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A masked negative self-esteem? Implicit and explicit self-esteem in patients with Narcissistic Personality Disorder

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ABSTRACT

The mask model of narcissism states that the narcissistic traits of patients with NPD are the result of a compensatory reaction to underlying ego fragility. This model assumes that high explicit self-esteem masks low implicit self-esteem. However, research on narcissism has predominantly focused on non-clinical participants and data derived from patients diagnosed with Narcissistic Personality Disorder (NPD) remain scarce. Therefore, the goal of the present study was to test the mask model hypothesis of narcissism among patients with NPD. Male patients with NPD were compared to patients with other PD's and healthy participants on implicit and explicit self-esteem. NPD patients did not differ in levels of explicit and implicit self-esteem compared to both the psychiatric and the healthy control group. Overall, the current study found no evidence in support of the mask model of narcissism among a clinical group. This implicates that it might not be relevant for clinicians to focus treatment of NPD on an underlying negative self-esteem.

1. Introduction

Although the concept of narcissism has intrigued clinicians, theorists, and scientists for many decades, the Narcissistic Personality Disorder (NPD; DSM-5, APA, 2013) has received relatively little empirical attention (e.g., Roepke and Vater, 2014; Ronningstam, 2005; 2010). This lack of research is problematic because patients with NPD form a difficult and challenging group to treat in clinical practice (Thomaes and Bushman, 2011). Theories and treatments of NPD are predominantly based upon clinical theories resulting from patient observations or even single case studies (Cain et al., 2008). It is often assumed that NPD symptoms originate from underlying low self-esteem (e.g. Morf and Rhodewalt), but there is a lack of empirical support for this theory among clinical samples (Cain et al., 2008; Pincus and Lukowitsky, 2010; Vater et al., 2013a. The current study therefore aims to further examine some of the most important features of patients with NPD (see Marissen et al., 2012), and examines the difference between implicit and explicit self-esteem among patients with NPD.

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; APA, 2013), patients with NPD have a pervasive pattern of high need for admiration, grandiosity, and lack of genuine interest in others (Emmelkamp and Kamphuis, 2007; Pincus and Lukowitsky, 2010; Ronningstam, 2013). The most common view regarding the origin of narcissistic behaviors is derived from psychodynamic literature. That theory suggests that pathological narcissism is the result of an underlying fragile and unstable self-esteem (Kernberg, 1989, 1998; Kohut, 1968). This impaired self-esteem is believed to be caused by severe frustrations as a result of inadequate parenting in early development (Akhtar, 1989). In that view, the central feature of narcissism, presenting oneself with superb grandiosity, is explained as a strategy of defense against feelings of extreme inferiority (Akhtar and Thomson, 1982, Akhtar, 1989). More recent theories from a social psychology point of view also support the idea behind this so-called “mask” model of narcissism. According to the mask model, patients with NPD attempt to maintain a grandiose, but fragile, view of themselves. These attempts accordingly stem from the urge to mask their profound feelings of inferiority that originate from early interpersonal experiences (Morf and Rhodewalt, 2001; Tracy and Robins, 2003).

Both the psychoanalytic theories and the mask model are based upon the idea that NPD patients have an impaired self-esteem (e.g.

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Cain et al., 2008). To understand the concept of self-esteem, it is important to consider that there are at least two levels: Implicit and explicit self-esteem (Jordan et al., 2003; Zeigler-Hill and Jordan, 2011). Implicit self-esteem has been defined as an automatic and non-conscious evaluation of the self that guides spontaneous reaction to self-relevant stimuli (Kernis, 2006). Several studies have examined the role of both implicit and explicit self-esteem among various psychiatric disorders such as depression and anxiety disorders, however results remain inconclusive concerning the influence of implicit self-esteem on the development and maintenance of these disorders (.e.g. Franck et al., 2007a, 2007b; Ritter et al., 2013). The mask model of narcissism suggests a discrepancy between high overt levels of self-esteem (explicit self-esteem) and lower automatic, uncontrollable levels of self-esteem (implicit self-esteem). This type of 'narcissistic' self-esteem is characterized by high explicit self-esteem and low implicit self-esteem, is also referred to as 'fragile self-esteem' (Zeigler-Hill, 2006; Zeigler-Hill and Jordan, 2011).

To investigate the scientific evidence for the mask model of narcissism, Bosson et al. (2008) performed a meta-analysis to examine and compare studies that tested the model among non-patient groups. Overall, they found no evidence for the mask model among normal populations since no association was found between narcissistic features and the expected high explicit/low implicit self-esteem combination (Bosson et al., 2008). To our knowledge only one study has examined the mask model among patients diagnosed with NPD compared to a group of patients with Borderline personality disorder (BPD) and non-clinical controls (Vater et al., 2013a, 2013b). In that study it was found that, contrary to the expectations, patients with NPD reported a lower explicit self-esteem compared to a non-clinical control group. Also, no differences in implicit self-esteem were found between these groups raising serious questions about the validity of the mask model of narcissism (Vater et al., 2013a, 2013b).

To summarize, although influential models are based upon the believe that narcissists tend to mask their feelings of inferiority by displaying grandiose feelings of self-worth, so far no solid scientific evidence (in both non-clinical and clinical groups) can be found to support this theoretical model. There seems to be little consensus about the underlying processes in narcissism, although the view upon the origins of narcissism can have serious implications for the treatment of patients with NPD. For example, when considering a low self-esteem as the origin of narcissistic behaviors, one would aim at repairing or enhancing this self-esteem during treatment. Studies focusing on patients with NPD are scarce and not comparable in numbers to the studies regarding other personality types such as borderline personality traits or anti-social traits (e.g., Pincus and Lukowitsky, 2010; Ronningstam, 2013). Besides, researchers often use female undergraduate psychology students as participants to test their hypotheses, making it highly questionable whether these groups are comparable to patients with NPD. It is therefore important to further investigate the underlying characteristics of NPD.

Since the mask model of narcissism is hardly investigated supported by research using patients with NPD, the current study aims to further investigate this model in a NPD patient sample. To our knowledge, the study of Vater et al. (2013a, 2013b) is the only one that examined self-esteem issues among a group of patients with NPD. In that study, for comparisons between NPD patients and non-clinical controls, half of the NPD group consists of female participants (Vater et al., 2013a, 2013b). That group might be less representative for NPD patient groups, as it is found that the lifetime prevalence of NPD is much higher for men than women (7.7% vs. 4.8%; APA, 2013). In a large epidemiologic study among the general population in the United States, characteristics of men and women with NPD were examined (Stinson et al., 2008). As expected, a higher prevalence of NPD for men than for women was found, but also sex-specific differences concerning mental disability between men and women. Disability was associated with NPD among men, but not among women, when other psychiatric disorders were controlled for in the analyses. The authors further suggests that NPD may have a more severe expression in men relative to women so this makes it important to take gender differences into account when examining patients with NPD.

The present study therefore further elaborates on the study of Vater et al. (2013a, 2013b) and examines evidence for the mask model among a male NPD patient group. First, to characterize the three groups, we examined whether patients with NPD differ in the degree of self-reported narcissism and psychological complaints compared to a psychiatric control group and a healthy control group. Our main question is whether NPD patients, conform the mask model, indeed possess high explicit, but low implicit self-esteem. Levels of explicit, implicit, and discrepant self-esteem will be compared between the three groups. It is expected that NPD patients will exhibit high explicit, low implicit, and large discrepant self-esteem when compared to both control groups.

2. Method

2.1. Measures

The *Structured Clinical Interview for DSM–IV* (SCID- II; First et al., 1997) was used to assess personality disorders in both patients groups and healthy controls. The Dutch version of the SCID-II has adequate test-retest inter-rater reliability to determine personality disorders (Weertman et al., 2003). Furthermore, therapists were asked to indicate the overall severity of symptoms of the patient with the use of the *Clinical Global Impression* (CGI; Guy, 1976). This is a widely used 7-point scale to assess overall symptom severity, from 'no symptoms' to 'extreme symptoms'. In addition to this, therapists were asked to rate the *Global Assessment of Functioning* score for their patients (GAF; Endicott et al., 1976). GAF scores range from 0 to 100 on a continuum from psychological or psychiatric sickness to health. The GAF has proven to be a reliable and valid method to determine the severity of psychiatric disturbance (Endicott et al., 1976; Jones et al., 1995).

The *Narcissistic Personality Inventory* (NPI; Raskin, and Hall, 1979; Raskin and Terry, 1988; Barelds and Dijkstra, 2010) was used to assess self-reported narcissistic traits. The NPI is commonly used in the field of social psychology to measure narcissistic traits (e.g. Vater et al., 2013a, 2013b). The version we used consisted of 40 statements, to which the participants had to respond on a 5-point *likert*-scale (1: strongly disagree, 5: strongly agree). Cronbach's Alpha in the current study was 0.85, an indication for a reliable measure. A high NPI score points towards narcissism.

Patients own experience of overall psychological distress was assessed with the *Brief Symptom Inventory* (BSI; Derogatis and Melisaratos, 1983). This 53-item self-report measures psychological symptoms that the patient experienced during past week, which for example includes symptoms of depression, anxiety, and hostility. Patients have to rate to what extend they experienced distress, such as difficulties remembering something. Amount of distress per symptom was rated on a 5-point scale, with answer possibilities ranging from 0: no distress, to 4: extremely distressed (Derogatis and Melisaratos, 1983). Current study showed a Cronbach's Alpha of 0.97, which indicates a reliable inventory.

Explicit self-esteem was measured with the Dutch *Rosenberg Self-esteem Scale* (RSES; Rosenberg, 1965; Franck et al., 2008). Participants have to respond to ten statements on a 4-point scale (1: 'strongly agree'; 4: strongly disagree). In the current study, the RSES had a Cronbach's alpha of 0.90, which indicates a good

Table 1.
SE-IAT.

Block	Practice vs. critical test blocks	Nr of trials	Categories
1	Practice block	10	'Positive' and 'negative'
2	Practice block	10	'Me' and 'not me'
3	Practice block	20	'Positive - me' and 'negative – not me'
4	Critical test block	40	'Positive - me' and 'negative – not me'
5	Practice block	20	'Not me' and 'me'
6	Practice block	20	'Positive – not me' and 'negative - me'
7	Critical test block	40	'Positive – not me' and 'negative - me'

reliability. A low score on the RSES indicates high explicit self-esteem.

To measure implicit self-esteem, the *Self-Esteem Implicit Association Task* (SE-IAT, Greenwald and Farnham, 2000) was administered. The SE-IAT is a computerized task to measure the relative strength of the participants' associations between two concept categories. It has been shown that the widely used self-esteem IAT has satisfying internal consistency as well as temporal stability. The split-half reliability of the IAT reaches a level comparable to that of traditional questionnaire measures, its test–retest reliability however does not reach the magnitude of those reported for direct measures (Krause et al., 2011). Participants were asked to classify words into categories as quickly as possible by pressing one of two keys on the keyboard. An overview of the categories of the task can be found in Table 1. Two sets of two word categories were presented to participants (De Jong, 2002). One category consisted of self-concept words, and contained *'me' words* (I, myself, me, my, own) and *'not me' words* (other, themselves, they, them, theirs). The second category consisted of self-attribution words, and was comprised of *'positive attributions'* (nice, good, smart, positive, and kind) and *'negative attributions'* (stupid, bad, dumb, negative, and unkind). The SE-IAT consisted of seven blocks as depicted in Table 1. Block 1, 2, 3, 5 and 6 were practice trials, whereas block 4 and 7 were critical test block trials. In block 1, 2, and 5, participants were asked to classify words in a single category. In block 3, 4, 6, and 7, combinations of self-concept and self-attribution words shared one response key. To control for order effects, blocks 4 and 7 were counterbalanced across participants. To interpret scores, the IAT-D effect was calculated following the algorithm as described by Greenwald et al. (2003). To determine the internal consistency of the IAT, a split-half reliability score was calculated for the IAT-D measure. By calculating the IAT-D measure for the odd and even trials separately, and calculating Spearman-Brown corrected Pearson correlations on these IAT-D measures, a strong internal consistency was found: $r=0.89$, $n=55$, $p<0.001$. A positive score (IAT-D) was obtained if participants showed positive implicit associations with the self.

Discrepant self-esteem was calculated with the scores on the RSES and SE-IAT. Calculation was made by standardizing the scores (z-scores) of RSES and SE-IAT (De Raedt et al., 2006). Hereafter, distance between the standardized scores was computed by subtracting the RSES scores from the SE-IAT. This calculation resulted in a score which indicated discrepancy between explicit and implicit self-esteem. Lower scores of discrepancy indicate congruent scores between implicit and explicit self-esteem, whereas higher scores imply a larger discrepancy between the two. A higher discrepancy score implies a higher level of fragile self-esteem.

2.2. Participants

The present study was part of a larger study examining empathy among patients with personality disorders (Marissen et al., 2012). Sixty participants agreed to participate in the study, which resulted in three groups consisting of twenty participants. All participants were men between the age of 18 and 65 years, matched on age and level of education. Patient groups were likewise matched on length of treatment to minimize possible effects of psychotherapeutic treatment. All patients were recruited at the Centre for Personality Disorders of PsyQ, Mental Health Institute in The Hague (the Netherlands), a specialized center where only patients with cluster B and C spectrum personality disorders are treated.

The first group were participants with a narcissistic personality disorder (NPD) who were in out-patient treatment in the Center for Personality Disorders. The NPD diagnosis was clinically made by two independent therapists, namely a psychologist and a psychiatrist. In addition to this, clinical diagnosis was confirmed by the SCID-II diagnostic interview.

Participants from the psychiatric control group were also in treatment at the Center for Personality Disorders in The Hague. Participants were diagnosed with a Cluster C personality disorder. As in the NPD group, diagnosis was made by two independent therapists and confirmed by the SCID-II diagnostic interview.

The control group was matched on age and level of education and consisted of psychologically healthy men who were not in treatment for any psychological problems. They were recruited through advertisements. The relevant sections of the SCID II were administered to confirm that participants did not meet the criteria of any personality disorder.

2.3. Procedure

Participants in both psychiatric groups were approached for participation in the study by their therapists in the treatment center. Participants in the control group were recruited through advertisements. After participants were provided with thorough information about the study and had signed informed consent, an appointment was made to conduct the tasks. Measurements were administered by a trained psychologist. First, the SCID-II was conducted. After this, participants filled out the self-report questionnaires BSI, NPI, and RSES. Lastly, the SE-IAT was administered. Participants in group 1 and 2 performed their measurement at their treatment center. For participants from group 3, their measurement was conducted at Erasmus University Rotterdam, the Netherlands. All participants received a reimbursement of 15 Euro for participating in the study.

3. Results

3.1. Descriptive statistics and intercorrelations of all measures

Table 2 shows the descriptive variables of questionnaires and baseline characteristics of the participants. Age, GAF and CGI were, as expected, not normally distributed in the participant groups. To assure the groups were comparable, non-parametric Kruskal-Wallis tests and chi-square tests were executed. Results show no significant differences for age [$H\,(2)=2.16$, $p=0.34$] or education level [$\chi^2\,(6)=2.99$, $p=0.81$]. Between patient groups, no differences were found between treatment duration [$\chi^2\,(5)=1.04$, $p=1.00$], clinical symptoms [CGI; $H\,(1)=0.82$, $p=0.37$] and global functioning [GAF; $H\,(1)=0.01$, $p=0.94$]. Also, patients groups did not differ on a number of comorbid Axis 1 disorders [$\chi^2\,(1)=2.85$, $p=0.09$], or Axis 2 disorders [$\chi^2\,(1)=0.00$, $p=1.00$], or medication

Table 2.
Descriptive variables and personality characteristic measures for participant groups.

	NPD ($N=20$)	**PD C** ($N=20$)	**HC** ($N=20$)
	Mean (SD)	Mean (SD)	Mean (SD)
Age (years)	47.35 (12.08)	42.75 (10.49)	43.50 (11.76)
CGI	3.47 (0.84)	3.44 (0.71)	0.30 (0.92)
GAF	57.89 (4.51)	57.89 (4.81)	78.00 (6.16)
BSI	50.11 (21.81)	66.32 (38.50)	9.60 (6.59)
NPI	114.60 (21.02)	95.25 (19.92)	97.60 (21.26)
RSES	21.45 (6.54)	25.15 (5.87)	17.55 (4.04)
SE-IAT	0.69 (0.27)	0.78 (0.53)	0.81 (0.30)
Discrepant self-esteem	−0.19 (1.21)	−0.55 (1.99)	0.74 (0.95)
	Comorbidity *(N)*	Comorbidity (*N*)	Comorbidity (*N*)
Any affective disorder	5	9	0
Substance use disorder	3	4	0
Any anxiety disorder	–	5	0
Other disorders	4	3	1
	Any other PD (*N*)	Any other PD (*N*)	Any other PD (*N*)
NPD	20	0	0
BPD	1	0	0
ASPD	1	0	0
OCPD	0	14	0
DPD	0	1	0
APD	0	2	0
PD NOS	0	4	0

Note: NPD = Narcissistic Personality Disorder, PD C = Cluster C personality disorder, HC = healthy control group, Age in years, CGI = Clinical Global Impression, GAF = Global Assessment of Functioning, BSI = Brief Symptom Inventory, NPI = Narcissistic Personality Inventory, RSES= Rosenberg Self-Esteem Scale, SE-IAT = Self-Esteem Implicit Association Task, Discrepant self-esteem = based upon z-scores calculation: SE-IAT – RSES, BPD = borderline personality disorder, ASPD = antisocial personality disorder, HPD = histrionic personality disorder, DPD = dependent personality disorder, APD = avoidant personality disorder, OCPD = obsessive compulsive personality disorder, PD NOS = personality disorder not otherwise specified.
Age, CGI, GAF, and co-morbid disorder data are also reported in a previous study, for more detailed information see Marissen et al., 2012.

use [χ^2 (1)=0.90, $p=0.34$].

Table 3 depicts the intercorrelations between all variables.

In line with earlier findings (Bosson et al., 2000; Vater et al., 2013a, 2013b) explicit and implicit self-esteem were found to be uncorrelated. Psychological complaints and explicit self-esteem were found to be correlated, indicating that higher scores on the RSES (indicating *low* explicit self-esteem) were associated with higher symptom severity. Finally, lower scores on the RSES (indicating *high* explicit self-esteem) were associated with higher scores on narcissistic symptoms.

To test for group differences between NPD patients, cluster C PD patients, and healthy controls on levels of narcissism and level of complaints, several multivariate analyses of variance (MANOVAs) were performed. First, a MANOVA was conducted with dependent variables NPI and BSI scores. Pillai's Trace statistic showed a significant difference on NPI and BSI scores between groups [V=0.64, F (2, 54)=784.14, $p<0.001$]. Levene's test of Equality showed that for BSI scores variance in groups is differently distributed [F (4, 110)=12.86, $p<0.001$]. One-way Analysis of variance (ANOVA) with Bonferroni corrected post-hoc analysis conducted after the MANOVA indicated a significant difference on BSI score between groups [F (2, 55)=25.51, $p<0.001$], and on NPI scores between groups [F (2, 57)=5.18, $p=0.009$]. With Bonferroni corrected post-hoc analysis, significant differences in NPI scores were found between NPD and cluster C PD ($p=0.01$) and healthy controls ($p=0.04$), and no significant difference between healthy controls and cluster C PD ($p=1.00$).

This indicates that, as expected, NPD patients reported significant higher narcissism scores compared to cluster C PD patients and healthy controls.

For BSI scores, Bonferroni corrected post-hoc analysis showed a significant difference between NPD and healthy participants ($p<0.001$), and between cluster C PD and healthy controls ($p<0.001$).

This shows that NPD and cluster C PD patients do not differ from each other, but both patient groups do report higher levels of psychological distress compared to a healthy control group.

Table 3.
Intercorrelations between all variables.

	(1) NPI	(2) RSES	(3) SE-IAT	(4) BSI
(1) NPI		−0.26*	0.09	−0.01
(2) RSES			−0.17	0.61**
(3) SE-IAT				−0.09
(4) BSI				

NPI = Narcissistic Personality Inventory, RSES= Rosenberg Self-Esteem Scale (high scores indicate low explicit self-esteem), SE-IAT = Self-Esteem Implicit Association Task, BSI = Brief Symptom Inventory

* $p<0.05$.
** $p<0.01$.

3.2. Self-esteem

Scores on explicit and implicit self-esteem were compared between NPD, cluster C PD and healthy controls. MANOVA's Pillai's Trace statistic revealed a significant difference between groups on implicit, explicit, and discrepant self-esteem [V =0.26, F (4, 114)= 4.33, $p=0.003$]. Levene's test of equality indicated that for the self-esteem IAT and discrepancy scores variance in groups was differently distributed (respectively $p=0.01$, $p=0.004$). To follow-up the results from the MANOVA, separate One-way ANOVAs were conducted on implicit and explicit self-esteem. Analysis indicated a significant difference between groups on RSES (F (2, 57)=9.26, $p<0.001$). Post-hoc Bonferroni corrected tests revealed a significant difference on RSES scores between cluster C PD and healthy controls ($p<0.001$), but no significant differences between cluster C and NPD patients. Also, there were no differences between NPD and healthy controls on RSES scores. Hence, patients with cluster C PD showed lower explicit self-esteem compared to healthy men, but not compared to NPD patients. Also, NPD patients exhibited explicit self-esteem levels similar to the healthy controls.

Most importantly, groups did not differ on SE-IAT scores [F (2, 57)=0.49, $p=0.62$]; both patients groups report similar implicit self-esteem levels compared to a healthy control group.

However, the one-way ANOVA of discrepancy scores did show a significant effect [F (2, 57)=4.15, $p=0.02$]. The Bonferroni post-hoc test showed that this effect was due to a significant difference on discrepancy scores between cluster C PD and healthy controls ($p=0.02$). There was no difference between NPD and cluster C PD, or between NPD and healthy controls. Hence, the effect was largely caused by larger discrepancy score of cluster C PD patients. This indicated that cluster C PD patients exhibited a greater difference between self-reported self-esteem versus implicit self-esteem.

4. Discussion

The aim of the current study was to explore evidence for the mask model of narcissism by investigating implicit and explicit self-esteem among patients with NPD. We therefore compared

NPD patients with patients with Cluster C personality disorder, and a healthy control group on psychological complaints, narcissistic traits and, most importantly, on self-esteem measures. Overall, the results of the current study could not support the mask model of narcissism.

To begin with, it was shown that NPD patients indeed reported more narcissistic features compared to cluster C PD and non-clinical men. This is an interesting finding since many authors criticized the use of the NPI as being a valid instrument to measure narcissism (Trull and McCrae, 2002; Brown et al., 2009; Pincus and Lukowitsky, 2010; Roepke and Vater, 2014). A possible explanation for this criticism is that most studies have used the NPI to measure narcissism among non-clinical groups such as undergraduate students and therefore did not find enough variation between groups. However, Vater et al. (2013a, 2013b) examined NPI scores between healthy controls and NPD patients and found that patients with NPD did not score higher on the NPI than non-clinical controls. They concluded that the NPI is not a valid indicator of NPD since scores were suppressed by NPD patient's low self-esteem.

Furthermore, it was found that patients with NPD reported high levels of psychological distress (similar to patients with other PD's) on a self-report questionnaire when compared to a healthy control group. This implies that patients with NPD seeking treatment do seem to be aware of their own psychological distress. This is in line with earlier studies where associations between NPD and psychological distress were found (Miller et al., 2007; Stinson et al., 2008). Miller et al. (2007) found relations between NPD and psychological distress, however these were mediated by functional impairment. So, in the present study it was found that NPD patients show awareness of their narcissistic traits and their psychological suffering.

To answer our main question, we examined whether the three groups differed on explicit, implicit, and discrepant self-esteem. The present findings show that NPD patients did not differ on explicit self-esteem compared to the healthy control group and cluster C PD patients. Cluster C PD patients on the other hand did show lower explicit self-esteem compared to healthy controls. Remarkably, and contrary to our expectations, patients with NPD report 'normal' explicit self-esteem although they are diagnosed by clinical experts as having an exaggerated and inflated self-image. Clearly there seems to be a discrepancy between the clinical opinion and the self-perception of patients with NPD.

The self-reported low self-esteem is similar to findings in the study of Vater et al. (2013a, 2013b). In that study it was even found that patients with NPD reported lower self-esteem compared to healthy controls. The authors suggested that their findings might be explained by the fact that their patients with NPD might have formally possessed high self-esteem but when seeking treatment might have suffered from a temporary crisis and therefore report low self-esteem (Vater et al., 2013a, 2013b). Perhaps the fact that approximately half of their NPD group in that study consisted of females could contribute to the low self-esteem findings. Studies show that men tend to exhibit slightly higher self-esteem scores compared to women (e.g., Kling et al., 1999; Sprecher et al., 2013).

Another important finding in our study was that the three groups did not differ in their levels of implicit self-esteem. Both findings on explicit and implicit self-esteem are contradictory to the mask model of narcissism that suggests a low implicit self-esteem that is masked by high explicit self-esteem among patients with NPD (Zeigler-Hill and Jordan, 2011). As a logical consequence, there was no difference between NPD and healthy controls, since NPD patients did not differ from healthy men on both implicit and explicit self-esteem.

Patients with cluster C PD's did not differ from NPD patients in levels of psychological complaints or implicit and explicit measures. They did differ from a healthy control group in a way that they reported more psychological complaints and lower explicit self-esteem. This is in line with earlier studies showing that Cluster C PD'S are associated with a wide range of functional impairment (Hardy et al., 1995; Morse et al., 2005). It was also found that cluster C PD patients exhibited a greater difference between self-reported self-esteem versus implicit self-esteem compared to a healthy control group. Although the focus of the present study was to examine patients with NPD, this finding of discrepancies between implicit and explicit self-esteem among Cluster C patients is interesting and warrants further examination in future research.

Some limitations should be bared in mind whilst interpreting current results. First, and most importantly, each of the three groups consisted of only twenty participants. Despite of this small sample size, distinct findings for patients with NPD were found. Future studies should replicate current findings in a larger sample. Another limitation of this study is the use of implicit self-esteem tasks since these measures are found to exhibit low reliability and low convergent and predictive validity (e.g., Bosson et al., 2000; Buhrmester et al., 2011). However, the IAT remains one of the most common methods to measure implicit self-esteem and there seems to be a lack of sufficient alternatives to capture this type of self-esteem.

Another point of discussion is that the diagnostic criteria of NPD as measured by the SCID II (First et al., 1997) based on DSM criteria, has a narrow emphasis on grandiose aspects of narcissism while many authors stretch the importance of also considering vulnerable aspects of narcissism. By including patients based on the SCID-II we selected narcissistic patients who are characterized by these grandiose features. It might be that the relation between implicit and explicit self-esteem is entirely different when examining a group of patients that are exhibiting more vulnerable features of narcissism. Further research is warranted to gain more knowledge about these vulnerable characteristics among narcissistic patients. Also, Pincus and Roche (2011) state that grandiosity and narcissistic vulnerability can both be expressed in overt and covert forms within the same individual. This is in line with the theory that self-esteem and the degree of expressed narcissistic symptoms among narcissistic individuals is not a static concept but that it is flexible and can change as a reaction to environmental demands (e.g. Morf and Rhodewalt, 2001; Ronningstam, 2010). Since the measurements were conducted only once we might have missed possible self-esteem fluctuations. Also, it might be that our findings are specific for individuals with NPD who are in treatment and thus (temporarily) experience more distress and vulnerability. It would be interesting to examine levels of psychological distress, empathy and self-esteem among better functioning individuals with NPD who are not in psychiatric treatment.

Despite these limitations, several implications for treatment can be derived from the results from the present study. As thoroughly described in the Handbook of Narcissism and Narcissistic Personality Disorders (2011) no protocols for treating patients with NPD have been examined in randomized controlled trials. Psychological interventions for people with NPD are generally derived from psychodynamically-based approached such as transference-focused therapy (TFP), Cognitive Analytic Therapy (CAT) or psychoanalytic psychotherapy where patients are helped in understanding and reflecting upon their inner mental processes and learn to relate their past experiences to their current difficulties. Since there is no evidence for the mask model of narcissism, one can add question marks to the use of therapeutic strategies aimed at repairing the (often presumed unconscious) negative self-esteem commonly applied to treat patients with narcissism. Further, when examining intercorrelations between all variables for all groups in general, we found narcissism to be

associated with higher explicit self-esteem but unrelated to psychological complaints. Perhaps there is a 'tipping point' where adaptable narcissism becomes pathological. In further research, it might be interesting to closer examine both the adaptable and pathological aspects of narcissism.

Future research could focus on the differences between clinical and subclinical narcissism. Also, as mentioned earlier, it would be interesting to measure levels of self-reported self-esteem on different moments in time to measure the stability of these measures among NPD patients.

The current study attempted to closely examine underlying characteristics of NPD, and contributed to a better understanding of the characteristics of pathological, clinical narcissism. Hopefully, more understanding of NPD will lead to better, and tailor-made therapeutic interventions to treat these patients.

Conflict of interest

Authors declare no conflict of interest.

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