
Adaptation and Validation of the Indonesian version of the Narcissistic Admiration and Rivalry Questionnaire

Darmawan Muttaqin, Shannen Vania Tanuwijaya, Amabel Kylila, Eunika Putri Kiara Bisowarno, Eunike Kristea Soegianto, Trivia Agatha

Faculty of Psychology, Universitas Surabaya, Indonesia

darmawan.muttaqin@staff.ubaya.ac.id

Abstract

The Narcissistic Admiration and Rivalry Questionnaire (NARQ) was developed to measure the Narcissistic Admiration and Rivalry concept, as a new process model related to narcissism. This research aimed to adapt and validate the Indonesian version of the NARQ and involved 467 individuals aged 17-25 years. Confirmatory factor analysis, reliability, and correlation test were used to test the factor structure, internal consistency, and criterion validity of the Indonesian version of the NARQ. The results show that the NARQ has the best factor structure in the form of a two-factor hierarchical model, representing two dimensions and six aspects of narcissistic admiration and rivalry. Also, the Indonesian version of the NARQ is supported by satisfactory reliability and validity criteria. This finding indicates that the Indonesian version of the NARQ is a measuring tool that can be used to assess narcissistic admiration and rivalry in individuals aged 17-25 years in Indonesia.

Keywords: adaptation, admiration and rivalry, narcissism, NARQ, validation

Abstrak

Narcissistic Admiration and Rivalry Questionnaire (NARQ) dikembangkan untuk mengukur konsep narcissistic admiration and rivalry, sebuah model proses yang baru terkait dengan narsisme. Penelitian ini bertujuan untuk mengadaptasi dan memvalidasi NARQ versi Indonesia dan melibatkan 467 individu yang berusia 17-25 tahun. Analisis konfirmatori faktor, reliabilitas, dan korelasi digunakan untuk menguji struktur faktor, konsistensi internal, dan validitas kriteria dari NARQ versi Indonesia. Hasil analisis menunjukkan bahwa NARQ memiliki struktur faktor terbaik berupa model hierarki dua faktor yang mempresentasikan dua dimensi dan enam aspek dari narcissistic admiration and rivalry. Selain itu, NARQ versi Indonesia juga ditunjang dengan reliabilitas dan validitas kriteria yang memuaskan. Temuan ini mengindikasikan bahwa NARQ versi Indonesia merupakan alat ukur yang dapat digunakan untuk mengukur narcissistic admiration and rivalry pada individu yang berusia 17-25 tahun di Indonesia.

Kata kunci: adaptasi, admiration and rivalry, NARQ, narsisme, validasi

Introduction

Narcissism is considered as the manifestation of an individual's need to maintain his self-esteem and remain connected to his social environment, such as wanting to be loved, recognized, and accepted by others (Behrendt, 2015). This term was first proposed in 1914 by Sigmund Freud, who viewed narcissism as something that arises when individuals suppress themselves excessively and fail to pay attention to their relationships with others (Freud, 2014). In contrast to Freud, Kohut (1977) viewed narcissism as a consequence of affection deprivation in people during childhood, leading to the development of fragile adults. As an extension of Kohut's view, Kemberg (1980) considered this term as an individual's self-defense mechanism to protect against instability from social environmental threats. Although these three figures have different views related to narcissism, they agree that this phenomenon emerges as a mask to hide feelings of inferiority and low self-esteem, which the individual may not realize (Southard et al., 2014).

Recently, Back et al. (2013) offered a new process model related to narcissism: the narcissistic admiration and rivalry concept. This model is based on the view that individuals develop narcissism to maintain a grandiose self, which can be achieved through two social strategies with different motivational, affective, cognitive, and behavioral dynamics. The first strategy is narcissistic admiration, which leads the individual to promote themselves and be admired by others. Meanwhile, the second is narcissistic rivalry, which precedes the individuals' tendency to defend themselves and prevent negative judgments from others (Back et al., 2013). Both strategies are mutually interrelated and have a similar goal of maintaining a grandiose self. This is supported by previous research, which discovered that narcissistic admiration and rivalry were both related to pride (Rogoza, Kwiatkowska, et al., 2018) and agentic orientation (Sauls & Zeigler-Hill, 2020). However, although both approaches have similar goals, their consequences related to social interaction are different. Specifically, individuals with narcissistic admiration tend to have positive self-esteem (Manley et al., 2019, 2020) and are willing to engage in prosocial behavior (Martin et al., 2019), while those with rivalry tend to have low self-esteem (Manley et al., 2019, 2020) and difficulty regulating their emotions (Cheshure et al., 2020).

The narcissistic admiration and rivalry concept can be measured using the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). Initially, the questionnaire was compiled by involving 30 items comprising 15 admiration dimensions, covering aspects of grandiosity, uniqueness, and charmingness and 15 rivalry dimensions, including devaluation, supremacy, and aggressiveness. Based on an exploratory factor analysis involving 158 participants, Back et al. (2013) selected 18 items with a factor loading greater than 0.500 from the NARQ. Furthermore, Back et al. (2013) conducted a confirmatory factor analysis involving 953 participants and discovered that the two-factor hierarchical model was compatible with the data. This model presents two dimensions, including admiration and rivalry, as well as six aspects, such as grandiosity, uniqueness, charmingness, devaluation, supremacy, and aggressiveness. The NARQ had a satisfactory reliability of > 0.700 through a test-retest reliability analysis conducted five weeks apart. Also, the questionnaire is supported by the criteria validity tested through the correlation between the NARQ and the measuring instrument for narcissistic personality, Big Five personality, and self-esteem.

Existing research on the NARQ validity is still limited, and only two have been conducted. First, Doroszuk et al. (2020) adapted and validated NARQ on Spanish-speaking participants in Spain, Chile, and Columbia, as well as tested the factor structure by examining a two-factor hierarchical model and discovered a match with the data. Also, Doroszuk et al. (2020) tested the criterion validity by correlating the NARQ with other measuring tools, including the Benign and Malicious Envy Scale (BeMaS; Lange & Crusius, 2015; Navarro-Carrillo et al., 2017) and Single-Item Self-Esteem (SIS; Robins et al., 2001). Second, Leckelt et al. (2018) compiled and validated a short-form NARQ with six-item among

participants in Germany, the US, and the UK. Leckelt et al. (2018) tested several measurement models of the questionnaire's short form, including the one-factor and the uncorrelated and correlated two-factor model. Consequently, the short-form was discovered to have the best factor structure in the correlated two-factor model, with reliability greater than 0.700 for the admiration and rivalry dimensions. Also, this questionnaire form is supported by the satisfactory criterion validity, based on the correlation between the short form NARQ and the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), the German version of the Dirty Dozen (Küfner et al., 2015), and Big Five personalities (McCrae & John, 1992).

NARQ has never been adapted and validated in Indonesia. Therefore, research on this process is encouraged because the instrument can be used to measure narcissistic admiration and rivalry among individuals in Indonesia. Moreover, the concept of narcissistic admiration and rivalry offers distinct psychological dynamics related to narcissism. For example, related to interpersonal relationships, narcissistic admiration is positively associated with interpersonal trust, while narcissistic rivalry is negatively associated with interpersonal trust (Dong et al., 2020; Fang et al., 2021). This concept differs from several studies conducted in Indonesia that have not distinguished between different types of narcissism. As a result, these studies tend to associate narcissism with negative behaviors in interpersonal relationships, including aggression (Fitriyah & Purwoko, 2018), relational aggression (Karlina et al., 2021), and cyberbullying (Permatasari & Wu, 2021). So, this research aims to test a new process model related to narcissism: the narcissistic admiration and rivalry concept in Indonesia. Specifically, this research aims to translate the NARQ into Indonesian and examine the factor structure, reliability, and criterion validity. Furthermore, factor structure testing intends to evaluate the grouping of items that make up certain dimensions (Bandalos, 2018; Rust et al., 2021), while reliability evaluates the consistency between these items used (Bandalos, 2018; Rust et al., 2021). Meanwhile, the criterion validity test aims to assess the accuracy of the measurement results based on the relationship with the criterion variables (Bandalos, 2018; Furr, 2011), such as the Big Five personality traits (McCrae & John, 1992) and psychological entitlement (Hart, Tortoriello, & Richardson, 2019). Big Five personality traits and psychological entitlement are chosen to measure criterion validity because several prior studies have correlated narcissistic admiration and rivalry with Big Five Personality traits (Dufner et al., 2015; Leckelt et al., 2018; Rogoza, Zemojtel-Piotrowska, et al., 2018; Rogoza, Żemojtel-Piotrowska, et al., 2016) and with psychological entitlement (Hart, Tortoriello, & Breeden, 2019; Hart, Tortoriello, & Richardson, 2019). The results from these previous researches can serve as a guide for evaluating the validity criteria of the Indonesian version of the NARQ.

A great deal of inconsistency was discovered between the results of previous research, which examined the relationship between narcissism and personality (Rogoza, Wyszynska, et al., 2016). Specifically, narcissism was positively associated with extraversion and negatively associated with agreeableness (Egan et al., 2014; Jakobwitz & Egan, 2006). However, research conducted by Brown et al. (2009) only discovered a positive relationship between narcissism and extraversion. This result is different from narcissistic admiration and rivalry, which tend to find different relationships between narcissism and personality. Also, narcissistic admiration was observed to have a positive relationship with openness to experience, conscientiousness, extraversion, and agreeableness while rivalry had no association with these factors (Leckelt et al., 2018; Rogoza, Zemojtel-Piotrowska, et al., 2018; Rogoza, Żemojtel-Piotrowska, et al., 2016). Apart from being related to personality, narcissistic admiration and rivalry are also connected to psychological entitlement since psychological entitlement is a main characteristic of narcissism (Krizan & Herlache, 2018). This statement is supported by previous research, which observed that narcissistic admiration has a moderately strong relationship with the psychological entitlement of the grandiose, while rivalry was positively related to vulnerable and grandiose (Hart, Tortoriello, & Breeden, 2019; Hart, Tortoriello, & Richardson, 2019).

Generally, this research aims to adapt and validate the Indonesian version of the NARQ, the adaptation was first conducted using a forward and back translation method, from English to Indonesian and from Indonesian to English. Subsequently, validation was performed by testing the factor structure, reliability, and criterion validity. The factor structure was examined using the confirmatory factor analysis (CFA), while the reliability test was performed by calculating the reliability coefficient of Cronbach's Alpha. Finally, the criterion validity analysis was performed by correlating the scores of the NARQ Indonesian version with the Big Five personality scores and psychological entitlement.

Methods

Participants

Research participants from the University of Surabaya included 467 undergraduate students aged 17-25 years ($M = 19.559$, $SD = 0.953$). These individuals consisted of 116 men (24.8%) and 351 women (75.200%), including 248 (53.100%), 118 (25.300%), and 101 (21.600%) students of the Faculty of Psychology, Economics and Business, and Law, respectively. During data collection, the participants were studying in the first (55.200%), second (29.100%), third (14.300%), and fourth years (1.300%). The ethnic backgrounds of the participants included Chinese (47.100%), Javanese (31.000%), Balinese (3.000%), Batak (1.100%), mixed (11.100%), and others (6.700%). Moreover, the data collection was conducted using the convenience sampling technique by asking for participants' willingness, who be approached after attending online lectures. Furthermore, those willing to participate were asked to complete an informed consent and research questionnaire via Google Form. In this study, the number of participants has met the rule of thumb for the minimum sample size to conduct confirmatory factor analysis, which is 20 times the number of items (Kline, 2014). This is because the number of items in the validated measuring instrument is 18, so the minimum sample size required is 360.

Instrument

Narcissism

The Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013), which consists of 18 items was used to measure narcissistic tendencies. This instrument comprised of two dimensions, including admiration, involving grandiosity (three items, for example, "I will someday be famous" / "*Saya akan menjadi terkenal suatu hari nanti*"), uniqueness (three items, for example, "I enjoy my successes very much" / "*Saya sangat menikmati kesuksesan saya*"), and charmingness (three items, for example, "I manage to be the center of attention with my outstanding contributions" / "*Saya berhasil menjadi pusat perhatian dengan kontribusi saya yang luar biasa*"). Secondly, the rivalry dimension, included devaluation (three items, e.g. "Most people are somehow losers" / "*Kebanyakan orang tidak akan mencapai apapun*"), supremacy (three items, e.g. "I secretly take pleasure in the failure of my rivals" / "*Saya diam-diam merasa senang ketika musuh saya gagal*"), and aggressiveness (three items, for example, "I often get annoyed when I am criticized" / "*Saya kesal jika orang lain mendapatkan perhatian lebih banyak dibandingkan saya*"). The NARQ response used six options ranging from 1 (strongly disagree) to 6 (strongly agree).

Personality

Big Five Inventory (BFI; John & Srivastava, 1999) consisting of 44 items was used to measure personality. This instrument consists of five dimensions: openness to experience (ten items, for example, "Has an active imagination" / "*Saya adalah orang yang aktif berimajinasi*"), conscientiousness (nine items, for example, "Perseveres until the task is finished" / "*Saya adalah orang yang teliti*"), extraversion (eight items, for example, "Is full of energy" / "*Saya adalah orang yang energik*"), agreeableness (nine items, for example, "Likes to cooperate with others" / "*Saya mudah percaya dengan orang lain*"), and neuroticism (eight items, e.g. "Get nervous easily" / "*Saya mudah gugup dalam berbagai situasi*"). The BFI response uses five options

ranging from 1 (strongly disagree) to 5 (strongly agree). Also, in this research, this tool had a reliability coefficient of 0.644, 0.767, 0.814, 0.676, and 0.796 for openness, conscientiousness, extraversion, agreeableness, and neuroticism, respectively.

Psychological Entitlement

Psychological Entitlement Scale-Vulnerable/Grandiose (PES-V/G; Hart, Tortoriello, & Richardson, 2019), which consisted of 18 items was used to measure psychological entitlement. This instrument consists of sub-scales, including vulnerable (nine items, for example, "I demand the best because I seem to always get the worst" / "*Saya menuntut yang terbaik karena selama ini saya selalu mendapat yang terburuk*") and grandiose (nine items, for example, "I feel entitled to more of everything because I am better than most" / "*Saya merasa lebih berhak akan segala hal karena saya lebih baik dari kebanyakan orang*"). The PES-V/G response uses seven response options ranging from 1 (strongly disagree) to 7 (strongly agree). In this research, this instrument had a reliability coefficient of 0.891 and 0.909 for the vulnerable and grandiose sub-scale, respectively.

Procedure

The NARQ was translated into Indonesian using guidelines from the International Test Commission (Hambleton, 2005). This translation process included (1) two independent translators converting NARQ into Indonesian, (2) two reviewers checking the accuracy of the translation, and (3) two other independent translators converting the Indonesian version into English. Several participants were asked to respond to the Indonesian version to determine their understanding of the statement items. The items of the Indonesian version of the NARQ are available in Appendix A.

The IBM SPSS AMOS 21 program with maximum likelihood estimation (Arbuckle, 2012) was used to perform a confirmatory factor analysis of the Indonesian version of the NARQ. This research tested and compared four measurement models, including two-factor correlation and hierarchical, six-factor correlation, and bifactor model to test the factor structure of this questionnaire. The two-factor correlation model was developed by involving two dimensions: admiration (nine items) and rivalry (nine items). Meanwhile, the two-factor hierarchical model was structured with six aspects with three items each: grandiosity, uniqueness, charmingness, which can indicate admiration, and devaluation, supremacy, and aggressiveness, which can indicate rivalry. Six-factor correlation model consisted of six aspects: grandiosity (three items), uniqueness (three items), charmingness (three items), devaluation (three items), supremacy (three items), and aggressiveness (three items). Then, the bifactor model was composed of two general factors, such as admiration and rivalry, as well as six specific factors, including aspects of grandiosity, uniqueness, charmingness, devaluation, supremacy, and aggressiveness. This study also evaluated the measurement models of BFI and PES. The measurement models of BFI and PES were developed by creating three items parceling for each dimension of BFI and PES. Item parceling in the measurement model of BFI and PES was done considering the large number of items and the large sample size (Wang & Wang, 2019).

Model fit indices, such as the Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) were used to evaluate the measurement model of the Indonesian version of the NARQ. GFI and CFI values greater than 0.900 and RMSEA values less than 0.080 were used as the minimum criteria to determine model fit (Kline, 2014; Schreiber et al., 2006; van de Schoot et al., 2012). In addition, statistical tests such as the chi-square test were used to compare models. A model was considered different from another model if its significance level was less than 0.050. Also, Cronbach's Alpha reliability analysis was used to evaluate the internal consistency of the NARQ. A reliability coefficient greater than 0.700 is the minimum requirement for a measuring instrument to have good internal consistency (Bandalos, 2018; Rust et al., 2021). Furthermore, correlation analysis between latent score of the Indonesian version of the NARQ with BFI and PES-V/G was used to test the validity of the criteria. The consistency between the results of this correlation analysis and previous research can be used to assert that the questionnaire has satisfactory criterion validity.

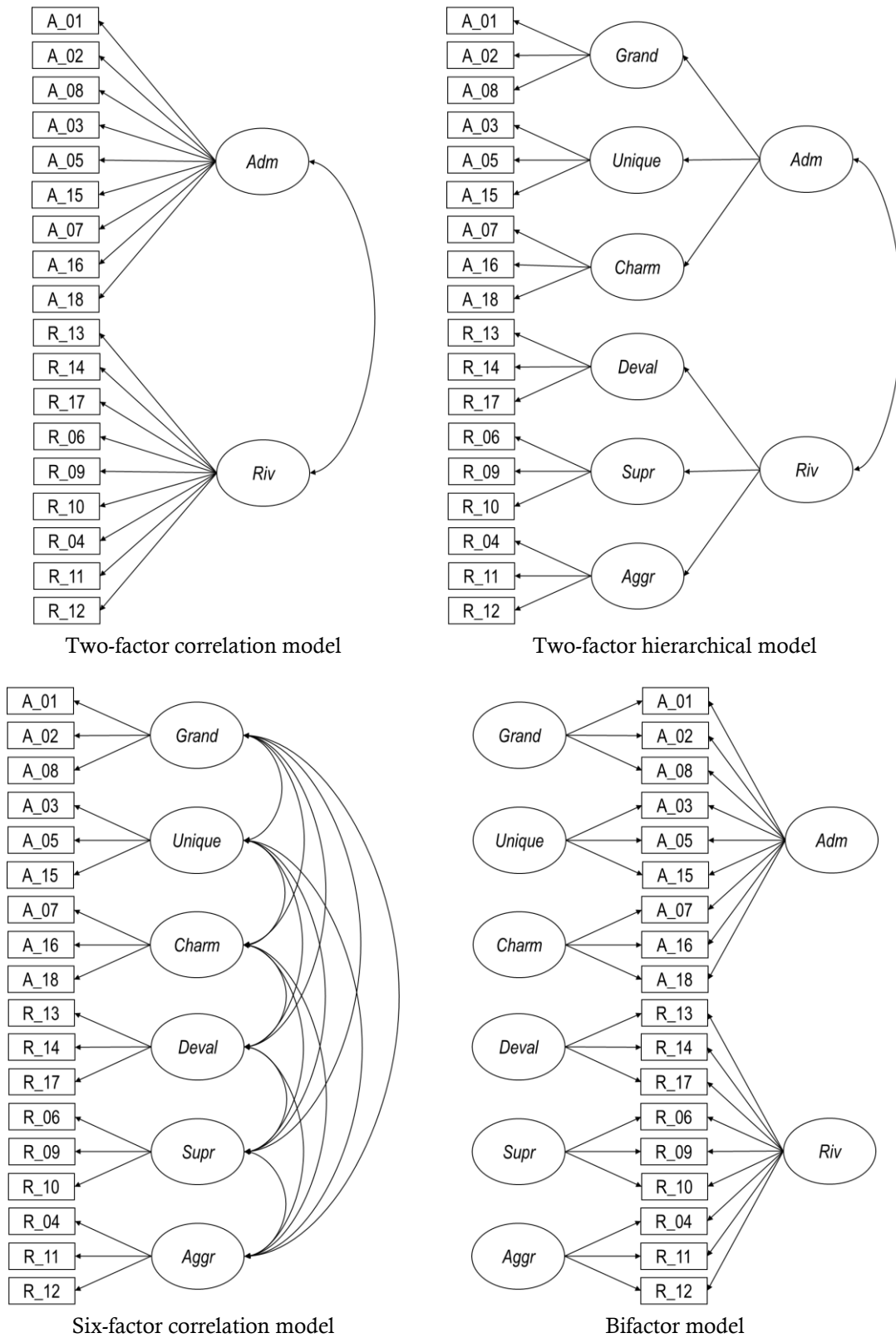


Figure 1. Conceptual Measurement Model of the Indonesian NARQ Version.

Results and Discussion

The Confirmatory Factor Analysis results (Table 1) found that the two-factor correlation model has GFI and CFI values less than 0.900 and RMSEA value greater than 0.080. In contrast, the two-factor hierarchical model, six-factor correlation model, and bifactor model have GFI and CFI values greater than 0.900 and RMSEA value less than 0.080. These findings suggest that the two-factor hierarchical model, six-factor correlation model, and bifactor model have acceptable model fit. In addition, the four tested models have significant differences based on the chi-square difference test (Table 2).

Table 1. Model Fit Indices of the Indonesian Version of the NARQ.

	Model fit indices					
	χ^2	df	χ^2/df	GFI	CFI	RMSEA
Two-factor correlation model	703.009	134	5.246	0.841	0.814	0.095
Two-factor hierarchical model	414.391	128	3.237	0.910	0.906	0.069
Six-factor correlation model	375.114	120	3.126	0.919	0.916	0.068
Bifactor model	355.936	117	3.042	0.924	0.922	0.066
BFI	253.725	80	3.172	0.932	0.940	0.068
PES	45.597	8	5.700	0.970	0.984	0.100

Table 2. Model Comparison of the Indonesian Version of the NARQ.

Model	Two-factor correlation	Two-factor hierarchical	Six-factor correlation	Bifactor
Two-factor correlation		288.618**	327.895**	347.073**
Two-factor hierarchical	6		39.277**	58.455**
Six-factor correlation	14	8		19.178**
Bifactor	17	11	3	

Note: The values above the diagonal correspond to the increment of the chi square ($\Delta\chi^2$). The values under the diagonal are the increment in the degrees of freedom (Δdf).

** $p < .01$.

Table 3 reports the factor loadings of each model. The two-factor hierarchical model and the six-factor correlation model are supported by acceptable factor loadings of over 0.500. In addition, in the two-factor hierarchical model, it is also known that each aspect contributes to measuring its latent variable. In detail, in the admiration dimension, the standardized beta coefficient of grandiosity is 0.974, uniqueness is 0.978, and charmingness is 0.845, while in the rivalry dimension, the standardized beta coefficient of devaluation is 0.684, supremacy is 0.802, and aggressiveness is 0.944. On the other hand, the bifactor model only has acceptable factor loadings for the general factor, with several items in the specific factor having inadequate factor loadings. As a result, the two-factor hierarchical model and the six-factor correlation model can be considered the most suitable measurement models for the Indonesian version of the NARQ. Table 3 also reports the skewness and kurtosis of each item in NARQ. The majority of the NARQ items, 17 out of 18, have a skewness between -2 and +2 (Collier, 2020). Although there is one item that exceeds the normality limit based on skewness, the results of multivariate normality testing indicate that the data is normally distributed because it has kurtosis exceeding -10 or +10, which is 107.350 (c.r. = 43.228)(Collier, 2020).

Table 3. Factor Loading of the Indonesian Version of the NARQ

Item	Mean	SD	Skewness	Kurtosis	Two-factor correlation	Two-factor hierarchical	Six-factor correlation	Bifactor-general factor	Bifactor-specific factor
A_01	4.298	1.183	-0.343	-0.342	0.663	0.700	0.700	0.672	-0.021
A_02	4.069	1.250	-0.256	-0.374	0.616	0.653	0.648	0.694	0.051
A_08	3.835	1.259	-0.361	-0.253	0.683	0.701	0.705	0.713	-2.215
A_03	3.713	1.307	-0.112	-0.582	0.649	0.689	0.690	0.687	0.018
A_05	4.490	1.093	-0.560	0.106	0.488	0.502	0.502	0.471	0.050
A_15	4.193	1.271	-0.441	-0.268	0.513	0.521	0.519	0.482	2.246
A_07	3.797	1.263	-0.311	-0.363	0.683	0.755	0.761	0.596	-0.537
A_16	3.285	1.323	0.080	-0.601	0.724	0.741	0.742	0.656	-0.256
A_18	3.508	1.271	-0.187	-0.407	0.609	0.679	0.671	0.511	-0.524
R_13	1.833	1.173	1.538	1.925	0.533	0.766	0.766	0.538	0.542
R_14	1.319	0.794	3.454	14.338	0.481	0.677	0.675	0.483	0.470
R_17	1.655	1.062	1.921	3.757	0.478	0.680	0.682	0.458	0.513
R_06	2.884	1.390	0.410	-0.632	0.762	0.815	0.817	0.622	0.533
R_09	2.490	1.351	0.715	-0.171	0.759	0.812	0.812	0.595	0.604
R_10	2.203	1.213	0.873	0.215	0.808	0.812	0.810	0.722	0.362
R_04	2.861	1.388	0.541	-0.490	0.579	0.662	0.666	0.617	0.393
R_11	2.929	1.278	0.282	-0.551	0.530	0.612	0.609	0.582	0.165
R_12	2.071	1.189	1.217	1.251	0.568	0.666	0.665	0.630	0.135

Table 4 shows the correlation results between latent score of aspects and dimensions of the Indonesian version of the NARQ. Generally, the aspects in the admiration dimension, including grandiosity, uniqueness, and charmingness, were positively associated. Also, the aspects in the rivalry dimension, including devaluation, supremacy, and aggressiveness, were positively related. Furthermore, a positive relationship was discovered between admiration dimensions and aspects of grandiosity, uniqueness, and charmingness with a relatively large correlation coefficient. Likewise, a relatively large correlation coefficient was observed between the aspects of devaluation, supremacy, and aggressiveness with the rivalry dimension. The analysis results also show a positive relationship between several aspects in the admiration and rivalry dimension with a relatively small correlation coefficient. Moreover, a relatively small correlation coefficient was seen between the aspect of admiration and rivalry dimension. A positive association was observed between admiration and rivalry ($r = 0.130$, $p < 0.050$). The Indonesian version of the NARQ scale has a reliability coefficient of 0.722, 0.599, 0.769, 0.739, 0.853, and 0.682 for the grandiosity, uniqueness, charmingness, devaluation, supremacy, and aggressiveness aspect, respectively, as well as 0.853 and 0.847 for the admiration and rivalry dimension, respectively.

Table 4. Correlation and Reliability of the Indonesian Version of the NARQ.

Variable	Mean	SD	1	2	3	4	5	6	7	8
1 Grand	4.067	0.987	(0.722)							
2 Unique	4.132	0.914	0.620***	(0.599)						
3 Charm	3.530	1.064	0.614***	0.562***	(0.769)					
4 Deval	1.602	0.828	-0.077	-0.024	0.046	(0.739)				
5 Supr	2.526	1.160	0.076	0.195***	0.123**	0.447***	(0.853)			
6 Aggr	2.620	1.007	0.120**	0.172***	0.116*	0.461***	0.571***	(0.682)		
7 Adm	3.910	0.846	0.870***	0.837***	0.860***	-0.019	0.152**	0.157**	(0.853)	
8 Rival	2.249	0.817	0.059	0.155**	0.122**	0.738***	0.859***	0.837***	0.130**	(0.847)

* $p < 0.050$, ** $p < 0.010$, *** $p < 0.001$

Table 5 shows the correlation results between latent score of the Indonesian version of the NARQ with BFI and PES. Generally, aspects of grandiosity, uniqueness, charmingness, and admiration dimensions were observed to have a positive relationship with openness, conscientiousness, extraversion,

and agreeableness, but negatively correlated with neuroticism. However, aspects of devaluation, supremacy, aggressiveness, and rivalry dimensions were negatively related to conscientiousness, extraversion, and agreeableness and had a positive relationship with neuroticism. Furthermore, all aspects and dimensions of the Indonesian version of the NARQ had a positive correlation with the vulnerable and grandiose dimensions.

Table 5. Correlation between the Indonesian Version of the NARQ with BFI and PES.

Variable	Mean	SD	Grand	Unique	Charm	Deval	Supr	Aggr	Adm	Rival
BFI O	3.427	0.498	0.211***	0.200***	0.297***	0.045	0.060	0.012	0.279***	0.049
BFI C	3.230	0.561	0.307***	0.266***	0.312***	-0.300***	-0.119*	-0.235***	0.345***	-0.254***
BFI E	3.125	0.714	0.388***	0.250***	0.572***	-0.179***	-0.123**	-0.135**	0.481***	-0.174***
BFI A	3.675	0.542	0.145**	0.141**	0.161***	-0.385***	-0.380***	-0.320***	0.175***	-0.441***
BFI N	3.187	0.714	-0.188***	-0.083	-0.241***	0.223***	0.205***	0.305***	-0.204***	0.298***
PES V	3.345	1.242	0.291***	0.409***	0.255***	0.268***	0.374***	0.356***	0.367***	0.413***
PES G	3.241	1.227	0.465***	0.478***	0.476***	0.236***	0.352***	0.313***	0.552***	0.375***

* $p < 0.050$, ** $p < 0.010$, *** $p < 0.001$

This research aims to examine the psychometric properties of the NARQ Indonesian version. The results of the factor structure test of the Indonesian version of the NARQ found that the two-factor hierarchical model and the six-factor correlation model have satisfactory model fit and factor loadings. These findings regarding the appropriateness of the two-factor hierarchical model are consistent with previous research examining the factor structure of the NARQ (Back et al., 2013; Doroszuk et al., 2020; Leckelt et al., 2018). However, the six-factor correlation model was not tested, making it an alternative to the questionnaire's factor structure. Also, this research discovered that the two-factor correlation model had an unsatisfactory model fit. This indicates that the items from the NARQ do not directly measure the admiration and rivalry dimensions, but only evaluate aspects, including grandiosity, uniqueness, charmingness, devaluation, supremacy, and aggressiveness. Lastly, despite having a satisfactory model fit, the bifactor model is not supported by acceptable factor loadings, particularly in the specific factor. As a result, the Indonesian version of the NARQ is unsuitable for generating scores for two dimensions and six aspects simultaneously.

Although the six-factor correlation model can be an alternative to the factor structure of the Indonesian version of the NARQ, it is not supported by satisfactory internal consistency because some aspects, such as uniqueness and aggressiveness have a reliability coefficient of less than 0.700. Also, a measuring instrument can be declared to have satisfactory internal consistency if it has a minimum reliability coefficient of 0.700 (Bandalos, 2018; Rust et al., 2021). However, the two-factor hierarchical model was supported by a satisfactory reliability coefficient greater than 0.800 on the admiration and rivalry dimensions. This finding is in line with previous research, which observed satisfactory reliability on both dimensions (Back et al., 2013; Leckelt et al., 2018). The finding on internal consistency provides supporting information regarding the internal structure validity of the Indonesian version of the NARQ. Moreover, internal consistency has been considered as part of the evidence for the internal structure validity of a measurement (AERA et al., 2014; Rios & Wells, 2014).

The correlation results between aspects of the admiration and rivalry dimensions show that the correlation between aspects on the same dimension has a higher correlation coefficient than the correlation between aspects on other dimensions. Also, the correlation coefficient between the admiration and rivalry dimensions is relatively small. This finding is in line with previous research, which discovered a relatively small correlation coefficient between the two dimensions (Back et al., 2013; Doroszuk et al., 2020; Dufner et al., 2015). However, the results regarding the criteria validity from the Indonesian version of the NARQ show that the admiration dimension and its three aspects have a positive relationship with openness, conscientiousness, extraversion, and agreeableness, but have a negative association with neuroticism. Meanwhile, the rivalry dimension and its three aspects have a negative relationship with

conscientiousness, extraversion, and agreeableness and are positively related to neuroticism. This finding is consistent with previous research, which observed similar correlation results between the NARQ and the five-factor personality measure (Dufner et al., 2015; Leckelt et al., 2018; Rogoza, Žemojtel-Piotrowska, et al., 2018; Rogoza, Žemojtel-Piotrowska, et al., 2016). Furthermore, the aspects of admiration and rivalry were observed to have a positive relationship with the vulnerable and grandiose dimensions of the PES measuring instrument. The positive relationship between the Indonesian version of the NARQ and PES-V/G is consistent with previous research, although the previous study did not find an association between admiration and rivalry with vulnerable (Hart, Tortoriello, & Breeden, 2019; Hart, Tortoriello, & Richardson, 2019). However, the conformity of the correlation results observed in this research indicates the Indonesian version of the NARQ has satisfactory criterion validity.

Generally, these findings support previous research, which shows that NARQ has good psychometric properties (Back et al., 2013; Doroszuk et al., 2020; Leckelt et al., 2018). Although this result is in line with previous works, which stated that NARQ had the best measurement model in the form of a two-factor hierarchical model, good reliability coefficient and criterion validity, this research attempted to test more measurement models than its predecessors (Back et al., 2013; Doroszuk et al., 2020; Leckelt et al., 2018). Previous investigations only tested the two-factor correlation and hierarchical models, while this research examined the six-factor and bifactor correlation models. The six-factor correlation model had an accuracy that fits the data and is supported by fairly good criterion validity, but two aspects, uniqueness and aggressiveness had unsatisfactory reliability coefficients. It may be due to low item inter-correlation and a limited number of items on each aspect (Bandalos, 2018).

Although this research contributes to evaluating of the psychometric properties of the NARQ Indonesian version, some limitations are present. First, the psychometric properties evaluation is not comprehensive because the content validity testing, which aims to evaluate the suitability of the items with the definition of the measured aspects was not included (Bandalos, 2018; Furr, 2011; Sireci & Faulkner-Bond, 2014). Also, response process testing, which intends to evaluate individual understanding related to the statement items used, was not incorporated (Bandalos, 2018; Furr, 2011; Padilla & Benítez, 2014). Then, this research does not include other measuring tools that assess narcissism, such as the Narcissistic Personality Inventory-16 (Ames et al., 2006) as an evaluation of convergent validity. Finally, only participants aged 17-25 years were involved, so the findings are less applicable to adolescents below 17 years and adults above 25 years.

Conclusion

The Indonesian version of the NARQ can be used to measure admiration and rivalry narcissistic in individuals aged 17–25 years in Indonesia. This instrument has a factor structure of admiration dimension, consisting of grandiosity, uniqueness, and charmingness aspects, and rivalry dimension, consisting of devaluation, supremacy, and aggressiveness. This instrument is also supported by satisfactory reliability. In addition, the Indonesian version of the NARQ also has satisfactory validity criteria based on its relationship with the Big Five personality traits and psychological entitlement. The findings of this study have practical implications for utilizing a new process model related to narcissism in individuals in Indonesia. Consistent with theoretical conceptualization, the Indonesian version of the NARQ can generate separate scores for the admiration and rivalry dimensions, which exhibit distinct psychological dynamics. However, further research can contribute to evaluating this instrument's content validity, response process, and convergence to create a more comprehensive psychometric property. Furthermore, psychometric property testing can involve participants with a wider age range to expand the use of the Indonesian version of the NARQ in a broader population.

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Conflict of Interest

The authors have no conflicts of interest to declare.

Authors Contribution

Darmawan Muttaqin is responsible for analyzing data and writing this article. Shannen Vania Tanuwijaya, Amabel Kylila, Eunika Putri Kiara Bisowarno, Eunike Kristea Soegianto and Trivia Agatha are responsible for designing the study, preparing measurement tools, and collecting data.

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Appendix A

Item of the Indonesian Version of the NARQ

Number	Dimension	Aspect	Item
A_01	Admiration	Grandiosity	<i>Saya hebat.</i> I am great.
A_02	Admiration	Grandiosity	<i>Saya akan menjadi terkenal suatu hari nanti.</i> I will someday be famous.
A_08	Admiration	Grandiosity	<i>Saya layak dipandang sebagai pribadi yang hebat.</i> I deserve to be seen as a great personality.
A_03	Admiration	Uniqueness	<i>Saya menunjukkan ke orang lain betapa spesialnya saya.</i> I show others how special I am.
A_05	Admiration	Uniqueness	<i>Saya sangat menikmati kesuksesan saya.</i> I enjoy my successes very much.
A_15	Admiration	Uniqueness	<i>Menjadi orang yang spesial memberi saya banyak kekuatan.</i> Being a very special person gives me a lot of strength.
A_07	Admiration	Charmingness	<i>Saya mampu menarik perhatian orang lain kepada saya dalam suatu percakapan.</i> Most of the time I am able to draw people's attention to myself in conversations.
A_16	Admiration	Charmingness	<i>Saya berhasil menjadi pusat perhatian dengan kontribusi saya yang luar biasa.</i> I manage to be the center of attention with my outstanding contributions.
A_18	Admiration	Charmingness	<i>Saya mahir dalam berurusan dengan orang lain.</i> Mostly, I am very adept at dealing with other people.
R_13	Rivalry	Devaluation	<i>Kebanyakan orang tidak akan mencapai apapun.</i> Most people won't achieve anything.
R_14	Rivalry	Devaluation	<i>Orang lain tidak berharga.</i> Other people are worth nothing.
R_17	Rivalry	Devaluation	<i>Kebanyakan orang adalah pecundang.</i> Most people are somehow losers.
R_06	Rivalry	Supremacy	<i>Saya diam-diam merasa senang ketika musuh saya gagal.</i> I secretly take pleasure in the failure of my rivals.
R_09	Rivalry	Supremacy	<i>Saya ingin saingan saya gagal.</i> I want my rivals to fail.
R_10	Rivalry	Supremacy	<i>Saya menikmati ketika orang lain lebih rendah daripada saya.</i> I enjoy it when another person is inferior to me.
R_04	Rivalry	Aggressiveness	<i>Saya kesal jika orang lain mendapatkan perhatian lebih banyak dibandingkan saya.</i> I react annoyed if another person steals the show from me.
R_11	Rivalry	Aggressiveness	<i>Saya merasa kesal ketika dikritik.</i> I often get annoyed when I am criticized.
R_12	Rivalry	Aggressiveness	<i>Saya tidak suka ketika orang lain menjadi pusat perhatian di suatu acara.</i> I can barely stand it if another person is at the center of events.