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CLINICAL PSYCHOLOGY | RESEARCH ARTICLE Short form of the five-factor narcissism inventory: A Japanese adaptation

Qi Dai¹*, Tadahiro Shimotsukasa¹ and Atsushi Oshio¹

Abstract: There is a pressing need for more evidence from regions from Western countries to draw conclusive outcomes concerning psychological sciences. Hence, the study intends to develop the Japanese version of the short form of the Five-Factor Narcissism Inventory; (FFNI-SF) to assess reliability and validity, and to explore the psychometric adaptation of a broad range of narcissistic personalities in relation to the Japanese people. Altogether, 449 Japanese undergraduate students took part in this study. The findings denoted that FFNI-SF had an acceptable level of reliability and correlated well with existing Japanese scales. Based on the exploratory factor analysis, the lack of empathy was excluded from grandiosity, yielding an isolated factor. However, the exploratory factor analysis revealed that the lack of empathy had nothing to do with Japanese narcissism.

Subjects: Psychological Science; Testing, Measurement and Assessment; Personality; Cross Cultural Psychology

Keywords: Five-Factor Narcissism Inventory; vulnerability; grandiosity; Japanese

1. Introduction

Narcissism is a long-established concept originating from a figure in Greek mythology called Narcissus. This notion occupied an essential position in Sigmund Freud's theories. Freud first regarded narcissism as related to homosexuality, but later suggested that it was connected to

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PUBLIC INTEREST STATEMENT

Most psychological studies were conducted in the industrialized and democratic countries of the West and samplings were biased in favour of educated and rich people. Samples from Asian countries made up only 4% of the total samples published in the Journal of Personality and Social Psychology from 2003 to 2007, but the figure was 62% for samples from the United States and 19% for samples from Europe. Hence, we need more evidence from regions apart from Western countries to draw conclusive outcomes. Based on the exploratory factor analysis, the lack of empathy was excluded from grandiosity, yielding an isolated factor. Also, the lack of empathy had slightly negative correlations with both PNI vulnerability (r = -.10) and PNI grandiosity (r = -.15). These provided consistent evidence that the lack of empathy is disassociated with Japanese narcissism. One possible reason might be that East Asians are comparatively more interdependent than Westerners.





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megalomania and a corresponding withdrawal of interest from the outside world (Ronningstam, 2011). Over the decades, several studies have endeavoured to refine the construct of narcissism (Krizan & Herlache, 2017; Russ et al., 2008). Such studies have sought for viable applications of narcissism in social (Huang, Krasikova, & Harms, 2019), criminal (Kalemi et al., 2019; Stone, 2007), and clinical (Kacel et al., 2017) domains.

Over a prolonged period of time, narcissism has been considered to have two dimensions which are narcissistic grandiosity and narcissistic vulnerability (Cain et al., 2008; Pincus & Roche, 2011). Typically, grandiosity is personified by an arrogant person who indulges in fantasies, treats others with contempt, and has aggressive self-assertiveness. In contrast, vulnerable narcissists behave in a moderating way, have excessive apprehensions of failure, and an insatiable need for admiration. Both of the narcissistic dimensions have consistently proven to be relative to low agreeableness and high extraversion among Big-Five personality model. In fact, Paulhus (2001) described this segment as 'disagreeable extraverts'. However, in recent years, the three-factor model of narcissism, of which the factors are agentic extraversion, narcissistic neuroticism, and self-centred antagonism, has been increasingly accepted (Crowe et al., 2019; Rogoza et al., 2020).

Currently, one of the most commonly used scales is the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1998); however, it has been criticized for its failure to recognize a vulnerable narcissism (Gore & Widiger, 2016). On the other hand, the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) is a comparatively novel scale that takes both grandiosity and vulnerability into account. However, the PNI is rather used to assess clinical narcissism, and high scores on the PNI are related to low self-esteem, shameful effects, and distress (Cain et al., 2008; Pincus & Lukowitsky, 2010), while normal narcissism demonstrates high self-esteem and low depression, contributing to higher wellbeing (Oldham & Morris, 1995; Pincus et al., 2009). The Five-Factor Narcissism Inventory (FFNI; Glover et al., 2012) is a more recent development based on the Five-Factor Model of personality (FFM). Among the 30 traits of FFM, 15 traits related to narcissism were selected and altered into more narcissistic-specific traits. For example, FFNI exhibitionism is derived from FFM gregariousness, which describes the propensity of human beings to enjoy the company of other people. Foster et al. (2018) claimed that the FFNI is the most comprehensive measure of narcissism in comparison to the Narcissistic Personality Inventory (Raskin & Hall, 1979), Grandiose Narcissism Scale (GNS; Foster et al., 2015), Single-Item Narcissism Scale (SINS; Konrath et al., 2014), Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). Also, the FFNI is the only measure simultaneously assessing the three factors mentioned above-agentic extraversion, narcissistic neuroticism, and self-centred antagonism, which are aligned with the narcissism spectrum model (Krizan & Herlache, 2017; Rogoza et al., 2021). Furthermore, Glover et al. (2012) revealed that the FFNI had incremental validity in accounting for variance within the NPI, the PNI-52, and most of the other narcissism scales. The original version has 148, all of which are time-consuming. Thus, Sherman et al. (2015) produced a 60-item version so that it can be used when assessment time is limited. Studies have demonstrated that the FFM personality disorder prototypes correspond well with the correlations between FFM facets and personality disorder symptoms, which means the FFM facets can be utilized as an accurate index for personality disorders (J. D. Miller et al., 2004).

Most psychological studies were conducted in the industrialized and democratic countries of the West and samplings were biased in favour of educated and rich people. This segment was labelled as WEIRD by Henrich et al. (2010), which only accounts for 12% of the world's population. As reported by Arnett (2008), samples from Asian countries made up only 4% of the total samples published in the Journal of Personality and Social Psychology from 2003 to 2007, but the figure was 62% for samples from the United States and 19% for samples from Europe. Besides, Foster et al. (2003) signified that participants from the United States reported more narcissism than Asian counterparts since narcissism was associated with individualism, which was relatively greater in the United States. Hence, we need more evidence from regions apart from western countries to draw conclusive outcomes.

Both the NPI and the PNI have been translated into Japanese, namely as NPI-J (e.g. Konishi et al., 2006) and PNI-J (Kawasaki & Oshio, 2015). To introduce the FFNI-SF into Japan, we first translated it into Japanese then verified whether it is adaptive in the Japanese cultural setting using combinations of FFNI-SF and existing Japanese scales.

2. Methods

2.1. Materials

2.1.1. The Japanese version of the short form of the Five-Factor Narcissism Inventory (FFNI-SF-J) The FFNI-SF (Sherman et al., 2015) is a 60-item measure of 15 subscales, namely acclaim-seeking, arrogance, authoritativeness, distrust, entitlement, exhibitionism, exploitativeness, grandiose fantasies, indifference, lack of empathy, manipulativeness, need for admiration, reactive anger, shame, and thrill-seeking. The FFNI-SF-J was translated from English into Japanese by a group of bilingual graduate students and back-translated by a translation agency. The equivalence of the original version and the back-translation was confirmed by the original author. The differences in nuance between English and Japanese were taken into careful consideration. The conceptually driven composite, vulnerable narcissism, can be computed as the sum/mean of the need for admiration, reactive anger, distrust, and shame. Another composite, grandiose narcissism, can be formulated as the sum/mean of the remaining subscales. It also has a three-factor structure where the FFNI antagonism is calculated as the sum of manipulativeness, exploitativeness, entitlement, lack of empathy, arrogance, reactive anger, distrust, and thrill-seeking, the FFNI extraversion is calculated as the sum of acclaim-seeking, authoritativeness, grandiose fantasies, and exhibitionism, and the FFNI neuroticism is calculated as the sum of shame, indifference (reversed), and need for admiration. Further, all items are scored on a 1 (strongly disagree) to 5 (strongly agree) scale.

2.1.2. The Japanese version of the Pathological Narcissism Inventory (PNI-J)

The PNI-J (Kawasaki & Oshio, 2015) is a 52-item measure of pathological narcissism that assesses both grandiose and vulnerable facets of narcissism. This measure includes seven subscales: GF = Grandiose Fantasy; CSE = Contingent Self-Esteem; DEV = Devaluing; EXP = Exploitativeness; SSSE = Self-Sacrificing Self-Enhancement; HS = Hiding the Self; ER = Entitlement Rage. GF, EXP, and SSSE constitute the grandiose facet and the remaining subscales are components of vulnerability. These items are scored on a 0 (not at all like me) to 5 (very much like me) scale.

2.1.3. The Japanese version of the Ten Item Personality Inventory (TIPI-J)

The TIPI-J (Oshio et al., 2012) is a very brief measure of the Big-Five personality domains that includes 10 items. Each domain (i.e. openness, extraversion, agreeableness, conscientiousness, and neuroticism) is assessed by one positively and one negatively worded item. It is a 7-point Likert-type scale ranging from 1 (disagree strongly) to 7 (agree strongly).

2.1.4. The Japanese version of the Dispositional Greed Scale (J-DGS)

The J-DGS (Masui et al., 2018) is a 7-item scale that has a unidimensional structure. Items are rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

2.1.5. The Japanese version of Rosenberg's Self-esteem Scale (RSES-J)

The RSES-J (Sakurai, 2000) is a unidimensional 10-item scale designed to measure explicit selfesteem. Questions ask both positive and negative feelings about the self, and items are scored on a 1 (strongly disagree) to 4 (strongly agree) scale.

2.2. Participant and procedure

The participants were 449 Japanese undergraduate students (321 Females, 171 males, 7 unknowns; mean age = 19.36, SD = 1.49) enrolled in three universities that are located in Tokyo and Kanagawa Prefecture.

We explained to all participants that their personal information and answers were completely confidential, and they had every right to refuse to answer the questions. Participants completed one of the four types of battery questionnaires: FFNI-SF and IPIP-IPC-J (n = 115); FFNI-SF and PNI-J (n = 92); FFNI-SF and SD3-J (n = 109); or FFNI-SF, TIPI-J, J-DGS, and RSES-J (n = 133). The four questionnaires were randomly distributed during lectures and collected on the spot.

The retest was carried out at one of the universities 4 weeks after the first survey to determine the test-retest reliability of the Japanese version of FFNI-SF. Participants were required to enter their initials, the sum of the numbers of the day and the month of their birthday, and the last four digits of their phone number. The combination of these pieces of information was used as a personal code by each participant for the convenience of the retest. In total, 92 sets of codes coincided with those in the main test.

2.3. Analyses

We conducted confirmatory factor analyses on four expected structures of FFNI-SF using Amos ver.26 to see which structure is the best fit. And we conducted analyses through SPSS ver.26 on item-subscale correlations and Cronbach's alphas to confirm the internal consistency, as well as the test-retest correlations to see the stability of FFNI-SF over time. We also carried out an exploratory factor analysis by SPSS ver. 26 to see whether there exists a better factor pattern for Japanese FFNI-SF. And last we figured out the correlations between FFNI-SF and TIPI-J, RSES-J, J-DGS, and PNI-J for the purpose of confirming the concurrent validity of FFNI-SF.

3. Results

3.1. Confirmatory factor analysis

The validity of the construct of FFNI-SF was evaluated through several confirmatory factor analyses on the four models. Model 1 had a structure of 15 factors, and 4 items were loaded on each factor. Model 2 had the same 15 factors, and one higher-order factor signifying unified narcissism was set. In Model 3, the 15 factors were kept unchanged, and two factors were determined to be the grandiosity and the vulnerability domains of narcissism, which were assumed to be correlated with each other. In Model 4, above the 15 subscales, extraversion, neuroticism, and antagonism were set as the higher-order factors which were correlated mutually. As shown in Table 1, it turned out that model 1 indicated the best fit for the dataset. Based on the results that $\chi 2/df = 2.27$ and RMSEA = .053, Model 1 had an acceptable level of fit, referring to the recommended thresholds for good fit (Hooper et al., 2008). The factor loadings of each item for model 1 are exhibited in Table 2.

Table 1.	Goodness-c	of-fit statis	tics for the	e four mod	els of conf	irmatory f	actor analy	/sis
Models	χ2	df	χ2/df	RMSEA	AGFI	GFI	CFI	NNFI (TLI)
Model 1	3644.05	1605	2.27	.053	.749	.780	.822	.803
Model 2	8352.61	1710	4.89	.093	.464	.499	.419	.399
Model 3	7708.25	1709	4.51	.088	.523	.555	.476	.457
Model 4	13,209.18	1770	7.46	.120	.239	.263	.000	.000

Note.

Model 1: 60 items, 15 factors.

Model 2: 60 items, 15 factors, and one higher-order factor (narcissism).

Model 3: 60 items, 15 factors, and two higher-order factors (grandiosity and vulnerability).

Model 4: 60 items, 15 factors, and three higher-order factors (extraversion, neuroticism, and antagonism).

Table 2. Item	-subscale corre	elations, results	of confirmate	ory factor analysis,	Cronbach's alphas, and	test-retest reliα	bility		
Item No.	Item-Sub	St. Est.	ಶ	~	Item No.	Item-Sub	St. Est.	ಶ	-
Acclaim-Seeking					Indiff	erence			
1	.64	.61	.77	.87	6	.64	.63	.79	69.
16	69.	.61			24	.82	.82		
31	.65	.79			39	.78	.77		
46	.72	.64			54	.57	.58		
Arrogance					Lack of	Empathy			
2	.42	.50	.63	.72	10	.29	.33	.65	.68
17	.70	.53			25	.69	.71		
32	.63	.48			40	.59	.59		
47	.48	.65			55	.73	69.		
Authoritativenes	Ň				Manipula	ativeness			
c	.52	.51	.68	.80	11	.81	.78	.81	.86
18	.57	.64			26	.82	.82		
33	64.	.52			41	.52	.54		
48	67.	.70			56	.76	.78		
Distrust						leed for Admiration			
4	.44	.51	.50	.78	12	.35	64.	.48	.73
19	.36	.23			27	.37	.27		
34	.44	.34			42	.41	.32		
49	.55	.63			57	.61	.60		
Entitlement					Reactiv	e Anger			
5	.75	77.	.75	.70	13	.67	.66	.72	62.
20	.25	.25			28	69.	.64		
35	.86	.87			43	.53	.59		
50	.87	.85			58	.62	.62		
									(Continued)

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Table 2. (Cont	tinued)									
Item No.	Item-Sub	St. Est.	ಶ	~		Item No.	Item-Sub	St. Est.	ಶ	-
Exhibitionism						Shame				
6	.78	.80	.72	.86		14	.71	.67	.77	.76
21	.51	.50				29	.61	.60		
36	.46	744				44	.66	.70		
51	62.	.81				59	.70	.71		
Exploitativeness						Thrill-S.	aeking			
7	62.	.80	68.	62.		15	.47	.49	.80	.85
22	.92	.91				30	.66	.66		
37	.80	.80				45	.87	.85		
52	62.	.80				60	.85	.86		
Grandiose Fanta	Isies									
8	.88	.82	.85	.84						
23	.81	.83				Total c	f FFNI		06.	.87
38	.67	.66								
53	.72	.76								
Note. Item-Sub =	· Item-subscale co	rrelations. St. Est. =	 Standardized est 	imated coefficient.	s in the confirmatory	/ factor analysis	of Model 1. $\alpha = co$	efficient alpha.r =	correlation coeffic	ients.

lues of rotated factors.



3.2. Internal consistency

As shown in Table 2, the alpha values of most subscales of FFNI-SF-J, specifically, acclaim-seeking, entitlement, exhibitionism, exploitativeness, grandiose fantasies, indifference, manipulativeness, reactive anger, shame, and thrill-seeking, were greater than 0.70, indicating that no further structure was needed. For the remaining five subscales, arrogance, authoritativeness, distrust, lack of empathy, and need for admiration, the alpha values were lower than 0.70 but none of them fell below 0.45. Thus, it can be safely assumed that all the alpha values were within the acceptable range. Furthermore, the alpha value of the total FFNI-SF-J was 0.90, which proved a fairly good internal consistency (Taber, 2016). As for the indicators of internal consistency, the item-subscale correlations and the standardized estimated coefficients in the confirmatory factor analysis of Model 1 for all of the 60 items were also calculated. Except for the 10th, 19th, 20th, and 27th item, all results supported high internal consistency for the FFNI-SF-J. Additionally, the test-retest correlations which ranged from .68 to .87 proved an acceptable level of stability over time (Nunnally & Bernstein, 1994).

Table 3. Rotated facto	r pattern of FFNI-SF		
	1	2	3
Acclaim Seeking	.82	03	11
Authoritativeness	.77	04	.01
Grandiose Fantasies	.72	.13	13
Arrogance	.69	04	.20
Exhibitionism	.68	03	47
Entitlement	.68	.01	.08
Manipulativeness	.61	13	.15
Thrill Seeking	.51	14	.04
Exploitativeness	.38	.13	.35
Shame	05	.77	.03
Need For Admiration	11	.69	05
Indifference	.06	62	.38
Reactive Anger	.31	.48	.26
Distrust	.01	.37	.34
Lack of Empathy	.00	12	.68
Inter-factor correlations	—	.19	.31
		_	03

Table 4. Correlation coel	fficients betweer	n FFNI-SF-J and bi	g-five personality tra	iits, greed, and self	-esteem		
			Big Five personality				
	Ш	A	C	z	0	Greed	SE
FFNI-SF-J	.14	20	.16	22	.32	87.	.22
FFNI-SF -J-Vulnerability	20	25	08	.36	02	.57	38
FFNI-SF -J-Grandiosity	.29	60	.27	28	L 4.	.38	07
FFNI-SF-J-Lack of Empathy	20	25	19	35	60	03	01
Subscale							
Acclaim-Seeking	.24	.04	.32	07	.35	.27	.22
Arrogance	.07	09	.25	31	.32	.20	.40
Authoritative ness	.32	17	.24	22	.22	.35	.34
Distrust	25	19	04	.07	.07	747	26
Entitlement	60.	06	.14	29	.31	12.	.38
Exhibitionism	.50	.07	.16	.06	.31	.14	.40
Exploitativeness	02	22	01	24	.08	22	.08
Grandiose Fantasies	.17	.01	.13	03	.27	.35	.22
Indifference	.03	.03	00.	37	.01	26	.21
Lack of Empathy	20	25	19	35	60'-	٤0.	01
Manipulative ness	.13	12	.26	42	72.	12	.29
Need for Admiration	18	12	15	.51	17	.31	53
Reactive Anger	08	38	04	.03	.14	.57	09
Shame	19	14	07	.31	12	.38	28
Thrill-Seeking	.31	.01	.17	20	.40	.27	.21
M	3.88	4.92	3.39	4.47	3.85	22.06	24.98
SD	1.44	1.15	1.26	1.23	1.26	5.14	6.11
α	.62	.41	.50	.37	67.	62.	.88

Note. N = 133. Statistical significance, p < .05, indicated in boldface. E = Extraversion; A = Agreeableness; C = Conscientiousness; N = Neuroticism; O = Openness; SE = Self-Esteem.



lable 5. Correlatio	ins between	FFN1-SF-J and p	athological nard	cissism inventory Patholog	/ ical Narcissism I	Inventory			
	GF	CSE	DEV	EXP	SSSE	HS	ER	Vulnerability	Grandiosity
FFNI-SF -J-Vulnerability	.43	.72	.52	16	. 40	.31	.57	.64	.32
FFNI-SF -J-Grandiosity	.62	.33	.21	.57	87.	.22	.47	.38	.71
FFNI-SF-J-Lack of Empathy	13	30	02	02	19	7 0.	03	10	15
Subscale									
Acclaim-Seeking	.53	.29	.18	.38	.38	.20	.36	.32	.56
Arrogance	.45	.18	.30	.46	.37	.23	.37	.33	.53
Authoritative ness	.46	.23	.14	.57	.45	.24	.35	.29	.61
Distrust	.11	.21	.45	.12	.16	.35	.27	.38	.17
Entitlement	.44	.11	.15	64.	.27	.11	.33	.22	.51
Exhibitionism	.45	.37	.06	.37	67	.11	.27	.25	.56
Exploitativeness	.21	.10	.24	.17	.11	.06	.30	.22	.27
Grandiose Fantasies	.79	.46	.17	.16	.45	.18	.43	.38	7 9'
Indifference	20	57	24	.16	30	02	24	33	16
Lack of Empathy	13	30	02	02	19	.04	03	10	15
Manipulative ness	.28	.12	.10	.72	.33	.15	.26	.19	.53
Need for Admiration	.33	.58	.25	22	.32	.15	.28	.38	.22
Reactive Anger	.36	.43	.46	08	.23	.27	.71	.58	.25
Shame	.42	.58	.35	19	.33	.26	.37	.47	.28
Thrill-Seeking	.13	00.	04	.32	.13	60.	.19	.08	.24
									(Continued)



	GF	CSE	DEV	EXP	SSSE	HS	ER	Vulnerability	Grandiosity
W	2.37	2.72	2.19	1.97	2.51	2.58	1.95	9.43	6.85
SD	1.11	0.91	0.89	0.80	68.0	0.78	1.01	3.58	2.80
α	68.	06.	.82	.75	.82	.71	.92	.86	69.

Pathological Narcissism Inventory

Table 5. (Continued)

Note. N = 92. Statistical significance, p < .05, indicated in boldface. GF = Grandiose Fantasy; CSE = Contingent Self-Esteem; DEV = Devaluing; EXP = Exploitativeness; SSSE = Self-Sacrificing Self-Enhancement; HS = Hiding the Self; ER = Entitlement Rage.



3.3. Exploratory factor analysis

According to the scree plot presented in Figure 1, three factors, all of which had an eigenvalue greater than 1, were extracted by maximum likelihood estimation with Promax rotation, and the factor pattern is presented in Table 3. We also evaluated the results by carrying out parallel analysis and a Velicer's Minimum Average Partial (MAP) test (both analyses were conducted by R ver. 3.5.3), and the former suggested a 4-factor result whereas the latter suggested a 3-factor result. Based on the previous studies that showed a 3-factor structure (Glover et al., 2012), we adopted the MAP criterion. Acclaim-seeking, authoritativeness, grandiose fantasies, arrogance, exhibitionism, entitlement, manipulativeness, thrill-seeking, and exploitativeness had relatively high loadings on Factor 1. Shame, need for admiration, indifference (reversed), reactive anger, and distrust contributed to Factor 2. Referring to the original factor pattern, Factor 1 represented Japanese grandiosity (hereinafter referred to as FFNI-SF -J-Grandiosity) and Factor 2 defined Japanese vulnerability (hereinafter referred to as FFNI-SF -J-Vulnerability). Besides, it seems likely that the lack of empathy, which is originally a component of grandiosity, was an isolated factor in the Japanese cultural setting (Factor 3).

3.4. The correlations between FFNI-SF-J and big-five, the greed, and self-esteem

Table 4 highlights the correlation coefficients between FFNI-SF-J and other variables. The results manifested a positive correlation between greed and both FFNI-SF-J-Grandiosity and FFNI-SF-J-Vulnerability, which agreed with a previous study (Miller & Maples, 2011) that reported narcissism personality disorder (NPD) having a negative correlation with greed avoidance. It should be noted that vulnerable narcissists appeared to have a stronger desire for possessions, provided that the significant positive correlation coefficient between greed and FFNI-SF-J-Vulnerability was r = .57 (p < .001), whereas that between greed and FFNI-SF-J-Grandiosity was just r = .38 (p < .001), and the difference was proved to be statistically significant by Fisher Z-transformation (z = 2.09, p = .036).

Similar to the results reported by a previous study (J.D. Miller et al., 2013), grandiose narcissists tend to be extraverted (r = .29, p < .001), while vulnerable narcissists tend to be introverted (r = -.20, p < .05). Since the construct of the FFNI vulnerable facet is based on the FFM neuroticism, it is reasonable to have a significantly positive correlation (r = .36, p < .001) between them. Moreover, FFNI-SF-J-Grandiosity turned out to have a significantly positive correlation with openness (r = .41, p < .001), whereas FFNI-SF-J-Vulnerability had little relation with openness (r = -.02, n.s.). Likewise, a previous study (Miller & Maples, 2011) validated that grandiose narcissism was positively correlated with openness and vulnerable narcissism did not show significant association with openness.

The results supported an appreciable correlation between FFNI-SF-J-Grandiosity and self-esteem (r = .40, p < .001), which was consistent with the results reported by a previous study (Jordan et al., 2003), which stated that participants who scored high on the Narcissistic Personality Inventory also got high scores on the Rosenberg Self-esteem Scale. As opposed to grandiosity, vulnerability was found to negatively correlate with self-esteem (r = -.38, p < .001). Notably, a previous study (Kawasaki & Kodama, 2010) has reported a similar result that explicit self-esteem positively correlated with grandiose narcissism and negatively correlated with hypersensitive (i.e. vulnerable) narcissism.

3.5. The correlations between FFNI-SF-J and PNI-J

Table 5 presents information about the correlations between FFNI-SF-J and PNI-J. The original research of FFNI (Glover et al., 2012) specified that the correlation coefficient between the two vulnerabilities of FFNI and PNI was r = .74 (p < .001) and a correlation between the two grandiosities was r = .30 (p < .001), respectively. By implementing the Japanese version of the factor pattern, the association between the vulnerable domains was r = .64 (p < .001), whereas the correlation between the grandiosities was more than doubled the original result (r = .71, p < .001). Fisher Z-transformation proved that the difference in the correlation between the grandiosities in this study and that in the original study was statistically significant (z = 4.38, p < .001). Additionally, similar findings were informed by Fossati et al. (2018) in a sample of Italian university students

validating that FFNI-SF grandiosity significantly correlated with PNI grandiosity (r = .55, p < .001) and FFNI-SF vulnerability significantly correlated with PNI vulnerability (r = .73, p < .001). As measures designed to examine the same psychological phenomenon, narcissism, they have several subscales in common. The most evident one is grandiose fantasies. The correlation between the two grandiose fantasies was .79 (p < .001). The second one is labelled exploitativeness in PNI but, in turn, reflects a manipulative interpersonal orientation (Pincus et al., 2009). Interestingly, this option did exhibit a respectable correlation with FFNI manipulativeness (r = .72, p < .001). The third one is labelled entitlement rage in PNI. This notion reflects angry effects when entitled expectations are not met (Pincus et al., 2009); hence, it is a subscale describing a reaction against unsatisfactory conditions rather than a desire to be entitled. Thus, it was quite reasonable to get a correlation of 0.71 (p < .001) between PNI-entitlement rage and FFNI reactive anger. The fourth one is labelled contingent self-esteem in PNI, reflecting a significantly fluctuating experience of self-esteem and acknowledgement of dysregulation in the absence of external sources of admiration and recognition (Pincus et al., 2009). This element is consistent with the concept of the need for admiration concerning the FFNI, which expresses a mental state of needing compliments of others to be content with oneself and it did show a high correlation (r = .58, p < .001). The fifth one is labelled self-sacrificing self-enhancement in PNI, the dependence on purportedly altruistic acts to support an inflated self-image (Pincus et al., 2009). It was quite rational such reliance to have a correlation of 0.49 (p < .001) with exhibitionism, which described as the tendency to entertain others and to attract attention.

Also, the lack of empathy had slightly negative correlations with both PNI vulnerability (r = -.10) and PNI grandiosity (r = -.15). These provided consistent evidence that the lack of empathy is disassociated with Japanese narcissism.

4. Discussion

This study aims to develop a Japanese version of the short form of the Five-Factor Narcissism Inventory and to evaluate its compatibility with the original version by conducting tests on its internal consistency and concurrent validity with other measures.

Albeit some exceptionable figures, the Japanese version of FFNI-SF showed good reliability from the perspective of item-subscale correlations, Cronbach's alphas, and test-retest correlations. Also, the FFNI-SF-J generally correlates well with other existing scales, which showed good validity. The 15 factors were proved to have an acceptable fit, and the EFA suggested that 3 higher-order factors could be derived.

On the grounds of correlations of FFNI-SF-J with the Big-Five personality, greed, and self-esteem, grandiose narcissists behave extravertedly, diligently and insensitively, and enjoy trying new things. By contrast, vulnerable narcissists are more introverted and anxious about the judgements of others. Weiss and Miller (2018) reviewed meta-analyses of the relationship between narcissism and general models of personality assessed by the FFM, and they also provided supportive evidence for the above characteristics, indicating a higher level of anxiety and hostility for vulnerable narcissists, and that grandiose narcissism correlated negatively with neuroticism (mean r = -.16) and positively correlated with openness (mean r = .30). Also, vulnerable narcissists displayed a stronger desire for abundance than their grandiose counterparts, for which the reason may be that vulnerable narcissists rely more on exterior judgements; thus, they have a stronger motivation to chase material wealth.

As mentioned in the results section, the relation between FFNI-SF-J-Grandiosity and PNI grandiosity was stronger than that in the original research (Glover et al., 2012), which mainly resulted from that the PNI correlated stronger with exhibitionism, authoritativeness, and acclaim-seeking in Japan than in the USA. These three may be regarded as pathological-like traits in Japan where 'The nail that sticks out gets hammered down'. Referring to the original research (Sherman et al., 2015), the composite factor, grandiosity, is calculated as the sum/mean of acclaim-seeking, arrogance, authoritativeness, entitlement, exhibitionism, exploitativeness, grandiose fantasies, indifference, lack of empathy, manipulativeness, and thrill-seeking and the remaining subscales compose the other factor, vulnerability. Nonetheless, the factor loadings suggested a slightly different pattern where the indifference (reversed) was a variable for vulnerability rather than grandiosity. Based on the exploratory factor analysis, the lack of empathy was excluded from grandiosity, yielding an isolated factor. One possible reason for this difference is that East Asians are comparatively more interdependent than Westerners (Markus & Kitayama, 1991; Takata, 1999), making lack-of-empathy a trait that is contrary to Japanese popular beliefs. Additionally, Takata (1999) reported that interdependent self-construal reached the highest state during the period from secondary school to university, and our participants were completely within this range, which may have exacerbated this tendency. So, we do not recommend that researchers rashly eliminate lack-of-empathy when using the FFNI-SF-J.

5. Limitations and conclusions

One limitation of this study was sampling bias. All participants were undergraduate students with an average age of 19.36 years, meaning that other age brackets were outside the scope of the investigation. To verify the quality of the Japanese version of FFNI-SF more precisely, a study covering a broader age range is indispensable. Another factor that restricted the comprehensiveness of the study was the self-report method, which highly depends on one's self-perception and self-assessment. The combined use of self- and informant-report may modify the bias to some extent. Albeit with these limitations, this study provided a series of further evidence for the reliability and validity of FFNI-SF and we clarified the rationale to introduce the scale into Japan.

Last, as the main difference between American and Japanese narcissism, a lack of empathy was found irrelevant to narcissism in Japan. Nevertheless, it is worth analysing why Japanese narcissists do have empathy for others and whether narcissists of other nations share this feature. Further comparative studies are required to figure out agreements and differences.

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Appendix

Japanese translation for the short-form version of the Five-Factor Narcissism Inventory 1私は極めて野心的だ。

2他の人は私が偉そうで自慢しすぎると言うが、私が言うことはすべて正しいと思う。

3リーダーシップを発揮することは、私にとって簡単なことだ。

4誰かに親切にされたら、その人は私に何かを求めているのだろうかと考える。

5私は特別扱いされるべき価値がある人間だと思う。

6私は人を楽しませることで大きな喜びを感じる。

7出世のために他人を利用するのは当然だと思う。

8私はいつか有名になることをよく空想する。

9人々が私を評価しても,私は全く気にしない。

10私は他人が望むものに関心がない。

11私は他人を操ることが得意だ。

12自分に自信をもつために、他の人から褒められることが必要だとよく感じる。

13私は批判されるのが大嫌いなので、もしそうなったら怒りが抑えられなくなる。

14私は自分が何か失敗したと気づいたときには、恥ずかしく思う。

15私は、「ゾクゾクする」体験をするために労力を惜しまないつもりだ。

16私は何が何でも成功したい。

17私は、自分と同じような実力を持つ人々としか付き合わない。

18私は,権力のある地位につくことが心地よい。

19私は他の人が私に正直に接してくれるだろうと信じている。

20他の人が従うルールが,私にも同じように適用されるとは思わない。

21私は他人に注目されるのが好きだ。

22私は、自分の出世のためなら人々を利用するだろう。

23私は多くの成功と権力を持つことをよく空想する。

24私は,他の人が自分のことをどう思おうが本当に気にしない。

25私はたいてい,他の人の苦しみをあまり気にしない。

26人を操って何かさせることができる。

27私は安定して自分という感覚を持っている。

28正当に扱われないと,私は激しく怒ることがある。

29人前で恥をかかされたら、私はとても嫌な気分になる。

30私は命知らずな面がある。

31私は偉大さを目指している。

32私は、自分と釣り合わない劣った人々と付き合って時間を無駄にしない。

33人々はたいてい、私の指導や権威に従うものだ。

34私は他人を信用するまで時間かかる。

35不公平に見えようが、私は特別扱いを受けるに値する (例えば、注目や特権、名誉)。

36私は宴会で一番人気になるのが好きだ。

37時々、あなたは成功のために他人を利用する必要がある。

38私は、大成功を空想することはめったにない。

39私は,他の人からの批判を気にかけない。

40私は他の人に同情するのがあまり好きではない。

41私は、どんなことでもうまく言って切り抜けることができる。

42私は,自分が人生で大成功するかどうかとても不安を感じる。

43欲しいものが手に入らない時,私は本当に腹が立つ。

44人に批判されたら,私は恥ずかしく思う。

45私は,怪我をするリスクを冒しても何か刺激的なことをするだろう。

46私は成功に向けて突き動かされている。

47私は優れた人間だ。

48私はほとんどの場面で主導権を握ろうとする傾向がある。

49私はよく,他の人が偽りのない真実を話していないと考えることがある。

50私は自分が特別待遇を受ける資格があると信じている。

51私は人々を楽しませるのが好きだ。

52私は自分の目的を達成するために、進んで他の人を利用する。

53私は自分の名前がいつか世間に知られると信じている。

54他の人がもつ私への意見は,私にはほとんど関心がない。

55人が苦しんでいても私が動揺することはない。

56人々に私の思い通りにさせるのは,簡単なことだ。

57他の人にどう思われるかを、そこまで気にしなかったらよかったのにと思う。

58人が私に失礼なことをしたら,私はひどく腹が立つ。

59他人の前でミスをした時には、私は自分を愚かだと思う。

60私は冒険的あるいは危険なことをするのが好きだ。



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