Validating Korean Narcissistic Admiration and Rivalry Questionnaire (NARQ): Its Relations with Big Five, Self-esteem, NPI and Benign and Malicious Envy

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Empirical interest in narcissism in the fields of psychology and social sciences has been growing in recent years, with scholars increasingly acknowledging that grandiose narcissism is best understood as a two-dimensional construct: rivalry (self-protection) and admiration (assertive self-enhancement). Despite the increase of utilizing the Narcissistic Admiration and Rivalry Questionnaires (NARQ), validating the NARQ across countries and language has not been extensively utilized. In the present study ($n = 600$), we sought to validate the Korean version of NARQ by investigating its theoretically derived relationship with the Narcissistic Personality Inventory (NPI), Big Five personality traits, self-esteem and envy (benign and malicious). The results supported the findings that the Korean version of NARQ is a reliable and valid measure of the two-dimensional structure of grandiose narcissism. Interestingly, we observed that the two-dimensional latent factors did not correlate with each other, indicating that admiration and rivalry can be distinct among Koreans. The findings broaden our understanding of the dynamics of narcissism by providing validated evidence of the NARQ in South Korea.

Keywords: NARQ, narcissism, admiration, rivalry, validation, personality

Introduction

Narcissism has garnered considerable attention in psychology, and it has been investigated in both clinical and non-clinical samples. Compared with vulnerable narcissism, grandiose narcissism has mostly been interpreted as normal or subclinical narcissism (Miller et al., 2017; Krizan & Herlache, 2018). Grandiose narcissism, as a personality trait, has often been evaluated and conceptualized as a unidimensional construct. However, it is also associated with paradoxical nature. For instance, narcissistic individuals can be described as assertive, self-assured, charming, extraverted and confident but they can also be dominant, exploitative, defensive, aggressive and hostile (Ackerman et al., 2011; Back et al., 2013; Krizan & Herlache, 2018; Miller et al., 2011, 2017). Due to the contradictory attributes, many psychologists have recognized the need to address the heterogeneity of narcissistic grandiosity in cognition, motivation and behavior. In order to resolve these paradoxes, the use of the Narcissistic Admiration and Rivalry Concept (NARC), a two-dimensional process (admiration and rivalry), was suggested and developed the related Narcissistic Admiration and Rivalry Questionnaire (NARQ) (Back et al., 2013).

According to the Narcissistic Admiration and Rivalry Concept (NARC), both dimensions serve the same goal of gaining and maintaining a grandiose sense of self although they operate differently in social strategies. The first dimension, narcissistic admiration, involves expectation and approach of opportunities for admiration through two aspects of narcissism: self-enhancing and assertive, which is related to endeavoring for uniqueness, grandiose fantasies, and expressions of charm that evoke desired outcomes, such as positive attention and status granted by others. Consequently, the grandiose sense of self and positive style of social approach can be maintained and strengthened by feeling admired, respected and special (Back et al., 2013).

The second dimension, narcissistic rivalry, involves anticipation that one's desired self-image would be threatened by losing status and admiration through defensive or avoidant motivational orientations. This dimension entails an antagonistic style of preemptive self-protection, in which individuals tend to devalue others, strive for superiority over others, and behave toward others in an aggressive, annoying, arrogant, hostile, insensitive, and defensive manner. Thus, the antagonistic nature can be maintained and enhanced by experiencing rejection, unpopularity, and criticism and can cause negative social outcomes (e.g., social conflict) accompanied by threat to the ego (Back et al., 2013; Lange et al., 2016; Leckelt et al., 2015).

So far, the two-dimensional conceptual model of grandiose narcissism (Back et al., 2013) has been supported by many studies (e.g., Cichocka et al., 2019; Dufner et al., 2015; Fatfouta & Schröder-Abé, 2017; Geukes et al., 2017; Lange et al., 2016; Rogoza et al., 2018; Wetzel et al., 2016). For instance, narcissistic admiration is correlated with high self-esteem, grandiosity, gratitude, forgiveness, reduced anxiety, and lowered distrust, while narcissistic rivalry is associated with loneliness, lowered self-esteem, higher anxiety, impulsivity, lowered empathy, lack of forgiveness, and lowered trust (e.g., Fatfouta & Schröder-Abé, 2017; Kwiatkowska et al., 2019; Manley et al., 2020; Rogoza et al., 2016, 2018; Wetzel et al., 2016). Furthermore, within the five-factor personality model, the strongest correlation with admiration is high extraversion, whereas for rivalry, it is (low) agreeableness (Back et al., 2013; Rogoza et al., 2016; Vecchione et al., 2018). In the context of social relations, narcissistic admiration is also associated with achievement values,

hope for success, short-term romantic success, and benign envy, but narcissistic rivalry is related to fear of failure, desire for revenge, avoidance after interpersonal difficulties, long-term romantic problems, and malicious aspects of envy (Doroszuk et al., 2020; Fatfouta et al., 2015; Lange et al., 2016; Rogoza et al., 2016; Wurst et al., 2017). Thus, the two-constructs can be distinct in their outcomes and correlates, albeit both strategies can maintain a grandiose sense of self.

The NARQ scale has been translated into various languages, including English, Polish, Dutch, Danish, Chinese, Turkish, Italian and Spanish (e.g., Back et al., 2013; Doroszuk et al., 2020; Rogoza et al., 2016; Vecchione et al., 2018; Zhang et al., 2017). However, except for its original English and German versions (Back et al., 2013), the scale has been validated only in Polish (Rogoza et al., 2016), Italian (Vecchione et al., 2018) and Spanish (Doroszuk et al., 2020). Moreover, studies have shown diverse findings regarding the relationships between narcissisms and culture (Brailovskaia & Bierhoff, 2016; Brailovskaia et al., 2019; Jonason et al., 2020; Moriizumi & Mcdermott, 2017; Żemojtel-Piotrowska et al., 2019; Wetzel et al., 2020). For instance, higher levels of narcissism have been observed in societies that do not value egalitarianism or intellectual autonomy, but instead put importance upon embeddedness and hierarchy (Jonason et al., 2020). In addition, the positive relationship between grandiose narcissism and depression and suicidal ideation was significant among Chinese but not among Germans (Brailovskaia et al., 2019). To support the conceptualization and measurement of grandiose narcissism associated with culture, further validation of the NARQ in many more languages is required.

The present research, for the first time, tested the structure of grandiose narcissism measured by the Korean translated version of the NARQ by examining its psychometric properties (validity and reliability). First, we examined the factor structure of the scale using a Confirmatory Factor Analysis (CFA). Our expectation was to replicate the second-order factorial structure (admiration and rivalry; each with three first-order variables) observed in previous validation studies (Back et al., 2013; Doroszuk et al., 2020; Vecchione et al., 2018). Our measurement model is illustrated in Figure 1. To assess the internal reliability of the scale scores, we applied Cronbach's alpha as well as the McDonald's omega coefficients (as has been recommended, Dunn et al., 2014; Hayes & Coutts, 2020),
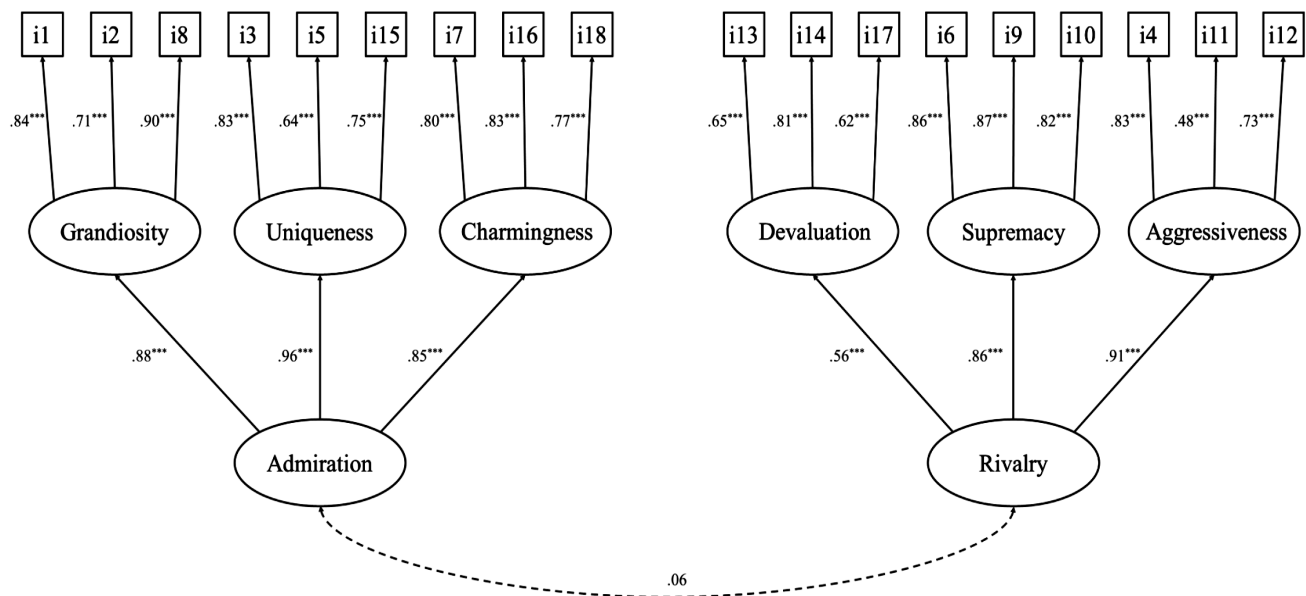
Figure 1. A CFA model of the narcissism admiration and rivalry questionnaire. Standardized factor loadings are presented in this model.
***$p < .001$.

albeit the values of both coefficients are generated similarly.

We examined the construct validity of the NARQ through the correlations with another measurement of narcissism: Narcissistic Personality Inventory (NPI), as well as several variables conceptually and empirically related to the two-dimensional structure of narcissism such as the Big Five (five-factor model of personality), self-esteem and dispositional envy (e.g., Back et al., 2013; Doroszuk et al., 2020; Leckelt et al., 2018; Vecchione et al., 2018). Based on these previous validation studies, we expected that narcissistic rivalry and admiration would be associated differently with the study variables. Specifically, admiration would be more strongly associated with grandiose exhibitionism and the NPI leadership/authority facets than rivalry, whereas rivalry would be more strongly or similarly related to the NPI entitlement/exploitativeness facet. In relation to the Big Five, we predicted that admiration would be most strongly associated with high extraversion and rivalry would be most strongly associated with low agreeableness. Furthermore, we expected a positive relationship between admiration and self-esteem, while rivalry would be negatively related to self-esteem. Finally, we expected that benign envy would only be predicted by admiration and malicious envy would only be predicted by rivalry.

Method

Participants and Procedure

Six-hundred participants (300 women; $M_{age} = 44.09$, $SD_{age} = 13.18$, range = 19 to 78) from South Korea were recruited using an online platform (Qualtrics) via a large research institute. In order to detect a minimum small-to-medium effect size ($\delta = 0.2$), at 80% power and $\alpha = .05$ in a model (relationship between NARQ and BeMaS) with 10 latent and 28 observed variables, the recommended sample size is $n = 475$ (Soper, 2019). Amongst the Korean participants, 93.0% lived in a large-sized city, 6.2% in a smaller/medium-sized city, and only 0.8% stated that they lived in a village/rural area. Participants were from various metropolitan cities and provinces: Seoul (51.3%), Busan (14.0%), Incheon (11.0%), Daegu (10.7%), Gwangju (5.7%), and Daejeon (5.8%). Fewer than 5% of Korean participants accounted for in the sample were from other regions. The average monthly income of the participants was KRW 3,655,117 ($SD = 2,277,545$ KRW). More than half of the participants had a college or university qualification (86.7%; high school = 12.5%) and were employed (64.6%; other = 12.0%, student = 4.3, retired = 4.0%, unemployed = 4.8%, homemaker = 10.3%).

The present study was approved by the Psychology Ethics Com-

mittee of Leeds Beckett University. The participants were invited for a study on personality assessment, and they completed a set of self-report measures, including NARQ, NPI, Big Five, RSES, and BeMaS. All participants were informed about the research purpose and were given research ethics-related information. The study questionnaires were presented only to those who signed an informed consent form. Participants were paid KRW 3,000 (approximately USD 2.55) in exchange for their participation. NARQ and BeMaS were translated from English to Korean to perform the stage of linguistic validity following guidelines for translation and back-translation (Brislin, 1986). Specifically, in the first stage, the original English version of the measures was translated into Korean by two independent translators. The translators then made the final translated version together. In the second stage, the translated version was translated back into English by two other independent translators who were unaware of the original English version. The translators compared the original and the translated versions to ensure that both versions were semantically equivalent. The final Korean-translated version of the measures was completed after discussions between the translators. All translators were fluent in both English and Korean and had higher education degrees (PhD and MA).

Materials

NARQ

The Narcissistic Admiration and Rivalry Questionnaire (Back et al., 2013) was measured using an 18-item scale rated on a 6-point Likert scale (1 = *do not agree at all*, 6 = *agree completely*). It assesses two narcissistic dimensions (*admiration and rivalry*). Each dimension consists of three facets, with three test items per facet.

Table 1. *Means and Standard Deviations for NARQ Items*

#	English version	Korean version	M	SD	Skew	Kurt	ω if item deleted	α if item deleted
1	I am great	나는 훌륭하다	3.87	1.04	-0.301	-0.232	.77	.83
2	I will someday be famous	나는 언젠가 유명해질 것이다	3.03	1.28	0.297	-0.471	.75	.82
8	I deserve to be seen as a great personality	나는 훌륭한 사람으로 인정받을만 하다	3.76	1.10	-0.172	-0.263	.77	.83
3	I show others how special I am	나는 다른 사람들에게 내가 얼마나 특별한지 보여준다	3.50	1.07	-0.212	-0.288	.75	.82
5	I enjoy my successes very much	나는 나의 성공을 굉장히 즐긴다	4.03	1.12	-0.305	-0.051	.76	.83
15	Being a very special person gives me a lot of strength	내가 매우 특별한 사람이라는 점은 나에게 큰 힘이 된다	3.95	1.10	-0.310	0.024	.76	.83
7	Most of the time I am able to draw people's attention to myself in conversations	누군가와 대화하는 시간 대부분 나는 사람들의 이목을 끌 수 있다	3.52	1.12	-0.114	-0.211	.77	.83
16	I manage to be the center of attention with my outstanding contributions	나는 나의 탁월한 공헌으로 관심의 중심에 설 수 있다	3.33	1.13	-0.037	-0.196	.76	.82
18	Mostly, I am very adept at dealing with other people	대부분 나는 사람들을 다루는데 매우 능숙하다	3.46	1.14	-0.248	-0.342	.77	.83
13	Most people won't achieve anything	대부분의 사람들은 어떤 성취도 이루지 못할 것이다	2.78	1.11	0.310	-0.474	.78	.84
14	Other people are worth nothing	다른 사람들은 아무런 가치가 없다	1.87	1.05	1.214	0.976	.77	.83
17	Most people are somehow losers	대부분의 사람들은 어느 정도 실패자이다	2.48	1.22	0.460	-0.677	.78	.84
6	I secretly take pleasure in the failure of my rivals	나는 내 경쟁자들의 실패를 마음 속으로 즐긴다	2.87	1.20	0.077	-0.828	.77	.83
9	I want my rivals to fail	나는 내 경쟁자들이 실패하기를 바란다	2.80	1.22	0.155	-0.818	.77	.83
10	I enjoy it when another person is inferior to me	나는 다른 사람이 나보다 열등한 순간을 즐긴다	2.73	1.22	0.244	-0.757	.77	.83
4	I react annoyed if another person steals the show from me	나는 다른 사람이 인기를 독차지하면 짜증이 난다	2.78	1.19	0.142	-0.858	.77	.83
11	I often get annoyed when I am criticized	나는 종종 비판받을 때 짜증이 난다	3.94	1.11	-0.544	0.227	.78	.84
12	I can barely stand it if another person is at the center of events	나는 나 아닌 사람이 어떤 일의 중심에 있는 걸 참을 수 없다	2.44	1.10	0.576	-0.033	.76	.83

Note. The first nine items are related to narcissistic admiration. The last nine items are related to narcissistic rivalry.

Narcissistic admiration includes *uniqueness, charmingness* and *grandiosity*. Narcissistic rivalry includes *supremacy, aggressiveness* and *devaluation*. The English and Korean versions of this scale are listed in Table 1.

NPI

The 40-item version of the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) is the most frequently used measure of narcissism. It features a dichotomous forced-choice format. For every item, participants are required to select either a narcissistic or non-narcissistic option. We used a validated Korean version of this measure (Chung, 2001). Based on the past studies (Back et al., 2013; Vecchione et al., 2018), we derived three components from 25 of the 40 NPI items following Ackerman et al.'s (2011) approach. The three components include leadership/authority (11 items; $\omega[\alpha]=.82[.81]$), grandiose exhibitionism (10 items; $\omega[\alpha]=.73[.73]$), and entitlement/exploitativeness (4 items; $\omega[\alpha]=.30[.15]$). The observed lower reliability of the subscale (E/E) was in line with past studies (Ackerman et al., 2011; Vecchione et al., 2018), which aligns with concerns about the psychometric properties of the NPI (e.g., Brown et al., 2009; Grosz et al., 2019). As the present study used a Korean sample, we additionally followed the approach by Chung (2001) and derived four components from 32 of the 40 NPI items: leadership/self-confidence (11 items; $\omega[\alpha]=.77[.76]$), need for power/entitlement (11 items; $\omega[\alpha]=.77[.76]$), need for admiration/exhibitionism (11 items; $\omega[\alpha]=.70[.70]$), and superiority (11 items; $\omega[\alpha]=.60[.64]$).

Big Five

The validated 44-item Korean version of the Big Five Inventory (BFI-K; Kim et al., 2010) was used to assess the Big Five personality factors (extraversion [8 items; $\omega(\alpha)=.68(.68)$], agreeableness [9 items; $\omega(\alpha)=.71(.71)$], conscientiousness [9 items; $\omega(\alpha)=.81(.82)$], neuroticism [8 items; $\omega(\alpha)=.74(.74)$], and openness [10 items; $\omega(\alpha)=.80(.79)$]). Using a 5-point scale, participants specified the extent to which they agree with the statement (1 = *Strongly disagree*, 5 = *Strongly agree*; e.g., "I see myself as someone who tends to be lazy").

Self−esteem

The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to assess global self-esteem. Items were administered using a 4-point scale (1 = *Strongly Disagree*, 4 = *Strongly Agree*; e.g., "I take a positive attitude toward myself"). A validated Korean version of this measure was used (Bae et al., 2014). McDonald's omega (Cronbach's alpha) coefficient was .87 (.86) in this study.

Envy

The 10-item Benign and Malicious Envy Scale (BeBaS; Lange and Crusius, 2015; the Korean translated version of the scale is available at https://osf.io/kgyhv/?view_only = 60d9b463c10d4de3a4ccd9fc4f25d355) was rated on a 6-point Likert scale (1 = *Strongly disagree*, 6 = *Strongly agree*). The scale assesses two types of dispositional envy: benign (5 items; e.g., "I strive to reach other people's superior achievement"; $\omega[\alpha]=.85[.85]$) and malicious (5 items; e.g., "I feel ill will toward people I envy"; $\omega[\alpha]=.88[.87]$).

Results

Reliability and Descriptive Statistics

The 18 items of the NARQ for both English and Korean versions with descriptive statistics (means, standard deviation, skewness, and kurtosis) are shown in Table 1. When values of skewness and kurtosis are close to zero (approximately between -1.5 and + 1.5), a normal distribution can be demonstrated (Byrne & Campbell, 1999). The values presented in Table 1 indicate that the normality assumption for all NARQ items was not violated. Descriptive statistics, including reliability estimates, the intercorrelations for the NARQ scales, standard deviations, means, and gender differences are shown in Table 2. Regarding the gender difference, males scored significantly higher than females on admiration, but there was no significant difference for rivalry.

Structural Validity of the NARQ

Based on the Narcissistic Admiration and Rivalry Concept (NARC; Back et al., 2013), the Structural validity of the NARQ scales was assessed using a second-order confirmation factor analysis (CFA) with two main components: (a) admiration (composed of grandiosity, charmingness and uniqueness) and (b) rivalry (composed of supremacy, devaluation and aggressiveness). The lavaan package and robust standard errors were used to conduct the analysis using R

Table 2. Descriptive Statistics, Intercorrelations for the NARQ Scales, Reliability Estimates and Gender Differences

	ω (α)	M (SD)	Intercorrelations for the NARQ scales									Male	Female	t	p	d [CI95%]
			1	2	3	4	5	6	7	8	9	M (SD)	M (SD)			
1. NARQ	.77 (.84)	3.18 (.59)	—									3.19 (.59)	3.16 (.59)	.767	.443	.05 [.06; 13]
2. Admiration	.91 (.91)	3.60 (.85)	.75***	—								3.69 (.84)	3.51 (.85)	2.61	.009**	.21 [.05; 32]
3. Grandiosity	.84 (.84)	3.55 (.99)	.65***	.89***	—							3.65 (1.01)	3.45 (.96)	2.46	.014*	.20 [.04; 36]
4. Uniqueness	.79 (.79)	3.83 (.92)	.70***	.88***	.71***	—						3.88 (.90)	3.76 (.94)	1.64	.102	.13 [-.02; 27]
5. Charmingness	.85 (.85)	3.43 (.99)	.64***	.87***	.65***	.64***	—					3.54 (.98)	3.33 (.98)	2.70	.007**	.21 [.06; 37]
6. Rivalry	.85 (.85)	2.75 (.78)	.69***	.04	.01	.09*	.02	—				2.69 (.79)	2.80 (.77)	-1.70	.090	-.14 [-.23; 02]
7. Devaluation	.73 (.73)	2.38 (.91)	.48***	.01	.01	-.03	.04	.72***	—			2.37 (.91)	2.38 (.90)	-.08	.934	-.01 [-.15; 14]
8. Supremacy	.86 (.88)	2.80 (1.10)	.60***	.03	-.01	.09*	.003	.87***	.41***	—		2.72 (1.10)	2.89 (1.09)	-1.92	.056	-.16 [-.35; 004]
9. Aggressiveness	.74 (.70)	3.06 (.90)	.60***	.07	.03	.16***	.01	.83***	.37***	.65***	—	2.99 (.92)	3.13 (.87)	-2.01	.045*	-.16 [-.29; -.003]

*p < .05, **p < .01, ***p < .001.

(Rosseel, 2012). Robust maximum likelihood was implemented to estimate the parameters. In the present study, the following criteria were used to evaluate model fit: CFI ≥ 0.90, RMSEA ≤ 0.08 and SRMR < 0.10 suggests an acceptable fit and CFI ≥ 0.95, RMSEA < 0.06 and SRMR < 0.08 suggests an excellent fit (Chen et al., 2008; Gana & Broc, 2019; Schumacker & Lomax, 2016; cf. Hu & Bentler, 1999; Kline, 2016). It is worth noting that we are also aware of the cutoff recommendation of Hu and Bentler (1999), which suggests that a model should have 1) RMSEA value ≤ 0.06, with confidence interval at 90% values should be between 0 and 1.00; 2) SRMR value ≤ 0.08; and 3) CFI and TLI values ≥ 0.95. However, we subscribe to the idea of Chen et al., (2008) who state that there is no "golden rule" on these fit indices and that there cannot be a universal, inter-changeable threshold for them in all models. In fact, Chen et al., (2008) demonstrated how the universal threshold of 0.05 for RM-SEA can penalize (reject) good models estimated with a small sample size ($n < 100$). The authors rightly concluded that researchers must combine these statistical tests with human judgment when making decisions about the goodness-of-fit of a model (Gana & Broc, 2019). Based on this, the model fit of research models for the present study was judged to be acceptable.

The two-dimensional NARQ scale demonstrated an acceptable fit, χ^2 (128, $n = 600$) = 434.76, $p < .001$, CFI = .93, RMSEA = .07 (CI90% [.06, .08], $p < .001$), and SRMR = .07, except for the chi-square statistic, because it was significant. However, it should be noted that the reliability for this index is low because of its sample size and dependency on multivariate normality (Schermelleh-Engel et al., 2003). In addition, we explored whether the model fit could be further improved. Based on the inspection of the modification indices, we first allowed for a correlation between the residual errors of Items 6 and 8. The model fit was significantly improved, χ^2 (127, $n = 600$) = 398.28, $p < .001$, CFI = .94, RMSEA = .07 (CI90% [.06, .08], $p < .001$), SRMR = .07. Next, we included another correlation for the residual errors of 10 and 11. The model fit was further improved, χ^2 (126, $n = 600$) = 370.34, $p < .001$, CFI = .94, RMSEA = .06 (CI90% [.06, .07], $p < .001$), SRMR = .06. Although these modified models yielded a significantly better fit than the posited model (Δχ^2 [1] = 27.58, $p < .001$; (Δχ^2 [2] = 53.19, $p < .001$), we conducted following analysis, such as construct validity, with the posited model because the posited model also has acceptable fit and it is the same

as the originally developed model (Back et al., 2013; Study 1). Figure 1 shows proposed model with standardized factor correlations and factor loadings.

We also tested two alternative models: (1) a model with a single higher-order factor, χ^2 (135, $n = 600$) = 2369.14, $p < .001$, CFI = .49, RMSEA = .19 (CI$_{90\%}$ [.18, .19], $p < .001$), SRMR = .20; (2) a model with two uncorrelated higher-order factors, χ^2 (129, $n = 600$) = 436.24, $p < .001$, CFI = .93, RMSEA = .07 (CI$_{90\%}$ [.06, .08], $p < .001$), SRMR = .07. The first alternative model did not meet the criteria for adequate fit; however, the second alternative model demonstrated acceptable fit. According to the scaled difference chi-square tests, overall model fit of the posited model was significantly better than the first alternative model ($\Delta\chi^2$ [7] = 2203.8, $p < .001$), but was similar to the second alternative model ($\Delta\chi^2$ [1] = 1.26, $p = .262$).

In the postulated model (Figure 1), the standardized loadings of the items on the first-order factors were all significant ($p < .001$) and greater than .48 ($M = .76$). The standardized loadings of the first-order factors on each higher-order factor were also significant ($p < .001$) and greater than .56 ($M = .84$). The latent correlation between the two second-order factors (admiration and aivalry) was not significant (.06, $p = .267$), which is inconsistent with previous studies conducted in Italy and other Spanish speaking countries (Vecchione et al., 2018; Doroszuk et al., 2020), including the original validation study performed in Germany (Back et al., 2013). This suggests that the two dimensions (admiration and rivalry) are distinct among Koreans.

Construct Validity of the NARQ

Using Fisher's Z transformation, we assessed the significance of the correlation strength between admiration and rivalry, and the criterion variables.

NPI

Table 3 shows the correlations between admiration and rivalry and the NPI measures. Narcissistic admiration had a stronger relationship with all NPI facets than rivalry for Chung's (2001) facet ($Z_{L/S}$ = 13.63; $Z_{P/E}$ = 5.75; $Z_{A/E}$ = 6.93; Z_S = 7.27, all $p_s < .001$). For Ackerman et al.'s (2011) facet, rivalry and narcissistic admiration both correlated with all NPI facets, but admiration had a more pronounced relationship with leadership/authority (Z = 11.59, $p < .001$) and grandiose exhibitionism (Z = 6.97, $p < .001$). The size of the correlations for exploitativeness/entitlement did not differ between admiration and rivalry (Z = -.80, $p = .213$).

Table 3. Correlations Between NARQ and NPI Measures

NARQ measure	NPI total score	Chung's (2001) facet				Ackerman et al.'s (2011) facet		
		Leadership /Self-confidence	Power /Entitlement	Admiration /Exhibitionism	Superiority	Leadership /Authority	Grandiose exhibitionism	Entitlement /Exploitativeness
NARQ	.586**	.432**	.522**	.461**	.454**	.518**	.492**	.295**
Admiration	.667**	.635**	.513**	.502**	.506**	.640**	.523**	.192**
Rivalry	.160**	-.039	.230**	.150**	.136**	.087*	.175**	.236**

*$p < .05$, **$p \leq .001$.

Table 4. Relations to the Big Five and Self-esteem

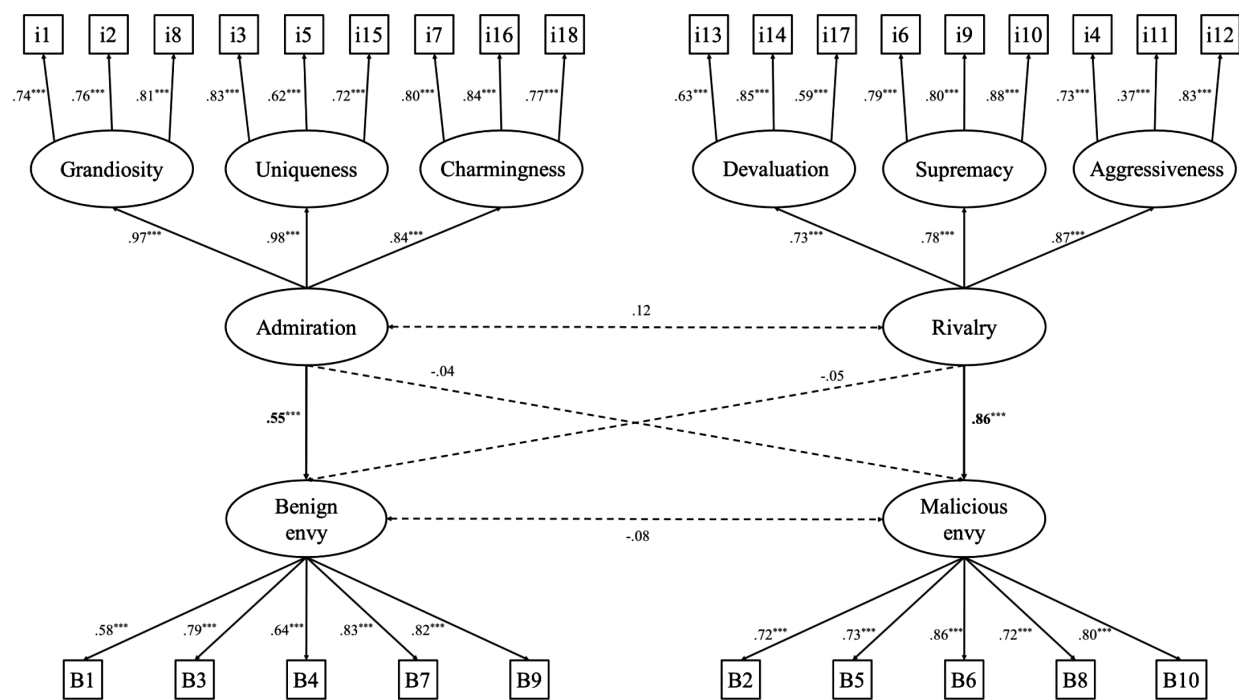| Trait correlate	ω (α)	NARQ $r/\beta/CI_{95\%}$		R^2
		Admiration	Rivalry	
Extraversion	.68 (.68)	.541**/ .547**/ [.28, .36]	-.119*/-.142**/ [-.13, -.05]	.31
Agreeableness	.71 (.71)	.232**/ .251**/ [.10, .17]	-.413**/ -.424**/ [-.28, -.20]	.23
Conscientiousness	.81 (.82)	.305**/ .316**/ [.15, .25]	-.243**/-.257**/ [-.23, -.13]	.16
Neuroticism	.74 (.74)	-.219**/ -.232**/ [-.20, -.10]	.292**/ .302**/ [.16, .26]	.14
Openness	.80 (.79)	.470**/ .472**/ [.25, .33]	-.027/ -.047/ [-.08, .02]	.22
Self-esteem	.87 (.86)	.516**/ .530**/ [.26, .33]	-.039**/ -.332**/ [-.24, -.16]	.38

*$p < .01$, **$p < .001$.

Figure 2. *The latent variables model: coefficients for predictors of benign envy and malicious envy. Gender and age are covariates in the model. Note. Dashed lines are nonsignificant paths at p > .10. ***p < .001.*

Big Five and self–esteem

Table 4 shows the results from correlational and regression analyses for the Big Five personality traits and self-esteem. Correlations with the Big Five and self-esteem were dependent on which narcissism dimension was investigated. Narcissistic admiration correlated positively with extraversion, agreeableness, conscientiousness and openness, but negatively with neuroticism. In contrast, narcissistic rivalry was correlated negatively with extraversion, agreeableness and conscientiousness, but positively with neuroticism. Regression analyses also confirmed this pattern of results. Admiration had a more pronounced relation with extraversion ($Z = 8.40$, $p < .001$), whereas rivalry was more strongly related to agreeableness ($Z = 3.51$, $p < .001$). The correlation between admiration and conscientiousness was found to be similar in magnitude to the correlation between rivalry and conscientiousness ($Z = 1.16$, $p = .123$). Similarly, the correlation between admiration and neuroticism was not significantly different in magnitude from the correlation between rivalry and neuroticism ($Z = 1.35$, $p = .088$). As expected, admiration was positively correlated with self-esteem, whereas rivalry was negatively correlated with self-esteem, which

was also confirmed by the regression analysis. The strength of the correlation for admiration was even stronger than that for rivalry when examining self-esteem ($Z = 9.19$, $p < .001$).

Benign and malicious envy scale

Based on theory and past research (Doroszuk et al., 2020; Lange et al., 2016), we estimated a structural equation model (SEM) in which narcissistic admiration predicted benign envy, whereas narcissistic rivalry predicted malicious envy. Figure 2 shows the standardized factor loadings of the measurement models (NARQ and BeMas) and standardized regression coefficients.

The model demonstrated good fit to the data, χ^2 (384, $n = 600$) $= 952.85$, $p < .001$, CFI $= .92$, RMSEA $= .06$ (CI$_{90\%}$ [.05, .06], $p = .02$), SRMR $= .07$. Within the measurement model of the BeMas, the two-dimensional latent factors did not correlate with each other ($r = .05$, $p = .276$), indicating the distinct characteristics of malicious and benign and envy. According to the correlation and regression analyses, benign envy was positively predicted by narcissistic admiration ($r = .49$, $\beta = .55$, $SE = .06$, $p_s < .001$), but the association between benign envy and rivalry was non-significant ($r = .05$,

$\beta = -.05$, $SE = .03$, $p_s \leq .33$). In contrast, malicious envy was positively predicted by narcissistic rivalry ($r = .69$, $\beta = .86$, $SE = .13$, $p_s < .001$), but the association between malicious envy and admiration was non-significant ($r = .07$, $\beta = -.04$, $SE = .05$, $p_s \leq .39$). As expected, the prediction for rivalry was significantly stronger than that for admiration ($Z = 5.39$, $p < .001$), which is consistent with a previous study (Doroszuk et al., 2020).

Discussion

In the current study, we validated, for the first time, a Korean version of the Narcissistic Admiration and Rivalry Questionnaire (NARQ) using a large-sized sample in which the sample characteristics (age, gender, region of residence, and education) are somewhat representative of the general population of South Korea. The normality assumption for all NARQ items was not violated in the current sample. Regarding the gender differences in narcissistic admiration and rivalry, prior research showed ambiguous findings. Some studies found gender differences in both admiration and rivalry; men scored significantly higher than women (samples from Germany, Italy, the US and the UK; Back et al., 2013; Leckelt et al., 2018; Vecchione et al., 2018), but a recent study observed gender differences in rivalry only in several Spanish speaking countries such as Spain and Chile (but no differences in Colombia; Doroszuk et al., 2020). In the present study, we found gender differences for admiration, but not rivalry; men scored significantly higher than women. Thus, gender differences in the two core factors of NARQ may be associated with culture.

The result from the confirmatory factor analysis supported the two-dimensional structure (rivalry and admiration) that reflects two aspects of grandiose narcissism. The reliability scores on the admiration and rivalry scales were acceptable at each level (i.e., overall NARQ, first-order and second-order components). Although the total NARQ can be used as an alternative to the NPI because the reliability for the overall NARQ score was acceptable and it had a higher correlation with the NPI, our results suggest that the two-dimensional structure model is more adequate because the alternative model with a single higher-order factor did not meet the criteria for an adequate model fit. Unexpectedly but interestingly, the present study revealed that the two factors were not correlated with each other; the measurement model with two correlated higher-order factors and the model with two uncorrelated factors were not significantly different, which is inconsistent with prior research (e.g., Back et al., 2013; Doroszuk et al., 2020; Leckelt et al., 2015, 2018; Vecchione et al., 2018). This suggests that grandiose narcissism may not necessarily be equivalent to having high scores in both dimensions, albeit it may be possible that high scores in both dimensions are combined within the same individual due to the positive correlation between the two factors. Indeed, the past research provides evidence for different ranges of correlation sizes between the dimensions (about .16 - 60; Back et al., 2013; Doroszuk et al., 2020; Rogoza et al., 2016; Vecchione et al., 2018). Moreover, recent evidence showed that the two types of moderately narcissistic subgroups (admiration vs. both admiration and rivalry) can be distinct (Wetzel et al., 2016). Accordingly, the present study sample from South Korea may have included more moderate narcissists, which may have led to the dissociation of the correlation between admiration and rivalry. More importantly, according to the NARC, each dimension can independently affect social interaction outcomes (i.e., social conflict and social potency; Back et al., 2013), which has been empirically supported (e.g., Back et al., 2013; Lange et al., 2016; Manley et al., 2020; Sauls et al., 2019). Nonetheless, future work is required to verify whether the findings from the present or previous research can be replicated.

As expected, our study provided evidence that rivalry and admiration are associated differently with several narcissism-related variables. First, we found that admiration had stronger relationships with the NPI leadership/authority and grandiose exhibitionism facets than rivalry, whereas rivalry and admiration were similarly related to the NPI entitlement/exploitativeness facet. Additionally, we observed the stronger relationship between admiration and the Korean validated NPI sub-facets. The total NARQ and NPI scores were also highly correlated. Therefore, the NPI may be associated with the total NARQ and the narcissistic admiration.

Second, consistent with prior studies (e.g., Back et al., 2013; Leckelt et al., 2018; Rogoza et al., 2016; Vecchione et al., 2018), we observed that admiration is most strongly associated with high extraversion and rivalry is most strongly associated with low agreeableness. This continues to support the notion that narcissistic in-

dividuals are not simply disagreeable extraverts; narcissists' personal traits should be specified by these two dimensions (Rogoza et al., 2016). In addition, narcissistic admiration correlated positively with conscientiousness and openness, but negatively with neuroticism, whilst narcissistic rivalry correlated negatively with conscientiousness, but positively with neuroticism, which aligns with prior research (Back et al., 2013; Leckelt et al., 2018; Rogoza et al., 2016). Furthermore, our results supported different patterns of relationship between narcissistic dimension and self-esteem; admiration was positively related to self-esteem and rivalry was negatively related to self-esteem (e.g., Back et al., 2013; Geukes et al., 2017; Rogoza et al., 2016).

Finally, our prediction that only admiration would predict benign envy, and only rivalry would predict malicious envy was confirmed by a structural equation model (SEM), which aligns with previous literature (Doroszuk et al., 2020; Lange et al., 2016). This implies that the assertive self-enhancement (self-promotion) of narcissistic admiration is in line with the upward-directed motivational tendencies of benign envy, whereas the antagonistic self-protection (self-defense) strategies of narcissistic rivalry are consistent with hostile characteristics of malicious envy. Envy, conceptualized as a status-related emotion, can be associated with grandiose narcissism (Crusius & Lange, 2017; Lange et al., 2016). According to the self-regulation model of grandiose narcissism, narcissistic admiration can manifest itself in self-enhancing behaviors of status pursuit, while narcissistic rivalry can manifest itself in other-derogating behaviors of status pursuit (see Grapsas et al., 2020, for a review). According to Lee (2016), it has been suggested that the phenomenon of bullying and rudeness ("Gapjil") in Korean society may be a manifestation of pathological narcissism. Future research should aim to extend these findings to the context of social hierarchy.

In conclusion, we showed that the Korean version of NARQ is a reliable and valid measure of grandiose narcissism that concerning its agentic and antagonistic aspects. However, as this research is the first validation of the NARQ in South Korea, future research is required to provide definitive validity evidence including other relevant constructs such as the Dark Triad personality traits (narcissism, Machiavellianism, and psychopathy), anger, empathy, and cultural value orientations. Nonetheless, the present research con-

tributes to extending our understanding of the dynamics of narcissism by providing validated evidence of the NARQ in South Korea.

Data availability statement

Data supporting the findings of this study are available upon request from the corresponding authors.

Compliance with Ethical Standards

All procedures performed in studies involving human participants were in accordance with the Ethical Standards of the Leeds Beckett University Ethics Committee and the 1964 Helsinki Declaration and its later amendments, or comparable ethical standards. Informed consent was obtained from all participants included in the study.

Author contributions statement

CM, Assistant Professor at Royal Holloway, University of London, collected and analyzed data and created the initial draft of the manuscript. SL, Lecturer at Chonnam National University, reviewed and revised the manuscript. Both authors deliberated thoroughly before approving the final version for submission.

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