

# Depressive symptoms induce paranoid symptoms in narcissistic personalities (but not narcissistic symptoms in paranoid personalities)

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## Abstract

Based on clinical experience, anecdotal reports, and past empirical and conceptual work, we predicted that when people with narcissistic tendencies experience depressive symptoms, they are prone to develop paranoid attitudes. Moreover, we expected that this process was unidirectional, and that the combination of paranoid tendencies and depressive symptoms would not be associated with an increase in narcissistic symptoms. In both cases, results from our 6-month longitudinal study of 71 previously suicidal adults conformed to our expectations.

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## 1. Introduction

According to a psychiatrist who conducted hours of in-depth interviews with Oklahoma City bomber Timothy McVeigh, McVeigh was prone to grandiose fantasies in which he was an all-powerful figure (“The Mind of McVeigh,” National Public Radio’s “All Things Considered,” Wade Goodwyn, June 8, 2001). Often, the fantasies involved his coming to the rescue in a dangerous and complex situation, followed by wide admiration from others. These fantasies may have acquired a realistic tinge in the Gulf War, during which McVeigh served with accomplishment. He

apparently expected that such fantasies would continue to be realized through post-war service in an elite Special Forces unit, but McVeigh did not pass the unit’s exacting qualifying standards and exams.

McVeigh then quit the military and returned to his hometown, where he was initially shocked and then very despondent that he could not find work and could not establish any romantic relationships. During this time, he developed what probably was a major depressive episode and had thoughts of suicide.

It was during this time that McVeigh developed deep mistrust and suspicion regarding the U.S. government. He became restless, and started traveling around the country visiting ex-army buddies and gun shows. When visiting Terry Nichols, he saw TV coverage of the Davidian fire in Waco, and at that point, resolved revenge (“The Mind of

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McVeigh,” National Public Radio’s “All Things Considered,” Wade Goodwyn, June 8, 2001).

Before he quit the military, there is little evidence that McVeigh was mistrustful, suspicious, or paranoid. McVeigh’s pre-existing narcissistic tendencies, when combined with failure and depression, seemed to produce paranoid personality symptoms, with horrible consequences (cf. [Meloy and McEllistrem, 1998](#)).

Similar anecdotal reports support a trajectory from narcissism to paranoia in the face of distress. For example, [Beck, Freeman, and associates \(1990\)](#) reported a case history of a narcissistic man facing a string of stresses including layoffs, financial hardship, separation from his wife, and loss of custody of their four small children. After his estranged wife telephoned taunting him about her boyfriend’s superior qualities, the man became increasingly suspicious and angry, as well as preoccupied with the idea that the wife and boyfriend were going to steal his children. The situation culminated with the man murdering his four children, his wife, and her mother, as well as wounding the boyfriend. Here, as with McVeigh, distress-related paranoia developed in a previously narcissistic person, and a horrible tragedy resulted.<sup>1</sup>

Our thesis is that this trajectory from narcissistic to paranoid symptoms is generalizable. Anecdotal reports are consistent with this view, but so are some empirical findings and conceptual accounts. There is clear empirical evidence that the symptoms of narcissistic and paranoid personality disorders co-occur (e.g., [Flick et al., 1993](#)). Conceptual overlap has been noted as well. For example, several theorists have postulated that narcissistic and paranoid personality disorders comprise subtypes of one another (cf. [Millon’s \(1981\)](#) paranoid–narcissistic subtype of paranoid personality disorder), or are disorders within the same higher-order cluster of disorders (e.g., [Bursten, 1982](#); but note that in the DSM nosology, the disorders are assigned to different clusters).

Perhaps a more penetrating view of the development of paranoia in threatened narcissists was provided by [Baumeister and colleagues \(e.g., Baumeister et al.,](#)

[1996](#)). The “threatened egotism” model asserts that an inflated self-concept, combined with a negative evaluation by others, leads to a discrepancy between internal and external appraisals. This causes a state of “threatened egotism” and forces individuals to decide between two things: either they accept the appraisal and lower their self-concept (unlikely for someone with narcissistic personality symptoms), or they reject the appraisal and maintain their self-concept. According to [Baumeister et al.](#), maintenance of inflated self-concept, together with rejection of an unfavorable external appraisal, is associated with negative emotions and attitudes (e.g., suspicion, anger) toward the source of the threat, and possibly aggression or violence (for compatible, clinically-oriented accounts, see [Ronningstam et al., 1995](#); [Simon, 2002](#)).

Some empirical work has supported the “threatened egotism” model. Research has found that inflated self-esteem may be associated with anger, hostility, and aggressiveness ([Raskin et al., 1991](#); [Baumeister et al., 1996](#); [Rhodewalt and Morf, 1998](#)), as well as with interpersonal problems (e.g., [Perez et al., 2001](#)). Other studies have shown that those high in narcissism react with anger and anxiety when challenged with threatening feedback (e.g., [Morf and Rhodewalt, 1993](#); [Rhodewalt and Morf, 1998](#)), and that pathological narcissism shows relative long-term stability ([Ronningstam et al., 1995](#)). But is “threatened egotism” associated with paranoia? This question has not received thorough attention (and is the topic of the current paper), but there is at least one relevant study. [Jette and Winnett \(1987\)](#) studied elderly individuals with narcissistic symptoms, who were facing a stressful transition into a nursing home. They concluded that marked pre-morbid narcissism, in conjunction with the stressful transition, predisposed elderly individuals to developing co-morbid paranoid symptoms (e.g., suspiciousness of relatives’ and health professionals’ motives).

The purpose of the present study was to evaluate whether disappointed narcissists may be particularly prone to adopt paranoid attitudes. As a corollary to our main prediction that pre-morbid narcissism combined with stress may induce paranoid symptoms, we are predicting that the reverse process does *not* occur (i.e., that people with paranoid symptoms who are distressed do not become more narcissistic).<sup>2</sup> The grounds for making this corollary prediction are less firm than that for our main prediction, and indeed, previous theorists have implied

<sup>1</sup> It is potentially problematic to characterize a symptomatic reaction (e.g., paranoid attitudes in response to stress) as a personality disorder *per se* (defined as an enduring pattern of problems with onset in adolescence at the latest). On the other hand, personality and its disorders do change, as evidenced by empirical work ([Heatherton and Weinberger, 1994](#); [Ronningstam et al., 1995](#)) and by successful treatment of personality disorders. To both acknowledge and grapple with this complexity, we will refer in most sections of this paper to paranoid and narcissistic *symptoms*; such symptoms are isomorphic with those of their respective personality disorders, but at the same time, do not meet full criteria (especially regarding age of onset and duration) for diagnosis of the respective personality disorders.

<sup>2</sup> One might wonder whether stress-induced narcissistic symptoms have been documented, because, unlike paranoid symptoms, narcissistic symptoms may seem less reactive. In fact, in the theoretical and empirical work of [Baumeister and colleagues \(e.g., Baumeister et al., 1996\)](#), and in the theoretical work of [Millon \(1981\)](#) and [Kohut \(1977, 1987\)](#), these types of reactions have been postulated and found.

the opposite prediction (e.g., Millon, 1981 characterized the “paranoid–narcissistic personality” subtype as someone with paranoid tendencies and social skill deficits who, when thwarted, retreats to narcissistic fantasies; cf. Colby, 1981). But we make the prediction nevertheless, for two main reasons. First, from clinical experience and anecdotal reports, we are aware of no instances of clear pre-morbid paranoid symptoms leading to reactive narcissistic symptoms under conditions of stress. Second, the prediction provides for a kind of internal validity check, in that we are predicting differential inter-relationships over time between narcissistic, paranoid, and depressive symptoms. It should be noted that we are using depressive symptoms as a marker of distress, failure, and disappointment. We do not equate the concepts; however, we reasoned that if depressive symptoms are high, the likelihood of distress, failure, and/or disappointment is similarly high, whereas if distress, failure, and/or disappointment occur, depressive symptoms may or may not be a concomitant occurrence. We tested our predictions among a group of patients with suicidal symptoms who were followed over time (and who were well suited for this study due to elevated levels of – and high variability in – personality symptoms).

## 2. Method

### 2.1. Participants

Participants for this study included 71 individuals (58 men; 13 women), evaluated as they proceeded through the follow-up phase of a study on the efficacy of treatments for suicidal young adults (Rudd et al., 1996). All participants were initially referred for severe suicidality (i.e., recent attempt, or ideation serious enough to warrant immediate evaluation for hospitalization) from two outpatient clinics, a 20-bed inpatient facility, and an emergency room, all affiliated with a major U.S. Army Medical Center. Patients' mean score on the Modified Scale for Suicidal Ideation (MSSI; Miller et al., 1986) at the beginning of the project was 23.67, S.D.=9.45. A popular cut-off for clinical significance is 11 (Joiner et al., 1999); thus initial severity of suicidal symptoms was pronounced among this group (more than a standard deviation above a common cut-off score for clinical significance). Notably, we covaried initial MSSI scores from our regression analyses, reported later, and the direction, magnitude, and significance levels of all findings remained very similar.

All patients provided full, informed, and written consent for research participation. All received rigorous treatment (either a problem-solving treatment as described

by Rudd et al., 2000, or treatment-as-usual [often a few days of inpatient psychiatry then outpatient antidepressant medicines plus supportive therapy]).<sup>3</sup>

For the purposes of the present study, baseline and follow-up assessments occurred approximately 6 months and 12 months, respectively, following termination of treatment. This time frame was specifically chosen based on two considerations: 1) by 6 months after termination of treatment (i.e., the baseline session for the present study), most if not all of the symptoms associated with the *initial* acute crisis (6 months earlier) had resolved, which is advantageous for valid assessment of personality syndromes (Zimmerman, 1994); and 2) by allowing 6 months to pass between termination of treatment and baseline assessment for this study, we obtained a more naturalistic picture of relevant processes, somewhat removed from initial crisis as well as from treatment (although treatment effects persist, a portion of these patients definitely experience various renewed symptoms 6 months to a year after treatment — the timeframe of the current study; cf. Walker et al., 2001).

Regarding attrition, a total of 64 patients completed this study's baseline session but did not complete the follow-up session (which occurred 6 months after this study's baseline session). Attrition was due, in large part, to military reassignments and discharges. Importantly, attrition status was completely unrelated to all study variables.

The sample reported on below includes the 71 individuals who attended both baseline and follow-up for the present study. Mean age for this sample was 22 (S.D.=2.5 years). The gender distribution (82% men) is common in military medical settings. Most participants were Caucasian (60%); 24% were African-American; 10% were Hispanic; 1.5% were Native American; 1.0% were Asian or Pacific Islander; the remainder were classified as Other.

### 2.2. Procedures

Assessments were conducted by clinical staff (i.e., licensed doctoral-level psychologists, licensed master's level professionals, one advanced-level doctoral student). All staff were thoroughly trained and carefully monitored (see Rudd et al., 1996 for more information on procedures). The following measures were completed at

<sup>3</sup> Regarding treatment condition, it was not related to changes in symptom scores from the 6-month assessment (baseline for the current study) to the 12-month assessment (follow-up for the current study). When the treatment condition variable was used as a covariate in our analyses, results were not changed in any fundamental way. Finally, the treatment condition variable did not moderate any of our effects (e.g., the three-way interaction between treatment condition, narcissism, and depression did not predict changes in paranoia).

this study's baseline session as well as 6 months after this study's baseline session.

### 2.3. Measures

#### 2.3.1. Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983)

The original MCMI is a 175-item, true–false inventory designed for use with psychiatric patients. It contains numerous scales falling into two main categories corresponding to DSM's Axes I and II. For the present purposes, we will focus on the MCMI subscales for narcissistic and paranoid personality syndromes. Item overlap between the MCMI narcissistic and paranoid personality scales is not extreme (31%; Millon, 1983). The reliability and validity of these scales appear to be adequate (cf. Millon, 1983). In the validation sample, KR-20 for the narcissistic and paranoid personality scales were 0.87 and 0.90, respectively. The content of the scales' items is consistent with DSM descriptions (e.g., for narcissistic symptoms: "I know I'm a superior person, so I don't care what others think;" "I have many ideas that are ahead of the times;" "People have never given me enough recognition for the things I've done"). Construct validity seems reasonable. As one of numerous possible examples, in the validation sample, the correlation of the MCMI narcissistic scale with the MCMI antisocial scale was 0.34 (in our participants it was 0.32), similar to the average correlation of 0.30 between measures of narcissism and psychopathy in general (Hart and Hare, 1998). Congruence of various versions of the MCMI scales has been adequate (e.g., Marlowe et al., 1998).

#### 2.3.2. Beck Depression Inventory (BDI; Beck et al., 1961)

The BDI is a 21-item self-report inventory of depressive symptoms. Each item is rated on a 0 to 3 scale; inventory scores thus may range from 0 to 63. The BDI is a reliable and well-validated measure of depressive symptomatology (Beck et al., 1988).

## 3. Results

Means, standard deviations, and intercorrelations for all variables are presented in Table 1. Several features of the Table are of interest. For example, the *T*-score means for the MCMI narcissistic and paranoid personality syndrome subscales are somewhat elevated, and, especially in the case of narcissistic symptoms, begin to approach the cut-off score for clinical significance (i.e., *T*-score of 75). Elevated scores on measures of personality syndromes are expected in a sample with significant histories of suicidal behavior. Notably, the standard devi-

Table 1

Means and standard deviations for, and intercorrelations between, all measures

	1	2	3	4	5	6
1. Narcissistic 1	–					
2. Narcissistic 2	0.72*	–				
3. Paranoid 1	0.63*	0.40*	–			
4. Paranoid 2	0.46*	0.42*	0.70*	–		
5. BDI 1	–0.53*	–0.36*	–0.16	–0.04	–	
6. BDI 2	–0.22	–0.44*	0.08	0.18	0.47*	–
MEAN	67.70	70.29	66.79	65.69	8.24	6.96
S.D.	23.72	19.37	14.80	13.83	7.50	8.79

*N* = 71. Narcissistic 1 = the narcissistic personality syndrome subscale of the Millon Clinical Multiaxial Inventory administered at this study's baseline session. Narcissistic 2 = the narcissistic personality syndrome subscale of the Millon Clinical Multiaxial Inventory administered at this study's follow-up session. Paranoid 1 = the paranoid personality syndrome subscale of the Millon Clinical Multiaxial Inventory administered at this study's baseline session. Paranoid 2 = the paranoid personality syndrome subscale of the Millon Clinical Multiaxial Inventory administered at this study's follow-up session. MCMI means are *T*-scores. BDI = Beck Depression Inventory. \**P* < 0.01.

ations for the MCMI scales are also substantial, reflecting considerable variability among participants on narcissistic and paranoid symptoms. Means and standard deviations for BDI depression were in the normal range, consistent with the view that as a general rule, participants' crises had passed and that they benefited from treatment.

Regarding correlations, test–retest correlations were high for MCMI narcissistic and paranoid personality syndromes, whereas BDI test–retest was somewhat lower (as expected; personality-related measures should be more stable than Axis I symptom measures). The indices of narcissistic and paranoid symptoms themselves were inter-correlated, consistent with past work on their co-occurrence (Flick et al., 1993). Interestingly, MCMI narcissistic symptoms scores tend to be inversely related to BDI depression scores; in general, participants who endorsed narcissistic symptoms tended not to endorse depressive symptoms. This is consistent with the view that people with narcissistic symptoms tend not to see themselves in negative terms. MCMI paranoid symptoms were not systematically related to BDI scores.

#### 3.1. Do disappointed narcissists develop paranoid attitudes?

To evaluate whether depressive symptoms may encourage the development of paranoid symptoms in people with pre-existing narcissistic symptoms, we conducted a regression analysis. The dependent variable was paranoid symptoms at the follow-up session. Baseline paranoid symptom scores were entered first into the regression equation, thereby creating residual change scores in

Table 2  
Narcissistic symptoms, BDI depressive symptoms, and the two-way interaction predicting changes in paranoid symptoms

Order of entry of set	Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	<i>df</i>	Partial correlation (PR/pr)	Model <i>R</i> <sup>2</sup>
1.	Baseline paranoid symptoms	67.68*	8.23*	1, 69	0.70	0.50
2.	Main effects	1.19		2, 67	0.19	0.51
	Narcissistic symptoms		0.75	67	0.09	
	BDI		1.53	67	0.18	
3.	Interaction	5.44*	2.33*	1, 66	0.28	0.55

PR=Multiple partial correlation for a set of predictors; pr=partial correlation for within-set predictors. \**P*<0.05.

paranoid symptoms from baseline to follow-up. Next, baseline narcissistic symptom scores and follow-up BDI depression scores<sup>4</sup> were entered into the regression equation simultaneously as a set. At Step 3 of the regression equation, we entered the BDI×Narcissistic Symptoms interaction term. If depressive symptoms encourage the development of paranoid symptoms in people with pre-existing narcissistic symptoms, the BDI×Narcissistic Symptoms interaction term should emerge as a significant predictor of increases in paranoid symptoms.

Results are displayed in Table 2 (the assumption of homogeneity of covariance was tested and met; cf. Joiner, 1994). As can be seen there, baseline paranoid symptoms were of course strongly related to follow-up paranoid symptoms (*pr*=0.70, *t* [1, 69]=8.23, *P*<0.01). There were no other main effects. Crucial to our hypothesis, the BDI×Narcissistic Symptoms interaction term did indeed emerge as a significant predictor of increases in paranoid symptoms (*pr*=0.28, *t* [1, 66]=2.33, *P*<0.05).

To explicate the form of this interaction, we examined the relation between baseline narcissistic symptoms and increases in paranoid symptoms among two subgroups — those who reported depressive symptoms at follow-up (i.e., those who scored above 11 on the BDI; *n* = 17; BDI mean=20.35, S.D.=8.78) and those who did not (i.e., those who scored 11 or below on the BDI; *n* = 54, BDI mean=3.03, S.D.=3.07). In line with prediction, narcissistic symptoms significantly predicted increases in paranoid symptoms among those who reported depressive symptoms at follow-up (*pr*=0.44, *t* (21)=2.03, *P*<0.05),

<sup>4</sup> We chose to use the *baseline* narcissistic symptom score because we were interested in effects of pre-existing narcissistic symptoms. We chose to use the *follow-up* depression score because it was most relevant to the interval during which we were examining development of paranoid symptoms — this is a standard approach in vulnerability research.

but not among those who reported no depressive symptoms at follow-up (*pr*=−0.15, *P*=ns).

### 3.2. The reverse is not true: paranoid symptoms do not interact with depressive symptoms to predict increases in narcissistic symptoms

We used a similar regression approach to evaluate whether depressive symptoms interact with pre-existing paranoid symptoms to predict narcissistic symptoms. The dependent variable was narcissistic symptoms at the follow-up session. Baseline narcissistic symptom scores were entered first into the regression equation, thereby creating residual change scores in narcissistic symptoms from baseline to follow-up. Next, baseline paranoid symptoms scores and follow-up BDI depression scores were entered into the regression equation simultaneously as a set. At Step 3 of the regression equation, we entered the BDI×Paranoid Symptoms interaction term. If depressive symptoms interact with paranoid symptoms to predict narcissistic symptoms, the BDI×Paranoid Symptoms interaction term should emerge as a significant predictor of increases in narcissistic symptoms.

Results are displayed in Table 3 (the assumption of homogeneity of covariance was again tested and met). As can be seen there, baseline narcissistic symptoms were of course strongly related to follow-up narcissistic symptoms (*pr*=0.72, *t* [1, 69]=8.50, *P*<0.01). There was a main effect for BDI depression: Those who reported depressive symptoms at the follow-up sessions tended to endorse a decrease in narcissistic symptoms from baseline to follow-up. Crucial to our present purpose, the BDI×Paranoid Symptoms interaction term did *not* serve as a significant predictor of increases in narcissistic symptoms (*pr*=0.04, *t* [1, 66]=0.30, *P*=ns). Whereas disappointed narcissists tended to endorse an

Table 3  
Paranoid symptoms, BDI depressive symptoms, and the two-way interaction predicting changes in narcissistic symptoms

Order of entry of set	Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	<i>df</i>	Partial correlation (PR/pr)	Model <i>R</i> <sup>2</sup>
1.	Baseline narcissistic symptoms	72.24*	8.50*	1, 69	0.72	0.51
2.	Main effects	6.14*		2, 67	0.39	0.59
	Paranoid symptoms		0.11	67	0.01	
	BDI		−3.39*	67	−0.38	
3.	interaction	0.09	0.30	1, 66	0.04	0.59

PR=Multiple partial correlation for a set of predictors; pr=partial correlation for within-set predictors. \**P*<0.05.

increase in paranoid symptoms (see Table 2), the reverse did not hold — people with paranoid symptoms who reported depression did not become more narcissistic.<sup>5</sup>

### 3.3. Specificity of findings

We considered the possibility that any MCMI personality symptom score might interact with depressive symptoms to predict increases in paranoid attitudes, but this was not the case. In separate regression analyses examining schizoid, avoidant, dependent, histrionic, antisocial, compulsive, passive–aggressive, schizotypal, and borderline personality symptoms, no personality scale interacted with depressive symptoms to predict increased paranoid symptoms. It thus appeared that the findings displayed in Table 2 held for narcissistic symptoms specifically, and did not indiscriminately apply to personality symptoms in general.

## 4. Discussion

Based on clinical experience, anecdotal reports, and past empirical and conceptual work (e.g., Baumeister et al., 1996), we predicted that when people with narcissistic tendencies experience depressive symptoms, they are prone to develop paranoid attitudes. Moreover, we expected that this process was unidirectional, and that the combination of paranoid tendencies and depressive symptoms would not be associated with an increase in narcissistic symptoms. In both cases, results from our study of previously suicidal adults conformed to our expectations.

Before discussing some implications of our results, it is important to consider several potential limitations of the study. First, although the MCMI has received support as a valid assessment tool for the study of personality disorder symptomatology, it has also been criticized (Zimmerman, 1994; cf. Piersma, 1987). Importantly, criticisms of the MCMI would apply to *both* of the

MCMI personality syndrome scales used here, and thus cannot fully explain the *differential* patterns of results for narcissistic vs. paranoid symptoms.

Second, because the indices of narcissistic and paranoid symptoms both derived from the same scale (the MCMI), and were highly correlated (see Table 1), item overlap should be considered. Here again, however, this limitation cannot explain the pattern of *differential* results for the two MCMI scales studied here. Moreover, in the analyses summarized in Tables 2 and 3, baseline scores on both MCMI scales are entered into the regressions, thus controlling one for the other.

Third, the study was conducted within the context of an ongoing, large-scale suicide treatment project in a military setting. Results should thus be viewed with the knowledge that all participants were specifically referred for suicidality, and that the gender ratio in our sample (4.6 men to 1 woman) is not representative of the usual mental health setting. In addition, the participants were from a military background, and it is possible that military participants are not representative regarding the personality and clinical variables studied here. Moreover, we focused here on participants who returned for assessment sessions at 6 and 12 months following termination of treatment — not a representative group of patients. Further still, patients were selected on the basis of suicidal symptoms, not narcissistic or paranoid symptoms. Nonetheless, as the descriptive data in Table 1 show, the sample had the advantages of elevated scores and high variability on narcissistic and paranoid symptom indices. Also, our study included no measure of aggression. Although our findings are relevant to anecdotal examples like McVeigh and to the threatened egotism model, which include aggression as outcomes, our results may or may not be relevant to aggression as an outcome (this would be an interesting area for future study). In general, then, caution should be exercised in generalizing current findings to other clinical issues, settings, and populations.

Fourth, as touched on in Footnote 1, our results may not be applicable to personality *disorders* as defined in the DSM nosology. Rather, we studied the symptoms of personality disorders, without regard to important definitional features of DSM personality disorders (especially age of onset and duration of symptoms; cf. Wiggins and Pincus, 1989; Trull, 1992; Livesley et al., 1994).

Fifth, ours was a naturalistic study, with the attendant benefit of ecological validity, as well as the attendant disadvantage of low experimental control. In this context, future researchers might consider laboratory studies which track paranoid reactions of people with

<sup>5</sup> Because baseline scores on both MCMI scales are entered into the regressions (thus controlling one for the other), and because the two scales were correlated, the issue of multicollinearity should be addressed. Multicollinearity did not appear to be a problem in our analyses, in that the Variance Inflation Factors (VIF; an index of collinearity, with high values indicating multicollinearity) for the two scales were less than 2.0 — a reasonably low value — and tolerance (a related index of collinearity, equal to 1 minus the predictor's squared multiple correlation with the other predictors, with low values indicating multicollinearity) for both scales exceeded 0.55 — a reasonably high value. Also, the analyses depicted in Tables 2 and 3 were likely equally affected by any multicollinearity problems, and thus multicollinearity cannot easily explain the differential (and predicted) pattern of findings shown in the Tables.

narcissistic symptoms in the face some sort of threatening challenge (e.g., ostracism). In fact, similar studies have been conducted (e.g., Morf and Rhodewalt, 1993; Rhodewalt and Morf, 1998), and have shown that those high in narcissism react with anger and anxiety when challenged with threatening feedback, generally consistent with the current results. On the other hand, our specific hypotheses involved symptomatic paranoid reactions in response to substantial depressive symptoms; experimental control of these variables presents grave ethical, practical, and safety concerns.

Turning to the implications of our study, the results may inform clinical assessment and therapeutics of personality disorders. Regarding assessment, our findings suggest that patients presenting with mixed narcissistic–paranoid symptoms may be primarily narcissistic, with a stress-induced paranoid overlay (this is not the only possible diagnostic conclusion for such patients; another is comorbid narcissistic and paranoid personality disorders, with or without depression). The possibility of a stress-induced paranoid overlay to primary narcissism should be evaluated, as should the risk for aggression and violence, as past anecdotal (Beck and Freeman, 1990), empirical, and theoretical work (Baumeister et al., 1996) suggests that such patients may become aggressive. In context of the reactive nature of stress-induced overlays, reactive disorders on Axis I should also receive attention, including mood, anxiety, and adjustment disorders.

Our results and suggestions for clinical assessment may facilitate decision-making regarding therapeutics. For depressed, narcissistic patients who develop paranoid attitudes, initial emphases may include anger management (see Beck and Fernandez, 1998), antidepressant medicines and cognitive–behavioral therapy for depressive symptoms (cf. Keller et al., 2000), and cognitive therapy targeting paranoid symptoms (see Beck and Freeman, 1990; see also Sheldon et al., 2003, chapter 10). Again, ongoing assessment of dangerousness seems indicated.

Our results may also have implications for personality disorder research. First, several studies have reported relatively low inter-rater reliability coefficients regarding personality disorders, including paranoid and narcissistic personality disorders (Zimmerman, 1994). In this regard, it is interesting to speculate that some proportion of narcissistic patients may be misdiagnosed with paranoid personality disorder, especially in settings where self-referred patients (who are usually distressed) are studied. Because narcissistic and paranoid personality disorders are in different Axis II clusters, any such diagnosis would also contribute to lower reliability in cluster assignments (assignment to cluster sometimes has been shown to have

higher reliability than assignment of particular Axis II diagnoses; see Zimmerman, 1994).

Second, our view that narcissistic people, when challenged, become more paranoid, differs from that provided by Millon (1981), who posited that when paranoid–narcissists' illusions of omnipotence are severely challenged, these individuals retreat to narcissistic fantasies (Millon, 1981), as opposed to becoming more paranoid. Millon contended that when agitated by threats against their self-esteem, these individuals take liberties with objective facts and social reality, and reconstruct themselves as more grandiose than before they were threatened and retreat into fantasies of omnipotence.

We predicted against this account, based partly on the theoretical and empirical work of Baumeister and colleagues (Baumeister et al., 1996) on threatened egotism. As we expected, our results were not consistent with depression-related increases in narcissistic symptoms among those with pre-existing paranoid traits (see Table 3).

But Millon's (1981) account also predicts that people with pre-existing narcissistic symptoms, when faced with stress, may become more narcissistic (e.g., retreat to fantasies of omnipotence). This possibility was actually tested, at least in part, in the course of determining whether the assumption of homogeneity of covariance was satisfied in Table 3's regression analysis (it was; i.e., baseline narcissistic symptoms – the covariate – did not interact with other predictors to predict the dependent variable, follow-up narcissistic symptoms). If narcissists who experience depression tend to become more narcissistic, we might have expected baseline depression to predict increased narcissism among those with pre-existing narcissistic symptoms, but this interaction was non-significant. We thus obtained no support for the possibility that people with pre-existing narcissistic symptoms, when depressed, may become more narcissistic (e.g., retreat to fantasies of omnipotence; cf. Millon, 1981). By contrast, findings did support a view based on threatened egotism — people with pre-existing narcissistic symptoms, when depressed, may become suspicious and mistrustful.

A final implication of our study is that it potentially illustrates the fluidity of personality and emotional processes within Baumeister et al.'s (1996) threatened egotism model (and in general; cf. Heatherton and Weinberger, 1994). The model asserts a dichotomy wherein, in the face of challenge, acceptance of lower self-appraisal is associated with negative emotions (e.g., depression) and withdrawal, whereas rejection of lower self-appraisal is associated with mistrust of others, anger, and aggression. In actuality, we suggest that this dichotomy is not absolute, and that threatened narcissists may become depressed *as well as* tend toward

paranoia (and, like McVeigh and other anecdotal examples, may subsequently become aggressive).

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