

Narcissistic personality disorder: relations with distress and functional impairment

Joshua D. Miller^{a,*}, W. Keith Campbell^a, Paul A. Pilkonis^b

^aUniversity of Georgia, Athens, GA 30602, USA

^bWestern Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, PA, USA

Abstract

This study examined the construct validity of narcissistic personality disorder (NPD) by examining the relations between NPD and measures of psychologic distress and functional impairment both concurrently and prospectively across 2 samples. In particular, the goal was to address whether NPD typically “meets” criterion C of the *DSM-IV* definition of Personality Disorder, which requires that the symptoms lead to clinically significant distress or impairment in functioning. Sample 1 ($n = 152$) was composed of individuals receiving psychiatric treatment, whereas sample 2 ($n = 151$) was composed of both psychiatric patients (46%) and individuals from the community. Narcissistic personality disorder was linked to ratings of depression, anxiety, and several measures of impairment both concurrently and at 6-month follow-up. However, the relations between NPD and psychologic distress were (a) small, especially in concurrent measurements, and (b) largely mediated by impaired functioning. Narcissistic personality disorder was most strongly related to causing pain and suffering to others, and this relationship was significant even when other Cluster B personality disorders were controlled. These findings suggest that NPD is a maladaptive personality style which primarily causes dysfunction and distress in interpersonal domains. The behavior of narcissistic individuals ultimately leads to problems and distress for the narcissistic individuals and for those with whom they interact.

© 2007 Elsevier Inc. All rights reserved.

1. Introduction

Narcissistic personality disorder (NPD), despite substantial interest from a theoretical perspective, has received very little empirical attention [1]. In fact, some have concluded that “most of the literature regarding patients suffering with NPD is based on clinical experience and theoretical formulations, rather than empirical evidence” [[2], p 303]. A large majority of empirical studies on narcissism come from a social-personality psychology perspective which, although methodologically sophisticated and important, may not pertain to NPD given the reliance on undergraduate samples and the use of the Narcissistic Personality Inventory (NPI) [3]. Trull and McCrae [4] have noted that narcissism measured by the NPI appears to be made up of high Extraversion, low Agreeableness, and low Neuroticism from the Five-Factor Model of personality [5], whereas *DSM* definitions suggest low Agreeableness, *high* Neuroticism, and *no* relation with Extraversion. These authors suggest

that “most narcissistic scales do not square well with *DSM-III-R* criteria for NAR” [[4], p 53]. The field must be cautious about relying on these studies to inform our knowledge of NPD. The few empirical studies of NPD that have used clinical samples and *DSM*-based measures have focused on the underlying factor structure and item content [6–8]. In particular, there is a striking lack of data regarding the impairment and distress associated with NPD. Central to the issue of validity for any *DSM* disorder is whether it is actually associated with distress or impairment—in fact criterion C for PD from *DSM-IV* [[9], p 689] mandates that one of the 2 be present to make a PD diagnosis. Although there is good evidence for the functional impairment of PDs in general [10,11], and certain specific PDs such as borderline [12], schizotypal, and avoidant [13], it is still quite unclear whether NPD predicts psychologic distress and problems in various life domains.

As noted, the association between NPD and psychologic distress is particularly unclear. The *DSM-IV* suggests that these individuals have a “very fragile” self-esteem (p 714), are “very sensitive to injury from criticism or defeat” (p 715), and that “sustained feelings of shame or humiliation. . . may be associated with social withdrawal” and “depressed mood”

* Corresponding author. Department of Psychology, University of Georgia, Athens, GA 30602, USA. Fax: +1 706 542 8048.

E-mail address: jdmiller@uga.edu (J.D. Miller).

(p 716). However, given the derivation of the *DSM* over time, these statements appear to be the result of expert opinion rather than empirical findings. Results from clinical samples are both sparse and contradictory. In fact, a meta-analysis of the relations between the FFM and *DSM* PDs found an effect size (ie, r) of only 0.03 between Narcissism and Neuroticism, which measures emotional stability and the tendency to experience negative affective states such as depression, anxiety, and shame [14]. However, this hides the substantial variability of the findings; of the 18 included effects, 5 were significantly positive, 7 were significantly negative, and 6 were nonsignificant. Within clinical samples, the effect size was 0.14 suggesting a small but significant relation to Neuroticism. There has also been some speculation that narcissism may be linked to higher rates of suicide [2], although the data are quite limited.

Alternatively, Watson et al [15] found significant *negative* relations between measures of narcissism (derived from the Minnesota Multiphasic Personality Inventory-2 [16]) and depression in 2 clinical samples. Studies on comorbidity between PDs and Axis I disorders have not found a relation between NPD and depression or anxiety-related disorders [17–20]. Furthermore, findings from the large nonpsychiatric literature on narcissism conducted from a social-personality perspective suggest a negative relation between narcissism and psychologic distress. Research using the Narcissism Personality Inventory has suggested that narcissistic individuals are psychologically resilient, relatively immune to psychopathology, and manifest primarily interpersonal impairment [21,22]. Indeed, a reading of the social personality might lead one to conclude that narcissism, as a result of being composed of high positive and low negative affect and high self-esteem, is an adaptive trait [23].

Where the clinical lore and social-personality data do converge is on the interpersonal impairment linked with narcissism. The *DSM-IV* postulates that “interpersonal relations are typically impaired due to problems derived from entitlement, the need for admiration, and the relative disregard for the sensitivities of others” (p 716). Empirical studies of narcissism in the social-personality literature find that it predicts a self-centered, selfish, and exploitative approach to interpersonal relationships, including game-

playing, infidelity, a lack of empathy, and even violence [24,25]. The negative consequences of narcissism are felt especially strongly by those who are involved with the narcissist [26]. How quickly this personality style manifests this interpersonal impairment is up for debate. There is some evidence that the interpersonal difficulties associated with narcissism are only apparent over time, with narcissism being associated with apparently positive interpersonal functioning during initial relationship stages [27,28]. However, other studies have found that individuals with unrealistically high positive self-evaluations are rated negatively by independent raters after a very brief competitive interaction with a peer [29]. Unfortunately, there are very few data on NPD and interpersonal impairment using clinical samples. There are data from therapeutic relationships where items from a measure of countertransference were rated by a sample of psychiatrists and psychologists for patients with NPD. The authors of this study found that “clinicians reported feeling anger, resentment, and dread in working with patients with NPD; feeling devalued and criticized by the patient; and finding themselves distracted, avoidant, and wishing to terminate the treatment” [[30], p 894]. These findings provide strong support for the interpersonal impairment these individuals experience as even trained clinicians experience strong negative feelings about these types of clients.

Given the relatively stronger evidence of a link between NPD and interpersonal impairment than between NPD and psychologic distress, it is plausible that NPD, at times, leads to clinically significant depression and/or anxiety, but these negative affective states are probably secondary to the interpersonal impairment. That is, NPD may lead individuals to experience failure in a number of important domains (eg, romance) that might lead to psychologic distress; however, this distress may not be endemic to NPD. This may differ from other PDs such as borderline in which negative affectivity appears to be an intrinsic part of the disorder.

The goals of the current study are as follows: (1) To assess the association between NPD and psychologic distress including depression and anxiety. (2) To assess the association between NPD and impairment, including indices of romantic, social, occupational, and general impairment, as well as the spillover effects of NPD on significant others.

Table 1

Axis I diagnoses-current	Sample 1		Sample 2	
	n	%	n	%
Affective disorders only	54	35.5	31	20.5
Anxiety disorders only	13	8.6	12	7.9
Substance abuse disorders only	6	3.9	7	4.6
Comorbid affective and anxiety disorders	31	20.4	19	12.6
Comorbid affective and substance abuse disorders	11	7.2	7	4.6
Comorbid anxiety and substance abuse disorders	3	2.0	1	0.7
Comorbid affective, anxiety, and substance abuse disorders	7	4.6	2	1.3
Other diagnoses (eg, eating disorders, somatoform disorders)	14	9.2	17	11.3
None (V codes or past diagnoses only)	13	8.6	55	36.4

Total n = 152 (sample 1) patients who received a “best estimate” consensus diagnosis at intake. Total n = 151 (sample 2) who received a “best estimate” consensus diagnosis at intake.

(3) To assess the predictive power of NPD in relation to psychologic distress and impairment over a 6-month period. (4) To test a model in which any positive link between narcissism and psychologic distress is accounted for by impairment. (5) To assess the unique predictive power of NPD in predicting psychopathology and impairment, when controlling for the other Cluster B personality disorders.

2. Method

2.1. Participants and procedures

2.1.1. Sample 1

Participants ($n = 152$) were solicited from inpatient and outpatient programs at Western Psychiatric Institute and Clinic in Pittsburgh, Penn. Patients with psychotic disorders, organic mental disorders, and mental retardation were excluded, as were patients with major medical illnesses that influence the central nervous system and might be associated with organic personality disturbance. Participants (in both samples) provided written informed consent after all study procedures had been explained. See [Table 1](#) for current Axis I diagnostic information.

Of the 152 individuals, 85 (56%) were women, 135 (89%) were whites, 16 (11%) were African Americans, and 1 (1%) was Asian American, 121 (80%) were outpatients, and the mean age was 34.5 years ($SD, 9.4$). Of the original sample, 105 (69%) were also assessed at a 6-month follow-up. Attrition analyses were conducted on the following 16 variables: age, sex, race, treatment condition, marital status, education, and symptom counts for the 10 *DSM III-R* PDs that remain in the *DSM-IV*. No significant differences were found.

2.1.2. Sample 2

This sample ($n = 151$) was composed of 70 psychiatric patients and 81 nonpsychiatric participants. The nonpsychiatric patients were recruited from 2 sources: diabetic patients ($n = 23$) or university faculty or staff ($n = 58$). This sample was part of a larger sample ($n = 624$) that was first screened for PDs. The larger sample was stratified on the basis of initial scores and individuals were randomly selected to participate in the interview portion of the study. The goal was to create a sample that had a 50% prevalence rate for PD. The psychiatric patients were solicited from an adult outpatient clinic at Western Psychiatric Institute and Clinic. The rule-outs used in sample 1 were also used in this study. See [Table 1](#) for Axis I information.

Of the 151 individuals, 103 (68%) were women, 131 (86.8%) were whites, 16 (10.6%) were African Americans, 4 (2.6%) were Asian Americans, and the mean age was 38.85 years (range, 20–60 years; $SD, 11.18$). Of the original sample, 126 (83%) were assessed at a 6-month follow-up. Attrition analyses were conducted on the following 16 variables: age, sex, race, treatment condition, marital status, education, and symptom counts for the 10 *DSM-IV* PDs. No significant differences were found.

2.2. Measures

2.2.1. Consensus ratings of *DSM-III-R* (sample 1) and *DSM-IV* (sample 2) personality disorder criteria

Complete details of the assessment methodology are provided elsewhere [11,31]. At intake, participants were interviewed for 6 to 10 hours in a minimum of 3 assessment sessions. The assessment sessions included structured symptom ratings, structured interviews for Axis I and Axis II disorders (eg, the SCID, the PDE, SIDP-III-R, or SIDP-IV), and a detailed social and developmental history. Patients also completed self-report questionnaires between interviews. After the evaluation, the primary interviewer presented the case at a 2-hour diagnostic conference with colleagues from the research team. All available data (historical and concurrent) were reviewed and discussed at the conference: current and lifetime Axis I information, symptomatic status, social and developmental history, and personality features acknowledged on the Axis II interviews. In addition, significant others (eg, romantic partners, family members, friends) were interviewed (when available) about patients' characteristic personality features. Each PD symptom was rated on a scale of 0 to 2. The symptom counts used are the addition of these scores across symptoms for each PD. In sample 1, we altered the NPD count by deleting one *DSM-III-R* symptom (ie, reacts to criticism with feelings of rage, shame, or humiliation) to approximate the current *DSM-IV* conceptualization of NPD.

2.2.2. PDQ-4+ (sample 2)

The PDQ-4+ [32] is 99-item self-report measure of *DSM-IV* PDs and was used in sample 2. The mean NPD symptom count was 1.98 ($SD, 1.61$).

2.2.3. Consensus ratings of impairment (samples 1 and 2)

Consensus ratings of functional impairment were made separately for romantic relationships, other social relationships (eg, friends, family members), occupational impairment, distressed caused to significant others (eg, romantic partners, parents, children, close friends), and an overall impairment. The ratings ranged from 1 to 5 with higher scores indicating greater impairment (eg, unable to work, no friends, no history of romantic relationships, or history of chaotic relationships). As with PD ratings, all ratings were made using the LEAD model. As such, all information gleaned from the extensive interviews with participants and significant others (when available) pertaining to Axis I and II symptomatology, as well as past and present social, romantic, and educational/occupational histories was used to determine consensus ratings of impairment.

2.2.4. Clinical ratings of depression, anxiety, and functioning (sample 1 and 2)

Ratings of psychologic distress were conducted with the Hamilton Rating Scale for Depression (HAM-D) and the Hamilton Rating Scale for Anxiety (HAM-A). Functioning

was assessed via the Global Assessment of Functioning (GAF). For both samples, intraclass correlation coefficients (ICCs), computed with all available reliability data, documented good to excellent levels of reliability within our own group of judges. The ICCs for the HAM-D were 0.96 (sample 1) and 0.98 (sample 2). The ICCs for the HAM-A were 0.97 (sample 1) and 0.94 (sample 2). The ICCs for the GAF were 0.75 (sample 1) and 0.80 (sample 2).

2.2.5. Six-month follow-up

The assessment procedures completed at intake were used again at the 6-month follow-up, with the exception of the social/developmental history, which is not repeated. As with intake, all sources of available data were used to inform consensus ratings (ie, ratings of impairment, GAF) via the LEAD model. The 6-month ratings of depression and anxiety (eg, HAM-D, HAM-A) were again based on the clinical interviewer’s ratings, not consensus.

2.3. Statistical analyses

First, Pearson’s *r*’s were used to examine the relations between narcissism and measures of anxiety, depression, and various forms of functional impairment both concurrently and longitudinally. Next, we examined a model in which the prospective relations between narcissism and measures of psychopathology are mediated by impairment. Finally, we used hierarchical linear regression analyses to examine the unique predictive relations between narcissism

at time 1 and distress and impairment measured at 6-month follow-up, after controlling for the effects of the other cluster B PDs. Two-tailed *P* values were computed in all analyses. The distributions of all variables were examined and none showed signs of a significant departure from normality using existing guidelines [33] (skewness >2.0 and/or kurtosis >7.0). As such, Pearson *r*’s are used.

3. Results

3.1. Capturing narcissism: concurrent and longitudinal relations

3.1.1. Sex differences

There were significant sex differences for narcissism in sample 1 [$t(150) = 4.14, P < .001$] and sample 2 [$t(149) = 1.98, P < .05$], such that men had higher NPD symptom counts. All correlations presented in Table 2 were tested separately for men and women; no significant differences were found.

3.1.2. Relations with psychologic distress and impairment: concurrent and longitudinal findings

Concurrently, narcissism was related to ratings of depression and anxiety only in sample 2 (see Table 2). Longitudinally, narcissism was related to time 2 depression in sample 2 and anxiety in both samples. The weighted effects sizes (taking into account the correlations from both

Table 2
Characterizing NPD: relations with Axis I psychopathology and impairment

	Mean	SD	NPD Symptoms— Sample 1 (<i>r</i>)	Mean	SD	NPD Symptoms— Sample 2 (<i>r</i>)	wr
<i>Distress/psychopathology (concurrent)</i>							
Depression (HAM-D)	14.4	7.9	0.05	10.93	7.5	0.18*	0.12*
Anxiety (HAM-A)	15.0	8.8	−0.01	11.85	8.2	0.24**	0.11*
<i>Distress/psychopathology (longitudinal)</i>							
Depression (HAM-D)	7.86	6.6	0.15	8.33	7.1	0.26**	0.21**
Anxiety (HAM-A)	8.55	7.5	0.20*	9.08	7.4	0.25**	0.23**
<i>Impairment (concurrent)</i>							
GAF scores	54.6	7.2	−0.12	61.73	11.5	−0.26**	−0.19**
Overall impairment	3.22	0.67	0.44**	2.71	0.83	0.34**	0.39**
Social	2.85	0.88	0.37**	2.77	0.88	0.16*	0.27**
Romantic	3.70	0.72	0.22**	3.14	0.91	0.23**	0.22**
Work	2.86	0.94	0.36**	2.36	0.98	0.27**	0.32**
Distress—in a significant other	3.01	0.67	0.42**	2.38	0.89	0.50**	0.46**
<i>Impairment (6 mo)</i>							
GAF scores	62.20	8.5	−0.20*	62.00	11.51	−0.30**	−0.26**
Overall impairment	3.24	0.71	0.43**	2.81	.85	0.35**	0.39**
Social	2.91	0.87	0.33**	2.85	.90	0.17*	0.24**
Romantic	3.63	0.84	0.27**	3.21	.88	0.24**	0.25**
Work	2.96	0.95	0.24*	2.48	.99	0.31**	0.28**
Distress—in a significant other	3.03	0.80	0.42**	2.51	.94	0.52**	0.48**

wr indicates weighted mean effect size.

* *P* ≤ .05.

** *P* ≤ .01.

samples and weighting them on the basis of sample sizes) were small in all cases.

The pattern of findings between narcissism and impairment was quite consistent across assessments and samples. Narcissistic personality disorder symptoms were related to lower GAF scores in 3 of 4 instances. In addition, NPD symptoms were related to overall impairment, as well as all specific indices of impairment including impairment in romance, work, social life, and causing distress to significant others. Of the specific impairment scores, “distress to significant others” demonstrated the largest weighted effect sizes (r 's = 0.46 and 0.48).

3.1.3. Impairment as a mediator of the relationship between narcissism and psychologic distress

We next examined the hypothesis that narcissism may be related to psychologic distress primarily due to the impairment it causes in various life domains (see Fig. 1). To examine this, we conducted a series of regression analyses. First, we regressed time 2 distress (eg, depression, anxiety, GAF) on time 1 narcissism. Next, we regressed the mediator (time 2 overall impairment) on time 1 narcissism. Finally, we regressed time 2 distress variables on time 2 impairment and time 1 narcissism. These path analyses test whether functional impairment mediates the relations between narcissism and later distress. In addition, Sobel tests (which yield a z score) were used to test for statistical mediation. In sample 1, there was significant mediation by impairment for the relation between NPD and time 2 depression ($z = 2.81, P < .01$) and time 2 GAF scores ($z = 4.14, P < .01$). In addition, there was a trend toward significant mediation ($z = 1.81, P < .07$) for the relation between NPD and time 2 anxiety. In sample 2, the relations between NPD symptoms and depression, anxiety, and GAF scores were all significantly mediated (z 's = 3.31, 3.26, and 3.59, $P < .001$, respectively) by the impairment rating. Across these mediation models, the direct effect of narcissism on psychopathology decreased significantly after impairment was included in the model; in all 6 cases, narcissism was no longer significantly related to the distress outcome once impairment was included. In fact, the direct effect of narcissism was reduced by between 40% (anxiety, sample 1) and 100% (depression, sample 1; GAF, sample 1; depression, sample 2).

3.1.4. Replicating mediation analyses with self-reported PDQ narcissism scores

To reduce concern that the previous results might be due, in part, to common method variance (ie, consensus rating of both predictor and outcome variables), we replicated the same aforementioned model in sample 2 but used self-reported symptoms of narcissism (ie, PDQ) in place of consensus ratings of NPD. The results were nearly identical. Again, Sobel tests were used to test for statistical mediation. There was significant mediation by impairment for the relations between PDQ NPD and time 2 depression

($z = 2.78, P < .01$), time 2 anxiety ($z = 2.70, P < .01$), and time 2 GAF scores ($z = 2.93, P < .01$). The direct effect of narcissism was reduced by between 45% (anxiety) to 70% (GAF).

3.1.5. Narcissism: unique predictive relations of 6-month outcomes controlling for cluster B PDs

Finally, we examined whether narcissism was a unique predictor of psychopathology and impairment once we controlled for the symptoms of antisocial, borderline, and histrionic PDs (see Table 3). This is an extremely conservative test because it requires narcissism to predict above and beyond PDs that are significantly related to NPD (across both current samples, NPD was significantly related to antisocial, borderline, and histrionic PDs; median $r = .40$) and that might be associated with more serious psychopathology. We conducted a series of regression analyses in which sex, antisocial, borderline, and histrionic PD symptom counts were entered at step 1, followed by NPD symptoms at step 2. As can be seen in Table 3, narcissism was not a unique significant predictor of depression or anxiety at 6-month follow-up, although there was a trend for narcissism predicting anxiety in sample 1. Importantly, of the impairment indices tested, narcissism

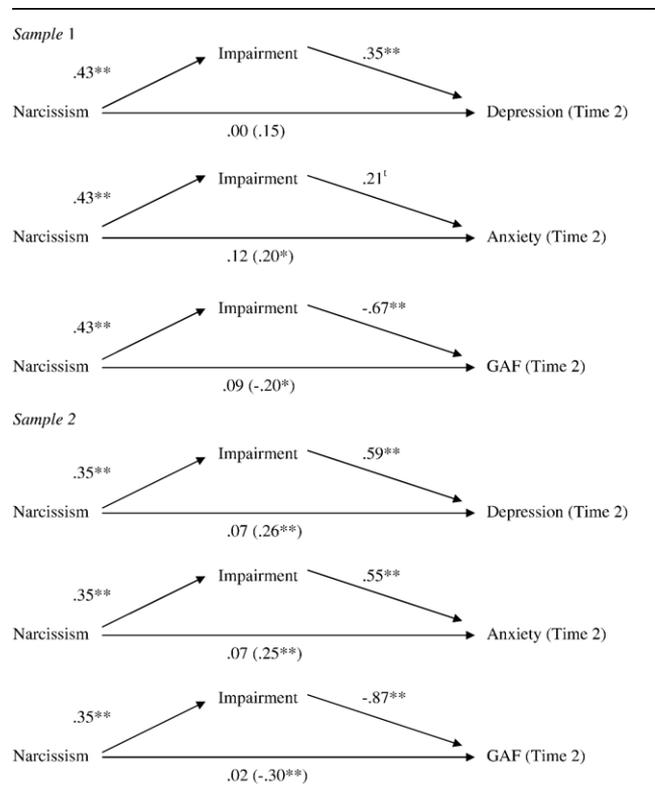


Fig. 1. Mediation of the relation between NPD and psychologic distress. [†] $P \leq .07$ * $P \leq .05$, ** $P \leq .01$. Direct effects of narcissism on outcome variables are noted within the parentheses.

Table 3
Unique predictive relations across 6 months: narcissism and psychopathology

	Depression	Anxiety	GAF	Social	Romantic	Work	Distress to others
<i>Sample 1, β</i>							
Step 1							
Sex	.07	.08	.08	-.27**	-.04	-.18*	.01
Antisocial	-.16	-.06	-.02	.03	-.03	.12	.10
Borderline	.36**	.17	-.42**	.50**	.48**	.45**	.44**
Histrionic	.02	.09	.09	-.14	-.08	-.11	.16
R^2	.12*	.06	.16**	.30**	.19**	.26**	.35**
Step 2							
Narcissism	.13	.27 ^a	-.09	.19	.24 ^a	.04	.26*
ΔR^2	.00	.04 ^a	.00	.02	.03 ^a	.00	.03*
<i>Sample 2, β</i>							
Step 1							
Sex	-.06	.02	.00	-.02	-.11	-.12	-.02
Antisocial	-.05	.05	-.08	.08	-.01	.29**	.15
Borderline	.52**	.39**	-.52**	.35**	.43**	.40**	.41**
Histrionic	.14	.22**	-.12	.02	.19*	.08	.33**
R^2	.31**	.30**	.39**	.16**	.28**	.42**	.51**
Step 2							
Narcissism	.05	.02	-.04	.03	-.04	.02	.23**
ΔR^2	.00	.00	.00	.00	.00	.00	.03**

^a $P \leq .10$.

* $P \leq .05$.

** $P \leq .01$.

was a consistent significant unique predictor for only one form of impairment—causing distress to significant others. This pattern was found in both samples. There was also a trend for narcissism predicting romantic impairment in sample 1.

4. Discussion

Despite its placement in the last 3 editions of the *DSM* as one of only 10 officially recognized personality disorders, narcissistic PD has received scant empirical attention. Specifically, there have been little data presented that make a clear and persuasive argument for its inclusion on the basis of the distress and impairment NPD causes. One strategy for dealing with this dearth of data on NPD would be to turn to the substantial empirical literature on narcissism that exists in the fields of social-personality psychology. However, this is problematic due to the use of measures (eg, NPI) that appear to capture only partially the construct as it is currently conceptualized by the *DSM-IV* and the reliance on undergraduate samples. Even if one were to rely on this body of literature, the central question would remain unresolved as to whether narcissistic individuals experience psychologic distress (this literature suggests they do not [21]) or substantial impairment [24,26]. The current study addresses these issues by presenting data on the concurrent and longitudinal relations between narcissistic PD and psychologic distress and functional impairment in 2 clinical samples. These constructs are of vital importance in determining whether narcissism warrants continued presence in our diagnostic nomenclature.

The current results suggest that NPD symptoms are significantly, but modestly, related to depression and anxiety both concurrently (sample 2 only) and prospectively. Narcissistic personality disorder was also significantly and more strongly related to 2 general measures of impairment and more specific indices of impaired functioning in work, social, and romantic domains. These findings were consistent across samples and assessments (ie, times 1 and 2) and are consistent with findings regarding the broad array of impairment attached to other specific PDs [12,13]. The GAF scores demonstrated the weakest relations, albeit still significant in 3 of 4 analyses. Across assessments, the weighted effect sizes were largest for impairment related to causing distress for important significant others. Indeed, NPD was only uniquely related to causing significant others pain and duress. This finding is consistent with knowledge gathered about the impact of narcissism in nonclinical samples, where narcissism is associated largely with costs experienced by others [24,26].

We found evidence in both samples for a model in which the relation between narcissism and psychologic distress was mediated by impaired functioning. That is, overall impairment accounted for the relationship between time 1 narcissism and lower GAF scores, higher depression, and anxiety at time 2. These findings support the notion that depression and anxiety may not be endemic to narcissism but develop as a result of problems or failures in a variety of contexts. Narcissistic individuals may eventually feel sad or worried as they gain insight into the fact that they are not as successful in their work, love, and friendship relations as they hoped or in comparison to their peers. This finding

might also partially explain the differences in the relationship between narcissism and psychologic distress as reported in the clinical and social-personality literatures. Most narcissists would enter a clinical setting as a result of some form of failure in their personal or professional life, and this failure would eventually be expected to lead to psychologic distress. Individuals with narcissistic personality traits who are able to avoid personal or professional failure, however, may both avoid clinical settings and report low levels of psychologic distress.

4.1. Limitations

One potential limitation of the current study is that the samples were somewhat different; the results from sample 1 used a slight variation of the *DSM-III-R* criteria rather than the *DSM-IV*, whereas sample 2 was a hybrid in that it included clinical patients and individuals from the community. These differences should have worked to make replication less likely, which was not the case. Another limitation is that the expert raters for the consensus ratings of impairment also generated the PD ratings and it is possible that raters' preconceived notions regarding the types of impairment attached to certain PDs could impact later impairment ratings. The likelihood that this impacted the current finding is diminished by the presentation of an ancillary analysis using the data from sample 2 in which the findings were nearly identical when different sources of ratings were used (ie, self-reports of narcissistic PD).

4.2. Conclusions

These results suggest that it is accurate to think of NPD as a pathologic personality style that predicts impaired functioning across a variety of life domains. This impaired functioning appears largely to explain NPD's weak but significant relation with intrapersonal distress. Importantly, the strongest impairment associated with NPD is the distress or "pain and suffering" experienced not by the narcissist but by his or her significant others. In fact, the suffering experienced by others is uniquely predicted by NPD when controlling for other PDs. It appears that there are traits specific to NPD that are especially difficult to tolerate when faced regularly.

Acknowledgment

This research was supported by NIMH grants R01 MH44672, Validity in the Diagnosis of Personality Disorders (PI: PA Pilkonis), and R01 MH56888, Screening for Personality Disorders (PI: PA Pilkonis).

References

- [1] Paris J. Personality disorders over time: precursors, course and outcome. *J Personal Disord* 2003;17:479-88.
- [2] Links PS, Gould B, Ratnayake R. Assessing suicidal youth with antisocial, borderline, or narcissistic personality disorder. *Can J Psychiatry* 2003;48:301-10.
- [3] Raskin RN, Terry H. A principle components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *J Pers Soc Psychol* 1988;54:890-902.
- [4] Trull TJ, McCrae RR. A five-factor perspective on personality disorder research. In: Costa PT, Widiger TA, editors. *Personality disorders and the five-factor model of personality*. Washington (DC): American Psychological Association; 2002. p. 45-58.
- [5] Costa PT, McCrae RR. *The NEO Personality Inventory manual*. Odessa (Fla): Psychological Assessment Resources; 1985.
- [6] Blais MA, Hilsenroth MJ, Castlebury FD. Content validity of the DSM-IV borderline and narcissistic personality disorder criteria sets. *Compr Psychiatry* 1997;38:31-7.
- [7] Fossati A, Beauchaine TP, Grazioli F, Carretta I, Cortinovis F, Maffei C. A latent structure analysis of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Narcissistic Personality Disorder criteria. *Compr Psychiatry* 2005;46:361-7.
- [8] Holdwick DJ, Hilsenroth MJ, Castlebury FD, Blais MA. Identifying the unique and common characteristics among the DSM-IV antisocial, borderline and narcissistic personality disorders. *Compr Psychiatry* 1998;39:277-86.
- [9] American Psychiatric Association. *Diagnostic and statistical manual*. 4th ed., text revision. Washington, DC; 2000.
- [10] Drake RE, Vaillant GE. A validity study of Axis II of DSM-III. *Am J Psychiatry* 1985;142:553-8.
- [11] Pilkonis PA, Heape CL, Ruddy J, Serrao PS. Validity in the diagnosis of personality disorders: the use of the LEAD standard. *Psychol Assess* 1991;3:46-54.
- [12] Zanarini MC, Frankenburg FR, Hennen J, Reich B, Silk KR. Psychosocial functioning of borderline patients and Axis II comparison subjects followed prospectively for six years. *J Personal Disord* 2005;19:19-29.
- [13] Skodol AE, Gunderson JG, McGlashan TH, Dyck IR, Stout RL, Bender DS, et al. Functional impairment in patients with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorder. *Am J Psychiatry* 2002;159:276-83.
- [14] Saulsman LM, Page AC. The five-factor model and personality disorder empirical literature: a meta-analytic review. *Clin Psychol Rev* 2004;23:1055-85.
- [15] Watson PJ, Sawrie SM, Greene RL, Arredondo R. Narcissism and depression: MMPI-2 evidence for the continuum hypothesis in clinical samples. *J Pers Assess* 2002;79:85-109.
- [16] Butcher JN, Dahlstrom WG, Graham JR, Tellegen A, Kaemmer B. *MMPI-2: Minnesota Multiphasic Personality Inventory-2: manual for administration and scoring*. Minneapolis (Minn): University of Minnesota Press; 1989.
- [17] Junemann SH. Affective disorders, personality and personality disorders. *Acta Psychiatr Scand* 2003;108:34-40.
- [18] Pfohl B, Black DW, Noyes R, Coryell WH, Barrash J. Axis I and II comorbidity findings: implications for validity. In: Oldham JM, editor. *Personality disorders: new perspectives on diagnostic validity*. Washington (DC): American Psychiatric Press; 1991. p. 145-61.
- [19] Alnaes R, Torgersen S. The relationship between DSM-III symptom disorders (Axis I) and personality disorder (Axis II) in an outpatient population. *Acta Psychiatr Scand* 1988;78:485-92.
- [20] Skodol AE, Stout RL, McGlashan TH, Grilo CM, Gunderson JG, Shea MT, et al. Co-occurrence of mood and personality disorders: a report from the Collaborative Longitudinal Personality Disorders Study (CLPS). *Depress Anxiety* 1999;10:175-82.
- [21] Sedikides C, Rudich EA, Gregg AP, Kumashiro M, Rusbult C. Are normal narcissists psychologically healthy? Self-esteem matters. *J Pers Soc Psychol* 2004;87:400-16.
- [22] Rose P. The happy and unhappy faces of narcissism. *Pers Individ Differ* 2002;33:379-92.
- [23] Campbell WK. Is narcissism really so bad? *Psychol Inq* 2001;12:214-6.

- [24] Campbell WK, Foster CA, Finkel EJ. Does self-love lead to love for others? A story of narcissistic game playing. *J Pers Soc Psychol* 2002;83:340-54.
- [25] Bushman BJ, Baumeister RF. Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: does self-love or self-hate lead to violence? *J Pers Soc Psychol* 1999;76:367-76.
- [26] Campbell WK, Bush CP, Brunell AB, Shelton J. Understanding the social costs of narcissism: the case of tragedy of the commons. *Pers Soc Psychol Bull* 2006;31:1358-68.
- [27] Oltmanns TF, Friedman JN, Fiedler ER, Turkheimer E. Perceptions of people with personality disorders based on thin slices of behavior. *J Res Pers* 2004;38:216-29.
- [28] Paulhus DL. Interpersonal and intrapsychic adaptiveness of trait self-enhancement: a mixed blessing? *J Pers Soc Psychol* 1998;74:1197-208.
- [29] Colvin CR, Block J, Funder DC. Overly positive self-evaluations and personality: negative implications for mental health. *J Pers Soc Psychol* 1995;68:1152-62.
- [30] Betan E, Heim AK, Conklin CZ, Westen D. Countertransference phenomena and personality pathology in clinical practice: an empirical investigation. *Am J Psychiatry* 2005;162:890-8.
- [31] Pilkonis PA, Heape CL, Proietti JM, Clark SW, McDavid JD, Pitts TE. The reliability and validity of two structured diagnostic interviews for personality disorders. *Arch Gen Psychiatry* 1995;52:1025-33.
- [32] Hyler SE. Personality Disorder Questionnaire-4. Unpublished test, NYSPI. 1994.
- [33] Curran PJ, West SG, Finch JF. The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychol Methods* 1996;1:16-29.