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Self-regulatory and narcissistic grandiosity and vulnerability: Common and discriminant relations

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ABSTRACT

In three studies we examined the unique relations of narcissistic grandiosity and vulnerability with the self-regulatory factors of promotion, prevention, assessment, and locomotion. We found that grandiosity has unique positive relations with promotion, assessment, and locomotion but is unrelated to prevention (Study 1). We also found that vulnerability has a unique positive relation with assessment, a unique negative one with promotion, and is unrelated to locomotion and prevention (Study 2). Study 3 replicated these findings and demonstrated that they do not derive from the self-regulatory factors' or grandiosity and vulnerability's associations with self-esteem. The results indicate that grandiosity and vulnerability have self-regulatory underpinnings and provide evidence of their *specific* discriminant nature. Further, they indicate that the critical evaluations associated with strong assessment concerns are a significant vulnerability for both narcissism presentations.

1. Introduction

Narcissism is of interest in both clinical and social-personality psychology (Luchner, Houston, Walker, & Houston, 2011). However, there are two presentations (e.g., Cain, Pincus, & Ansell, 2008); specifically, grandiosity or overt narcissism and vulnerability or covert narcissism (e.g., Luchner et al., 2011). Grandiosity, assessed using the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), is associated with feeling entitled and superior to others (Maxwell, Donnellan, Hopwood, & Ackerman, 2011) whereas vulnerability, assessed using the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997), is associated with feeling inadequate and incompetent (Miller, Gentile, Wilson, & Campbell, 2013). Similarly, grandiosity is positively related to self-esteem while vulnerability is negatively related (e.g., Foster & Trimm, 2008).

Although assessed using trait measures, grandiosity and vulnerability are proposed to co-exist within individuals (Morf & Rhodewalt, 2001) and people can fluctuate between the two presentations (Ronningstam, 2009). As a result, not surprisingly, grandiosity and vulnerability are weakly correlated (e.g., Luchner et al., 2011). Consequently, a central issue is which factors have similar relations with both presentations (i.e., are core factors) and which factors have distinct relations and differentiate between them. As it has been suggested that self-regulation is core to narcissism (e.g., Morf & Rhodewalt, 2001), the present studies examine the relations of grandiosity and vulnerability with the extents to which individuals self-regulate using a promotion and prevention focus (Higgins, Friedman, Harlow, Idson, & Taylor, 2001) and have assessment and locomotion concerns (Kruglanski et al., 2000).

Psychoanalytic and clinical theories view adult narcissism as an outcome of parental neglect (Otway & Vignoles, 2006). For example, arguing that childhood narcissism is a normal adaptive part of development, Kohut (1971) proposed that grandiosity and vulnerability develop when children do not receive appropriate mirroring and idealization responses from caregivers. To cope with this unresponsive environment, horizontal or vertical 'splitting' occurs. Horizontal splitting allows individuals to maintain overt grandiosity while denying feelings of shame and low self-esteem whereas vertical splitting results in conscious experiences of vulnerability, shame, and helplessness.

Building on Kohut's (1971) and other theories (e.g., Kernberg, 1975; Millon, 1981), Morf and Rhodewalt's (2001) dynamic self-regulatory processing model argues that narcissism is a manifestation of processes that maintain extremely positive self-views. Thus, they argued that narcissistic self-regulation focuses on advancement, growth, and accomplishment rather than security, duties,

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and obligations; concerns associated with being promotion- and prevention-focused, respectively (Higgins, 1997).

Individuals differ in the extent to which they are chronically promotion or prevention focused (e.g., Higgins et al., 2001). Promotion-focused individuals represent desired and undesired end-states as the presence and absence of positive outcomes (i.e., gains and non-gains), respectively (Higgins, 1997). They are concerned with advancement and accomplishment and, as a result, work to fulfil hopes and aspirations (Grant & Higgins, 2003). In contrast, prevention-focused individuals represent desired and undesired end-states as the absence and presence of negative outcomes (i.e., non-losses and losses), respectively (Higgins, 1997). They are concerned with safety and security and, as a result, work to meet duties and obligations (Grant & Higgins, 2003).

If "narcissists self-regulate with a promotion rather than a prevention focus" (Morf & Rhodewalt, 2001, p. 190), the extent to which individuals are promotion-focused (hereafter promotion) should be positively associated with grandiosity. Further, the extent to which they are prevention-focused (hereafter prevention) should be either unrelated or negatively related. However, Morf and Rhodewalt's (2001) proposition is silent about the relations of promotion and prevention with vulnerability. Moreover, factors beyond promotion and prevention need to be considered to understand the motivational nature of narcissistic self-regulation. One particular self-regulatory distinction that needs to be considered is that between assessment and locomotion concerns (e.g., Kruglanski et al., 2000). Successful self-regulation requires comparing and critically evaluating alternative goal options and alternative goal pursuit means so that the right or best goal to pursue and the right or best means to pursue it are selected (hereafter, assessment). Successful self-regulation also requires managing movement from state to state and to make things happen to effect change (hereafter, locomotion). Individuals differ in the extent to which they are concerned with assessment and locomotion (Kruglanski et al., 2000). Whereas promotion and prevention involve attaining or maintaining desired end-states, assessment involves establishing the right/best choice of what to do and locomotion involves managing to make things 'happen'. Thus, promotion, prevention, assessment, and locomotion relate to different kinds of effective self-regulation (Higgins, 2012).

Grandiosity and vulnerability share positive relations with hypercompetitiveness which includes being critical of others (Luchner et al., 2011). Further, grandiosity is positively related to engaging in social comparisons (e.g., Krizan & Bushman, 2011). As critical evaluations and making social comparisons are both forms of assessment, these relations suggest that grandiosity and vulnerability are both positively related to assessment.

Grandiosity is associated with viewing 'getting ahead' (i.e., achieving one's goals) as more important than getting along with others (Morf & Rhodewalt, 2001). Thus, it is likely positively related to locomotion. Although research has not examined vulnerability's relations with goal achievement, the hypersensitivity associated with this presentation (Dickinson & Pincus, 2003) probably impedes the effective pursuit of goals. As a result, vulnerability is less likely to be related to locomotion.

One final consideration is the role of self-esteem. Scores on Rosenberg's (1965) Self-esteem Scale (RSES) are positively related to promotion and locomotion, unrelated to prevention, and negatively related to assessment (e.g., Higgins, 2008). Similarly, promotion-focused individuals are more likely than prevention-focused individuals to 'inflate the self' to maintain the eagerness that fits promotion (Scholer, Ozaki, & Higgins, 2014). Finally, grandiosity is positively associated with self-esteem (i.e., inflated self-views) whereas vulnerability is negatively associated. Because of such associations with self-esteem, it was important for us to determine whether the relations between narcissistic grandiosity and vulnerability and the self-regulatory factors of promotion, prevention, assessment, and locomotion might be due to their associations with self-esteem.

Taken together, evidence suggests that assessment might be a 'core' factor in narcissism, being positively related to both grandiosity and vulnerability. In contrast, promotion and locomotion could motivationally differentiate them. Thus, the major purpose of our research was to examine the distinct relations of grandiosity and vulnerability with promotion, prevention, assessment, and locomotion. Further, as noted above, because these factors have differential associations with self-esteem, as do grandiosity and vulnerability, we examined whether any distinct relations that the self-regulatory factors have with grandiosity or vulnerability might be due simply to their differential associations with self-esteem.

2. Study 1

This study was designed to examine whether promotion, assessment, and locomotion have unique positive relations with grandiosity.

2.1. Method

2.1.1. Participants

Participants were 141 students (70% female, mean age 22 years, *SD* = 5.41, range = 18–44 years) who participated in partial fulfilment of a research participation course requirement. Of these, 78 were born in Australia whereas the remainder were born in a number of other countries, including those in South-East Asian (*N* = 49). Those born overseas had lived in Australia for, on average, 5.65 years (*SD* = 5.81, range = 1–25 years).

2.1.2. Measures and procedure

Participants completed the following measures presented on personal computers:

Grandiosity was assessed using the NPI. This presented the narcissistic statements of Raskin and Terry's (1988) 40 forced-choice items and participants indicated whether these were or were not self-descriptive. The number of self-descriptive items was counted.

Promotion and *prevention* were assessed using Higgins et al.'s (2000) 11-item Regulatory Focus Questionnaire (RFQ). Six items assess individuals' subjective experiences of being effective in promotion (promotion pride) and 5 assess individuals' subjective experiences of being effective in prevention (prevention pride). Participants rated how often each item was true for them on 6-point likert scales, from *never or seldom* (1) to *very often* (6). The mean across items was calculated. As the two subscales assess subjective experiences of self-regulatory effectiveness (i.e., promotion & prevention pride), these factors typically are modestly positively correlated (e.g., Grant & Higgins, 2003).

Assessment and *locomotion* were assessed using Kruglanski et al.'s (2000) 24-item Regulatory Mode Questionnaire (RMQ). Twelve items assess assessment and 12 assess locomotion. Participants indicated the extent to which they agreed or disagreed that each item described them on 6-point likert scales, from *disagree strongly* (1) to *agree strongly* (6). The mean across scale items was calculated.

2.2. Results and discussion

The measures were internally consistent (see Table 1). On average, participants reported moderately high promotion, prevention, assessment, and locomotion, and moderate grandiosity. Promotion was positively correlated with prevention and locomotion, and

Table 1
Descriptive statistics and zero-order correlations, Study 1.

	Mean	*SD*	Promotion	Prevention	Locomotion	Assessment	Grandiosity
Promotion	4.12	.64	(.60)	.21*	.37***	−.18*	.26***
Prevention	3.81	.89		(.78)	.09	−.01	−.06
Locomotion	4.31	.65			(.79)	.34***	.37***
Assessment	4.28	.69				(.80)	.32***
Grandiosity	22.67	7.84					(.89)

Note: The value of Cronbach's alpha for each scale is shown on the diagonal in parentheses.
* $p < .05$.
*** $p < .001$.

negatively correlated with assessment. Similarly, assessment and locomotion were positively correlated. However, prevention was unrelated to assessment and locomotion. Finally, promotion, assessment, and locomotion were positively correlated with grandiosity whereas prevention was unrelated.

A regression analysis conducted in Mplus 7.0 (Muthén & Muthén, 2013) revealed that together the self-regulatory factors accounted for 24% of the variance ($p < .001$) in grandiosity. Consistent with predictions, promotion ($\beta = .27$, $p < .001$), assessment ($\beta = .30$, $p < .001$), and locomotion ($\beta = .18$, $p < .001$) had unique positive relations with grandiosity. However, prevention was unrelated ($\beta = -.13$, $p = .072$).

3. Study 2

This study was designed to examine whether promotion has a unique negative relation with vulnerability whereas assessment has a unique positive one.

3.1. Method

3.1.1. Participants

Participants were 192 students (72% female, mean age 19 years, *SD* = 3.07, age range 17–44 years) who participated in partial fulfilment of a research participation course requirement. Of these, 112 were born in Australia whereas the remainder were born in a number of other countries, including those in South-East Asia ($N = 54$). Those born overseas had lived in Australia for, on average, 5.26 years (*SD* = 5.74, range = 1–21 years).

3.1.2. Measures and procedure

As in Study 1, participants completed the RFQ and the RMQ. They also completed the 10-item HSNS (Hendin & Cheek, 1997), indicating the extent to which they agreed or disagreed that each item described them on 6-point likert scales, from *strongly disagree* (1) to *strongly agree* (6). The mean across scale items was calculated.

3.2. Results and discussion

The measures were internally consistent (see Table 2). On average, participants reported moderately high promotion, prevention, assessment, and locomotion, and moderate vulnerability. Consistent with Study 1 results, promotion was positively correlated with prevention and locomotion. Similarly, assessment and locomotion were correlated. However, unlike Study 1 results, promotion and assessment were unrelated. Finally, vulnerability was positively correlated with assessment and negatively correlated with promotion and locomotion.

A regression analysis conducted in Mplus 7.0 revealed that together the self-regulatory factors accounted for 21% of the variance ($p < .001$) in vulnerability. Consistent with predictions, promotion ($\beta = -.18$, $p = .016$) had a unique negative relation whereas assessment ($\beta = .39$, $p < .001$) had a unique positive one. However, neither prevention ($\beta = -.01$, $p = .894$) nor locomotion ($\beta = -.15$, $p = .065$) were related.

Taken together, the results of Studies 1 and 2 indicate that, consistent with predictions, grandiosity and vulnerability both have a unique positive relation with assessment. However, they diverge with regard to their relationships with promotion and locomotion. Grandiosity is positively related to both factors whereas vulnerability is negatively related to promotion and unrelated to locomotion. Finally, neither presentation is related to prevention.

4. Study 3

In Study 1 promotion, assessment, and locomotion had unique positive relations with grandiosity. In Study 2 promotion had a unique negative relation with vulnerability whereas assessment had a unique positive one. As these studies are the first to examine these relations, they require replication. Accordingly, this study was designed to determine whether these effects would be replicated using a different sample. In addition, it was also designed to examine whether the relations of the self-regulatory factors with grandiosity and vulnerability might be due to their differential associations with self-esteem.

4.1. Method

4.1.1. Participants

Participants were 176 students (76% female, mean age 20 years, *SD* = 4.16, range = 17–51 years) who participated in partial fulfilment of a research participation course requirement. Of these,

Table 2
Descriptive statistics and zero-order correlations, Study 2.

	Mean	*SD*	Promotion	Prevention	Locomotion	Assessment	Vulnerability
Promotion	4.21	.80	(.71)	.17*	.51***	−.05	−.28***
Prevention	3.89	1.03		(.78)	.06	−.06	−.07
Locomotion	4.01	.72			(.81)	.21**	−.15*
Assessment	4.26	.66				(.75)	.38***
Vulnerability	3.47	.76					(.74)

Note: The value of Cronbach's alpha for each scale is shown in parentheses on the diagonal.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

119 were born in Australia whereas the remainder were born in a number of other countries, including those in South-East Asia (N = 41). Those born overseas had lived in Australia for, on average, 8.80 years (SD = 8.97, range = 1–40 years).

4.1.2. Measures and procedure

As in Studies 1 and 2, participants completed the RFQ and the RMQ. However, RFQ items were assessed on 5-point likert scales rather than on 6-point ones. Participants also completed the NPI and the HSNS. Finally, they completed the 10-item RSES, indicating how often each item described them on 5-point Likert scales, from *never* (1) to *always* (5). The mean level of endorsement across items was calculated.

4.1.3. Data analysis

As in Studies 1 and 2, we first examined the correlations between our variables. Using Mplus 7.0, we then simultaneously regressed grandiosity and vulnerability on the self-regulatory factors. As this analysis included the correlated residuals between grandiosity and vulnerability as well as those between the self-regulatory factors, it was identical to conducting two separate multiple regression analyses. Thus, we could directly compare these results with those obtained in Studies 1 and 2. Finally, to examine whether any relations of grandiosity and vulnerability with the self-regulatory factors occur because of their differential associations with self-esteem, we conducted an additional hierarchical regression analysis that included self-esteem. This analysis examined the direct and indirect effects of the self-regulatory factors and the direct effects of self-esteem on grandiosity and vulnerability. The bootstrapped bias-corrected 95% confidence intervals of the indirect effects were computed using 5000 samples. Confidence intervals that do not contain zero provide evidence of indirect effects (Preacher & Hayes, 2008).

4.2. Results and discussion

The measures were internally consistent (see Table 3). As in Studies 1 and 2, on average, participants reported moderately high promotion, prevention, assessment, and locomotion, and moderate grandiosity and vulnerability. As in those studies, promotion and locomotion were correlated. However, prevention and assessment were unrelated to each other and to locomotion. As in Study 1, promotion, assessment, and locomotion were positively correlated with grandiosity and prevention was unrelated. As in Study 2, vulnerability was positively correlated with assessment, negatively correlated with promotion, and unrelated to prevention. However, unlike in Study 2, vulnerability was unrelated to locomotion (although, notably, in Study 2 the correlation was −.15 whereas here the correlation was −.13). Consistent with the results of Foster and Trimm (2008), self-esteem was positively related to grandiosity and negatively related to vulnerability. Finally, consistent with Higgins's (2008) results, self-esteem was positively related to promotion and locomotion, negatively related to assessment, and unrelated to prevention.

4.2.1. Relationships of self-regulatory factors with grandiosity and vulnerability

Together 30% of the variance in grandiosity (p < .001) and 34% of the variance in vulnerability (p < .001) was accounted for by the self-regulatory factors. Consistent with Study 1 results, grandiosity had unique positive relations with promotion (β = .26, p = .001), assessment (β = .25, p < .001), and locomotion (β = .27, p < .001) but was unrelated to prevention (β = −.11, p = .096). Similarly, as in Study 2, vulnerability had a unique negative relation with promotion (β = −.39, p < .001), a positive one with assessment (β = .45, p < .001), but was unrelated to prevention (β = −.09, p = .134) and locomotion (β = .08, p = .316). Thus, Study 3 results replicated Study 1 and 2's major findings.

4.2.2. The role of self-esteem

To determine whether the relations between the self-regulatory factors with grandiosity and vulnerability might be due to their associations with self-esteem, we conducted an additional analysis. This included self-esteem as an additional predictor and specified the indirect effects through self-esteem of promotion, locomotion, and assessment on grandiosity and of promotion and assessment on vulnerability.

Self-esteem did not account for additional variance in grandiosity, R^2 = .29. Thus, the relations of promotion, assessment, and locomotion did not derive from promotion and locomotion's positive relation with self-esteem or assessment's negative one.

The inclusion of self-esteem accounted for an additional 3% of the variance in vulnerability, R^2 = .37. Consistent with Foster and Trimm's (2008) results, self-esteem had a unique negative association with vulnerability (β = −.25, p = .005). Further, it partially accounted for vulnerability's relationship with promotion (β = −.15, p = .009, 95% CI = −.477, −.076). However, it did not account for vulnerability's relation with assessment (β = .04, p = .053, 95% CI = −.013, .094). Further, importantly, both promotion (β = −.25, p = .026) and assessment (β = .43, p < .001) remained predictors controlling for self-esteem. Accordingly, vulnerability's unique negative relation with promotion does not derive from this factor's positive relation with self-esteem, although it does contribute. Similarly, vulnerability's unique positive relation with assessment does not derive from this factor's negative relation with self-esteem.

5. General discussion

The current three studies were designed to examine the relations of the self-regulatory factors of promotion, prevention,

Table 3
Descriptive statistics and zero-order correlations, Study 3.

	Mean	*SD*	1	2	3	4	5	6	7
1. Promotion	3.58	.54	(.68)	−.04	.59***	−.00	.64***	.42***	−.34***
2. Prevention	3.54	.65		(.75)	.07	−.14	.10	−.13	−.14
3. Locomotion	4.07	.70			(.79)	.06	.40***	.43***	−.13
4. Assessment	4.10	.76				(.81)	−.16*	.28***	.47***
5. Self-esteem	4.32	1.00					(.89)	.25***	−.43***
6. Grandiosity	17.38	6.61						(.83)	.17*
7. Vulnerability	3.36	.77							(.76)

Note: The value of Cronbach's alpha for each scale is shown in parentheses on the diagonal.
** p < .01.
* p < .05.
*** p < .001.

assessment, and locomotion with narcissistic grandiosity and vulnerability. Using information about the nature of promotion- and prevention-focused self-regulation (Higgins, 1997) and assessment and locomotion concerns (e.g., Kruglanski et al., 2000), we predicted and found that NPI-assessed grandiosity had unique positive relations with promotion, assessment, and locomotion. Similarly, consistent with predictions, HSNS-assessed vulnerability had a unique positive relation with assessment and a unique negative one with promotion. However, vulnerability was unrelated to locomotion and both grandiosity and vulnerability were unrelated to prevention.

We also examined whether the unique relations of grandiosity and vulnerability with the self-regulatory factors were accounted for by both sets of factors' relations with self-esteem. Despite self-esteem being a 'crucial' aspect of grandiosity (e.g., Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), this factor did not account for promotion, assessment, and locomotion's positive relations with grandiosity. Furthermore, it did not account for assessment's positive relation with vulnerability. However, it partially accounted for promotion's negative relation with vulnerability although promotion remained negatively related to the narcissism presentation even when controlling for self-esteem.

Taken together these findings indicate that the relations of the self-regulatory factors with grandiosity and vulnerability occur for reasons other than their relations with self-esteem. This could occur because promotion-focused individuals are concerned with maintaining the eagerness that sustains or fits the promotion system (e.g., Higgins, 2000) which leads them to inflate their self-evaluations (Scholer et al., 2014), producing grandiosity and protecting against vulnerability. Thus, although individuals who are high in grandiosity are "zealous pursuers of esteem" (Krizan & Bushman, 2011, p. 216), this pursuit may be an outcome of, rather than a precursor to, grandiosity. Similarly, the results suggest that factors, such as low esteem, sensitivity to criticism, and shame proneness, which are positively related to vulnerability (e.g., Hendin & Cheek, 1997), are likely to be outcomes rather than precursors. Of course, this is speculative and requires investigation in future research.

Our findings suggest that the self-regulatory factor that increases individuals' susceptibility to both narcissism presentations is assessment. This factor had positive unique relations with both grandiosity and vulnerability, independent of its negative relation with self-esteem. One possible reason for this is that individuals particularly high in assessment (i.e., 'strong' assessors) are not only critical of themselves (i.e., the self-criticism that lowers self-esteem) but also they always want to do 'what's right'. This could lead to grandiosity when individuals succeed and vulnerability when they fail, providing a possible mechanism for the proposed switching between the narcissism forms (e.g., Ronningstam, 2009).

It is possible that strong assessors want to do what is right because, when they were growing up, they did not receive sufficient feedback from caretakers about their choices, making them uncertain of them. As a result, as adults they require greater certainty about their choices' correctness or appropriateness than others do. This interpretation is consistent with psychoanalytic and clinical theories of narcissism as the outcome of parental neglect (e.g., Kohut, 1971; Otway & Vignoles, 2006).

Second, it is interesting that assessment is positively related to both grandiosity and vulnerability whereas prevention is related to neither. This indicates the discriminability of assessment and prevention. Both factors are associated with doing what 'should' be done rather than just moving away from the current state to a new one. However, the nature of the 'should' associated with assessment is different to that associated with prevention. Assessment is associated with making the right or best choice among alternatives, which can mean continuing to seek new options that might be better than the present ones *before* taking action. In contrast, prevention is associated with meeting duties and obligations (i.e., what one 'ought' to do). As a result, those high in prevention maintain a satisfactory, safe status quo by being careful and not making mistakes, which often means restricting options to just those that are necessary rather than considering all possible options to find the right or best one. Thus, the present results suggest that both narcissism presentations are associated with being motivated with making the right or best choice rather than doing what one 'ought' to do.

One other aspect of our findings that should be highlighted is the discriminant relations that were obtained. First, both promotion and locomotion were positively related to grandiosity but were, respectively, negatively related and unrelated to vulnerability. This suggests another mechanism for switching between grandiosity and vulnerability, specifically when one fails to attain positive outcomes (i.e., promotion failure) or does not manage to move from one's current state to a new one (i.e., locomotion failure). Further, as both promotion and locomotion are critical for self-regulatory control and performance (Higgins, 2012), our findings are consistent with the proposition that grandiosity is more 'adaptive' than vulnerability (Cain et al., 2008).

Our studies do have limitations. First, they used college student samples. Accordingly, their results need to be generalized with caution. However, the majority of research examining narcissism in social and personality psychology uses these samples (e.g., Cater, Zeigler-Hill, & Vonk, 2011) and there is evidence that both presentations are dimensional (Miller et al., 2011). Thus, it is likely that our results have wider applicability although this should be examined in future research, especially with clinical samples. Second, our studies are correlational. As a result, although we speculated that the self-regulatory factors are precursors of grandiosity and vulnerability, this could not be evaluated in the current studies.

We believe that our research's most important finding is that assessment is the self-regulatory factor positively related to *both* narcissistic grandiosity *and* vulnerability. This was the case when promotion, locomotion, and prevention were statistically controlled and was not due to assessment's relations with self-esteem. As noted earlier, the relation between assessment and needing to be 'right' suggests that assessment concerns are the critical self-regulatory deficit underlying narcissism. Thus, further research is needed to investigate the role of assessment concerns in narcissism. This includes experimental studies that induce an assessment state (Avnet & Higgins, 2003) and measure its effect on narcissistic outcomes, as well as those that examine narcissistic individuals' assessment concerns with being right (and best) and test assessment's potential role as mediator of the relations between the two forms of narcissism and their outcomes.

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