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Narcissistic Personality Disorder and Suicidal Behavior in Mood Disorders

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Abstract

The relationship of Narcissistic Personality Disorder (NPD) to suicidal behavior is understudied. The modest body of existing research suggests that NPD is protective against non-fatal suicide attempts, but is associated with high lethality attempts. Mood-disordered patients (N = 657) received structured interviews including Axis I and II diagnosis and standardized clinical

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measures. Following chi-square and t-tests, a logistical regression model was constructed to identify predictors of suicide attempt. While there was no bivariate relationship of NPD on suicide attempt, in the logistic regression patients with NPD were 2.4 times less likely to make a suicide attempt (OR = .41; 95% CI = .19 – .88; $p < .05$), compared with non-NPD patients and controlling for possible confounding variables. NPD was not associated with attempt lethality. NPD patients were more likely to be male, to have a substance use disorder, and to have high aggression and hostility scores. Limitations include that the sample consists of only mood-disordered patients, a modest sample size of NPD, and the data are cross-sectional. The multivariate protective effect of NPD on suicide attempt is consistent with most previous research. The lower impulsivity of NPD patients and less severe personality pathology relative to other personality disorders may contribute to this effect. No relationship of NPD to attempt lethality was found, contradicting other research, but perhaps reflecting differences between study samples. Future studies should oversample NPD patients and include suicide death as an outcome. Clinical implications include discussion of individualized suicide risk assessment with NPD patients.

Keywords

Narcissistic Personality Disorder; Depression; Suicide Attempt; Suicide Attempt Lethality

1. Introduction

Suicide is the tenth leading cause of death in the US (CDC, 2013) and the fifteenth leading cause of death globally (WHO, 2014). For every suicide death, the World Health Organization estimates that 20 people have made one or more suicide attempts (WHO, 2014). While personality problems are a central focus in research on the relationship of psychopathology to suicidal behavior, the relationship of Narcissistic Personality Disorder (NPD) to suicidal behavior has received relatively little attention. The modest body of empirical studies consists primarily of studies of clinical samples, with one general population epidemiological study identified (Bolton and Robinson, 2010).

NPD is associated with greater risk of suicide death when compared to other personality disorders (Giner et al., 2013; Stone, 1989), and among a small series of consecutive suicide deaths in the Israeli military (Apter et al., 1993). NPD also is linked to greater self-rated suicide attempt lethality compared to other DSM-IV Cluster B personality disorders (Blasco-Fontecilla et al., 2009).

In contrast to the evidence that NPD is associated with suicide death and high lethality attempts, the majority of clinical studies have found no relationship or a modest to moderate protective effect of NPD on non-fatal suicidal behavior. A study of adolescents found that NPD was not related to suicidal behavior (Cross et al., 2011). Ansell and colleagues (2015) analyzed 10-year longitudinal follow-up of personality disordered patients with an innovative simultaneous analysis of any attempt and number of attempts. Controlling for other personality disorders, a trend was evident ($p < .10$) that meeting more NPD criteria was protective against ever attempting, but more NPD criteria was a risk for an increasing number of attempts over time. The association of NPD criteria score with the increasing

number of attempts is consistent with those studies that found NPD associated with greater suicide attempt lethality and death (Apter et al., 1993; Blasco-Fontecilla et al., 2009; Giner et al., 2013; Stone, 1989). In contrast to the majority of clinical studies that found a null or protective effect of NPD on suicide attempt, one study of older adults found those with NPD or narcissistic traits scored higher on clinician rated suicide risk (Heisel et al., 2007).

Finally, the Bolton and Robinson (2010) epidemiological study of over 34000 adults found NPD is protective against suicide attempt compared to the general population. In summary, existing research suggests that NPD is associated with greater risk of suicide death and of highly lethal suicide attempts, but NPD is either not associated or moderately protective against lower lethality, non-fatal attempts.

A factor that might influence this pattern of a protective effect against non-fatal attempt, but a risk effect on suicide death or highly lethal attempt is the relatively lower severity of personality psychopathology in NPD. NPD patients scored lower on almost all indices of personality pathology than Borderline Personality Disorder (BPD) patients (Ackerman et al., 1999; Berg, 1990). Compared to other Cluster B personality disorders, NPD patients score lower on impulsivity (Blasco-Fontecilla et al., 2009). The lower severity of personality psychopathology and impulsivity of NPD may contribute to lower rates of non-fatal suicide attempts compared with other Cluster B personality disorders, and even compared with healthy adults (Bolton & Robinson, 2010). However, greater self-control, planning and perfectionism potentially lead to the greater risk of suicide death and higher lethality attempts when NPD patients do engage in suicidal behavior.

This study proposed to test this model by examining the relationship of NPD to suicide attempt and lethality of attempt in a large sample of mood-disordered patients. We hypothesized that NPD would have either no association with nonfatal suicide attempt or be modestly protective against an attempt, and that NPD would be associated with greater attempt lethality.

2. Materials and Methods

2.1. Samples and Procedures

This is a secondary analysis of a clinical research data collected through NIMH funded grants at the New York State Psychiatric Institute (NYSPI)/Columbia University and the Western Psychiatric Institute and Clinic in Pittsburgh, PA. We included all outpatients in a current major depressive episode of either Major Depressive Disorder or Bipolar Disorder assessed at presentation for outpatient treatment (N=657) in the database. Of these, 503 (77%) met criteria for Major Depression and 154 (23%) were diagnosed with Bipolar Disorder based on structural diagnostic interviews using the Structured Clinical Interview for DSM-IV Axis 1 Disorders (SCID-I) (First et al., 2012). The Institutional Review Boards of the New York State Psychiatric Institute, Columbia University, and the Western Psychiatric Institute and Clinic approved the study. Additional exclusion criteria included neurological illness and active medical conditions.

The sample was composed of 60% women ($n = 395$) and 40% men ($n = 262$). Participants ranged in age from 18 to 85 years old with a mean age of 38.33 ($SD = 13.13$). The majority of the sample identified as White ($n = 500$, 76%).

Personality disorder diagnoses were determined using the SCID-II (Gibbon et al., 1997). Twenty six percent of the sample ($n = 168$) were diagnosed with BPD and 7% ($n = 48$) met criteria for NPD.

A suicide attempt was defined as a self-destructive act with some degree of intent to end one's life (O'Carroll et al., 1996). The Lethality Rating Scale (Beck et al., 1975) assessed the degree of medical injury resulting from the suicide attempt (lethality of most severe attempt was used if more than one attempt). Self-rated lethality of attempt was scored from the Suicidal Intent Scale (Beck et al., 1974a), following Blasco-Fontecilla and colleagues (2009), using 7 items identified by factor analysis. Self-rated lethality and medical lethality were modestly correlated (Spearman's $r(282) = .30$, $p < .001$).

Employment status and experience of childhood abuse were recorded in the clinical research interview using the Columbia Baseline Clinical And Demographic Form. The number of major depressive episodes, PTSD, and substance use disorders were assessed using the SCID. The clinical research interviewer rated the 17-item Hamilton Depression Rating Scale (Hamilton, 1960). Aggression was measured using the Brown-Goodwin Aggression Scale (Brown et al., 1979), and hostility with the Buss-Durkee Hostility Inventory (Buss and Durkee, 1957). The Barratt Impulsiveness Scale evaluated impulsivity (Barratt, 1965). Self-rated depression was assessed with the Beck Depression Inventory (Beck et al., 1996). Hopelessness was evaluated using the Beck Hopelessness Inventory (Beck et al., 1974b). Prior and current suicidal ideation were measured by the Scale for Suicide Ideation (Beck et al., 1988). Possible protective factors against suicide attempt were assessed with the Reasons for Living Inventory (Linehan et al., 1983).

2.2 Statistical Analysis

Demographic and clinical characteristics were compared using t-tests and chi-square tests in those with and without NPD (Table 1) and in suicide attempters and non-attempters (Table 2). The overall sample was large, but the relatively small number of NPD participants meant that not all significant covariates could be entered into the multiple logistic regression model of suicide attempt. Potential covariates were selected based on significant association to both suicide attempt and to NPD, with the exception of patient sex. Patient sex was also included since men were markedly overrepresented among NPD patients. Following this rationale, a multivariate model was constructed with suicide attempt status as the dependent variable and NPD as the independent variable controlling for aggression, hostility, substance abuse, and sex (Table 3). Though aggression and hostility are correlated variables ($r = .55$ in this sample), both were retained in the model as previous research showed partially independent effects of hostility and aggression on suicidal behavior (Oquendo et al., 2007). Based on the results of this model, a post hoc regression model was constructed substituting BPD for hostility and aggression.

3. Results

Approximately 7% of the sample was diagnosed with NPD. Table 1 shows how the study variables differed in the NPD and non-NPD subsamples. Men were over five times more likely to be diagnosed with NPD compared with women [Odds-Ratio (OR) = 5.74]. NPD patients were three times more likely to have a history of comorbid substance use disorder (OR = 3.03). NPD patients also scored higher on hostility (Cohen's $d = .71$) and aggression (Cohen's $d = .46$). One-third of the NPD participants were also diagnosed with BPD compared to 25% of the non-NPD sample, a difference that was not statistically significant ($p > .05$).

Table 2 displays the clinical and demographic characteristics associated with suicide attempt. There was no association of NPD with suicide attempt. Caucasian (OR = .58) and older participants (Cohen's $d = .33$) were less likely to have made an attempt. Attempts were more likely in those diagnosed with BPD (OR = 5.34), substance use disorder (OR = 2.24), Bipolar Disorder (OR = 1.51), those with more episodes of major depression (Cohen's $d = .27$), and in those who reported a childhood abuse history (OR = 1.77). The Reasons for Living scale score was higher in non-attempters (Cohen's $d = .57$). All of the remaining clinical scale scores were higher in attempters, in order from strongest to weakest: suicidal ideation in the two weeks before intake (Cohen's $d = .98$); current suicidal ideation (Cohen's $d = .60$); aggression (Cohen's $d = .59$); hostility (Cohen's $d = .42$); BDI (Cohen's $d = .41$); hopelessness (Cohen's $d = .30$); clinical interviewer rated depression (Cohen's $d = .24$); and impulsivity (Cohen's $d = .21$).

NPD was not related to clinician-rated lethality of suicide attempt [NPD ($n = 20$) mean = 3.4, SD = 1.9; Not NPD ($n = 290$) mean = 3.2, SD = 2.0; $t(308) = .36$, $p = .71$]. Similarly, NPD was not associated with self-rated lethality [NPD ($n = 19$) mean = 9.7, SD = 3.9; Not NPD ($n = 263$) mean = 10.0, SD = 3.5; $t(280) = .25$, $p = .80$]. NPD did not differ from other cluster B personality disorders on self-rated lethality.

Shown in Table 3, the multivariate model of suicide attempt included NPD, aggression, hostility, substance use, and male as predictors. NPD patients were 2.4 times less likely to make an attempt (OR = .41), controlling for the risks of aggression, hostility, and substance use. Male sex was not related to attempt status.

In interpreting our regression model, it was noted that hostility and aggression are hallmark traits of BPD. This motivated construction of a post hoc regression model substituting BPD for hostility and aggression. The protective effect of NPD was slightly reduced in this model with NPD participants being 1.96 times less likely to make a suicide attempt. The large risk effect for BPD was clear, with an odds-ratio of nearly 5.

4. Discussion

In this sample of mood-disordered patients, a multivariate model controlling for other important clinical variables demonstrated that NPD was moderately protective against suicide attempt. There was no bivariate relationship of NPD to suicide attempt, and NPD was not related to either clinician-rated or self-rated lethality of suicide attempt.

Our sample was composed entirely of mood-disordered patients, a group with a substantially elevated rate of suicide attempt in contrast to the general population. In the National Comorbidity Study, those with any mood disorder were approximately 12 times more likely to report an attempt than other participants (Kessler et al., 1999). That NPD was protective against suicide attempt must be judged in relation to a large increased risk in mood-disorders relative to the general population. Our finding generates the hypothesis that NPD may blunt the heightened risk for suicide attempt among those with mood disorders.

The protective effect of NPD emerged in the multivariate model controlling for hostility, aggression and substance use. Substance use disorder is noted by DSM 5 as a related condition to NPD, and hostility and aggression are implied by criteria about lack of empathy, exploitation of others and “haughty” and “arrogant” attitudes (APA, 2013). The model suggests that it is the criteria other than hostility or aggression that account for the protective effect on suicide, such as: grandiosity, fantasies of success, viewing self as special, need for admiration and entitlement. These are the “self-love” criteria, so the exaggerated self-regard in itself may be protective against suicide attempt. One of the studies that contributed participants to our dataset did not retain the item-by-item SCID-II responses (only the resulting categorical diagnoses), so we could not test if the “self-love” criteria themselves were protective. Future studies with larger samples of NPD patients could examine the factor structure of the NPD criteria set and test for differential predictive power on suicidal behavior.

Given the shared traits of NPD and BPD, and the prominence of hostility and aggression within BPD, we conducted a post-hoc regression analysis controlling for BPD in place of hostility and aggression. NPD remained protective against suicide attempt, controlling for the heightened risk associated with BPD diagnosis, suggesting that the protective effect was not due to a contrast with BPD. Further, these two regressions indicate that the distinctive narcissistic traits confer a protective effect on suicide attempt when controlling for the shared DSM Cluster B traits.

As noted in the literature review, NPD patients are lower in impulsivity than other Cluster B personality disorder patients and this may also contribute to a lower rate of attempts. This lower impulsivity is one feature of the lower personality pathology of NPD compared to other Cluster B personality disorders (Ackerman et al., 1999; Berg, 1990). Patients with NPD have longer and more stable periods of defensive self-esteem inflation and grandiosity, in contrast to BPD with its rapidly fluctuating idealization-devaluation of self and other (Pincus and Lukowitsky, 2010).

Bolton and Robinson’s (2010) epidemiological study (the National Epidemiologic Survey on Alcohol and Related Conditions or NESARC) also found a similar magnitude protective effect of NPD to our study when controlling for other DSM diagnoses: NPD cases were 1.7 times less likely to report a suicide attempt. An important difference to note is that the reference group in Bolton and Robinson (2010) is adults with no mental disorder because the model controls for 25 Axis I and II disorders. In our multivariate model, the reference group is adults with major depressive episodes, partialling out the influence on suicide attempt of hostility, aggression and substance use. Further analysis is warranted with the

NESARC data to examine the bivariate association of NPD with suicide attempt (not reported by Bolton and Robinson, 2010) and also to test for moderation effects of NPD by major diagnostic groups including mood, anxiety and substance use disorders.

Nonetheless, a protective effect for NPD on suicide attempts when contrasted with healthy adults, as found by Bolton and Robinson (2010), might be explained by the low impulsivity and rigid personality style of those with NPD. The mean level of impulsivity found in Blasco-Fontecilla and colleagues (2009) for NPD participants, and in this sample, were one-half to one standard deviation below the mean impulsivity (Barratt Impulsivity Scale) score found in a large community sample (Spinella, 2007).

The lower impulsivity and relatively rigid personality of NPD may be related to reduced risk of impulsive, non-fatal, lower lethality, suicide attempts. However, when NPD patients do become suicidal they may be more likely to make carefully planned, highly lethal suicide attempts that often result in death. This association of NPD with greater lethality or with suicide death has been replicated in several studies (Apter et al., 1993; Giner et al., 2013; Stone, 1989). However, we found no association of NPD with either medical or self-rated suicide attempt lethality. The mean level of medical lethality in this sample indicates a moderate medical severity only requiring outpatient treatment, and the mean level of self-rated lethality was also moderate. Studies that sample at an emergency department may result in a higher proportion of more lethal attempts, possibly explaining the disparate findings.

Given the rigid coping style of NPD, it is also expectable that narcissistic patients may have greater suicide risk when confronted with life stressors. To date, the evidence for this interaction is modest and it warrants further research (Blasco-Fontecilla et al., 2010; Heisel et al., 2007).

It is also of interest to use the emerging dimensional models of personality pathology to study the relationship of narcissism to suicidal behavior as done by Ansell and colleagues (2015). It is valuable if these studies show how their results relate to categorical diagnosis, such as reporting the number of participants who did not meet criteria for NPD but had sub-threshold narcissistic symptoms. This translation between dimensional and categorical frameworks will facilitate integrative interpretation of findings both for research and clinical implications.

Our results, in the context of the previous literature, generate hypotheses for future study. First, it is predicted that NPD is either not associated or moderately protective against low lethality suicide attempt. This pattern was found in our study of depressed patients, in comparison to other Cluster B PDs (Giner et al., 2013) and in the general population (Bolton & Robinson, 2010). Previous research supports predicting that NPD leads to greater suicide lethality in comparison to other PDs (Blasco-Fontecilla et al., 2009) and a higher risk of suicide completion (Giner et al., 2013). Future well-powered studies with large samples of different diagnostic groups should include tests for differential effects on suicidal behavior of NPD in mood-disordered patients in contrast to other diagnoses, or with no Axis I

diagnosis. As noted further analysis with the NESARC will provide relevant results, but clinical studies are also needed.

The interpretation that NPD is protective against low-lethality suicide attempts is not definitive. It is based primarily in our findings and those of the NESARC. In both cases the protective effect was found once controlling for other dimensions of psychopathology. NPD without aggression and hostility, or other psychopathology, may be a rare phenomenon. Our NPD sample was small to examine separately a low aggression and hostility NPD subsample. The large sample size of the NESARC, however, likely will allow examination of the relationship of subtypes of NPD to suicidal behavior in further analysis of that dataset.

The results of this study, and the context of previous findings, represent something of a clinical paradox that requires careful interpretation to avoid overly simplistic and even potentially dangerous conclusions such as “narcissists love themselves too much to kill themselves.” The research literature is clear that NPD is associated with greater risk of suicide death and high lethality attempts, but it is also emerging that NPD is protective against low lethality attempts, at least among depressed outpatients when controlling for some shared cluster B pathology (in this study) or other Axis I and II psychopathology in the general population (Bolton & Stinson, 2010).

The preliminary analyses also reveal some relationships of clinical interest. Depressed NPD patients were more likely to be male, to have a substance use disorder, and have high aggression and hostility scores. However, as has been discussed, NPD was not associated with impulsivity in this sample. The high comorbidity of NPD with other Axis I and II diagnoses, as well as the possibility that NPD interacts differentially with various diagnoses, suggests that clinicians must make careful, individualized judgments in their practice about suicide risk. While the hypothesis that NPD might be protective against attempt in mood-disordered patients is intriguing, it is in the context of the higher risk from the mood-disorder itself, and in the risk of high lethality attempts of NPD patients. Clinicians should be aware that NPD patients are less likely to send out the “distress signals” of low lethality suicide attempts while potentially being at greater risk of suicide completion or a high lethality attempt.

Strengths of this study include a large overall sample size and high integrity clinical assessment techniques. Limitations include the relatively small subsample of NPD patients and cross-sectional collection of independent and dependent variables. *The relatively small number of NPD cases did not allow exploration of subtypes of NPD, such as low aggression and hostility NPD cases.* As noted previously, recruitment of participants from a mental health treatment setting might have limited the proportion of highly lethal suicide attempts. This study examines the relationship of NPD in the context of major mood disorders. As with BPD, suicidal behavior in NPD patients may be at least partially independent of depression, *but personality features may also be exacerbated by a current depressive episode.* DSM diagnosis of NPD also does not include the vulnerable subtype of narcissistic personality problems (Dickinson and Pincus, 2003), though the alternate personality disorder model included in DSM V includes NPD criteria that capture features of the

vulnerable subtype. As noted earlier, we also did not have individual NPD SCID items available to conduct post hoc analyses.

This study contributes to the evidence of the relationship of NPD to suicidal behavior, namely to uncovering the potentially protective effect of NPD for *low-lethality* suicide attempt. Though NPD has a relatively low prevalence, its probable association with serious suicide attempts and with suicide death makes it an important focus of research and clinical attention.

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Table 1

Clinical and Demographic Characteristics of those with and without Narcissistic Personality Diagnosis

Variable	No NPD (N=609)		NPD (N=48)		Analysis	
	N	N%	N	N%	χ^2 t	df p
Female	384	63.05	11	22.92	29.90	1 0.00
Male	225	36.95	37	77.08		
White	465	80.45	35	74.47	0.97	1 0.32
Hispanic	72	11.98	3	6.38	1.33	1 0.25
Childhood Abuse	191	36.24	11	28.95	0.82	1 0.37
Employed	248	41.13	16	33.33	1.12	1 0.29
Substance use	216	35.47	30	62.50	13.88	1 0.00
Bipolar	138	22.66	16	33.33	2.82	1 0.09
Borderline PD	152	24.96	16	33.33	1.64	1 0.20
PTSD	98	16.09	4	8.33	2.04	1 0.15
Mean	SD	Mean	SD	t	df	p
Age	38.3	13.3	38.9	11.3	-0.31	653 0.76
MD Episodes	5.4	6.0	3.9	5.0	1.60	610 0.11
Hamilton	18.9	7.2	17.6	5.8	1.18	638 0.24
Aggression	18.1	5.4	20.6	5.5	-3.01	612 0.00
Hostility	34.2	12.3	43.2	13.2	-4.30	537 0.00
Impulsivity	51.7	16.3	55.7	20.0	-1.42	521 0.16
BDI	26.2	12.2	25.6	9.0	0.28	577 0.78
Hopelessness	11.5	6.2	11.7	5.3	-0.18	588 0.85
Prior SI	11.4	10.6	12.0	10.4	-0.36	579 0.72
Current SI	6.6	8.0	5.6	6.8	0.86	607 0.39
Reasons for Living	153.7	43.1	157.8	33.5	-0.54	481 0.59

P-values < .05 are shown in bold. NPD- Narcissistic Personality Disorder; Borderline PD-Borderline Personality Disorder; PTSD- Post-Traumatic Stress Disorder, MD Episodes – Major Depressive Episodes Count, Hamilton- Hamilton Depression Scale, BDI- Beck Depression Inventory, Prior SI- Prior Suicidal Ideation, Current SI – Current Suicidal Ideation.

Table 2
Clinical and Demographic Characteristics of Patients with and without a Suicide Attempt

Variable	No Suicide Attempt		Suicide Attempt		Analysis	
	N	N%	N	N%	χ^2_t	p
NPD	28	8.21	20	6.33	0.86	1 0.35
Not NPD	313	91.79	296	93.67		
Female	198	58.06	197	62.34	1.25	1 0.26
White	272	84.21	228	75.50	7.41	1 0.01
Hispanic	45	13.35	30	9.65	2.17	1 0.14
Childhood Abuse	91	29.74	111	42.86	10.51	1 0.00
Employed	146	43.20	118	37.70	2.04	1 0.15
Substance use	97	28.45	149	47.15	24.50	1 0.00
Bipolar	68	19.94	86	27.22	4.84	1 0.03
Borderline PD	39	11.44	129	40.82	74.42	1 0.00
PTSD	47	13.78	55	17.41	1.64	1 0.20
Age	Mean 40.3	SD 13.9	Mean 36.1	SD 11.9	t 4.14	df 653 p 0.00
MD Episodes	4.5	5.4	6.1	6.4	-3.32	610 0.00
Hamilton	18.0	7.8	19.7	6.1	-2.94	638 0.00
Aggression	16.8	4.6	19.9	5.8	-7.32	612 0.00
Hostility	32.4	12.5	37.6	12.0	-4.95	537 0.00
Impulsivity	50.3	16.6	53.8	16.4	-2.44	521 0.01
BDI	23.8	12.1	28.7	11.4	-5.05	577 0.00
Hopelessness	10.7	6.3	12.5	5.7	-3.46	588 0.00
Prior SI	6.9	8.1	16.2	10.7	-11.85	579 0.00
Current SI	4.3	6.1	8.9	8.9	-7.50	607 0.00
Reasons for Living	164.8	38.0	141.2	44.0	6.34	481 0.00

P-values < .05 are shown in bold. NPD- Narcissistic Personality Disorder; Borderline PD-Borderline Personality Disorder, PTSD- Post-Traumatic Stress Disorder, MD Episodes – Major Depressive Episodes Count, Hamilton- Hamilton Depression Scale, BDI- Beck Depression Inventory, Prior SI- Prior Suicidal Ideation, Current SI – Current Suicidal Ideation.

Table 3

Multivariate Logistic Regression Models Predicting Suicide Attempt Status

Model 1. Original Model				
Variable	Odds-ratio	95% CI	z	p
NPD	0.41	.19 – .88	–2.3	0.021
Aggression	1.10	1.05–1.14	4.2	0.000
Hostility	1.02	1.01–1.04	2.5	0.012
Substance Use	1.57	1.05–2.34	2.2	0.029
Male	0.70	.47–1.02	–1.9	0.065

Model 2. <i>Post hoc</i> model substituting BPD for Aggression and Hostility				
Variable	Odds-ratio	95% CI	z	p
NPD	0.51	.26 – .99	–2.0	0.049
BPD	4.96	3.25–7.58	7.42	0.000
Substance Use	1.87	1.31–2.67	3.46	0.001
Male	1.06	.74–1.52	0.34	0.737

N = 528; NPD- Narcissistic Personality Disorder.

N = 657; NPD- Narcissistic Personality Disorder; BPD- Borderline Personality Disorder.