

# Grandiose and Vulnerable Narcissism

## Self-Construal, Attachment, and Love in Romantic Relationships

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**Abstract.** It is suggested that the two factors of narcissism identified by Wink (1991) – grandiose (overt) and vulnerable (covert) narcissism – represent different conceptualizations of narcissism, which are measured by the Narcissistic Personality Inventory and the Narcissism Inventory, respectively. The focus of this research is on the divergent interpersonal consequences of both factors of narcissism. Results of two studies indicate that the nomological networks of grandiose and vulnerable narcissism in terms of self-construal on the one hand and attachment and love on the other hand differ substantially. As predicted, grandiose narcissism was linked to high self-esteem and independent self-construal, whereas vulnerable narcissism was linked to low self-esteem and interdependent self-construal. In addition, high vulnerable narcissism implied higher attachment anxiety than low vulnerable narcissism, whereas high grandiose narcissism implied less attachment avoidance than low grandiose narcissism. In partial support of the hypotheses, Eros, Ludus, and Pragma correlated positively with the measure of grandiose narcissism, whereas Eros, Ludus, Pragma, Mania, and Agape were positively related to the measure of vulnerable narcissism. An intriguing pattern of results emerged because vulnerable narcissism turned out to be the more powerful predictor for love styles than grandiose narcissism.

**Keywords:** grandiose narcissism, vulnerable narcissism, Narcissistic Personality Inventory, Narcissism Inventory, self-esteem, self-construal, attachment, love style

Narcissism refers to self-love, inflated self-views, self-serving bias, and demanding display of entitlement (Campbell, Brunell, & Finkel, 2006; Twenge & Campbell, 2009). The meaning of narcissism differs somewhat depending on the conceptualization. One of the first personality researchers who explicitly acknowledged the differences in the use of the concept of narcissism was Wink (1991), who reported empirical evidence in support of the dual nature of narcissism. He identified two dimensions underlying the narcissistic personality, which he labeled grandiosity-exhibitionism (grandiose or overt narcissism) and vulnerability-sensitivity (vulnerable or covert narcissism). Grandiose narcissism includes a desire to maintain a pretentious self-image, an exhibitionistic tendency, and a strong need for the admiration of others. Vulnerable narcissism, in contrast, is characterized by preoccupation with grandiose fantasies, oscillation between feelings of superiority and inferiority, and fragile self-confidence. Whereas grandiose narcissism is equated with the social-personality conceptualization of narcissism, vulnerable narcissism resembles the clinical conceptualization (Miller & Campbell, 2008).

Wink's pioneering research has been continued by Dickinson and Pincus (2003), Lapsley and Aalsma (2006), Miller and Campbell (2008), Rose (2002), and Smolewska

and Dion (2005). The present studies stand in the same tradition. They focus on self-construal as a general mode of relating to others (either in an independent or interdependent way) on the one hand and attachment and love in personal relationships on the other hand. In accordance with Dickinson and Pincus (2003) and Smolewska and Dion (2005), we focus on the link between narcissistic personality types and attachment styles. We broaden the scope of this research by extending the range of interpersonal consequences. Specifically, we investigate the divergent consequences of grandiose versus vulnerable narcissism on love styles. Because we consider how the social personality and clinical conceptualization of narcissism relate to both attachment styles and love styles, we are able to compare the predictive power of grandiose and vulnerable narcissism in terms of relationship outcomes more comprehensively than previous studies. Our goal is to show that vulnerable narcissism is related to important interpersonal outcome measures and that it plays a key role in love relationships. More specifically, a comparison of zero-order correlations between grandiose narcissism and love styles (Campbell, Foster, & Finkel, 2002) on the one hand and vulnerable narcissism and love styles (Neumann & Bierhoff, 2004) on the other hand is instructive. Whereas the magnitude of

the correlation with Ludus, or game-playing love, was quite similar in both studies ( $r = .28, p < .01$  vs.  $r = .26, p < .01$ ), the significant correlations of vulnerable narcissism with Pragma (pragmatic love) and Mania (possessive love) were considerably larger ( $r = .38, p < .001$  and  $r = .36, p < .001$ ) than the correlations of grandiose narcissism with these love styles ( $r = .11, p < .05$  and  $r = -.04, ns$ ). The conclusion from this comparison is intriguing: Vulnerable narcissism might be the more powerful predictor of love styles.

The present studies were also designed as validation research of the Narcissistic Personality Inventory (NPI) and the Narcissistic Inventory (NI) as measures of grandiose versus vulnerable narcissism. The NPI (Raskin & Terry, 1988), which is the most widely used narcissism questionnaire, was derived from diagnostic criteria of the Narcissistic Personality Disorder (NPD) defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM III; American Psychiatric Association, 1980). In contrast, the NI by Deneke and Hilgenstock (1989) and its revised form, the NI-R (Neumann & Bierhoff, 2004), was derived from psychodynamic theory.

## Pilot Study

A content analysis of the questionnaires which purportedly measure grandiose and vulnerable narcissism was conducted. Specifically, it was assumed that the majority of items of both scales correspond to criteria of the NPD as described by the DSM-IV-TR (American Psychiatric Association, 2000). Two experienced psychotherapists served as raters. They were instructed to differentiate items that represent criteria of the narcissistic personality disorder from items representing criteria relevant for other personality disorders listed in the DSM-IV-TR. They indicated for each item whether it matched the DSM-IV-TR criteria of the narcissistic personality disorder and/or the criteria of another personality disorder.

## Results

Thirty-nine of the 40 NPI items were matched with the NPD.<sup>1</sup> In summary, the content analysis of the NPI items showed that they correspond very well with the criteria of the NPD. Therefore, all analyses including the NPI were run with the complete 40-item questionnaire.

Thirty-six of the 42 NI-R items were matched with the NPD. Four items of the NI-R could only be matched with personality disorders other than the NPD (three items with the Paranoid PD and one item with the Schizotypal PD). Finally, the content of two NI-R items did not fit the criteria of any of the personality disorders at all. Therefore, the data analysis of the NI-R was based on those 36 items which matched the diagnostic criteria of the NPD.

<sup>1</sup> For the classification of all NPI items and all NI-R items on the basis of the DSM-IV-TR manual, see Appendix A and Appendix B.

## Study 1

Evidence which refers to the dual nature of narcissism was collected with special emphasis on the self. Because the NPI and the NI-R are based on different psychological approaches, it was assumed that the nomological networks of these instruments differ from each other supporting the divergent validity of grandiose versus vulnerable narcissism. The first hypothesis was directly derived from the distinction between overt and covert narcissism. Specifically, overt narcissism represents grandiosity, self-confidence, and optimism, whereas covert narcissism includes vulnerability, preoccupation with possible failure, and self-doubt (for further confirmation on the negative link between vulnerable narcissism and self-esteem, see Miller & Campbell, 2008; Pincus et al., 2009). In correspondence with earlier studies (e.g., Campbell, Rudich, & Sedikides, 2002; Dickinson & Pincus, 2003; Miller & Campbell, 2008), we assumed that self-esteem correlates positively with the NPI and negatively with the NI-R. Further assumptions focus on the relationship between narcissism and self-construal. Interdependent self-image is dominated by striving for harmony in social relationships, interpersonal accommodation, and conformity to group norms. It was hypothesized that only the NI-R correlates positively with interdependent self-construal because vulnerable narcissism implies a dependency on others. According to Markus and Kitayama (1991), the independent definition of the self is characterized by autonomy, individualism, egocentrism, and self-centered attitudes. Therefore, in correspondence with results by Konrath, Bushman, and Grove (2009) it was assumed that the NPI correlates positively with independent self-construal because grandiose narcissism emphasizes a strong self-orientation (Campbell, 1999) which corresponds with expressing an independent self-image. In addition, we expected that the NPI correlates negatively with interdependent self-construal (cf. Konrath et al., 2009).

## Method

### Participants

One hundred twenty-four respondents (37 men and 87 women) with an average age of 28 years ( $SD = 10$ , range from 18 to 68 years) participated in the study. Most of the participants were students. Among the 122 participants who provided the relevant information, 81 lived in a romantic relationship with a partner, whereas 41 participants indicated that they were singles.

### Measures

#### Self-Construal

To assess interdependent and independent self-construal, the Singelis (1994) 24-item Self-Construal Scale (SCS) was

employed. Respondents assessed the items on 7-point scales ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). Example items which tap interdependent self-image and independent self-image, respectively, are “I have respect for the authority figures with whom I interact” and “I’d rather say ‘No’ directly, than risk being misunderstood.” Higher scores on each subscale indicate higher self-construal in terms of interdependence ( $\alpha = .79$ ) and independence ( $\alpha = .63$ ), respectively. The mean assessment of the interdependent self was somewhat lower than that of the independent self,  $M = 4.02$  ( $SD = .84$ ) and  $M = 5.09$  ( $SD = .68$ ). A similar trend was obtained by Singelis (1994). An independent-samples *t*-test revealed no gender differences on the SCS.

### Self-Esteem

The Feelings of Inadequacy Scale (FIS) was employed as a measure of self-esteem. The German adaptation of this widely used scale includes 16 of the original 23 items. In accordance with Fleming and Courtney (1984), some items in the abridged form were rephrased in order to control for response set. A sample item is “How often do you feel that you dislike yourself?” Items are assessed on a 5-point scale ranging from *never* to *very often* or from *generally no* to *very strongly*. After rescaling negatively scored items, higher scores indicate higher self-esteem ( $\alpha = .85$ ). The average self-esteem was slightly above the scale mean,  $M = 3.33$ ,  $SD = .50$ . No gender differences were registered.

### Narcissistic Personality Inventory (NPI)

Grandiose narcissism was measured by the German version of the 40-item NPI (Raskin & Terry, 1988; Schutz, Marcus, & Sellin, 2004). Specifically, the items were presented in a simplified form using a true-false format (1 = *agree* and 0 = *disagree*; cf. Rhodewalt, Madrian, & Cheney, 1998; Rohmann, Bierhoff, & Schmohr, 2011). Participants responded to each statement by indicating their agreement or disagreement. The internal consistency of the scale was good,  $\alpha = .82$  ( $M = 16.69$ ,  $SD = 6.48$ ). A sample item is “I rarely depend on anyone else to get things done.”

On the basis of factor-analytic research by Emmons (1984) two components of the NPI are contrasted with each other (Dickinson & Pincus, 2003): Nine items from the dimension Entitlement/Exploitation which consistently relates positively to measures of maladaptiveness are included in the maladaptive NPI component (NPI-Mal), whereas 25 items are combined in the adjusted NPI component (NPI-Adj). In correspondence with the results of Dickinson and Pincus (2003) the internal consistency of NPI-Adj was  $\alpha = .79$  and that of NPI-Mal was  $\alpha = .53$ . This difference in reliabilities underlines the conclusion by Pincus et al. (2009) that the NPI “predominantly assesses ... adaptive expressions of the concept” (p. 366) of narcissism.

### Narcissistic Inventory-Revised (NI-R)

Vulnerable narcissism was measured by the NI-R, which is a revised and abridged form of the 163 items of the NI (Deneke & Hilgenstock, 1989). Neumann and Bierhoff (2004) conducted a factor analysis including all 77 NI items which were appropriate for a nonclinical sample. The 36 items which were selected in the Pilot Study were included in the NI-R ( $\alpha = .88$ ). A sample item is “Other people would be really amazed if they knew about my talents.” Items are assessed on a 5-point scale ranging from 1 (*not at all true*) to 5 (*completely true*). Vulnerable narcissism is measured by several other questionnaires including the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997). We conducted a validation study with a sample of psychology students ( $N = 111$ ) including the HSNS, the NI-R, and the NPI. The correlation between NI-R and HSNS which presumably measure the same dimension of narcissism was highly significant,  $r(109) = .54$ ,  $p < .001$ . Therefore, the NI-R turns out to be a valid measure of vulnerable narcissism. Note also that in correspondence with results by Hendin and Cheek (1997) and Pincus et al. (2009) the association between NPI and HSNS was not significant,  $r(109) = .12$ ,  $p = .209$ .<sup>2</sup>

Women ( $M = 2.84$ ) expressed more vulnerable narcissism than men ( $M = 2.63$ ),  $t(122) = 2.14$ ,  $p = .034$ . Although gender differences were scattered and not very strong, we controlled for gender in the statistical analyses by using partial correlations and multiple regressions.

## Results

Hypotheses were tested by partial correlations between narcissism (measured by NPI or NI-R, respectively), SCSs, and self-esteem. In addition, the effect of NI-R was statistically removed from the correlations with the NPI, and the effect of NPI was removed from the correlations with the NI-R. The results of these analyses are summarized in Table 1. Finally, multiple regression analyses were performed with gender, narcissism (represented by NPI and NI-R), and their interactions as predictors of self-measures. We employed the procedure recommended by Aiken and West (1991) for the analysis of combinations of categorical and continuous predictor variables and their interactions. Therefore, we used dummy variable coding and centered the continuous predictor variables. We performed stepwise regressions entering gender in the first step and narcissism in the second step. Finally the interaction terms were added. The unstandardized B coefficients of gender, NPI, and NI-R are reported in Table 1. We also computed the unstandardized B coefficients of interaction terms (e.g., Gender  $\times$  NPI, Gender  $\times$  NI-R) which in every case turned out to be not significant and are not reported here in detail.

As expected, NPI and NI-R correlated positively, *partial*  $r(121) = .38$ ,  $p < .001$ . Inspection of Table 1 reveals that – in

<sup>2</sup> HSNS and NPI-Mal correlated positively,  $r(109) = .28$ ,  $p < .05$ , whereas the correlation of HSNS and NPI-Adj was close to zero,  $r(109) = -.00$ . Readers interested in the correlation matrix of NI-R, HSNS, and NPI, see Appendix C.

Table 1. Gender, narcissism, and self-measures

|                | Gender  | NPI     |                 | NI-R    |                  |
|----------------|---------|---------|-----------------|---------|------------------|
|                | Unst. B | Unst. B | Partial         | Unst. B | Partial          |
| FIS            | -.11    | 1.78*** | .39*** (.52***) | -.43*** | -.22** (-.43***) |
| SCS            |         |         |                 |         |                  |
| Independent    | -.08    | 1.77*** | .38*** (.38***) | -.09    | .10 (-.06)       |
| Interdependent | .16     | -1.05   | -.05 (-.21*)    | .75***  | .35*** (.40***)  |

Notes.  $N = 124$ . NPI = Narcissistic Personality Inventory, NI-R = Narcissism Inventory-Revised, SCS = Social Construal Scale, FIS = Feelings of Inadequacy Scale. In all correlations, gender is partialled out. In addition, correlations in parentheses control either for NI-R (first column) or NPI (second column). Unstandardized B coefficients represent the predictor main effects of gender, NPI, and NI-R. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ , two-tailed.

correspondence with the hypothesis – NPI and FIS were positively associated. The overlap among both scales was even stronger after removing the variance of NI-R in the partial correlation analysis and the regression analysis, respectively. Respondents who scored high on the NPI tended to express high self-esteem.

In contrast, NI-R and FIS were negatively associated. The negative association between both scales was even more pronounced in the statistical analyses which statistically controlled for NPI. Participants who strongly endorsed the NI-R tended to be low in self-esteem.<sup>3</sup>

The correlations of each of the two narcissism scales with self-construal were – as expected – mirror images. Specifically, considering both partial correlations and multiple regressions the NPI was positively related to independent self-construal and negatively related to interdependent self-construal. In contrast, the NI-R was positively related to interdependent self-image and unrelated to independent self-image.<sup>4</sup>

## Discussion

The distinction between grandiose and vulnerable narcissism reveals a central facet of the personality dynamics of self-construal. An intriguing pattern of results emerged which confirms the dual nature of narcissism. The nomological networks of the NPI and NI-R differed in terms of self-esteem and self-construal. Over and above the effects of gender, grandiose narcissism was significantly related to positive self-esteem and independent self-construal, whereas vulnerable narcissism was characterized by low self-esteem and interdependent self-construal. The pattern of correlations including self-esteem replicates results by Pincus et al. (2009) who found that the NPI correlated positively with self-esteem, whereas their newly developed Pathological Narcissism Inventory (PNI) correlated negatively with

self-esteem. Because the PNI in turn was positively correlated with the HSNS it might also be considered as a measure of vulnerable narcissism.

The NPI results with respect to self-construal confirm those of Konrath et al. (2009) giving further credence to the hypothesis that grandiose narcissism represents high self-focus combined with low other focus. This assumption is also supported by comparisons across cultures including Asia, Canada, Europe, Middle East, and United States (Foster, Campbell, & Twenge, 2003). Reported narcissism was higher in Canada, Europe, and especially in the United States (which presumably represent more individualistic cultures) than in Asia and the Middle East, that is, world regions that include less individualistic cultures. The Western view of the self is linked to the independent construal of the self with its emphasis on individualism and personal autonomy, whereas the non-Western view emphasizes more the interdependent construal of the self and therefore the public components of the self (Markus & Kitayama, 1991).

The NI-R results offer a new insight suggesting that vulnerable narcissism is meaningfully embedded in self-construal processes. Specifically, interpersonal self-construal seems to imply a psychological vulnerability which is represented by vulnerable narcissism. In addition, the correlations of the NPI-Mal with self-esteem and self-construal did not resemble the results of the NI-R indicating that the current findings do not replicate when the NPI is reorganized to measure an adjusted and a maladaptive dimension of narcissism. The conclusion is warranted that the NPI-Mal is not a suitable alternative measure of vulnerable narcissism (cf. Pincus et al., 2009). In addition, the NPI-Mal correlated positively with the NPI-Adj,  $r(122) = .63, p < .001$ , and also positively with the NI-R,  $r(121) = .32, p < .001$ . These correlations which correspond with results by Pincus et al. (2009) indicate that the NPI-Mal resembles more the NPI-Adj than the NI-R. Therefore, the distinction between NPI-Adj and NPI-Mal was not further pursued in Study 2.

<sup>3</sup> Furthermore, NPI-Adj correlated substantially with self-esteem,  $r(122) = .50, p < .001$ . NPI-Mal also correlated positively with self-esteem,  $r(122) = .18, p < .05$ , although lower.

<sup>4</sup> The correlation pattern of NPI-Adj with self-construal corresponds with the correlation pattern of the complete NPI,  $r(122) = .44, p < .001$  with independent self-construal and  $r(122) = -.09, p = .325$  with interdependent self-construal. In contrast, NPI-Mal was not correlated with independent and interdependent self-construal, respectively,  $r(122) = .142, p = .118$  and  $r(122) = -.02, p = .826$ .

## Study 2

In Study 2 an attempt was undertaken to replicate the results of Study 1. In addition, measures of attachment and love styles were included in order to investigate the interpersonal implications of the two types of narcissism more comprehensively.

Attachment is represented by two dimensions: Anxiety and avoidance (Brennan, Clark, & Shaver, 1998). Campbell et al. (2006) emphasize an approach orientation toward others as a fundamental narcissistic quality. This statement corresponds with the finding of a positive correlation between NPI and extraversion (Marcus, Machilek, & Schutz, 2006; Paulhus & Williams, 2002). An approach orientation toward others is compatible with grandiose narcissism. Therefore, it is likely that a negative association between NPI and attachment avoidance will be observed. But the alternative hypothesis – grandiose narcissism is related to high avoidant attachment – is also plausible because grandiose narcissism implies an unwillingness to engage in intimate communication (Campbell, 1999; Popper, 2002).

With respect to NI-R, attachment anxiety is closely related to its framework because an anxious defense orientation is compatible with vulnerable narcissism. Neumann and Bierhoff (2004) reported that NI-R and attachment anxiety were positively correlated corroborating results by Dickinson and Pincus (2003) and Smolewska and Dion (2005). Therefore, for theoretical and empirical reasons it is hypothesized that the NI-R is positively associated with attachment anxiety.

How is narcissism related to love styles? Lee (1973) distinguished between six love styles: Eros, Ludus, Pragma, Storge, Mania, and Agape. Eros is also referred to as romantic love in which love is primarily based on immediate attraction between the partners. The Latin term Ludus stands for game-playing love. Seduction and sexual adventure stand in the foreground of this love experience. Storge is friendship-based love. The love experience is primarily influenced by common interests and mutual trust. Mania translates into possessive love. It represents an extreme variant of romantic love in which there is a simultaneous idealization of the partner and possessiveness that leads to strong feelings of jealousy and dependence on the partner. Pragma (pragmatic love) represents a low-emotion love style which is dominated by considerations of advantages and utilities that might accrue in the partnership. Finally, Agape is also referred to as altruistic love. The altruistic love experience is focused on the well-being of the loved partner and facilitates readiness to sacrifice own resources for her or him.

Does the distinction between grandiose and vulnerable narcissism matter with respect to any of the love styles? Previous research sheds some light on this issue. Firstly, with respect to the NPI, empirical evidence indicates that a reliable positive relationship between narcissism and Ludus exists (Campbell, Foster, et al., 2002; Le, 2005). Furthermore, Campbell, Foster, et al. (2002) found that the NPI correlated positively with Pragma, marginally positively with Eros, and slightly negatively with Agape (see also Le, 2005). In correspondence with these results, we expected

the NPI to be positively associated with Ludus, Pragma, and Eros and negatively with Agape. Secondly, with respect to the NI-R, Neumann and Bierhoff (2004) reported that it was positively correlated with Ludus, Pragma, and Mania. Therefore, we assumed that high scorers on the NI-R tend to express more game-playing, pragmatic, and possessive love. Finally, we expected in correspondence with earlier research that vulnerable narcissism is overall a better predictor of the love-style typology than grandiose narcissism.

## Method

### Participants

Ninety-two respondents (31 men and 61 women; average age 24 years, range from 18 to 45 years,  $SD = 5$ ) participated, most of whom were students of psychology, social sciences, and natural and technical sciences at a German university. All participants lived together with a partner, the average relationship length being 37 months (range = 1–204 months,  $SD = 41$ ).

### Measures

#### Narcissism, Self-Construal, and Self-Esteem

The same measures of grandiose and vulnerable narcissism were employed in Study 2 as in Study 1. The 40-item NPI was used to assess respondents' grandiose narcissism ( $M = 18.57$ ,  $SD = 6.76$ ,  $\alpha = .84$ ), whereas the 36-item NI-R assessed vulnerable narcissism ( $M = 2.81$ ,  $SD = 50$ ,  $\alpha = .89$ ). No gender differences were obtained on both narcissism measures. Also, self-construal and self-esteem were assessed via the same questionnaires as before, interdependent SCS ( $M = 4.24$ ,  $SD = .74$ ,  $\alpha = .73$ ), independent SCS ( $M = 5.20$ ,  $SD = .66$ ,  $\alpha = .61$ ), and self-esteem ( $M = 3.30$ ,  $SD = .45$ ,  $\alpha = .80$ ). No gender differences emerged on these scales.

#### Adult Romantic Attachment

Attachment was measured by the German adaptation of the Experiences in Close Relationships (ECR) Scale by Brennan et al. (1998; Neumann, Rohmann, & Bierhoff, 2007). The ECR is a 36-item questionnaire, which includes two subscales that refer to attachment anxiety and attachment avoidance. High avoidance is indicated by refutation of emotional closeness, whereas high anxiety refers to feelings of insecurity and concern about possible rejection. Items were assessed on 7-point response scales (1 = *not true at all* and 7 = *completely true*). Each subscale which consists of 18 items proved to be highly reliable,  $\alpha = .86$  and  $\alpha = .85$  for anxiety and avoidance, respectively. In correspondence with earlier results, in the current sample mean endorsement of attachment anxiety was higher,  $M = 3.67$ ,  $SD = .97$ , than mean endorsement of attachment avoidance,  $M = 2.52$ ,  $SD = .82$ .

## Love Styles

The Marburg Attitude Inventory for Love Styles (MEIL; Bierhoff, Grau, & Ludwig, 1993) served as a measure of the six love styles proposed by Lee (1973). The MEIL is comparable to the Love Attitude Scale (LAS; Hendrick & Hendrick, 1986). We employed an abridged form in which each love style is represented by five items. Specifically, the following attitudes are assessed: Eros (e.g., “My lover fits my ideal standards of physical beauty/handsomeness”), Ludus (e.g., “I have sometimes had to keep two of my lovers from finding out about each other”), Pragma (e.g., “I try to plan my life carefully before choosing a lover”), Storge (e.g., “The best kind of love grows out of a long friendship”), Mania (e.g., “When my lover doesn’t pay attention to me, I feel sick all over”), and Agape (e.g., “I would rather suffer myself than let my lover suffer”). Whereas Ludus expresses a relationship-threatening tendency, the other love styles tend to support the maintenance of the relationship.

In general, pertinent research shows that Eros is endorsed most and Ludus is endorsed least. This trend was confirmed in our sample: Eros  $M = 6.87$ ,  $SD = 1.86$ ,  $\alpha = .86$ ; Storge  $M = 6.39$ ,  $SD = 1.44$ ,  $\alpha = .73$ ; Mania  $M = 6.06$ ,  $SD = 1.63$ ,  $\alpha = .83$ ; Agape  $M = 5.09$ ,  $SD = 1.72$ ,  $\alpha = .89$ ; Pragma  $M = 3.65$ ,  $SD = 1.54$ ,  $\alpha = .76$ ; Ludus  $M = 3.07$ ,  $SD = 1.84$ ,  $\alpha = .79$ .

## Results

The statistical analyses were identical with the statistical procedures employed in Study 1. Both narcissism measures correlated positively, *partial*  $r(88) = .50$ ,  $p < .001$ . Findings, which are summarized in Table 2, replicate those of Study 1.

Both a partial-correlation analysis in which NI-R was partialled out from NPI and vice versa and multiple regressions revealed that NPI and self-esteem were positively related, whereas NI-R and self-esteem correlated negatively. In addition, high NPI scorers tended to express a high independent self-construal, whereas high NI-R scorers were characterized by a high interdependent self-construal.

As predicted by our hypothesis, grandiose narcissism implied less avoidance. This negative association was maintained after controlling for NI-R. In contrast, vulnerable narcissism was positively linked to anxiety.

Finally, with respect to love styles, the correlation analysis confirmed the expected positive association between NPI on the one side and Eros, Ludus, and Pragma on the other side. In contrast, the expected negative association between NPI and Agape did not emerge. Most of the significant correlations disappeared in the analysis which controlled for NI-R scores. Only the positive association between Ludus and NPI remained marginally significant, thus confirming the NPI-Ludus link which Campbell, Foster, et al. (2002) pointed out in their theorizing on the love-style implications of narcissism.

In general, the NI-R turned out to be a good predictor of love styles. Based on partial correlations and multiple regressions, the conclusion is warranted that NI-R scores are significantly related to Eros, Ludus, Mania, Pragma, and Agape.

The evidence for gender differences was scattered. In correspondence with meta-analytic results of Del Giudice (2011) females ( $M = 2.36$ ) reported less avoidant attachment than males,  $M = 2.85$ ;  $t(90) = 2.80$ ,  $p = .006$ , whereas no gender differences were found with respect to attachment anxiety,  $t(90) = .39$ ,  $p = .700$ . With respect to love styles, a significant gender effect only occurred for altruistic love

Table 2. Gender, narcissism, self-measures, and attachment/love measures

|                | Gender  |                   | NPI                       |          | NI-R             |                 |
|----------------|---------|-------------------|---------------------------|----------|------------------|-----------------|
|                | Unst. B | Unst. B           | Unst. B                   | Partial  | Unst. B          | Partial         |
| FIS            | -.03    | 1.46***           | .41***                    | (.59***) | -.39***          | -.20* (-.51***) |
| SCS            |         |                   |                           |          |                  |                 |
| Independent    | .01     | 1.55***           | .40***                    | (.37***) | -.00             | .17 (-.04)      |
| Interdependent | .16     | -.52              | .11 (-.13)                |          | .71***           | .42*** (.42***) |
| ECR            |         |                   |                           |          |                  |                 |
| Anxiety        | -.12    | -.93              | .07 (-.17)                |          | .85***           | .35** (.39***)  |
| Avoidance      | -.51**  | -1.23*            | -.29** (-.24*)            |          | -.11             | -.17 (-.04)     |
| Love Styles    |         |                   |                           |          |                  |                 |
| Eros           | -.15    | 1.75              | .27* (.16)                |          | .72 <sup>†</sup> | .27* (.17)      |
| Ludus          | .21     | 2.00 <sup>†</sup> | .32** (.18 <sup>†</sup> ) |          | 1.04*            | .36*** (.24*)   |
| Mania          | .49     | -1.32             | .12 (-.12)                |          | 1.55***          | .45*** (.45***) |
| Storge         | -.02    | .72               | .09 (.12)                 |          | -.27             | -.05 (-.09)     |
| Pragma         | -.07    | .47               | .31** (.13)               |          | 1.11**           | .42*** (.32**)  |
| Agape          | -.96*   | -.46              | .13 (-.03)                |          | 1.04**           | .31** (.29**)   |

Notes.  $N = 90-92$ . NPI = Narcissistic Personality Inventory, NI-R = Narcissism Inventory-Revised, SCS = Social Construal Scale, FIS = Feelings of Inadequacy Scale, ECR = Experiences in Close Relationships. Gender is partialled out. In addition, correlations in parentheses control either for NI-R (left column) or NPI (right column). Unstandardized B coefficients represent the predictor main effects of gender, NPI, and NI-R.

<sup>†</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ , two-tailed.

with males, ( $M = 6.56$ ) scoring higher than females,  $M = 5.62$ ;  $t(90) = 2.53$ ,  $p = .013$ . Gender did not interact with narcissism measures in the multiple regressions.

## Discussion

The assumptions concerning attachment styles were confirmed. Vulnerable narcissism as measured by the NI-R correlated substantially with attachment anxiety. This result agrees with the analysis of Smolewska and Dion (2005), who also reported a significant positive association between vulnerable narcissism and anxious attachment. The negative association between NPI and attachment avoidance which we predicted corresponds with the fundamental approach orientation, which is in the center of the agency model of narcissism of Campbell et al. (2006). More research is needed to clarify the relationship between NPI and attachment avoidance because other studies found a positive association (Popper, 2002) or no association at all (Smolewska & Dion, 2005).

The correlations of the NPI with Lee's love styles support the hypotheses with respect to Ludus, Eros, and Pragma, but not with respect to Agape. The expected positive association between NPI and Ludus was confirmed supporting the "story of narcissistic game playing" (cf. Campbell, Foster, et al., 2002).

The correlates of vulnerable narcissism are revealing. High scorers on the NI-R showed game-playing tendencies. This result corresponds with the "story of narcissistic game playing." In addition, high scorers on the NI-R described themselves as quite pragmatic and also expressed a possessive love attitude. In addition, they reported more Agape and Eros, indicating that their love was based more on willingness to sacrifice and also more on romantic feelings. These associations are all positive indicating that vulnerable narcissism is a positive contributor to relationship-enhancing love styles (Eros, Mania, Pragma, Agape) as well as to the relationship-threatening love style Ludus. Although vulnerable narcissism substantially overlaps with grandiose narcissism, vulnerable narcissism turns out to be the key predictor of attachment and love styles. This pattern of results supports our expectation that vulnerable narcissism plays a key role in love relationships. Anxiety and defensiveness which are linked to vulnerable narcissism, but not to grandiose narcissism, contribute to the formation of styles of relating to others either in terms of attachment anxiety or in terms of a broad spectrum of personal love styles.

## General Discussion

The results of Study 2 closely replicate those of Study 1, indicating stable and reliable findings. Specifically, the conception of the dual nature of narcissism was confirmed by the impressive divergence between the nomological networks of grandiose and vulnerable narcissism. In accordance with the hypotheses, the NPI was positively related to self-esteem and independent self-construal whereas the

NI-R was negatively related to self-esteem and positively to interdependent self-construal. These results have cross-cultural implications. It is likely that Western culture fosters the link between grandiose narcissism and independent self-construal whereas non-Western cultures encourage the expression of vulnerable narcissism within the context of interdependent self-construal (cf. Markus & Kitayama, 1991).

At the same time the findings contribute to the validation of the NPI and NI-R as measures of grandiose and vulnerable narcissism, respectively. Whereas the link between grandiose narcissism and independent self-construal has been found in earlier studies (Campbell, Rudich, et al., 2002; Konrath et al., 2009), the mirror image in terms of the link between vulnerable narcissism and interdependent self-construal has received less attention in previous research.

The agency model of grandiose narcissism includes the fundamental narcissistic quality of approach orientation (Campbell et al., 2006). In correspondence with the agency model, high scorers on the NPI expressed a high approach orientation toward others. In addition, participants who scored high on the measure of grandiose narcissism also described themselves as more involved in game-playing love. The latter finding is crucial to the hypothesis contained in the "story of narcissistic game playing" (Campbell, Foster, et al., 2002).

Interpersonal consequences also vary in theoretically expected ways as a function of vulnerable narcissism which was linked to anxious attachment and Mania, likely because anxious attachment and possessive love exhibit an anxiety-related interpersonal attitude. In addition, vulnerable narcissism was also associated with Ludus, Pragma, and Agape even after controlling for the statistical influence of grandiose narcissism. Overall, the conclusion is warranted that vulnerable narcissism, more than grandiose narcissism, leaves a mark on attachment and love in romantic relationships. Feelings of vulnerability that are fuelled by narcissism seem to function like a matchstick which ignites anxious attachment and a wide variety of love styles.

## Limitations

Four limitations of this investigation should be noted. First, grandiose and vulnerable narcissism were each represented by only one questionnaire. Thus, the argument can be made that the results are limited due to the narrow operationalization of narcissism. Future researchers may wish to assess both grandiose and vulnerable narcissism by administering several questionnaires in parallel to the same sample in order to increase the generalizability of results across measurement instruments.

A second limitation refers to sample characteristics. Most of our study participants are students, and the majority of participants are female. Although this limitation is typical in research on narcissism, future research might specifically address nonstudent populations in order to enhance the generalizability of results. In addition, a more balanced composition of the sample in reference to gender is likely to increase the power of tests including gender effects.

Thirdly, like many other studies on narcissism this research is based on self-report measures only. Therefore, we cannot exclude the possibility that correlations are inflated by shared method variance. Nevertheless, the complex pattern of correlations which corresponds mostly with our hypotheses contradicts this interpretation. For example, the NI-R correlates negatively with self-esteem whereas higher NPI-values imply higher self-esteem.

Finally, both studies are based on a correlational design. A stronger test of the possibility of divergent interpersonal consequences of grandiose versus vulnerable narcissism might be to experimentally induce states of high grandiose/low vulnerable narcissism versus low grandiose/high vulnerable narcissism (see also Miller & Campbell, 2008). Dependent variables which could include self-related measures and measures of interpersonal consequences would possibly reveal significant differences between conditions in this experimental design which, for example, would allow the test of the hypothesis that more possessive love is expressed by participants in the low grandiose/high vulnerable condition than by participants in the high grandiose/low vulnerable condition.

## Concluding Comment

How does the two-dimensional conceptualization of narcissism contribute to our understanding of different modes of relating to others? Grandiose narcissism which represents the social-personality conceptualization implies positive self-esteem, independent self-construal, approach orientation toward others, and game-playing love. In contrast, vulnerable narcissism which is closely linked to the clinical conceptualization is related to self-doubt, interdependent self-construal, attachment anxiety, and a plethora of love styles including Ludus, Pragma, and Mania. In correspondence with our initial expectation, vulnerable narcissism turned out to be the more powerful determinant of relationship outcomes than grandiose narcissism although vulnerable narcissism has a high overlap with grandiose narcissism. The studies described here suggest that the grandiose and vulnerable narcissism play separable roles in our general and personal modes of relating to others. Thus, the results add a new piece of insight into our understanding of narcissism as an interpersonal personality construct.

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## Appendix A

Classification of NPI items according to DSM-IV-TR diagnostic criteria of personality disorders

| No. | Item   | Narcissistic Personality Disorder (NPD) | Other personality disorder (PD) |
|-----|--|---|---------------------------------|
| 1   | I have a natural talent for influencing people.                          | NPD                                     |                                 |
| 2   | Modesty doesn't become me.   | NPD                                     |                                 |
| 3   | I would do almost anything on a dare.                                    | NPD                                     |                                 |
| 4   | I know that I am good because everybody keeps telling me so.             | NPD                                     |                                 |
| 5   | If I ruled the world it would be a much better place.                    | NPD                                     |                                 |
| 6   | I can usually talk my way out of anything.                               | NPD                                     |                                 |
| 7   | I like to be the center of attention.                                    | NPD                                     | Histrionic PD                   |
| 8   | I will be a success.   | NPD                                     |                                 |
| 9   | I think I am a special person.   | NPD                                     |                                 |
| 10  | I see myself as a good leader.   | NPD                                     |                                 |
| 11  | I am assertive.  | NPD                                     |                                 |
| 12  | I like to have authority over other people.                              | NPD                                     |                                 |
| 13  | I find it easy to manipulate people.                                     | NPD                                     |                                 |
| 14  | I insist upon getting the respect that is due me.                        | NPD                                     |                                 |
| 15  | I like to display my body.   | NPD                                     | Histrionic PD                   |
| 16  | I can read people like a book.   | NPD                                     | Schizotypal PD                  |
| 17  | I like to take responsibility for making decisions.                      | Not covered                             |                                 |
| 18  | I want to amount to something in the eyes of the world.                  | NPD                                     |                                 |
| 19  | I like to look at my body.   | NPD                                     |                                 |
| 20  | I am apt to show off if I get the chance.                                | NPD                                     |                                 |
| 21  | I always know what I am doing.   | NPD                                     |                                 |
| 22  | I rarely depend on anyone else to get things done.                       | NPD                                     | Schizoid PD                     |
| 23  | Everybody likes to hear my stories.                                      | NPD                                     | Histrionic PD                   |
| 24  | I expect a great deal from other people.                                 | NPD                                     |                                 |
| 25  | I will never be satisfied until I get all that I deserve.                | NPD                                     |                                 |
| 26  | I like to be complimented.   | NPD                                     |                                 |
| 27  | I have a strong will to power.   | NPD                                     |                                 |
| 28  | I like to start new fads and fashions.                                   | NPD                                     | Histrionic PD                   |
| 29  | I like to look at myself in the mirror.                                  | NPD                                     |                                 |
| 30  | I really like to be the center of attention.                             | NPD                                     | Histrionic PD                   |
| 31  | I can live my life in any way I want to.                                 | NPD                                     |                                 |
| 32  | People always seem to recognize my authority.                            | NPD                                     |                                 |
| 33  | I would prefer to be a leader.   | NPD                                     |                                 |
| 34  | I am going to be a great person.   | NPD                                     |                                 |
| 35  | I can make anybody believe anything I want them to.                      | NPD                                     |                                 |
| 36  | I am a born leader.  | NPD                                     |                                 |
| 37  | I wish somebody would someday write my biography.                        | NPD                                     |                                 |
| 38  | I get upset when people don't notice how I look when I go out in public. | NPD                                     | Histrionic PD                   |
| 39  | I am more capable than other people.                                     | NPD                                     |                                 |
| 40  | I am an extraordinary person.  | NPD                                     |                                 |

## Appendix B

Classification of NI-R items according to DSM-IV-TR diagnostic criteria of personality disorders

| No. | Item  | Narcissistic Personality Disorder (NPD) | Other personality disorder (PD) |
|-----|---|---|---------------------------------|
| 1   | Other people would be really amazed if they knew about my talents.  | NPD                                     |                                 |
| 2   | I believe that others envy me because of my good looks.   | NPD                                     |                                 |
| 3   | I would like to be friends with somebody who is a celebrity.  | NPD                                     |                                 |
| 4   | I just seem to be attracted to persons who have that certain something.                                   | NPD                                     |                                 |
| 5   | I get into a better mood immediately if I am together with somebody whom I highly admire.                 | NPD                                     |                                 |
| 6   | I'll gladly follow the example of another person if I can really respect and acknowledge him or her.      | NPD                                     |                                 |
| 7   | Somehow everybody searches for the ideal person, whom he or she can honor and respect.                    | NPD                                     |                                 |
| 8   | Persons who know how to make a good show of themselves fascinate me.                                      | NPD                                     |                                 |
| 9   | I think that I would really enjoy being the center of attention for once.                                 | NPD                                     | Histrionic PD                   |
| 10  | It really boosts my self-confidence if others find me appealing.  | NPD                                     | Histrionic PD                   |
| 11  | At times I have the strong urge to seek signs of love and affection.                                      | NPD                                     | Histrionic PD                   |
| 12  | For me to be in the limelight is an exciting prospect.  | NPD                                     | Histrionic PD                   |
| 13  | I would really enjoy being praised for everything I do (like a child is praised by his/her parents).      | NPD                                     | Histrionic PD                   |
| 14  | To be honest, I do enjoy showing off in front of others.  | NPD                                     | Histrionic PD                   |
| 15  | One word of praise and already I'm in good spirits.   | NPD                                     | Histrionic PD                   |
| 16  | I am a person who needs a lot of approval from others.  | NPD                                     | Histrionic PD                   |
| 17  | Sometimes I have the feeling that I am just craving for admiration.                                       | NPD                                     | Histrionic PD                   |
| 18  | I can get seething angry if I am criticized unjustly.   | NPD                                     | Borderline PD                   |
| 19  | I get into a temper if I don't get the recognition that I deserve.  | NPD                                     | Borderline PD                   |
| 20  | I have often found myself looking for revenge when I don't get the recognition that I deserve.            | NPD                                     | Borderline PD                   |
| 21  | I can get really nasty if I don't get what I want.  | NPD                                     | Borderline PD                   |
| 22  | I get into a fit if someone makes negative remarks about things that I cherish.                           | NPD                                     | Borderline PD                   |
| 23  | I fly into a rage if somebody expects me to do tasks that are really beneath my skill level.              | NPD                                     | Borderline PD                   |
| 24  | If somebody embarrasses me in front of others I think: I'll pay you back for that one of these days.      | NPD                                     | Borderline PD                   |
| 25  | If something doesn't work out, I could just explode.  | NPD                                     | Borderline PD                   |
| 26  | I often find people boring after I have gotten to know them better.                                       | NPD                                     | Borderline PD                   |
| 27  | One should not hope for real help; in the end, every person stands alone.                                 |   | Schizotypal PD                  |
| 28  | We are living in times where the word "moral" has lost its meaning.                                       | NPD                                     |                                 |
| 29  | Persons who criticize me should first put their own house in order before getting on my case.             | NPD                                     |                                 |
| 30  | One should be wary of most other people; that way they cannot become dangerous for oneself.               |   | Paranoid PD                     |
| 31  | Often a person is disappointed only because he or she puts too much faith in others.                      |   | Paranoid PD                     |
| 32  | Never show your weak spots as these will be exploited by others.  |   | Paranoid PD                     |
| 33  | In many cases, it is not worth making the effort to win the sympathy of other persons.                    | NPD                                     |                                 |
| 34  | Conscientiousness and carefulness have their justification in the world; today, this is often overlooked. | NPD                                     | Obsessive-compulsive PD         |
| 35  | Men and women today are lacking the ideals which could give meaning to their lives.                       | NPD                                     | Obsessive-compulsive PD         |
| 36  | I believe that each and every individual needs to have a guiding principle to live by.                    | Not covered                             |                                 |
| 37  | I have set high moral standards for myself; other people are less strict with themselves.                 | NPD                                     | Obsessive-compulsive PD         |

(Continued on next page)

## Appendix B (Continued)

| No. | Item  | Narcissistic Personality Disorder (NPD) | Other personality disorder (PD) |
|-----|---|---|---------------------------------|
| 38  | I remain loyal to my principles, no matter if others ridicule me.   | NPD                                     | Obsessive-compulsive PD         |
| 39  | I am a person who still has principles according to which I live.   | NPD                                     | Obsessive-compulsive PD         |
| 40  | You can only feel sorry for persons who don't have their own convictions.                                 | NPD                                     |                                 |
| 41  | In a true partnership the thought that one day one could be abandoned is impossible to bear.              | NPD                                     | Borderline PD                   |
| 42  | Persons who have somebody that supports them with words and deeds even as adults are to be congratulated. | Not covered                             |                                 |

## Appendix C

Validation study: zero-order correlations between Narcissistic Personality Inventory Scales (NPI), Narcissism Inventory (NI-R), and Hypersensitive Narcissism Scale (HSNS)

|         | NPI | NI-R   | HSNS   | NPI-Mal | NPI-Adj |
|---------|-----|--------|--------|---------|---------|
| NPI     | –   | .49*** | .12    | .77***  | .95***  |
| NI-R    |     | –      | .54*** | .46***  | .40***  |
| HSNS    |     |        | –      | .28**   | –.00    |
| NPI-Mal |     |        |        | –       | .59***  |

Notes. NPI-Mal = NPI Maladaptiveness. NPI-Adj = NPI Adjustment.  $N = 111$  (male  $N = 27$ , female  $N = 84$ ).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .