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PII: S0092-6566(19)30103-5
DOI: https://doi.org/10.1016/j.jrp.2019.103882
Reference: YJRPE 103882

To appear in: *Journal of Research in Personality*

Received Date: 4 July 2019
Revised Date: 30 September 2019
Accepted Date: 1 October 2019

Please cite this article as: Cichocka, A., Cislak, A., Stronge, S., Osborne, D., Sibley, C.G., Does high self-esteem foster narcissism? Testing the bidirectional relationships between self-esteem, narcissistic admiration and rivalry, *Journal of Research in Personality* (2019), doi: https://doi.org/10.1016/j.jrp.2019.103882

Does high self-esteem foster narcissism?

Testing the bidirectional relationships between self-esteem, narcissistic admiration and rivalry

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Cichocka and Cislak designed and conducted the study. Cichocka conducted the data analyses, which were checked by the remaining authors. The first draft was written by Cichocka, and substantial editing was contributed by all authors.

This work was supported by the Polish National Science Center [grant number 2014/13/B/HS6/03137] and the Templeton Religion Trust [grant number TRT0196]. The authors would like to thank Michał Główczewski for his help with manuscript preparation.

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Abstract

We examined the longitudinal associations between self-esteem and narcissism in a three-wave panel study (*N*=557). In a standard cross-lagged panel model, self-esteem had a positive bidirectional relationship with narcissistic admiration. Narcissistic rivalry predicted increases in narcissistic admiration, but the corresponding reciprocal cross-lagged effect was not significant, nor were the cross-lagged associations between self-esteem and narcissistic rivalry. However, a random-intercept cross-lagged panel model (which partitions between- and within-person variance) failed to identify significant cross-lagged relationships between self-esteem and admiration or rivalry. Rather, self-esteem correlated positively with narcissistic admiration (but not rivalry) only at the trait level. Furthermore, we observed positive bidirectional associations between admiration and rivalry, suggesting that the within-person fluctuations in these two sub-dimensions of narcissism mutually reinforce each other.

Keywords: self-esteem, narcissism, admiration, rivalry, random-intercept cross-lagged panel model

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Narcissism, or a feeling of "entitled self-importance" (Krizan & Herlache, 2017; p. 4), is often linked to undesirable social functioning. Narcissistic individuals tend to be arrogant, impulsive, low in empathy, interpersonally aggressive and dominant (e.g., Back et al., 2013; Bushman & Baumeister, 1998; Cichocka, Dhont, & Makwana, 2017; Krizan & Herlache, 2017; Paulhus, Robins, Trzesniewski, & Tracy, 2004). Yet, because it assumes a positive self-evaluation, narcissism usually correlates positively with self-esteem (e.g., Emmons, 1984; Hyatt et al., 2018). Thus, psychologists, as well as the public, have wondered whether attempts to boost feelings of self-worth might result in increased entitlement and narcissism (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003), thereby indirectly promoting socially undesirable outcomes. Consequently, self-esteem has begun to receive "bad press" (Sanchez, 2017; Singal, 2017), presumably due to its links with narcissism. Yet, there is little empirical evidence that self-esteem breeds narcissism. Accordingly, the challenge for personality research is to examine whether high or excessive self-esteem temporally precedes increases in narcissism as is often assumed. We contribute to this debate by examining the longitudinal associations between narcissism and self-esteem.

Some researchers argue that over-inflated feelings of self-worth might foster higher narcissism in the future (e.g., Twenge, 2006). However, nomological network analyses find little evidence that self-esteem and narcissism reflect similar psychological processes (e.g., Hyatt et al., 2018). In fact, recent research and theorizing stress the independence of self-esteem and narcissism (Brummelman, Thomaes, & Sedikides, 2016; Crowe, Sleep, Carter, Campbell, & Miller, 2018). For example, Brummelman, Thomaes, Nelemans, Orobio de Castro, and Bushman (2015) demonstrated that while parental over-evaluation nurtures narcissism, the aetiology of self-esteem is different—it stems from experiences of parental warmth. Others point to different, even opposing, outcomes associated with self-esteem and narcissism (e.g., Bushman & Baumeister, 1998; Cichocka, Marchlewska, & Golec de Zavala, 2016; Marchlewska & Cichocka, 2017). For instance, high narcissism, but low self-esteem, predicts antisocial (Paulhus et al., 2004) and anti-democratic attitudes (Marchlewska, Castellanos, Kofta, Lewczuk, & Cichocka, 2019).

Life-span research similarly suggests that fluctuations in self-esteem and narcissism do not necessarily go hand in hand (Brummelman et al., 2016). Whereas narcissism peaks in adolescence and decreases in adulthood (e.g., Carlson & Gjerde, 2009; Foster, Campbell, & Twenge, 2003), self-esteem is lowest in adolescence and increases later in life (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Crucially, the scarce longitudinal research needed to investigate reciprocal associations between self-esteem and narcissism in adulthood finds no evidence that high self-esteem predicts narcissism longitudinally, but rather, reveals that narcissism is a very stable personality trait (Orth & Luciano, 2015).

Although insightful, prior longitudinal work overlooks the distinct subtypes and dimensions of narcissism. For example, there is a theoretical debate on the existence of grandiose and vulnerable types of narcissism (e.g., Cain, Pincus, & Ansell, 2008; Stronge, Cichocka, & Sibley, 2016). Grandiose narcissism tends to correlate with high self-evaluation, whereas vulnerable narcissism is more likely to correlate with low feelings of self-worth (see Krizan & Herlache, 2017; Pincus, Cain & Wright, 2014). Because the aim of our research is to understand the dynamics of positive self-regard, here we focus specifically on narcissistic grandiosity.

Crucially, Back and colleagues (2013) proposed that grandiose narcissism might further be characterised by two related dimensions: admiration and rivalry. Their model assumes that the maintenance of a grandiose self-image is achieved via self-promotion and self-defence. Self-promotion is linked to assertive self-enhancement, which results in narcissistic striving for admiration. This dynamic is characterised by looking for uniqueness, engaging in grandiose fantasies and charming behaviour. Conversely, self-defence is linked to antagonistic self-protection, which results in narcissistic rivalry. This dynamic is characterised by looking for supremacy, devaluing others and being generally aggressive.

Cross-sectional research reveals that self-esteem correlates positively with narcissistic admiration, but negatively with narcissistic rivalry (e.g., Back et al., 2013; Leckelt et al., 2018). Furthermore, a recent diary study found that narcissistic admiration correlated with higher and more stable state self-esteem, whereas rivalry was associated with lower and more variable self-esteem (Geukes et al., 2017). Thus, changes in self-esteem may subsequently influence levels of narcissistic admiration, but not narcissistic rivalry. Another possibility is that these two dimensions differentially affect levels of self-esteem. We investigate these possibilities in our study.

Overview

Using data from a three-wave longitudinal survey[1], we investigate the mutual relationships between self-esteem and the admiration and rivalry aspects of narcissism over time. To this end, we test the cross-lagged associations between these three variables.

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[1] The first wave of this dataset was previously used by Cislak, Cichocka, Wojcik, and Frankowska (2018). Data, materials and code used for the current analyses are posted at: https://osf.io/7ckq6/?view_only=f5e0f01d6798423da0ba4d93251b1072. The study was not pre-registered.

Because numerous methodologists have critiqued standard cross-lagged panel models for confounding within-person change with between-person change (e.g., Hamaker, Kuiper, & Grasman, 2015), in addition to the standard model, we used a random-intercept cross-lagged panel model to examine our research question. The latter approach distinguishes the between-person (i.e., trait-like) associations from the within-person (i.e., time-varying) associations (e.g., Hamaker et al., 2015), thereby allowing us to examine how changes in self-esteem and the distinct components of narcissism influence each other over time *within* the individual.

Method

Participants and procedure. We used data from a large survey conducted among adults working in various organizations. Participants were recruited by an external research agency and took part in computer-assisted phone interviews in their workplace. We aimed for a sample of full-time employees, approximately one-third at non-managerial positions, one-third at low- or medium-level managerial positions, and one-third at the top managerial positions, balancing for gender at each level of the organization. Wave 1 surveyed 557 participants[2], including 284 women and 273 men, aged 19-67 (M=39.89, SD=9.47). Participants varied in terms of their current positions, 194 were assistants or line employees,

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[2] We originally obtained data from 600 participants but excluded 43 individuals who did not satisfy our basic inclusion criteria (e.g., not having a full-time position, failing to give full consent for participating in the study). Although the survey was not designed specifically for this project, we generally aimed for a sample size that would provide 80% power to detect the typical effect size in social/personality psychology of r=.21 (Richard, Bond Jr., & Stokes-Zoota, 2003; Vazire, 2015). Using GPower, we estimated the target sample size to be at least 173. Accordingly, we aimed for this sample size in the final wave.

201 were low- or medium-level managers, and the remaining 162 were high level or top managers. Participants completed measures of narcissism and self-esteem, among other variables. We retained 239 participants in Wave 2 and 158 participants in Wave 3. Missing data were handled with the full information maximum likelihood (FIML) estimation[3].

Waves were separated by intervals of around six months. Although this lag was not planned specifically for the purposes of these analyses, it was similar to previous research examining longitudinal associations between narcissism and self-esteem in adults (e.g., Orth & Luciano, 2015).

Measures.

Narcissism was measured with the six-item version of the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). Participants indicated whether statements such as “I deserve to be seen as a great personality” (Admiration Subscale) and “I want my rivals to fail” (Rivalry Subscale) apply to them on a scale from 1= *definitely disagree* to 7 = *definitely agree*.

Self-esteem was measured with the single-item self-esteem measure (Robins, Hendin, & Trzesniewski, 2001). Participants indicated whether the statement “I have high self-esteem” applies to them on a scale from 1 = *definitely disagree* to 7 = *definitely agree*.

Results

[3] We checked whether missingness in our dataset was related to any of our variables of interest. We found that missingness was significantly related only to Time 1 rivalry, although this effect was small (partial η^2=.016). Those high in rivalry were less likely to take part in the third wave (compared to first and second waves). Analyses using auxiliary variables yielded very similar results to the ones reported in the text.

Means, standard deviations, reliabilities and zero-order correlations between the three key variables are presented in Table 1. Across the three waves, we observed significant positive correlations between self-esteem and both narcissistic admiration and narcissistic rivalry.

-- Table 1 –

Cross-lagged panel model

To examine the bidirectional associations of self-esteem, narcissistic admiration and rivalry over time, we specified a standard cross-lagged panel model in which all the Time 1 variables predicted the Time 2 variables, and all the Time 2 variables predicted the Time 3 variables. We also estimated the contemporaneous correlations between all three variables at Time 1, as well as the correlated error terms at Time 2 and Time 3. Because the time-lag between waves was approximately equal, we constrained the autoregressive and the cross-lagged paths to be time invariant in order to reduce model complexity. This model showed reasonable fit to the data, $\chi^2(18) = 76.48$, $p < .001$, $TLI = .90$, $CFI = .95$, $RMSEA = .08$ [.06, .09].

As shown in Table 2, we observed reciprocal positive cross-lagged effects between self-esteem and narcissistic admiration. However, there were no cross-lagged effects between self-esteem and narcissistic rivalry. Narcissistic rivalry also predicted increases in narcissistic admiration over time, but the opposite effect was not significant: narcissistic admiration did not predict subsequent scores on narcissistic rivalry. Overall, these results are consistent with past work (Back et al., 2013; Geukes et al., 2017) and demonstrate positive cross-lagged associations between self-esteem and narcissistic admiration, but not rivalry.

Random intercept cross-lagged panel model

Although the previous model provides preliminary evidence for the cross-lagged effects of self-esteem on narcissistic admiration, we conducted a second set of analyses to properly partition the between-person (i.e., trait-like stability) variance of these constructs from the within-person fluctuations (Hamaker et al., 2015). To this end, we first examined the amount of variance at the within- and between-person levels by computing intraclass correlations (ICCs) for the three variables. The ICC for narcissistic admiration was .503, which suggests that 50.3% of the variance in the narcissistic admiration is explained by differences between individuals, and the remainder (49.7%) can be explained by fluctuations within the individual. The ICCs for narcissistic rivalry and self-esteem were also comparably high (i.e., ICCs = .405 and .477, respectively). Overall, these analyses suggest that a substantial part of the variance in each of these variables is explained both by stable differences between individuals and by within-person fluctuations over time.

To disentangle these two distinct sources of variance, we estimated a random intercept cross-lagged panel model. Notably, this model provided a better fit to these data, $\chi^2(12) = 27.94$, $p = .01$, $TLI = .96$, $CFI = .99$, $RMSEA = .05$ [.03, .07], than the more restrictive standard cross-lagged model, $\Delta\chi^2$ (6) = 48.54, $p < .001$. Contrary to the standard cross-lagged panel model, we did not observe cross-lagged effects between self-esteem and narcissistic admiration, nor narcissistic rivalry (see Table 2). Instead, self-esteem showed a strong between-person correlation with narcissistic admiration, $\beta = .86$, $B = 0.59$, both *p*s < .001. In other words, although admiration was associated with higher self-esteem at the trait level (i.e., in terms of stable personality predispositions), there was no evidence that within-person fluctuations in self-esteem and admiration affected each other over time. Notably, the between-person correlation between self-esteem and narcissistic rivalry was not significant, $\beta = .21$, $p = .061$, $B = 0.17$, $p = .083$.

Our model also allowed us to estimate the extent to which narcissistic admiration and rivalry influence each other over time. To these ends, we observed positive within-person bidirectional associations between narcissistic admiration and rivalry, suggesting that the within-person fluctuations in these two sub-dimensions of narcissism reinforce each other over time. Finally, between-person variance in narcissistic admiration and rivalry also correlated positively, $\beta = .27$, $p = .031$ (although the non-standardised coefficient, $B = 0.18$, was not significant, $p = .089$), demonstrating that this correlation also emerges at the trait level.

-- Table 2 –

Discussion

In a three-wave longitudinal study, we examined the cross-lagged associations between self-esteem and two components of narcissism: admiration and rivalry. Our standard cross-lagged panel model revealed that self-esteem had a bidirectional relationship with narcissistic admiration. These results are consistent with past research showing positive correlations between admiration and self-esteem (e.g., Back et al., 2013; Geukes et al., 2017), and with the suspicion that high self-esteem might breed narcissism (e.g., Twenge, 2006). We also found that narcissistic rivalry predicted increases in narcissistic admiration, but the opposite effect was not significant. Finally, there were no cross-lagged associations between self-esteem and narcissistic rivalry.

Subsequent analyses examined more nuanced relations using the random-intercept cross-lagged panel model, which is a recent analytic development that separates between-person (i.e., trait-like) associations from the within-person (i.e., time-varying) associations. Accordingly, the pattern we observed in the random-intercept model differed somewhat from the one reported for the standard cross-lagged analyses. Specifically, there were no cross-lagged relationships between self-esteem and admiration nor rivalry. Instead, self-esteem was associated with narcissistic admiration (but not with narcissistic rivalry) at the trait level. These results shed light on the relationship between self-esteem and narcissism by showing that the admiration dimension of narcissism is only associated with high self-esteem in terms of stable personality predispositions. This is likely because both those with high self-esteem and those with high levels of narcissistic admiration evaluate themselves positively.

However, we found no evidence that within-person fluctuations in self-esteem and admiration affect each other over time. This should alleviate concerns that boosts to self-esteem may foster narcissism. Indeed, the current work supports recent research and theorizing that questions viewing narcissism simply as an excessive form of self-evaluation. For example, Brummelman and colleagues (2016) suggest that narcissism and self-esteem should be considered separate constructs, with distinct developmental origins, phenotypes and consequences (see also Hyatt et al., 2018; Crowe et al., 2018). Similarly, recent research using a person-centred approach indicates that membership in profiles characterised by high levels of self-esteem versus narcissism are remarkably stable, at least over the course of a year (Stronge, Cichocka, & Sibley, 2019). Furthermore, those in profiles characterised by high self-esteem were very unlikely to move into high narcissism profiles. Collectively, these results demonstrate both the empirical and conceptual distinctions between self-esteem and narcissism.

Although our results help to distinguish between self-esteem and narcissism, we observed bidirectional associations between admiration and rivalry, suggesting that the within-person fluctuations in these two sub-dimensions of grandiose narcissism reinforce each other over time. These findings are consistent with the self-regulatory perspective on narcissism (Morf & Rhodewalt, 2001), which suggests that the antagonistic and assertive elements of narcissism serve a common purpose of pursuing social status (Grapsas, Brummelman, Back & Denissen, in press) and maintaining the grandiose self-image (Back et al., 2013). Thus, they likely affect each other in a dynamical system (see Grapsas et al., in press). It seems that changes in self-enhancement strivings sometimes trigger the need to derogate others, but these antagonistic tendencies might also further increase the need for admiration. In a similar vein, Carlson and Gjerde (2009) noted that impulsivity and hostility are not merely consequences of narcissism, but rather, might also inflate the self over time.

Interestingly, our analyses also revealed relatively low within-person stability coefficients for both self-esteem and the two narcissism components—at least after taking into account the trait-like stability of these measures. One reason for this perhaps surprising result might be that we used short and, thus, potentially less reliable, measures of self-esteem and narcissism. Still, our findings complement recent research by Orth and Luciano (2015), who found that narcissism consisted almost entirely of stable trait variance. While Orth and Luciano (2015) relied on the Narcissistic Personality Inventory (NPI; Ames, Rose, & Anderson, 2006), we measured the two components of narcissism with the NARQ (Back et al., 2013). Both questionnaires were designed to measure relatively stable individual differences. However, because the NARQ is thought to reflect the behavioural dynamics of the two components narcissism, it allowed us to capture the within-person dynamics characteristic for those scoring high in narcissism, which overall might contribute to the stabilisation of trait narcissism (Grapsas et al., in press).

Future work would do well to examine the associations between different aspects of narcissism and self-esteem, using different measurement tools. Greater within-person stability might be observed if a shorter lag between measurements is used. Future research could also analyse the dynamics of state self-esteem and narcissism (see Giacomin & Jordan, 2018), using (for example) more fine-grained experience sampling techniques. Finally, it is worth noting that our research was conducted among Polish adults. Although we do not have reasons to believe our findings would be exclusive to the Polish context, future work should examine potential cultural and cohort differences in the dynamics of self-esteem and narcissism.

Conclusion

Although the relationship between self-esteem and narcissism is frequently examined in personality psychology, past research has mostly tested this link cross-sectionally (cf. Orth & Luciano, 2015). Leveraging the strengths of recent advances in statistical modelling, we used a random-intercept cross-lagged panel model to partition the between-person and within-person variance in self-esteem, narcissistic admiration and narcissism. Accordingly, results revealed that while fluctuations within different aspects of narcissism affect each other over time, changes in self-esteem are less likely to be linked with corresponding changes in narcissistic admiration or rivalry. Together, these results suggest that the fear that nurturing high self-esteem might foster narcissism might be unfounded.

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Table 1

Descriptive Statistics and Bivariate Correlations across the Three Waves

Variable	α	*M*	*SD*	1	2	3	4	5	6	7	8
Wave 1											
1. Narcissistic admiration	.86	4.60	1.19	-							
2. Narcissistic rivalry	.76	3.62	1.33	.35***	-						
3. Self-esteem	-	5.07	1.33	.70***	.23***	-					
Wave 2											
4. Narcissistic admiration	.85	4.57	1.24	.45***	.20**	.37***	-				
5. Narcissistic rivalry	.80	3.73	1.52	.22***	.31***	.09	.49***	-			
6. Self-esteem	-	5.03	1.49	.41***	$.12^{+}$	.44***	.74***	.28***	-		
Wave 3											
7. Narcissistic admiration	.89	4.42	1.22	.50***	.41***	.44***	.68***	.38***	.55***	-	
8. Narcissistic rivalry	.74	3.47	1.29	.13	.48***	.09	.33***	.57***	.27***	.41***	-

9. Self-esteem	-	5.01	1.21	.47***	.36***	.55***	.52***	.18*	.58***	.66***	23**

+p<.10. *p < .05. **p < .01.***p < .001.

Table 2

Parameter Estimates Obtained in the Cross-Lagged and Random Intercept Cross-Lagged Panel Models

	Standard Cross-lagged Model				Random Intercept Cross-lagged Model (within-persons)			
Parameters	β	*B*	*SE*	*p*	β	*B*	*SE*	*p*
Self-esteem –> Self-esteem	**.32/.43**	**0.35**	**0.06**	**<.001**	.01/.02	0.01	0.11	.927
Self-esteem –> Admiration	**.14/.17**	**0.14**	**0.05**	**.008**	.04/.06	0.04	0.08	.610
Self-esteem –> Rivalry	.03/.04	0.03	0.07	.626	.03/.05	0.04	0.11	.736
Admiration –> Admiration	**.36/.43**	**0.39**	**0.06**	**<.001**	.12/.15	0.13	0.13	.297
Admiration –> Self-esteem	**.18/.23**	**0.22**	**0.07**	**.002**	.14/.24	0.17	0.12	.154
Admiration –> Rivalry	.08/.10	0.10	0.08	.194	**.29/.45**	**0.41**	**0.13**	**.002**
Rivalry –> Rivalry	**.36/.51**	**0.42**	**0.05**	**<.001**	-.04/-.07	-0.05	0.13	.708
Rivalry –> Self-esteem	-.01/-.01	-0.01	0.05	.832	.01/.03	0.02	0.09	.860

Rivalry –> Admiration	**.09/.12**	**0.09**	**0.04**	**.027**	**.21/.32**	**0.22**	**0.07**	**.003**

Note. For standardised coefficients (βs), we first report coefficients between Time 1 and Time 2, and after the dash we report coefficients between Time 2 and Time 3. For non-standardised coefficients (*B*s), we report only one value because these were constrained to be equal across the waves. Significant paths are highlighted in bold.

Highlights

- A three-wave survey measuring self-esteem, narcissistic admiration and rivalry.
- Analyses compare a standard cross-lag with a random-intercept cross-lagged model.
- Self-esteem associated with admiration (but not rivalry) only at the trait level.
- Within-person fluctuations in self-esteem and admiration did not affect each other.
- Within-person fluctuations in admiration and rivalry reinforced each other.