What makes narcissists unhappy? Subjectively assessed intelligence moderates the relationship between narcissism and psychological well-being

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ABSTRACT

We investigated the relations between narcissism, self-assessed intelligence and subjective well-being. In three studies, we aimed to replicate previous findings concerning the relationship between narcissism and both objectively and subjectively assessed intelligence (Study 1), as well as to examine whether the latter influenced narcissists' satisfaction with life (Study 2) and their mood (Study 3). The results confirmed the positive link between narcissism and self-assessed intelligence. Moreover, we demonstrated that this relationship was independent of actual abilities. In line with existing literature, we also found evidence that satisfying ego needs in this domain was a necessary precondition for narcissists' well-being. Specifically, the results of Study 2 indicated that narcissists who evaluated their intelligence as low were not satisfied with their life. Similar results were found in Study 3: narcissists evaluating their intelligence as low experienced higher tension and lower hedonic tone.

1. Introduction

Inflated self-views are one of the defining characteristics of narcissism (Morf, Horvath, & Torchetti, 2011). These views may concern one's communal qualities ("I am the most helpful person", as in the case of communal narcissists; Gebauer, Sedikides, Verplanken, & Maio, 2012), but mostly commonly they refer to agentic features ("I am the most intelligent person"). It has been well documented that narcissists positively evaluate their own cognitive abilities (Gabriel, Critelli, & Ee, 1994; Paulhus & Williams, 2002), however, empirical studies indicated a discrepancy between narcissist's beliefs about intelligence and their actual ability. In a recent meta-analytic investigation, O'Boyle, Forsyth, Banks, and Story (2013) examined the link between narcissism and other Dark Triad (DT) traits with actual intelligence. The authors tested two hypotheses. According to the 'evil genius' hypothesis, intellectually gifted individuals are more likely to display socially exploitative personality traits relative to the general population. This idea was based on the empirical findings suggesting that the DT traits were associated with success in different fields (e.g. sexual behavior) perhaps because individuals with these traits were more likely to use influence tactics for their interpersonal advantage (Jonason, Li, Webster, & Schmitt, 2009).

On the other hand, the "compensatory" hypothesis is based on results showing maladaptive aspects of DT, and suggests that individuals high on narcissism and other DT traits might engage in manipulative behavior to compensate for intellectual deficits (O'Boyle et al., 2013). O'Boyle et al. (2013) concluded that there was no significant relationship between general mental abilities and DT. Thus the data did not unequivocally support either the 'evil genius' or 'compensatory' hypothesis.

Although, there was no correlation between intelligence and DT, interesting findings emerged for the relationship between narcissism and subjectively assessed intelligence (SAI). For instance, Gabriel et al. (1994) found a positive correlation between narcissism and self-enhancement. On the other hand, the "compensatory" hypothesis is based on results showing maladaptive aspects of DT, and suggests that individuals high on narcissism and other DT traits might engage in manipulative behavior to compensate for intellectual deficits (O'Boyle et al., 2013). O'Boyle et al. (2013) concluded that there was no significant relationship between general mental abilities and DT. Thus the data did not unequivocally support either the 'evil genius' or 'compensatory' hypothesis.

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to intra- and inter-personal adjustment (Dufner et al., 2012). Moreover, the link between both variables and intrapersonal adjustment has been shown to be mediated by self-esteem (Dufner et al., 2012; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). However, there were no studies explicitly examining the role of cognitive self-enhancement for narcissist’s life. Thus, it would be interesting to see to what extent narcissists’ positive illusions about intellectual abilities influence their subjective well-being, one of the most important psychological constructs determining the quality of life as well as many real life outcomes, including health and longevity (Diener & Chan, 2011).

In the current research, we investigated the relationships between narcissism, SAI and subjective well-being. Is high regard of one’s own cognitive abilities not only a distinctive feature of narcissists but also a crucial and necessary condition for their well-being? We hypothesize that a narcissist frustrated in their egotistic needs concerning their own cognitive abilities is an unhappy narcissist. In three studies, we aimed to replicate the previous findings concerning the relationship between narcissism and both objectively and subjectively assessed intelligence (Study 1), as well as to examine whether the latter influences narcissists’ satisfaction with life (Study 2) and their mood (Study 3) – the two components of subjective well-being (Diener, Suh, Lucas, & Smith, 1999).

2. Study 1

In Study 1, we measured narcissism, SAI and various aspects of cognitive ability. We expected narcissism to be positively associated with self-evaluated intelligence, and that this relationship would be independent from actual ability. The present study was based on previous findings (Dufner et al., 2012; Gabriel et al., 1994; Paulhus & Williams, 2002), however it used a wider spectrum of cognitive abilities (fluid and verbal) and another measure of SAI.

2.1. Participants

The study involved 205 (105 female) students from various universities in Warsaw, Poland. The mean age of the sample was 23.10 years (SD = 2.66) with range 19–31.

2.2. Measures

Fluid intelligence was measured with Raven’s Advanced Progressive Matrices Test (APM; Raven, Court, & Raven, 1983).

Verbal intelligence was assessed with a Polish test of verbal comprehension designed to measure crystallized abilities (Matczak, Jaworowska, & Martowska, 2013). In this test participants are asked to find a synonym for a target word among four different words. There are 30 items with increasing difficulty, which an individual has to solve within 15 min. The test has high split-half reliability and correlates positively with other IQ tests (WAIS-R, Raven).

Narcissism was assessed using the Dirty Dozen subscale (Jonason & Webster, 2010) in the Polish version (Jonason, Li, & Czarna, 2013), which also measures psychopathy and Machiavellianism. The narcissism subscale consists of the following four items: “I tend to want others to admire me”, “I tend to want others to pay attention to me”, “I tend to expect special favors from others”, “I tend to seek prestige or status”.

Subjectively assessed intelligence (SAI) was assessed by having participants first read the general characteristic of intelligence taken from a public statement known as Mainstream Science on Intelligence issued by a group of 52 academic researchers in fields associated with intelligence (Gottfredson, 1997):

“Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience. It is not merely book-learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings ‘catching on,’ ‘making sense’ of things, or ‘figuring out’ what to do.”

“Next, participants assessed their own intelligence using a table with one row and 25 columns. Five groups of five columns were labeled as very low, low, average, high or very high, respectively. Participants’ SAI was indexed with the marked column counting from the first to the left; thus the score ranged from 1 to 25.

2.3. Results

The correlational analysis showed moderate positive associations between ability tests, and weaker positive, though significant, relationships between SAI and both intelligence tests and narcissism (Table 1). The latter did not correlate with objectively assessed intelligence.

Further, we tested whether there was a positive relationship between narcissism and SAI, and if this association was independent from objectively measured intelligence. The model (see Fig. 1) fitted the data well: \( \chi^2/\text{degree of freedom} = 0.73 \) \( (p = 0.39) \), CFI = 1.0, RMSEA = .00. SAI was significantly associated with narcissism and the intelligence latent variable. The results suggested then that narcissism was positively related with SAI even after controlling for actual cognitive ability.

3. Study 2

In Study 2 we measured narcissism, SAI and satisfaction with life. Existing evidence links narcissism inversely with daily sadness and anxiety, depression and neuroticism and relates it positively to subjective well-being, and, more importantly, self-esteem fully accounts for these relations (Sedikides et al., 2004). Additionally, self-esteem, a positive view about oneself, was shown to be positively correlated with self-enhancement of cognitive ability (Dufner et al., 2012). Therefore, we hypothesized that narcissists’ satisfaction with life may depend on the level of SAI.

3.1. Participants

The study included 202 (114 female) students from various universities in Warsaw, Poland. The mean age of the sample was 23.03 years (SD = 2.30) with range 18–30.

3.2. Measures

Narcissism and SAI were measured using the same methods as in Study 1. In the present research, the means for narcissism and satisfaction with life are presented in Table 1.

<table>
<thead>
<tr>
<th>Raven</th>
<th>Verbal ability</th>
<th>Narcissism</th>
<th>SAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.84</td>
<td>.85</td>
<td>.82</td>
<td></td>
</tr>
</tbody>
</table>

Note: Reliability = Cronbach’s alpha, except for Raven, where reliability was split-half correlation adjusted with the Spearman–Brown prophecy formula. \( p < 0.05 \).

\( p < 0.001 \).

Table 1: Correlations and descriptive statistics for all variables from Study 1.
Narcissism and SAI (r = .27; p < 0.01) as well as SAI and SWLS (r = .24; p < 0.01) correlated positively, while narcissism and SWLS did not correlate significantly (r = .03; p = 0.68).

To test whether SAI moderated the relationship between narcissism and SWLS, we ran a regression model with narcissism, SAI and an interaction term (narcissism × SAI) as predictors and SWLS as the dependent variable. The variables were standardized. The model was significant (F(3, 198) = 6.44; p < 0.001) and accounted for 8% of the variance. The interaction was significant (see Table 2). Fig. 2 shows graphically that at low levels of SAI, the association between narcissism and SWLS became negative, while at high and medium level of SAI there was no linear relationship.

### 4. Study 3

Next, we examined whether SAI influenced narcissists’ mood. We referred to the three-factor model of mood as the most relevant for understanding core affective experience within various concepts (Schimmack & Grob, 2000). The model proposed by Matthews, Jones, and Chamberlain (1990) distinguished between three dimensions: tense arousal (TA; contrasting tension with calmness), energetic arousal (EA; energy vs. tiredness), and hedonic tone (HT; contrasting pleasantness with unpleasantness), within the two factors proposed by Thayer (1989; TA and EA). We predicted that narcissists who viewed their intelligence as high will experience positive mood, that is high EA and HT, and low TA (Zajenkowski, Goryńska, & Winiewski, 2012). On the other hand, narcissists evaluating their ability as low, will exhibit rather opposite levels of mood dimensions.

#### 4.1. Participants

The study included 154 (113 female) students from various universities in Warsaw, Poland. The mean age of the sample was 23.10 years (SD = 4.06) with range 19–32.

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**Table 2**

Regression model with narcissism, SAI and narcissism × SAI as predictors and SWLS/mood as dependent variables.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1. Narcissism, SAI and narcissism × SAI as predictors of SWLS (Study 2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissism</td>
<td>−.31</td>
<td>.12</td>
</tr>
<tr>
<td>SAI</td>
<td>.28</td>
<td>.00</td>
</tr>
<tr>
<td>Narcissim × SAI</td>
<td>.16</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Model 2. Narcissism, SAI and narcissism × SAI as predictors of hedonic tone (Study 3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissism</td>
<td>−.51</td>
<td>.04</td>
</tr>
<tr>
<td>SAI</td>
<td>.02</td>
<td>.62</td>
</tr>
<tr>
<td>Narcissim × SAI</td>
<td>.62</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Model 3. Narcissism, SAI and narcissism × SAI as predictors of tense arousal (Study 3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissim</td>
<td>.69</td>
<td>.01</td>
</tr>
<tr>
<td>SAI</td>
<td>.03</td>
<td>.82</td>
</tr>
<tr>
<td>Narcissim × SAI</td>
<td>−.81</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Model 4. Narcissism, SAI and narcissism × SAI as predictors of energetic arousal (Study 3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissim</td>
<td>−.37</td>
<td>.14</td>
</tr>
<tr>
<td>SAI</td>
<td>.11</td>
<td>.48</td>
</tr>
<tr>
<td>Narcissim × SAI</td>
<td>.34</td>
<td>.28</td>
</tr>
</tbody>
</table>

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**Fig. 2.** Interaction effect of narcissism and SAI predicting satisfaction with life.
4.2. Measures

Narcissism and SAI were measured using the same methods as in Study 1. In the present study, the means for narcissism and SAI were 10.01 (SD = 4.01) and 16.70 (SD = 3.00), respectively; Cronbach’s alpha for narcissism was .85.

Mood was assessed using the Polish adaptation of the UWIST Mood Adjective Checklist (UMACL; Matthews et al., 1990), a 29-item questionnaire with a 4-point Likert-type response format which provided state measures of HT, TA and EA. In the present research, the means and alphas were $M = 28.26$ (SD = 6.37), alpha = .92 for HT, $M = 20.10$ (SD = 6.92), alpha = .89 for TA, and $M = 28.37$ (SD = 6.23), alpha = .85 for EA.

4.3. Results

Narcissism was positively correlated with SAI ($r = .33; p < 0.001$), and did not correlate significantly with HT ($r = .04; p = 0.621$), TA ($r = -.01; p = 0.917$), and EA ($r = -.03; p = 0.723$). SAI was positively associated with HT ($r = .26; p < 0.001$) and EA ($r = .22; p = 0.007$), and negatively with TA ($r = -.28; p < 0.001$).

To test whether SAI moderated the relationship between narcissism and mood, we ran a regression model with narcissism, SAI and an interaction term (narcissism × SAI) as predictors and each mood dimension as the dependent variables (Table 2). The analyses revealed that SAI significantly moderated the relationship between narcissism and HT and TA. Specifically, at low level of SAI, narcissism was negatively associated with HT (Fig. 3) and positively with TA (Fig. 4).

5. Discussion

The results of our three studies consistently confirmed the positive link between narcissism and SAI. Moreover, we demonstrated that this relationship was independent of actual abilities, which is consistent with previous findings in this area (Gabriel et al., 1994; Paulhus & Williams, 2002). In line with existing literature, we also found evidence that satisfying ego needs in this domain was a necessary precondition for narcissists’ well-being (Dufner et al., 2012; Sedikides et al., 2004). Our investigation however showed, unlike prior studies, that low self-esteem in the domain of regard to one’s own cognitive abilities modified the relationship between narcissism and intrapersonal adjustment in such a way that at low levels of intellectual self-esteem, narcissism was related to dissatisfaction with life and negative mood. While prior studies preponderantly showed positive relationships between narcissism and indicators of psychological health and adjustment (Sedikides et al., 2004), the results of Study 2 indicated that narcissists who evaluated their intelligence as low were actually not satisfied with their life. Similar results were also found in Study 3: narcissists evaluating their intelligence as low experienced higher tension and lower hedonic tone. Interestingly, there was no interaction effect between narcissism and SAI in predicting energy. It seems that the level of SAI is more important for narcissists’ feelings rather than EA, perhaps because the latter might be more related to motivational aspects and approach behavior (Thayer, 1989).

Our results appear to be in line with the extended agency model of narcissism (Campbell & Foster, 2007). The model explicitly lists, among many other strategies, having an inflated view of one’s own IQ as an important intrapsychic strategy serving a self-regulatory function to maintain positive feelings called here ‘narcissistic esteem.’ The self-regulation strategies, qualities and related skills of narcissists reinforce one another forming a system. As intelligence is the crucial agentic quality, estimating one’s own IQ as relatively high constitutes a failure of this self-regulatory system par excellence: playing havoc with narcissists’ feelings, happiness and satisfaction with life and possibly leading to a crisis.

An important question concerns the relation between SAI and self-esteem. It has been shown that the two variables were positively correlated (Dufner et al., 2012). Since narcissists reported relatively high self-esteem instability (Rhodewalt, Madrian, & Cheney, 1998), one may wonder whether the same is true for SAI. It would be interesting to examine in future studies whether situational factors, e.g., negative feedback about cognitive performance, influence the relationship between narcissism and self-assessment of intelligence. Also, differentiating between grandiose and vulnerable forms of narcissism in future research could further elucidate boundary conditions for well-being of narcissistic individuals. Based on extant literature (e.g., Besser & Priel, 2010) we find it likely that high self-assessed intelligence is more important for grandiose narcissists to feel happy while satisfaction with life of vulnerable narcissists might be more dependent on interpersonal approval than confirmation of their abilities.
Our conclusions might be limited by the fact that in Studies 2 and 3 we measured only SAI, without an objective measure of ability. Thus we cannot conclude whether the effects of SAI are due to narcissists' overestimation of their intelligence or whether SAI reflects their true ability.

Since narcissism has been on a rise (Twenge & Foster, 2010), investigating necessary conditions for the satisfaction with life of narcissists as well as factors that drive their dissatisfaction and possibly crisis is an important endeavor. Current research showed that lower subjective well-being in highly narcissistic individuals could be related to their low self-evaluations in a domain of exceptional personal importance – their intelligence, likely constituting a failure to live up to their own high standards and thus an unmitigated ego threat. Our results point out to the need for designing a clinical intervention that could possibly help highly narcissistic individuals to cope with their unsatisfactory self-views.

References