, J. S. (1991). *The personality belief questionnaire*. Bala Cynwyd: Unpublished assessment instrument. The Beck Institute for Cognitive Therapy and Research.
- Beck, A. T., Butler, A. C., Brown, G. K., Dahlsberg, K. K., Newman, C. F., & Beck, J. S. (2001). Dysfunctional beliefs discriminate personality disorders. *Behavior Research and Therapy, 39*, 1213–1225.
- Beck, A. T., Freeman, A., & Associates (1990). *Cognitive therapy of personality disorders*. New York: Guilford.
- Bhar, S. S., Brown, G. K., & Beck, A. T. (2008). Dysfunctional beliefs in psychopathology in borderline personality disorder. *Journal of Personality Disorders, 22*, 165–177.
- Butler, A. C., Beck, A. T., & Cohen, L. H. (2007). The Personality Belief Questionnaire-Short-Form: Development and preliminary findings. *Cognitive Therapy Research, 31*, 357–370.
- Butler, A. C., Brown, G. K., Beck, A. T., & Grisham, J. R. (2002). Assessment of dysfunctional beliefs in borderline personality disorder. *Behavior Research and Therapy, 40*, 1231–1240.
- Campbell, W. K., Bonacci, A. M., Shelton, J., Exline, J. J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment, 83*, 29–45.
- Goldberg, D. P., Bridges, K., Duncan-Jones, P., & Grayson D. (1988). Detecting anxiety and depression in general medical settings. *British Medical Journal, 297*, 897–899.
- Greer, T., & Dunlap, W. P. (1997). Analysis of variance with ipsative measures. *Psychological Methods, 2*, 200–207.
- Millon, T., Davis, R., Millon, C., Escovar, L., Meagher, S. (2000). *Personality disorders in modern life*. John Wiley.
- Paslow, R. A., Christensen, H., Griffiths, K. M., & Groves, C. (2006). The Warpy Thoughts Scale: A new instrument to measure dysfunctional attitudes. *Cognitive Behavior Therapy, 35*, 106–116.
- Preacher, K. J. (2002). Calculation for the test of the difference between two independent correlation coefficients [Statistics software]. Available from <http://www.quantpsy.org>
- Sheskin, D. J. (2004). *Parametric and non-parametric statistical procedures*. Boca Raton: Chapman & Hall/CRC.
- Trull, T., Goodwin, J., Schopp, A. H., Hillenbrand, L. H., & Schuster, T. L. (1993). Psychometric properties of a cognitive measure of personality disorders. *Journal of Personality Assessment, 61*, 536.