

Three-Dimensional Narcissism Scale for Children: Structure, Reliability, and Construct Validity

Assessment
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DOI: 10.1177/10731911251320050
journals.sagepub.com/home/asm



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Abstract

Recent advancements in the theory of narcissism emphasize that it is a multidimensional construct with three distinct facets: agentic, antagonistic, and neurotic. Although this model has been extensively studied and supported in adults, there is a lack of instruments assessing the multidimensional structure of narcissism in children. In response to this gap in the literature, we aimed to introduce a new measure of three-dimensional narcissism in children. In three studies among children aged between 8 and 10 years ($N = 189$, $N = 235$, $N = 163$), we successfully supported the presence of the three-factor structure of narcissism. In addition, we identified respectable reliability and validity for the new measure. Agentic narcissism positively correlated with self-enhancement values, agentic attributes, and self-esteem. Neurotic narcissism was negatively correlated with self-esteem. Finally, antagonistic narcissism was negatively associated with self-transcendence values and positively with self-enhancement values. In conclusion, we propose a 12-item measure distinguishing agentic, antagonistic, and neurotic narcissism in children.

Keywords

children, narcissism, narcissism scale

Narcissism is a personality trait characterized by entitlement and excessive self-importance (Miller et al., 2021). There is wide agreement that narcissism is a heterogeneous construct manifesting either in grandiose (i.e., inflated positive self-image, social boldness, approach motivation, and the need to be admired by others) or vulnerable (i.e., hypersensitivity, defensiveness, low self-esteem, and negative emotionality) form (Krizan & Herlache, 2018; Wink, 1991). These dimensions, however, can be decomposed into three specific facets—agentic (i.e., tendency toward self-enhancement, self-promotion, feelings of grandiosity, and personal greatness), antagonistic (i.e., entitlement, exploitativeness, and aggressiveness), and neurotic (i.e., anxiety, shame, distrust, and social withdrawal) narcissism (Ackerman et al., 2019; Back, 2018; Krizan & Herlache, 2018; Miller et al., 2021; Rogoza et al., 2019; Wright & Edershire, 2018). While the antagonistic facet is foundational to both grandiose and vulnerable narcissism, the agentic and neurotic facets are distinctly characteristic of grandiose and vulnerable narcissism, respectively (Miller et al., 2021; Rogoza et al., 2022).

The three-factor model of narcissism received a significant amount of empirical evidence both at a trait

(e.g., Crowe et al., 2019) and a state level (Rogoza, Krammer et al., 2024) using factor analytic or network psychometrics models (Rogoza et al., 2019, 2022). Moreover, the three facets of narcissism are differentially correlated with various psychological factors, such as self-esteem, personality traits, biological underpinnings, and beliefs. For instance, agentic and neurotic narcissisms are related to self-esteem positively and negatively, respectively, whereas antagonistic narcissism is associated with higher self-esteem variability (Geukes et al., 2017; Rogoza, Zajenkowski et al., 2024). Likewise, agentic narcissism correlates with inflated self-views in the agentic domain (e.g., high intelligence; Gignac & Zajenkowski, 2021; Zajenkowski et al., 2020). In a daily diary study, neurotic narcissism was

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negatively associated with self-assessed intelligence, whereas antagonistic facet correlated with increased variability. In addition, these facets can be meaningfully embedded within broader personality models, such as the Big Five: both agentic and neurotic narcissisms are related to extraversion (positively and negatively, respectively), antagonistic narcissism is related to low agreeableness, while a trait distinctive to the neurotic narcissism is neuroticism (Jauk et al., 2017; Miller et al., 2017; Rogoza et al., 2018).

Regarding the biological underpinnings, empirical assessments are scarce, yet Zajenkowski and colleagues (2023) found a positive association between agentic narcissism and testosterone level in men. Concerning the underlying motivations, agentic narcissism correlates positively with self-enhancement values (mainly achievement aspect), antagonistic narcissism is associated with high self-enhancement (mainly power aspect) and low self-transcendence (i.e., concern for the welfare and interests of others), while neurotic narcissism appears to be least related to the motivational values (Huczewska & Rogoza, 2020; Rogoza et al., 2016). In summary, the theoretical and empirical research (Back, 2018; Miller et al., 2021; Wright & Edershile, 2018) provides firm and robust support for the differentiation of these facets.

Narcissism in Children

Individual differences in narcissism become apparent after the age of 7 years (Brummelman et al., 2015). This developmental milestone is essential for understanding how this trait impacts social dynamics and relations with peers. Children with higher narcissism levels perceive themselves as better leaders and are more often nominated as leaders by their peers (Brummelman et al., 2021). However, when given a leadership role task, their actual leadership functioning did not differ from others, which suggests that they held inflated self-views of leadership capability, and their peers were susceptible to their charisma. In another study, children with higher narcissism showed intensified affective-motivational responses to status-relevant experiences (e.g., prominence and influence in a social group) on a simulated social media platform (Grapsas et al., 2020). Several studies also explored the effects of narcissism and self-esteem among children. Although both constructs are positively correlated, they show distinct predictive validity (Brummelman & Gürel, 2019). Children predisposed to narcissism showed elevated, whereas children predisposed to high self-esteem showed lowered, physiological arousal in social-evaluative contexts (Brummelman et al., 2022). Thus, narcissism was predicted by indicators reflecting early social-evaluative concerns, whereas self-esteem was predicted by indicators reflecting an

early sense of comfort in social-evaluative contexts. Furthermore, a study on parents' praise revealed that inflated praise predicted lower self-esteem in children, which is in line with the self-deflation hypothesis, stating that inflated praise sets unattainable standards (Brummelman et al., 2017). However, parents' inflated praise predicted higher narcissism—but only in children with high self-esteem (self-inflation hypothesis). Collectively, these findings suggest that individual differences in narcissism are observed at a relatively young age and might have important social consequences.

Although research on narcissism among adults is at a relatively advanced stage, the understanding of narcissism in children is still limited. Specifically, the studies above mostly failed to distinguish between facets of narcissism, focusing mainly on unidimensional grandiose narcissism (Barry & Ansel, 2011; Brummelman et al., 2015). This is unfortunate, as findings from the adult population suggest different mechanisms underlying various facets of narcissism and their relations to self-views, status pursuit, or self-esteem. For instance, the inflated self-views in the agentic domain (e.g., leadership, intelligence) are solely associated with agentic narcissism (Gignac & Zajenkowski, 2021; Zajenkowski et al., 2020). Moreover, both agentic and antagonistic facets of narcissism are associated with dominance-based status pursuit. However, only agentic narcissism correlates with prestige-based status-seeking (Zeigler-Hill et al., 2019). Finally, self-esteem among adults is differentially correlated with each facet of narcissism (Geukes et al., 2017). Thus, there is a need for more fine-grained studies of narcissism in children.

The Current Study

Recent advancements in the theory of narcissism (Miller et al., 2021) emphasize that the inclusion of the three narcissism facets is a necessary step toward understanding the processes underlying narcissistic personality (Back, 2018; Rogoza, Zajenkowski et al., 2024). Thus, to overcome this gap within the literature on childhood narcissism, we developed a concise multidimensional self-report measure of narcissism in children (i.e., encompassing agentic, antagonistic, and neurotic facets). In addition, we assessed its internal structure, associations with self-esteem, basic values, self-beliefs, and the popular one-dimensional measure of narcissism in children (the Childhood Narcissism Scale [CNS]; Thomaes et al., 2008). Based on prior findings, we formulated five hypotheses.

Hypothesis 1 (H1): Narcissism in children will have a three-factor structure. Specifically, we expected a

similar structure of narcissism as that found among adults (e.g., Crowe et al., 2019; Rogoza et al., 2022).

Hypothesis 2 (H2): Agentic narcissism will be positively correlated with self-enhancement values, agentic attributes, and self-esteem. Agentic narcissism is defined through the lens of self-enhancement tendencies and overly positive self-image (Back, 2018). Research findings on the link between narcissism and basic values (Rogoza et al., 2016), self-esteem (Geukes et al., 2017), and self-views (Zajenkowski et al., 2020) generally support these assumptions. Thus, we expected a similar pattern among children.

Hypothesis 3 (H3): Neurotic narcissism will be negatively correlated with self-esteem. This expectation is consistent with a general characteristic of neurotic narcissism as related to negative emotionality and negative self-image, as well as prior work indicating that the neurotic facet goes along with lower levels of self-esteem (Rogoza et al., 2018).

Hypothesis 4 (H4): Antagonistic narcissism will be negatively correlated with self-transcendence values and positively with self-enhancement values. Self-enhancement values include a power motive (dominance over people), whereas self-transcendence is described as a concern for others. Antagonistic narcissism is characterized by a tendency to dominate and a hostile attitude toward people (Back, 2018).

Hypothesis 5 (H5): Agentic and antagonistic narcissism will be positively correlated with the CNS. The theoretical basis and empirical findings suggest that the scale captures primarily grandiose narcissism. Recent advancements suggest the existence of two facets of grandiose narcissism (e.g., Back, 2018). We expect that the CNS will be associated with higher levels of both agentic and antagonistic facets.

We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the investigation. Study 2 (<https://doi.org/10.17605/OSF.IO/K6GWY>), and Study 3 (<https://doi.org/10.17605/OSF.IO/6UHQK>) were preregistered. The data and code necessary for the reproduction of the results are available at: <https://osf.io/tsr8u> (Studies 1 and 2) and <https://osf.io/kyjv4> (Study 3).

Method

Participants and Procedure

We conducted three studies. In Study 1 (a pilot study), there were 189 Polish children. However, 12 children were excluded from analyses due to the substantial presence of missing data (more than 30% of total test scores missing) or indications of diminished motivation during

questionnaire completion (e.g., withdrawal from participation or drawing on the questionnaire instead of answering the questions.). As a result, Study 1 involved 177 children (79 girls and 98 boys) from the second (53.7%) and third (46.3%) grades at public elementary school in Warsaw, ages 7 to 10 years ($M_{\text{age}} = 8.25$, $SD_{\text{age}} = 0.63$, 11 children did not provide their year of birth). Study 2 involved 245 Polish children. However, 10 children were excluded from analyses due to incomplete data (overall more than 30%) and significant indications of inattention during questionnaire completion (similar to Study 1). Thus, the final sample was 235 (113 girls and 122 boys). Their ages ranged from 8 to 10 years ($M_{\text{age}} = 8.43$; $SD_{\text{age}} = 0.56$; two children did not provide their birth year). The research was conducted in four public schools in Warsaw, encompassing pupils from the second (58.7%) and third (41.3%) grades of elementary school. In Study 3, there were 166 Polish children. However, three children were excluded from analyses due to incomplete data (overall more than 30%) and significant indications of inattention during questionnaire completion (similar to Study 1). Thus, the final sample was 163 (81 girls and 82 boys). Their ages ranged from 7 to 10 years ($M_{\text{age}} = 8.40$; $SD_{\text{age}} = 0.64$).

All three studies were conducted in person by a psychologist in school classrooms, in the presence of a teacher. Prior to testing, we obtained consent from the school principal, teacher, and parents. Children were asked to provide verbal consent. They were informed that participation is voluntary and anonymous, and they had the right to refuse or defer from the study at any time. The researcher provided comprehensive information to the children regarding the research and its overarching objectives. Additional clarifications were provided to children as requested. The researcher ensured that children responded independently, without consulting with one another. In return for participating in the study, the class received a compensation of \$250. Ethical approval for the studies was obtained from the Ethics Committee of the Faculty of Psychology, University of Warsaw. In all studies, to achieve satisfactory power of factor analyses, we aimed to maintain the item-to-participant ratio of at least 1:10 (Costello & Osborne, 2005).

Measures

Three-Dimensional Narcissism Scale for Children (3D-NSC). Three narcissism factors were measured in Study 1 (Pilot), Study 2, and Study 3. In Study 1, we¹ generated a pool of items covering the theoretically defined facets of narcissism, that is: agentic, antagonistic, and neurotic narcissism. Specifically, we referred to two widely known conceptualizations: the trifurcated model as

measured by the Five-Factor Narcissism Inventory (FFNI; Glover et al., 2012) and the Narcissistic Admiration and Rivalry Concept as measured by the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). The items of agentic narcissism covered most areas of the construct (as delineated by the FFNI and NARQ: Authoritativeness, Grandiose Fantasies, Exhibitionism, Grandiosity, Uniqueness, and Charmingness). In the final version of the scale (tested in Study 2), some items were removed due to poor factor loadings or cross-loadings on two factors (see the Results section for more details). Thus, the final version of the agentic narcissism scale contains items associated with Grandiose Fantasies/Grandiosity (*I like to think about how great I am*, and *I like to think that I'm very cool*), Exhibitionism/Uniqueness (*I want everyone to see that I am special*), and Charmingness (*I like it when others praise me*).

The antagonistic narcissism scale covers the following areas distinguished in the FFNI and NARQ: Exploitativeness (*Other children should do what I want*), Entitlement (*I deserve to receive more than other children*), and Supremacy/Devaluation (*Other children are worse than me; I'm happy when other kids get worse grades than me*). Within the initial version of our scale (Study 1), we also included an item related to lack of empathy; however, it was removed due to its poor factor loading (see Results).

The neurotic narcissism scale includes the FFNI areas of Shame (*I feel very ashamed when I fail at something*), and low Indifference (*I worry all the time about what others think about me*). In addition, our scale contains items (e.g., *I stay away because I'm afraid others won't like me*) related to another area—social isolation as it has been suggested that this domain is crucial for the neurotic aspect (Krizan & Herlache, 2018; Rogoza et al., 2022). The role of isolation is to prevent the vulnerable core from discovery (Caligor et al., 2015; Krizan & Herlache, 2018).

For each aspect of narcissism, four items were proposed; hence, there were 12 items in total. The response format consists of six points: 1 (*completely disagree*), 2 (*disagree*), 3 (*slightly disagree*), 4 (*slightly agree*), 5 (*agree*), and 6 (*completely agree*). After Study 1, we identified several psychometric concerns (see Results). In addition, we collaborated with a developmental psychologist to tailor the items to the appropriate cognitive development levels. Based on the Pilot Study, we removed three items, two were modified in response to feedback from the children, and six new items were generated. After the analyses, the final version contained 12 items, four items per scale (see Results for more details of the analyses). In Study 3, we tested the structure of

the final 12-item scale on an independent sample using confirmatory factor analysis (CFA).

Childhood Narcissism Scale. This 10-item self-report unidimensional measure (Thomaes et al., 2008) employs a 4-point scoring system, ranging from 0 (*not at all true*) to 3 (*completely true*) and was translated to Polish for the purpose of this study. Responses were averaged across items (Cronbach's $\alpha = .73$). Higher cumulative scores indicate elevated levels of childhood grandiose narcissism.

Lifespan Self-Esteem Scale. Self-esteem was assessed using two Lifespan Self-Esteem Scale items (Harris et al., 2018). The response options were augmented by illustrative depictions of corresponding emotional states, ranging from “really sad” (illustrated by a crying face), “sad” (displayed as a slight frown), “neutral” (represented by a flat mouth), “happy” (manifested through a slight smile), to “really happy” (conveyed by an open-mouthed smile). Two items were selected for employment in our study: “When you think about yourself, how do you feel?” and “How do you feel about yourself?” The Polish version shows high internal consistency ($\alpha = .91$) and convergent validity (e.g., correlations with agentic and antagonistic narcissism; Rogoza & Danieluk, 2021). The self-esteem composite for the purposes of our study was the mean of these two items. The two items were correlated $.54$ ($\alpha = .75$).

The Picture-Based Value Survey. Value preferences in children were measured using the Picture-Based Value Survey (Döring et al., 2010), adapted for the Polish context (Cieciuch et al., 2013). The child is presented with a set of 20 images accompanied by brief descriptions, each referring to specific situations. The items reflect 10 types of values (with each value type represented by two images) based on Schwartz's (1992) conceptualization. These values are considered indicators of the four higher-order domains: openness to change (self-direction, stimulation), conservation (tradition, conformity, security), self-enhancement (hedonism, achievement, power), and self-transcendence (benevolence, universalism). The child uses a 6-point scale to indicate how much they would like to pursue each value in their life. In this study, the reliabilities for the domains were: $\alpha = .55$ for openness to change, $\alpha = .66$ for conservation, $\alpha = .55$ for self-enhancement, and $\alpha = .63$ for self-transcendence. These reliabilities are considered acceptable for research purposes (Gignac, in press). The authors of the original scale noted alpha might be

relatively low, as Schwartz's values cover relatively broad areas (Döring et al., 2010).

Self-Report Attributes. We used three items from various domains (i.e., agentic and communal) to assess children's self-perceptions. We asked children to rate how smart, good-looking and well-liked they feel in comparison with other children using a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Specifically, they read the instruction: *Read the sentence and indicate if this describes you*, followed by the items: *I am smart, I am pretty, I am liked*.

Statistical Analyses

To test the hypothesis regarding the underlying structure of narcissism in children, we relied on the evaluation of the results of the CFA. The analysis was carried out in Mplus v. 8.3 (Muthén & Muthén, 2017) using robust maximum likelihood estimation (i.e., Mplus's MLR). We considered a model to be well-fitted if the approximate fit indices met the following criteria: the comparative fit index (CFI) greater than .90, and the root mean square error of approximation (RMSEA) less than .08 (Byrne, 1994; Schermelleh-Engel et al., 2003). To evaluate the robustness and generalizability of the factor solution results obtained from Study 2, we conducted tests of measurement invariance across Studies 2 and 3 with the same 12-item version of the scale. That is, we estimated three models: configural (i.e., unconstrained), metric (i.e., with factor loadings set to equal), and scalar (i.e., with factor loadings and item intercepts set to equal). We deemed results as invariant if the difference between the two compared models did not exceed .010 in CFI, RMSEA, and standardized root mean squared residual (SRMR) and the value of the χ^2 was nonsignificant (Chen, 2007).

Results

Assessment of Factorial Structure

Study 1: Pilot. The tested three-factor CFA comprising 12 items model revealed a suboptimal fit to the data, $\chi^2(51) = 76.20$; $p < .001$; CFI = .885; RMSEA = .053 (90% confidence interval [CI] = [.025, .076]), SRMR = .058. The factor loadings of two items were particularly weak (i.e., $\lambda < .20$) but their removal even worsened the overall model fit, $\chi^2(32) = 57.81$; $p < .001$; CFI = .880; RMSEA = .068 (90% CI = [.038, .095]), SRMR = .059. Furthermore, the correlation between the latent agentic and antagonistic narcissism suggested an undesirable level of multicollinearity ($r = .75$; $p < .001$). For instance, the item, *I want to have the best grades in the class*,

exhibited high loadings on both agentic and antagonistic factors. It is possible that the thought of having the best grades entails comparing oneself with others and perceiving other children as less capable (i.e., worse). Thus, we decided to remove this item as it seemed to contain a mix of agentic and antagonistic variance. In addition, we removed two items with relatively low factor loadings (below |.20|): *Usually, I decide what we play* (agentic narcissism), and *I don't care when others are sad* (antagonistic narcissism). We also tested an exploratory structural equation model (ESEM) with geomin rotation, $\chi^2(33) = 55.08$; $p < .001$; CFI = .899; RMSEA = .061 (90% CI = [.031, .089]), SRMR = .040, which revealed that while neurotic narcissism reproduced well, antagonistic narcissism reproduced poorly, largely due to cross-loadings on agentic narcissism. These findings provided initial support for a three-factor structure of narcissism in children; however, they also highlighted considerable challenges with its measurement.

Study 2. The initial model comprising 15 items revealed a suboptimal fit to the data, $\chi^2(87) = 144.30$; $p < .001$; CFI = .890; RMSEA = .053 (90% CI = [.037, .068]), SRMR = .074. The inspection of factor loadings revealed that two items had particularly weak (below |.20|; Gignac, 2019) loadings (i.e., $\lambda = .05$; *I get angry when someone tells me I'm doing something wrong* from neurotic narcissism, and $\lambda = .15$; *I often argue with other children* from antagonistic narcissism). To maintain item-to-scale balance, we decided to additionally exclude the item with the weakest factor loading from the agentic narcissism scale ($\lambda = .35$; *My class is cool because of me*). The resulting 12-item measure of three factors of narcissism in children revealed a good close-fit to the data, $\chi^2(66) = 68.73$; $p < .001$; CFI = .961; RMSEA = .038 (90% CI = [.002, .060]), SRMR = .052.

The standardized factor loadings of this final version are presented in Figure 1. The strength of the remaining factor loadings was adequate. Both agentic ($p = .022$) and neurotic ($p = .021$) narcissism were found to be positively related to antagonistic narcissism, but unrelated to one another ($p = .105$). Of importance, the three subscales were also associated with acceptable estimates of internal consistency reliability: $\alpha_{\text{agentic}} = .72$, $\alpha_{\text{antagonistic}} = .70$, $\alpha_{\text{neurotic}} = .71$. Thus, our results supported the expectation of a three-factor model of narcissism in children (H1). The items of the measure are presented in Table 1. The Polish version, as well as item intercorrelations, items' descriptive statistics, and mean scale scores of boys and girls, is presented in Supplemental Material.

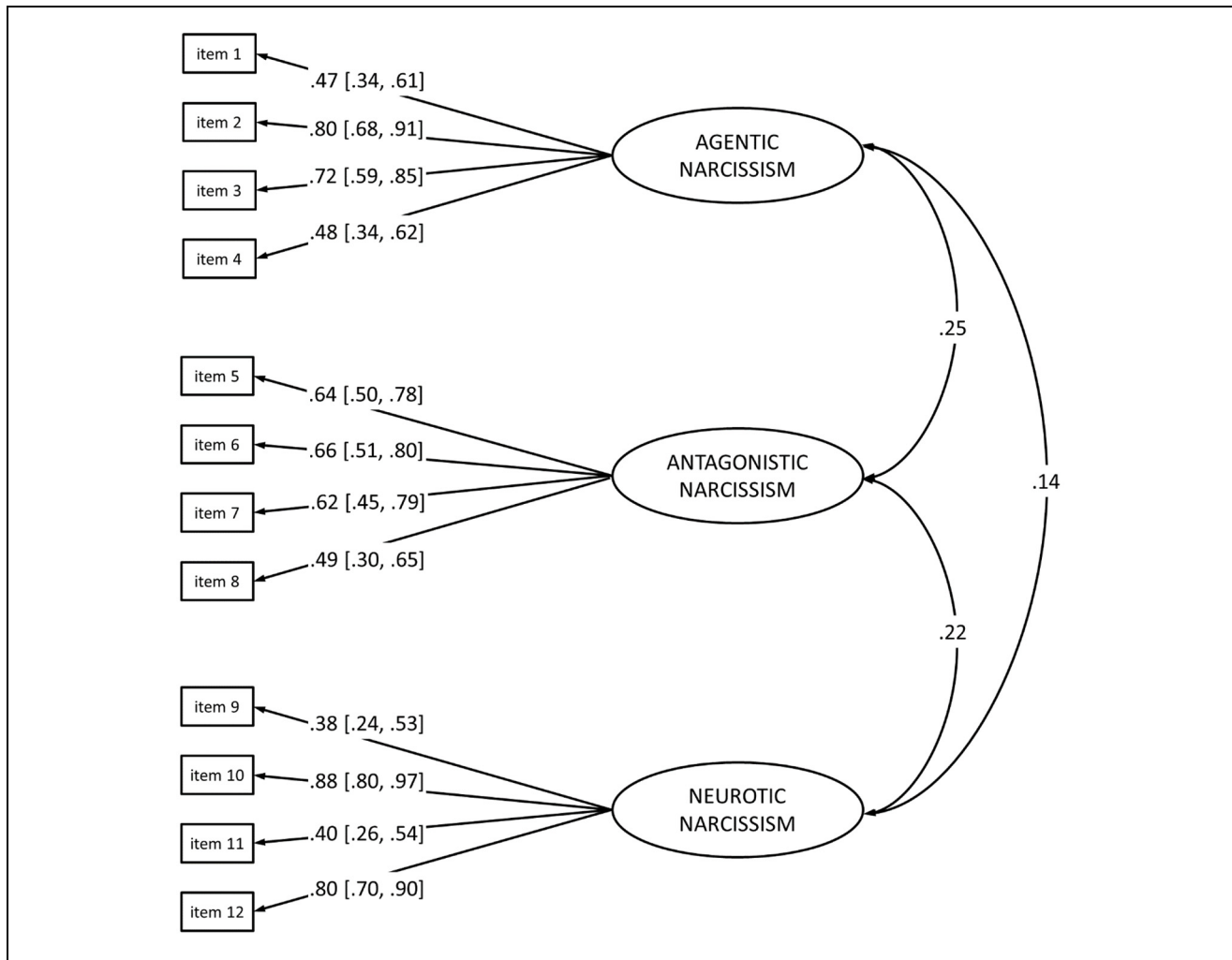


Figure 1. Three-Factor Structure of Narcissism in Children.

Note. $N = 235$; all coefficients completely standardized; factor loadings presented with 95% CI in the parenthesis.

Study 3: Replication, Invariance and Stability. In Study 3, we evaluated the degree to which the model identified in Study 2 was replicated on an independent sample. The model yielded good fit to the data, $\chi^2(51) = 86.46$; $p = .001$; CFI = .910; RMSEA = .065 [.040, .088]. The strength of the factor loadings was good, ranging from .44 to .90 (see Supplemental Material for the factor loadings). Next, we assessed the measurement invariance of the resulting model with the one reported in Study 2. The model fit indices of the compared models are reported in Table 2. The results revealed full scalar invariance, suggesting that the tested model reproduced equally well on an independent sample.

Convergent and Divergent Validity

In Study 2 we also examined correlations between the three facets of narcissism and other variables (Table 3).

The Children Narcissism Scale strongly positively correlated with agentive and antagonistic narcissism, supporting convergent validity, as hypothesized (H5). However, the correlation with agentive narcissism was significantly higher than with antagonistic narcissism ($z = 2.30$; $p < .05$). The correlation between the Children Narcissism Scale and neurotic narcissism was significantly lower than with agentive ($z = 6.14$; $p < .001$) and antagonistic ($z = 4.14$; $p < .001$) narcissism.

Consistent with H2, agentive narcissism was correlated positively with self-enhancement values, agentive attributes (being smart and being pretty) and self-esteem. In addition, it was positively correlated with openness to change, conservation, self-transcendence values, and self-assessed communal attributes (being liked). Neurotic narcissism was associated with lower self-esteem (supporting H3) and perceiving oneself as less smart. Antagonistic narcissism negatively correlated

Table 1. Items of the Three-Dimensional Narcissism Scale for Children.

Agentic narcissism
1. I want everyone to see that I'm special.
2. I like to think about how great I am.
3. I like to think that I'm very cool.
4. I like it when others praise me.
Antagonistic narcissism
5. I'm happy when other kids get worse grades than me.
6. Other children are worse than me.
7. I deserve to receive more than other children.
8. Other children should do what I want.
Neurotic narcissism
9. I worry all the time about what others think about me.
10. I stay away because I'm afraid others won't like me.
11. I feel really ashamed when I fail at something.
12. I keep to myself because I'm afraid that others will think badly about me.

Note. We propose also less stigmatizing term "self-orientation" instead of "narcissism" (see Discussion).

Table 2. Results of Measurement Invariance Between Study 2 ($N = 235$) and Study 3 ($N = 164$).

Model	χ^2 (df)	P	CFI	RMSEA	SRMR
Configural	154.81 ₍₁₀₂₎	.001	.938	.051	.057
Metric	169.24 ₍₁₁₁₎	< .001	.932	.051	.060
Scalar	175.84 ₍₁₂₀₎	< .001	.934	.048	.060
Metric vs. configural	14.31 ₍₉₎	.112	.006	.000	.003
Scalar vs. metric	5.98 ₍₉₎	.742	.002	.003	.000

with self-transcendence values, as hypothesized (H4). However, we failed to find a significant association with self-enhancement values. In addition, we found a positive correlation between antagonistic narcissism and conservation. The variable that clearly differentiated the three narcissism subscales was self-esteem. Specifically, we found positive, null, and negative associations of self-esteem with agentic, antagonistic, and neurotic narcissism, respectively. All these correlations differed significantly ($p < .05$). Interestingly, we found a similar pattern of correlations with self-assessed smartness, which might also be an indicator of self-esteem (Zajenkowski, 2021).

Finally, we tested the incremental validity of our scale in comparison with the unidimensional CNS. Table 4 presents the proportion of variance (ΔR^2) explained by the subscales of our measure in predicting outcome variables, after controlling for CNS. In the regression models, CNS was entered in Step 1, followed by each of the

subscales (i.e., agentic, antagonistic, and neurotic narcissism) separately in Step 2 as predictors of self-esteem, basic values, and self-assessed attributes. The results indicated that our scale significantly predicted these variables above and beyond CNS.

Discussion

The structure of narcissism has long been a subject of debate (Wink, 1991). Research findings indicate that narcissism is a multidimensional construct, including agentic, antagonistic, and neurotic facets (Miller et al., 2021). The presence of these narcissism facets has been empirically confirmed among adults (e.g., Crowe et al., 2019; Rogoza et al., 2022); however, there is a lack of studies focusing on younger age groups. To date, studies have mainly concentrated on unidimensional grandiose narcissism (Barry & Ansel, 2011; Brummelman et al., 2015), opening a vast and underexplored theoretical area related to the effects of antagonistic and neurotic narcissism in children. In response to the need to conceptualize narcissism in children as a three-factorial construct, we developed a questionnaire tailored to the capabilities of 8-year-old children, providing robust evidence of its psychometric properties.

Factorial Validity

According to our expectations, we found consistent support for a three-factor structure of narcissism in the sample of children around the age of 8. This finding corroborates our main hypothesis that the structural manifestation of narcissism in children mirrors that observed in adults (e.g., Crowe et al., 2019; Rogoza et al., 2022). The final version of the questionnaire is relatively short, consisting of 12 designed to align with the cognitive abilities of children at this age. Thus, we expanded upon the existing measures of narcissism for children, which often treated narcissism as unifactorial (e.g., the CNS by Thomaes et al., 2008) or merely differentiated between grandiose and vulnerable narcissism (e.g., Narcissism Scale for Children by Derry et al., 2018). As demonstrated below, we can capture nuanced associations more effectively by discerning a more nuanced structure of narcissism.

Convergent and Divergent Validity

Agentic and antagonistic narcissism correlated positively and significantly with the CNS, aligning with our hypotheses. Conversely, neurotic narcissism showed no significant relation to the scale. Designed as a unidimensional measure of grandiose narcissism (Thomaes et al., 2008), the CNS's validity was supported by our findings, which demonstrated significant correlations exclusively with traits typical of grandiose narcissism (i.e., agentic and antagonistic), but not with neurotic narcissism.

Table 3. Correlations Between the Three Subdimensions of Narcissism and Other Variables (Study 2).

Variable	1	2	3	4	5	6	7	8	9	10	11	M	SD
1. Agentic narcissism												4.00	1.07
2. Antagonistic narcissism	.21**											1.98	0.93
3. Neurotic narcissism	.07	.15*										2.84	1.14
4. Openness to change	.15*	-.06	.12									4.75	0.91
5. Conservation	.51**	.34**	-.11	.30**								4.20	0.83
6. Self-enhancement	.26**	-.07	.07	.37**	.21**							4.66	0.71
7. Self-transcendence	.16*	-.29**	.13	.42**	.02	.49**						4.95	0.82
8. Narcissism (CNS)	.59**	.44**	.11	.20**	.56**	.21**	.01					2.39	0.45
9. Self-esteem	.37**	.02	-.27**	.18**	.30**	.16*	.11	.21**				3.83	0.84
10. Being smart	.33**	.09	-.19**	.16*	.35**	.18**	.03	.29**	.38**			4.94	0.96
11. Being good looking	.30**	.06	-.01	.21*	.22**	.29**	.20**	.30**	.31**	.27**		4.47	1.29
12. Being liked	.18**	.05	-.10	.17**	.23**	.28**	.17**	.23**	.33**	.30**	.36**	4.76	1.02

Note. $N = 232-235$; CNS = Childhood Narcissism Scale.

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

Table 4. The Proportion of Variance (ΔR^2) Explained by the Three Factors of Narcissism in Predicting Outcome Variables Over a Unidimensional Measure of Narcissism (CNS).

Step	Variable	Outcome							
		Openness to change	Conservation	Self-enhancement	Self-transcendence	Self-esteem	Being smart	Being good looking	Being liked
1	Narcissism (CNS)	.039**	.318*	.044*	.000	.044*	.083*	.092*	.055*
2	Agentic narcissism	.001	.050*	.027**	.035**	.096*	.041*	.021	.644
2	Antagonistic narcissism	.028*	.012	.032**	.110*	.006	.002	.007	.003
2	Neurotic narcissism	.010	.029*	.002	.015	.090*	.049*	.503	.017

Note. $N = 232-235$; CNS = Childhood Narcissism Scale.

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

However, this also suggests the need to distinguish subdimensions of grandiose narcissism. While the CNS was associated with virtually all our validity measures, the agentic and antagonistic dimensions showed different patterns of associations with basic values, self-esteem, and self-assessed attributes. Thus, a more fine-grained measure of narcissism facilitated the identification of more nuanced findings. It would be interesting to examine the interplay between three facets of narcissism and self-esteem found in previous studies (Brummelman et al., 2017). It has been shown that parents' inflated praise predicted higher narcissism measured with the CNS—but only in children with high self-esteem. It is possible that this effect might be specific to agentic narcissism. Children with high levels of antagonistic narcissism might view inflated praise with suspicion, whereas those with higher levels of neurotic narcissism could see it as a standard they are unable to meet.

Construct Validity

The pattern of associations among the three factors of our new measure and other constructs is consistent with

previous findings in adults. Agentic narcissism is primarily characterized by a desire to receive attention and adulation, striving for uniqueness, and the tendency to engage in self-promotion (Back, 2018). Agentic narcissism is associated with self-enhancement and distorted, overly positive self-views, especially in the agentic domain, such as being intelligent or attractive (e.g., Gignac & Zajenkowski, 2021, 2023; Grijalva & Zhang, 2016). Consistent with theoretical expectations and previous research, our study found that agentic narcissism was linked to higher levels of self-enhancement values, self-esteem, and self-assessed agentic attributes, specifically intelligence, and attractiveness. However, agentic narcissism also correlated positively with other basic values: conservation, self-transcendence, openness to change, and a self-assessed attribute of being liked. Whereas openness to changes reflects self-direction and excitement seeking, which corresponds with agency, the other variables are more communal-oriented. Thus, agentic narcissism tends to correlate with a generally adaptive profile, which is congruent with the theoretical framework that it is the most psychologically adjusted aspect of narcissism (Back, 2018).

Antagonistic narcissism reflects a self-protective tendency aimed to protect the threatened ego and manifests in entitlement, the devaluation of others, and a desire to see others fail (Back, 2018). It is typically triggered by cues of social disapproval and threat to one's self-image (Back, 2018; Grapsas et al., 2020). In our study, antagonistic narcissism showed a negative correlation with self-transcendence, as hypothesized. Self-transcendence values describe the tendency to focus on the welfare of other people. This includes engaging in prosocial behavior, understanding, and appreciation of the in-group and out-group members (Schwartz, 1992). Individuals with high antagonistic narcissism tend to manifest opposite tendencies, such as quarrelsomeness and frequent interpersonal conflicts (Back, 2018). In contrast to studies on adults (Rogoza et al., 2016), antagonistic narcissism was unrelated to self-enhancement values. However, self-enhancement seems to be central especially for agentic narcissism in both theory (Back, 2018) and empirical findings (e.g., Gignac & Zajenkowski, 2021, 2023). Antagonistic narcissism was also associated positively with conservation values, a result we did not expect. Previous studies on values change in childhood indicated that around the age of our study's participants, conservation values decrease while openness to change increases (Ciecuch et al., 2016). The tendency to become more independent (open to change) may conflict with prior values of stability and safety. Higher levels of conservation may lead to higher psychological tension, which, in turn, manifests in elevated antagonism.

Neurotic narcissism is characterized by fragile self-esteem, feelings of inferiority, difficulties in emotional regulation, and frequent experiences of shame and self-consciousness (Miller et al., 2021). Individuals with neurotic narcissism often exhibit withdrawal tendencies while simultaneously interpreting external stimuli in an exaggeratedly personal manner, perceiving them as personal attacks, and seeking threats in their surroundings (Rogoza et al., 2022). Consistent with prior research (Crowe et al., 2019), we found that neurotic narcissism correlated negatively with self-esteem. In addition, children scoring high on neurotic narcissism rated themselves as less intelligent. Similar findings were reported by Rogoza among adults, where neurotic narcissism was negatively associated with self-assessed intelligence. Self-perceived intelligence is considered a global self-evaluation of one's abilities that may influence real-life outcomes, such as school performance (Howard & Cogswell, 2018). Thus, neurotic narcissism correlates with generally negative feelings about oneself. This has been supported by the finding that a fundamental trait for this dimension of narcissism is neuroticism, which encompasses a wide range of negative emotionality (Rogoza et al., 2019).

In summary, our findings suggest that narcissism can be described as multidimensional not only in adulthood but also from its onset, around the age of 8. Thus, narcissism in childhood manifests as a spectrum, ranging from a neurotic form characterized by negative emotions and intrapersonal difficulties, through antagonistic and externalized behaviors, to an agentic form, which is the most adaptive (Krizan & Herlache, 2018). The three-dimensional approach to narcissism enables capturing nuanced differences within narcissism, such as associations with self-esteem, which can be positive, negative, or null, depending on the dimension.

In the current study, we present a new measure of narcissism in children. However, in the case of this population, one must be particularly cautious when labeling traits with pejorative connotations, such as narcissism. We propose to use the less stigmatizing term "self-orientation" instead of "narcissism." Thus, the three dimensions captured by our questionnaire might be described as:

- agentic self-orientation—the child's tendency toward self-promotion, self-confidence, and focusing on their own importance and abilities;
- antagonistic self-orientation—the child's sense of interpersonal entitlement, expectations for special treatment, and conflicts with social norms;
- neurotic self-orientation—the child's preoccupation with their own anxieties, fears, and concerns about how others perceive them.

Limitations and Future Studies

Our study has limitations. First, we tested the associations of our scale with a limited range of variables, such as basic values, self-esteem, and self-assessed attributes. Future studies might include other important underpinnings of narcissism, such as personality traits (Rogoza et al., 2019). In addition, it may be worthwhile to test the validity of our scale further, potentially extending beyond self-report measures. For instance, agentic narcissism might be associated with social popularity, especially in the short term (Back et al., 2018). Furthermore, antagonistic narcissism could be linked with externalized behavior, such as frequent conflict, verbal aggression, and aggressive behavior, whereas neurotic narcissism should correlate with internalized difficulties, such as depressive symptoms. Second, our study provides only cross-sectional results. It would be worthwhile to examine longitudinally the stability of the three-dimensional scale and its dynamic associations with social and emotional outcomes. Moreover, the three-dimensional narcissism scale needs to be tested in other languages and populations. Finally, although in Study 2, our sample

was relatively large ($N = 235$), it is recommended to use samples exceeding 250 participants for correlational studies in personality research (Schönbrodt & Perugini, 2013).

Conclusion

Across two studies, we found support for a three-dimensional structure of narcissism among children, consistent with findings in adults. These three dimensions of narcissism—agentic, antagonistic, and neurotic—exhibit distinct patterns of associations with other variables. Consequently, our study offers valuable insights for advancing research on children by facilitating more nuanced and comprehensive approaches to measurement and analysis.

Author Contributions

AT: conceptualization, writing-original draft, data curation, formal analysis. MZ: conceptualization, writing-original draft, funding acquisition. RR: writing-review & editing, validation, data curation, formal analysis. MR: writing-review & editing, validation. GEG: writing-review & editing, validation.


Declaration of Conflicting Interests


The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.


Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was funded by a grant no 2022/47/O/HS6/00393 from the National Science Centre of Poland awarded to the first author.

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Supplemental Material

Supplemental material for this article is available online.

Note

1. The authors of the current research have experience in narcissism-related psychometric studies as well as psychological research and work with children.

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