



Three faces of Narcissism

Louise Houlcroft*, Miles Bore, Don Munro

University of Newcastle, Faculty of Science and IT, School of Psychology, Australia

ARTICLE INFO

Article history:

Received 3 January 2012

Received in revised form 22 March 2012

Accepted 30 March 2012

Available online 21 April 2012

Keywords:

Narcissism

Pathological Narcissism Inventory (PNI)

Narcissism–Aloofness–Confidence–

Empathy scale (NACE)

Factor structure

ABSTRACT

Narcissism is increasingly recognised as a heterogeneous construct, with **two dimensions** of narcissistic dysfunction commonly accepted, **Grandiose Narcissism and Vulnerable Narcissism**. The current study aimed to provide empirical support for the heterogeneity of Narcissism. Along with the Pathological Narcissism Inventory (PNI) and the Narcissism subscale of the Narcissism–Aloofness–Confidence–Empathy (NACE), questionnaires assessing personality traits, psychopathologies, and behavioural characteristics were administered to Australian university students. In addition to **confirming the two dimensions** of Narcissism through factor and correlational analyses, **a possible third dimension** of Narcissism emerged which was **markedly aggressive and antisocial**. The current study highlights the phenomenological breadth of Narcissism and the need for an improved understanding of Narcissism, particularly given the imminent publication of DSM-5.

© 2012 Elsevier Ltd. All rights reserved.

1. Introduction

Narcissism has been a concept of interest for a considerable time, having been explored in a variety of domains including Greek mythology, psychodynamic theory, psychiatric practice, and personality research. Despite this enduring fascination, there has been a **lack of agreement regarding the conceptualisation of Narcissism**. Although **Narcissism is now commonly accepted as multi-dimensional**, it was traditionally conceptualised as a homogeneous construct. An appreciation of the heterogeneity of Narcissism is crucial for a clearer understanding of the construct as well as improving the detection and management of Narcissism. This is particularly relevant at the present time as the reformulation of the Diagnostic and Statistical Manual of Mental Disorders is questioning the diagnostic utility and reliability of Narcissism as an independent personality disorder.

Two distinct dimensions of Narcissism are increasingly accepted (Cain, Pincus, & Ansell, 2008; Wink, 1991). **Grandiose Narcissism is characterised by overt grandiosity and exhibitionism**. Individuals with this grandiose expression of Narcissism openly **display a sense of entitlement** and are preoccupied with a need for admiring attention from others. **Vulnerable Narcissism is a more covert dimension of Narcissism associated with hypersensitivity to criticism and a tendency to withdraw from social interactions**. For those displaying this vulnerable expression of Narcissism, attempts

to inhibit grandiose desires and control an underlying sense of entitlement often result in distress.

With these distinct and **seemingly conflicting descriptions of narcissistic dysfunction**, it is not surprising that approaches to the measurement of Narcissism have been varied. Research examining self-report measures of Narcissism has shown little association between scales which have been found to focus on grandiosity and those that emphasise vulnerability (Wink, 1991). This supports the idea that there are **two distinct groups of self-report Narcissism scales, neither of which portray the full breadth of the construct**. However, measures that assess both Grandiose Narcissism and Vulnerable Narcissism have begun to emerge. The most notable of these is the Pathological Narcissism Inventory (PNI; Pincus et al., 2009). Although not as well explored in empirical literature, the Narcissism subscale of the Narcissism–Aloofness–Confidence–Empathy scale (NACE; Munro, Bore, & Powis, 2005) is another measure of Narcissism that assesses a range of narcissistic tendencies.

Research that distinguishes between the dimensions of Narcissism reveals that **Grandiose Narcissism and Vulnerable Narcissism display distinct relationships with various correlates**. For example, Miller et al. (2011) found Grandiose Narcissism related positively to Extraversion and negatively to Neuroticism, while Vulnerable Narcissism related negatively to Extraversion and positively to Neuroticism through factor and correlational analysis using the PNI. Miller et al. also found **Grandiose Narcissism was unrelated to psychological distress, whilst Vulnerable Narcissism was positively related to psychological distress**.

Similarly, the dimensions of Narcissism were found to relate to different factors of Psychopathy, with Grandiose Narcissism more closely related to Primary Psychopathy and Vulnerable Narcissism

* Corresponding author. Address: School of Psychology, University of Newcastle, AVGO8 Aviation Building, University Drive, Callaghan, NSW 2308, Australia. Tel.: +61 4 3263 2341; fax: +61 2 4921 6980.

E-mail address: Louise.Houlcroft@uon.edu.au (L. Houlcroft).

more closely associated with Secondary Psychopathy (Miller et al., 2010). Distinguishing between the dimensions of Narcissism may also provide further insight into established relationships between Narcissism and other correlates such as aggression (Baumeister, Bushman, & Campbell, 2000).

Like the aforementioned work of Miller et al. (2011), the current study used factor and correlational analyses to explore the dimensional structure of Narcissism and provide further evidence for its heterogeneity. However, different measures of Narcissism and construct validity variables were used in this study. Based on the aforementioned clinical and empirical literature (Cain et al., 2008; Miller et al., 2011; Wink, 1991), it was predicted that a two-factor structure would underlie both PNI and the NACE Narcissism subscale, with one factor characterised by grandiosity and self-centredness (Grandiose factor) and the other factor characterised by vulnerability and hypersensitivity (Vulnerable factor). It was predicted that the Grandiose and Vulnerable factors would share characteristics fundamental to Narcissism, with both factors displaying negative relationships with Empathy, Agreeableness, and Conscientiousness. Additionally, it was predicted that the factors of Narcissism would be distinguishable through distinct patterns of intrapersonal and interpersonal styles. Consistent with previous empirical research (Miller et al., 2010, 2011), it was anticipated that the Grandiose factor would display relationships indicative of a grandiose and self-centred individual (e.g. positive relationships with Grandiosity, Extraversion, Primary Psychopathy, and Physical and Verbal Aggression; negative relationships with Neuroticism and Psychological Distress). On the other hand, the Vulnerable factor was expected to display correlations suggestive of vulnerable and hypersensitive individuals (e.g. positive relationships with Hypersensitivity, Neuroticism, Secondary Psychopathy, Anger and Hostility; negative relationships with Extraversion).

2. Method

2.1. Participants and procedure

Three hundred participants were recruited from the first year undergraduate psychology cohort at an Australian university. Demographic details such as age and sex were not collected. Participants completed the test battery online and received course credit for their participation. The order of questionnaires was randomly assigned to each participant by an online research participation system to account for potential order and fatigue effects.

2.2. Measures

Pathological Narcissism Inventory (PNI; Pincus et al., 2009) is a 52-item self-report measure of Narcissism ($\alpha = .95$), designed to capture both the grandiose and vulnerable aspects of Narcissism based on an extensive review of cross-discipline theoretical and empirical literature on Narcissism and discussions with psychotherapists about clinical cases of narcissistic psychopathology. Within the PNI, there are four scales that assess Grandiose Narcissism (Exploitative scale, Self-Sacrificing Self-Enhancement scale, Grandiose Fantasy scale, and Entitlement Rage scale) and three scales that assess Vulnerable Narcissism (Contingent Self-Esteem scale, Hiding the Self scale, Devaluing scale). A six-point Likert scale ranging from 'not at all like me' to 'very much like me' was used to rate items such as "I often fantasise about being admired and respected" and "My self-esteem fluctuates a lot". High scores overall on the PNI are associated with low empathy, low self-esteem, interpersonal distress, and aggression.

Narcissism–Aloofness–Confidence–Empathy scales (NACE; Munro et al., 2005) are a self-report measure of personality traits

considered to be undesirable and desirable, particularly in medical professionals. Only the 24 Narcissism items ($\alpha = .87$) and the 24 Empathy items ($\alpha = .85$) were used in the current study. The NACE consists of a comprehensive selection of Narcissism and Empathy items identified through a thorough review of literature on the constructs, including existing measures and the DSM-IV (American Psychiatric Association, 2000) diagnostic criteria for Narcissistic Personality Disorder. Examples of Narcissism items include: "It is important that others recognise how much I have achieved" and "I think people pretend to care more about others than they really do". An example of the Empathy items includes: "I feel most worthwhile as a human being when I am helping others". Items were rated on a four-point Likert scale ranging from 'definitely true' to 'definitely false'. High scores on the NACE Narcissism subscale are associated with disagreeableness, sensitivity to reward, and aggression. High scores on the NACE Empathy subscale indicate a high level of empathy.

Revised Short-scale Eysenck Personality Questionnaire (Eysenck, Eysenck, & Barrett, 1985) is a 48-item measure of Eysenck's personality types: Psychoticism ($\alpha = .51$), Extraversion ($\alpha = .87$), and Neuroticism ($\alpha = .79$). Rated on a dichotomous response scale (Yes/No), examples of items include: "Would you take drugs which may have strange or dangerous effects?" (Psychoticism subscale), "Are you a talkative person?" (Extraversion subscale), and "Does your mood often go up and down?" (Neuroticism subscale).

Goldberg's International Personality Item Pool (International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences) is a widely-used self-report measure of the Five Factor model of Personality. Only the 60 Agreeableness items ($\alpha = .92$) and 60 Conscientiousness items ($\alpha = .94$) were used in this study as the EPQ provided an index of Extraversion and Neuroticism. The Openness subscale was not included as no hypotheses were made for this construct. Items such as "Trust others" (Agreeableness subscale) and "Complete tasks successfully" (Conscientiousness subscale) were rated on a four-point Likert scale ranging from 'definitely false' to 'definitely true'. High scores on the Agreeableness and Conscientiousness subscales indicate a high level of agreeableness and conscientiousness, respectively.

Serkownek's Narcissism–Hypersensitivity Scale (Serkownek, 1975) is a 20-item self-report measure of Hypersensitivity ($\alpha = .64$). Items such as "My feelings are not easily hurt" were rated on a dichotomous response scale (True/False). High scores on the scale are associated with hypersensitivity and low self-confidence.

Peters et al. Delusions Inventory (Peters, Joseph, & Garety, 1999) is a self-report measure of delusional ideation ($\alpha = .78$). In the current study, the five Grandiosity items were rated using a five-point Likert scale ranging from 'feel it rarely' to 'feel it all the time'. An example of the items is: "Do you ever feel as if you are destined to be someone very important?" High scores on the Grandiosity items indicate a high level of grandiosity.

Kessler Psychological Distress Scale (Kessler et al., 2002) is a 10-item self-report screening tool used to detect psychological distress ($\alpha = .90$). Items such as "Do you feel depressed?" were rated on a five-point Likert scale ranging from 'all of the time' to 'none of the time'. High scores on the scale indicate a high level of psychological distress.

Levenson Self-Report Psychopathy Scale (Levenson, Kiehl, & Fitzpatrick, 1995) is a 26-item self-report scale that assesses the two commonly accepted factors of Psychopathy: Primary Psychopathy ($\alpha = .86$) and Secondary Psychopathy ($\alpha = .71$). Items such as "Success is based on survival of the fittest; I am not concerned about the losers" (Primary Psychopathy subscale) and "I find myself in the same kinds of trouble, time after time" (Secondary Psychopathy subscale) were rated on a four-point Likert scale ranging from 'disagree strongly' to 'agree strongly'. High scores on the

Primary Psychopathy subscale indicate a high level of Primary Psychopathy, a grandiose and unempathetic manifestation of Psychopathy, while high scores on the Secondary Psychopathy subscale indicate a high level of Secondary Psychopathy, an emotionally unstable manifestation of Psychopathy.

Buss and Perry Aggression Questionnaire (Buss & Perry, 1992) is a 29-item self-report measure of four forms of Aggression: Physical Aggression ($\alpha = .87$), Verbal Aggression ($\alpha = .82$), Anger ($\alpha = .85$), and Hostility ($\alpha = .85$). Examples of items from each of the subscale include: “Once in a while I can’t control the urge to strike another person” (Physical Aggression), “I tell my friends openly when I disagree with them” (Verbal Aggression), “I flare up quickly but get over it quickly” (Anger), and “I am sometimes eaten up with jealousy” (Hostility). Items were rated on a seven-point Likert scale ranging from ‘extremely uncharacteristic of me’ to ‘extremely characteristic of me’. High scores on the Physical Aggression subscale indicate a high propensity for physical aggression; high scores on the Verbal Aggression subscale indicate a high propensity for verbal aggression; high scores on the Anger subscale indicate a high propensity for anger; high scores on the Hostility subscale indicate a high propensity for hostility.

3. Results

3.1. Exploratory factor analysis

Exploratory factor analysis ($n = 300$) of the PNI and the NACE Narcissism subscale were undertaken separately. Examination of the scree plots suggested that both the PNI and the NACE Narcissism subscale consisted of one large factor and several smaller factors. The first five eigen values for the 52 PNI items and the 24 NACE Narcissism subscale items were 15.287, 3.683, 3.320, 2.445, and 1.764; 6.377, 1.763, 1.585, 1.332, and 1.174, respectively. Given two dimensions of Narcissism are commonly accepted, two factors were extracted from both the PNI and the NACE Narcissism subscale. The two factors explained 36.48% of the variance in the PNI and 33.92% of the variance in the NACE Narcissism subscale. Although the dimensions of Narcissism are conceptually related, orthogonal rotations were used to ensure a clear distinction between the factors (see Fig. 1).

An examination of the PNI item loadings indicated that the first extracted factor was associated with feelings of worthlessness, hypersensitivity, and social withdrawal. The second extracted factor was characterised by a grandiose sense of self, self-centeredness, and arrogance. Given these loadings, and their similarity to the two dimensions of Narcissism, the extracted factors were labelled *PNI Vulnerable Narcissism* and *PNI Grandiose Narcissism*, respectively. The first extracted factor of the NACE Narcissism subscale was characterised by a need for recognition by others, self-importance, and a desire for control similar to Grandiose Narcissism, and was labelled *NACE Grandiose Narcissism*. Unlike Grandiose Narcissism or Vulnerable Narcissism, the second extracted factor of the NACE Narcissism subscale was associated with aggressive self-affirmation and rationalised antisocial behaviours. This extracted factor was tentatively named *NACE Aggressive Narcissism*.

3.2. Correlational analysis

The correlations between the two extracted factors of the PNI, the two extracted factors of the NACE Narcissism subscale, and construct validity variables are reported in Table 1. Within the extracted factors, a significant, moderate correlation was found between PNI Grandiose Narcissism and NACE Grandiose Narcissism. Conversely, the correlation between PNI Vulnerable Narcissism and NACE Grandiose Narcissism was significant but weak, as were

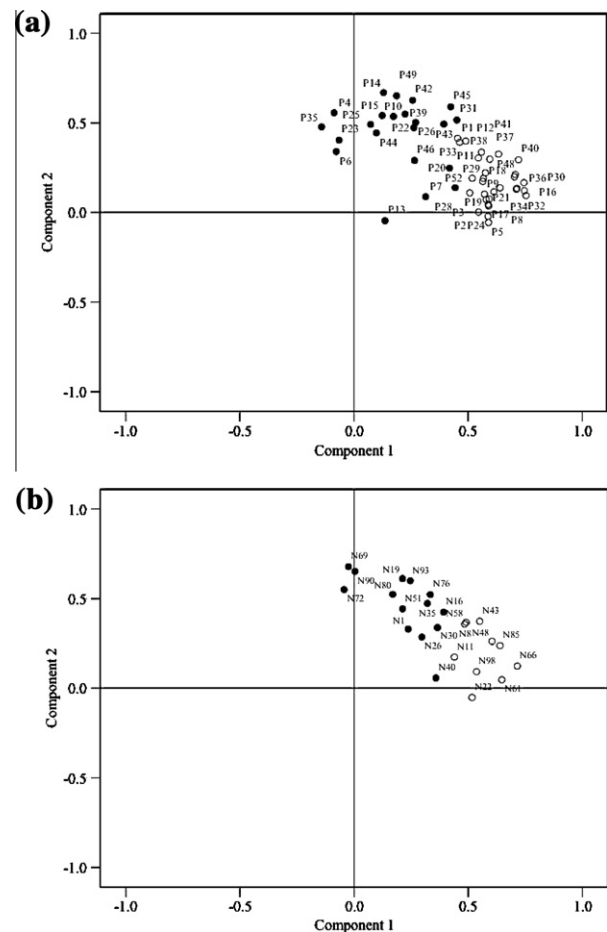


Fig. 1. Two-component orthogonal rotation solutions for: (a) Pathological Narcissism Inventory (PNI); (b) Narcissism–Aloofness–Confidence–Empathy (NACE) Narcissism subscale.

the correlations between the two extracted factors of the PNI and NACE Aggressive Narcissism.

In line with Miller et al. (2011), the extracted factors displayed similar relationships with variables fundamental to Narcissism; PNI Vulnerable Narcissism was significantly and negatively correlated with Agreeableness and Conscientiousness, PNI Grandiose Narcissism and NACE Grandiose Narcissism were significantly and negatively correlated with Agreeableness, and NACE Aggressive Narcissism was significantly and negatively correlated with Empathy, Agreeableness, and Conscientiousness.

Distinct patterns were also observed in the relationships between the extract factors and indices of intrapersonal and interpersonal style. Similar to Miller et al. (2011), PNI Grandiose Narcissism and NACE Grandiose Narcissism were significantly and positively correlated with Grandiosity and Extraversion, whilst unrelated to Neuroticism and Psychological Distress. Conversely, a significant, positive correlation was found between PNI Vulnerable Narcissism and Hypersensitivity, Neuroticism, and Psychological Distress. PNI Vulnerable Narcissism was also significantly and negatively correlated with Extraversion. NACE Aggressive Narcissism was unrelated to Grandiosity, Extraversion, and Neuroticism, but weakly correlated with Hypersensitivity and Psychological Distress.

In line with Miller et al. (2010), PNI Grandiose Narcissism and NACE Grandiose Narcissism were more strongly correlated with Primary Psychopathy, whilst PNI Vulnerable Narcissism was more strongly correlated with Secondary Psychopathy. When the relationships with the forms of Aggression were examined, PNI Vulnerable Narcissism was most strongly correlated with Anger and

Table 1
Correlations between the factors of Narcissism and related variables.

	PNI Vulnerable Narcissism	PNI Grandiose Narcissism	NACE Grandiose Narcissism	NACE Aggressive Narcissism
PNI Grandiose Narcissism	.00			
NACE Grandiose Narcissism	.23***	.46***		
NACE Aggressive Narcissism	.27***	.13*	.00	
Empathy (NACE)	-.04	.26***	-.02	-.26***
Agreeableness (IPIP)	-.32***	-.20**	-.40***	-.62***
Conscientious (IPIP)	-.37***	.03	-.09	-.30***
Extraversion (EPQ)	-.31***	.30***	.27***	-.08
Neuroticism (EPQ)	.64***	-.03	.07	.14*
Grandiosity (PDI)	.01	.49***	.38***	.10
Hypersensitivity (SNHS)	.57***	.13*	.12*	.23***
Psychological Distress (K10)	.56***	.03	.05	.18**
Primary Psychopathy (LSRP)	.29***	.21***	.43***	.58***
Secondary Psychopathy (LSRP)	.48***	.06	.17**	.44***
Overall Psychopathy (LSRP)	.42***	.18**	.39***	.61***
Psychoticism (EPQ)	.03	.11	.13*	.30***
Verbal Aggression (BPAQ)	.13*	.32***	.23***	.49***
Physical Aggression (BPAQ)	.25***	.23***	.18**	.54***
Anger (BPAQ)	.41***	.07	.20***	.45***
Hostility (BPAQ)	.60***	.19**	.11	.47***
Overall Aggression (BPAQ)	.45***	.24***	.22***	.61***

Note: PDI = Peter's Delusion Inventory; SNHS = Serkownek's Narcissism–Hypersensitivity Scale; IPIP = International Personality Item Pool; EPQ = Eysenck's Personality Questionnaire; K10 = Kessler Psychological Distress Scale; LSRP = Levenson Self-Report Psychopathy Scale; BPAQ = Buss and Perry Aggression Questionnaire.

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

Hostility, whilst PNI Grandiose Narcissism was most strongly correlated with Verbal Aggression and Physical Aggression, and NACE Grandiose Narcissism was most strongly correlated with Verbal Aggression, Physical Aggression, and Anger. NACE Aggressive Narcissism was strongly related to both factors of Psychopathy as well as all forms of Aggression.

4. Discussion

Overall, the results of the current study provide further support for the heterogeneity of Narcissism. Two-factor solutions were found underlying both the PNI and the NACE Narcissism subscale. The extracted factors appeared to be related and had similar relationships with Empathy, Agreeableness, and Conscientiousness, but were distinguishable due to distinct relationships with intra-personal and interpersonal variables including Extraversion, Neuroticism, Psychological Distress, factors of Psychopathy, and forms of Aggression. Consistent with clinical and empirical literature differentiating between the Grandiose and Vulnerable dimensions of Narcissism (Cain et al., 2008; Miller et al., 2011; Wink, 1991), PNI Grandiose Narcissism and NACE Grandiose Narcissism were grandiose, extraverted, emotionally stable, and overtly aggressive, while PNI Vulnerable Narcissism was hypersensitive, emotional unstable and distressed, and hostile. The observation of these conceptually consistent correlations between extracted factors and construct validity variables provide evidence of the construct validity of Grandiose Narcissism and Vulnerable Narcissism.

In addition to supporting the two commonly accepted dimensions of Narcissism, the results of the current study also provide evidence of a possible third dimension of Narcissism. Whilst possessing fundamental characteristics of Narcissism, being negatively related to Empathy, Agreeableness, and Conscientiousness, NACE Aggressive Narcissism was markedly aggressive and antisocial unlike Grandiose Narcissism or Vulnerable Narcissism. Notably, three dimensions of Narcissism similar to the factor extracted in this study have been documented in clinical and empirical literature (Ronningstam, 2005; Russ, Shedler, Bradley, & Westen, 2008).

Through an examination of the clinical similarities and differences in the self-esteem regulation, emotional adjustment, and

interpersonal problems of narcissists, Ronningstam (2005) identified three 'subtypes' of Narcissism: the Arrogant type, the Shy type, and the Psychopathic type. Like Grandiose Narcissism, and consistent with the characteristics of PNI Grandiose Narcissism and NACE Grandiose Narcissism, the Arrogant type was described as grandiose, self-important, and entitled. The Shy type was depicted as hypersensitive, inhibited, and socially withdrawn like Vulnerable Narcissism, and similar to PNI Vulnerable Narcissism. Finally, the Psychopathic type was identified as being characterised by aggression, malignant attitudes, and antisocial behaviours, similar to NACE Aggressive Narcissism.

Russ, Shedler, Bradley, and Westen (2008) also identified three subtypes of Narcissism through factor analysis of clinicians' descriptions of patients with Narcissistic Personality Disorder that are similar to those found in the current study and those described by Ronningstam (2005). Like Grandiose Narcissism and Ronningstam's Arrogant type, High Functioning/Exhibitionistic Narcissism was grandiose, competitive, and emotionally resilient. Fragile Narcissism was associated with feelings of inferiority, depression, and social isolation similar to Vulnerable Narcissism and Ronningstam's Shy type. Crucially, Grandiose/Malignant Narcissism was exploitative, controlling, and aggressive similar to Ronningstam's Psychopathic type and the NACE Aggressive Narcissism factor identified in the current study.

It should be acknowledged that the factors of Narcissism extracted were largely determined by the items that formed the measures of Narcissism used in this study. As aforementioned, there appears to be an aggression component to NACE Narcissism subscale (Munro et al., 2005), and as such it is not surprising that an aggressive and antisocial factor emerged. It is possible that this extracted factor is an index of aggression, rather than a third dimension of Narcissism. However, if this were the case, it could be expected that the correlations between the extracted factor and the indices of Aggression used as construct validity variables would be greater than those that were observed.

5. Conclusion

The current study provides further empirical support for Grandiose Narcissism and Vulnerable Narcissism through factor and

correlational analyses similar to Miller et al. (2011). Unexpectedly, a third possible dimension of Narcissism emerged from this study. Empirical support for the two dimensions of Narcissism, and the emergence of a possible third dimension, highlights the phenomenological breadth and complexity of Narcissism. As the current study was exploratory, further research into the aggressive, antisocial dimension of Narcissism is required. With the imminent publication of DSM-5, the results of the study emphasise the need for Narcissistic Personality Disorder diagnostic criteria that fully reflects the richness of the construct.

References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* ((4th text revision ed.)). Washington, DC: American Psychiatric Association.
- Baumeister, R., Bushman, B., & Campbell, W. (2000). Self-esteem, Narcissism, and aggression: Does violence result from low self-esteem or from threatened egotism? *Current Directions in Psychological Science*, 9(1), 26–29.
- Buss, A., & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality & Social Psychology*, 63(3), 452–459.
- Cain, N., Pincus, A., & Ansell, E. (2008). Narcissism at the crossroads: Phenotypic description of Pathological Narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28(4), 638–656.
- Eysenck, S., Eysenck, H., & Barrett, P. (1985). A revised version of the Psychoticism scale. *Personality and Individual Difference*, 6(1), 21–29.
- Kessler, R., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., & Normand, S. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959–976.
- Levenson, M., Kiehl, K., & Fitzpatrick, C. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality & Social Psychology*, 68(1), 151–158.
- Miller, J., Dir, A., Gentile, B., Wilson, L., Pryor, L., & Campbell, W. (2010). Searching for a vulnerable dark triad: Comparing factor 2 psychopathy, Vulnerable Narcissism, and borderline Personality Disorder. *Journal of Personality*, 78(5), 1529–1564.
- Miller, J., Hoffman, B., Gaughan, E., Gentile, B., Maples, J., & Campbell, W. (2011). Grandiose and Vulnerable Narcissism: A nomological network analysis. *Journal of Personality*, 79(5), 1012–1042.
- Munro, D., Bore, M., & Powis, D. (2005). Personality factors in professional ethical behaviour: Studies of Empathy and Narcissism. *Australian Journal of Psychology*, 57(1), 49–60.
- Peters, E., Joseph, S., & Garety, P. (1999). Measurement of delusional ideation in the normal population: Introducing the PDI (Peters et al. Delusions Inventory). *Schizophrenia Bulletin*, 25(3), 553–576.
- Pincus, A., Ansell, E., Pimentel, C., Cain, N., Wright, A., & Levy, K. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, 21(3), 365–379.
- Ronningstam, E. (2005). *Identifying and understanding the narcissistic personality*. New York: Oxford University Press.
- Russ, E., Shedler, J., Bradley, R., & Westen, D. (2008). Refining the construct of Narcissistic Personality Disorder: Diagnostic criteria and subtypes. *The American Journal of Psychiatry*, 165(11), 1473–1481.
- Serkownek, K. (1975). *Subscales 5 and 9 of the Minnesota Multiphasic Personality Inventory*. Unpublished manuscript.
- Wink, P. (1991). Two faces of Narcissism. *Journal of Personality & Social Psychology*, 61(4), 590–597.

Web references

- International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (n.d.). <<http://www.ipip.ori.org/>> (retrieved 11. 11. 2011).