



## Narcissism and partner-enhancement at different relationship stages

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### ABSTRACT

Partner-enhancement refers to perceiving the romantic partner more positively than one's own self. Partner-enhancement often varies as a function of relationship duration: It is stronger in the earlier than later stage of a relationship. We asked whether narcissism moderates the association between relationship duration and partner-enhancement. We conducted three studies, with two testing participants individually ( $N_1 = 70$ ;  $N_2 = 412$ ) and the third testing couples ( $N_3 = 84$ ). Overall, narcissism negatively predicted partner-enhancement. However, low narcissists enhanced their partners at earlier but not later relationship stages, whereas high narcissists showed little partner-enhancement across relationship stages. High narcissists do not enhance their partner, albeit they self-enhance, a pattern that may have consequences for the quality of their relationships.

### 1. Narcissism and partner-enhancement at different relationship stages

Especially in the earlier stage of a close relationship, individuals often see their partner through rose-colored glasses. They overestimate the partner's qualities (Karney & Bradbury, 1997), perceive the partner's virtues as remarkable and unique (Barelds-Dijkstra & Barelds, 2008; Karney & Bradbury, 1997), and deny the partner's faults or reinterpret them as virtues (Murray & Holmes, 1994). Indeed, individuals often evaluate their partner more favorably than they evaluate themselves on a variety of attributes, a phenomenon known as partner-enhancement (Busby et al., 2009, 2017; Neff & Karney, 2002; Morry et al., 2014).

With the relationship progressing from an initial stage to a later stage, partner-enhancement likely declines in a degree commensurate to relationship satisfaction (Fincham et al., 2018; Karney & Bradbury, 1997). Indeed, the results of several studies are consistent with the possibility that partner-enhancement declines from earlier to later relationship stages (Campbell et al., 2006; Swami et al., 2009; 2010).

The relevant literature has mainly been concerned with implications of partner-enhancement for relationship functioning. Couples who manifest partner-enhancement cope more effectively with

disappointment or conflict, and experience weaker expectations of partner change, less negative communication, and higher relationship satisfaction (Busby et al., 2009; Murray et al., 1996). Such couples are also more likely to progress in commitment, moving from dating to engagement and marriage (Busby et al., 2009). Conversely, couples who manifest self-enhancement (i.e., individuals evaluate themselves more favorably than their partner; Sedikides, 2020) are likely to experience relationship dissatisfaction and face relationship dissolution (Morry et al., 2014; Murray & Holmes, 1999). This literature, however, has neglected the role of personality in partner-enhancement. Our investigation redresses this imbalance, focusing on grandiose narcissism (hereafter: narcissism; for a review of narcissism forms, see: Thomaes et al., 2018; Sedikides, 2021). Narcissism, compared to other personality traits (e.g., the Big Five), is particularly likely to be relevant in the context of partner-enhancement, given the role of comparative evaluations of self and other in narcissists' ability to maintain their highly inflated self-views (Bogart et al., 2010; Brummelman et al., 2018; Horton & Sedikides, 2009).

#### 1.1. Narcissism and partner perceptions

Narcissism is defined as "... a self-centered, self-aggrandizing,

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dominant, and manipulative interpersonal orientation” (Sedikides et al., 2004, p. 400). Individuals high on this trait feel self-important, regard themselves entitled to special treatment, and often engage in vain or exhibitionistic self-promotion (Morf et al., 2011; Sedikides & Campbell, 2017).

Grandiose narcissists manifest their manipulative orientation, in part, by using close relationships to advance self-interest (Morf & Rhodewaldt, 2001; Sedikides et al., 2002). Specifically, they choose partners who are attractive, high in social status, and prone to returning admiration but not intimacy: The partners often serve as trophies, attesting to the narcissist’s desired status (Campbell, 1999; Seidman et al., 2019). Also, narcissists frequently exhibit low relationship intimacy, investment, or commitment, display game playing and infidelity, are unapologetic, and are at high risk of divorce (Campbell, Brunell, & Finkel, 2006; Foster, Shrira, & Campbell, 2006; Lavner, Lamkin, Miller, Campbell, & Karney, 2016; Leunissen, Sedikides, & Wildschut, 2017; Wurst et al., 2017; Zeigler-Hill et al., 2019; Brunell and Campbell, 2011).

Do narcissists engage in partner-enhancement? Some psychodynamic (Kernberg, 1974; Masterson, 1988) and social-personality (Campbell & Foster, 2002; Morf & Rhodewaldt, 2001) theorizing suggest that narcissists might enhance their romantic partners early on, but this tendency will fade rapidly. As mentioned previously, narcissists are attracted to trophy partners, whom they see as mirror images of their own faultless self and as a springboard for their own status (Campbell, 1999; Grapsas et al., 2020; Seidman, 2016). With the passage of time, however, narcissists’ propensity to self-enhance at others’ cost takes over, and so narcissists will begin to devalue comparatively their partner, especially if the partner somehow apprises narcissists or reminds them of their own inadequacies (Morf & Rhodewaldt, 2001; Robins et al., 2001a). Stated otherwise, based on early theorizing, the decline of partner-enhancement that typically accompanies relationship progression would be sharper among high narcissists. Of note, we are not aware of any empirical research supporting this evaluative trajectory.

Empirical research, however, provides rationale for an alternative evaluative trajectory, which we test. Given narcissists’ remarkable self-centeredness, narcissism might be negatively linked to partner-enhancement. Narcissists put themselves above others (Park & Colvin, 2015; Rau et al., 2021; South et al., 2003), including close others (Krizan & Bushman, 2011; Roberts et al., 2018; Tortoriello et al., 2017). Narcissists feel that they contribute more to the relationship than their partners, and consider themselves more attractive and better than their partners (Campbell et al., 2002; Rohmann et al., 2011). Furthermore, results from studies using varied methods and measures converge in indicating—contrary to the above-stated perspective—that high narcissists do not partner-enhance in the first place (Campbell, 1999; Campbell et al., 2002; Grapsas et al., 2020; Krizan & Bushman, 2011; Rohmann et al., 2011; Tortoriello et al., 2017; Seidman, 2016). Overall, then, narcissism will be negatively associated with partner-enhancement, and this lack of partner-enhancement among high narcissists will likely persist throughout relationship stages.

## 1.2. Overview

We tested three hypotheses derived from the above-reviewed literature in each of three studies. First, based on prior findings (Campbell et al., 2006; Swami et al., 2009; 2010), we hypothesized that, overall, participants would engage in stronger partner-enhancement in an earlier than later relationship stage (H1). Second, consistent with the narcissism-in-relationships literature (Campbell et al., 2002; Rohmann et al., 2011; Tortoriello et al., 2017), we hypothesized that high narcissists would engage in weaker partner-enhancement than low narcissists (i.e., narcissism predicts reduced partner-enhancement; H2). Finally, and most importantly, we hypothesized that, although low narcissists would enhance their partner at an earlier (than later) relationship stage, high narcissists would refrain from partner-enhancement

altogether (i.e., narcissism moderates the link between relationship duration and partner-enhancement; H3).

We tested these hypotheses among ongoing heterosexual relationships, focusing on individual partners (Studies 1–2) and on couples (i.e., assessing both an actor’s and a partner’s level of partner-enhancement; Study 3). In all studies, we controlled for self-esteem, given that it is a small-to-medium correlate of both narcissism (Brummelman, Gürel, Thomaes, & Sedikides, 2018; Geukes et al., 2017; Hyatt et al., 2018; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004) and positive relationship outcomes (Bellavia and Murray, 2003; de Moor et al., 2021; Luciano & Orth, 2017). Self-esteem is a global, affective self-evaluation (Rosenberg, 1965; Sedikides & Gregg, 2003). As such, it reflects along with narcissism positive perceptions of the self, and is implicated along with narcissism in self-other comparisons in the context of partner-enhancement.

We obtained Ethical approval from the first author’s institution. All participants were volunteer Polish speakers. Where relevant, materials were translated into Polish and back by a committee of bilinguals (Brislin, 1980). In each study, we focused on measures pertinent to our specific theoretical objectives (for a full list of variables, see [Supplementary Materials](#)). We did not preregister Studies 1–2, but we preregistered the expected interaction effect in Study 3 (<https://aspredicted.org/blind.php?x=hd3h8q>; for a slight deviation from the preregistered plan, see [Supplementary Materials](#)).<sup>1</sup> We made stimulus materials, data, and code available at: [https://osf.io/8j4td/?view\\_only=dee38744aef04831b98484076616d98d](https://osf.io/8j4td/?view_only=dee38744aef04831b98484076616d98d).

## 2. Study 1

Study 1 was a preliminary test of the three aforementioned hypotheses.

### 2.1. Method

#### 2.1.1. Participants

We advertised this online study on social networking websites via flyers and word-of-mouth. We recruited 70 individuals (36 women, 34 men;  $M_{\text{years}} = 23.50$ ,  $SD_{\text{years}} = 3.80$ ) involved at the time in a romantic relationship. (We did not collect information about marital status.) Students at two large southern Polish universities comprised approximately 70% of the sample. Data collection was time-bound due to a Master’s thesis requirement.  $N = 55$  would suffice to detect a medium-size interaction effect in multiple regression analysis ( $f^2 = 0.15$ ; Cohen, 1988<sup>2</sup>) at  $\alpha = 0.05$ , power = 0.80 (Faul et al., 2009). However, detecting a small-size interaction effect ( $f^2 = 0.06$ ) under the same specifications would require  $N = 130$ .

#### 2.1.2. Measures

**Relationship Duration.** We assessed this variable in months.

**Self-Esteem.** We assessed this variable with the 10-item Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965; Polish version by Dzwonkowska et al., 2007;  $\alpha = 0.89$ ; e.g., “On the whole, I am satisfied with myself”). The response scale ranged from 1 (*strongly disagree*) to 6 (*strongly agree*).

**Partner-Enhancement.** We assessed this variable with a 15-item equity questionnaire (Rohmann et al., 2011). Sets of five items measure the perceived difference between the partner and oneself on

<sup>1</sup> In the pre-registration, we (mis)labeled partner-enhancement as partner idealization. We conducted additional analyses using the Ideal-Actual Partner Discrepancy Score as a dependent variable, and report the results in [Supplementary Materials](#).

<sup>2</sup> Cohen’s  $f^2$  (Cohen, 1988) is appropriate for calculating the effect size within a multiple regression model in which both the independent and dependent variable are continuous (Selya et al., 2012).

attractiveness (e.g., “who is more physically attractive”), liking/feeling (e.g., “who is better at showing affection”), and status (e.g., “who achieved higher academic/professional success”). The response scale ranged from 1 (*decidedly my partner*) to 9 (*decidedly myself*). We recalculated the variable by subtracting 5 and multiplying by  $-1$  so that values above zero indicate partner-enhancement, the value of zero indicates parity between partner and oneself, and values below zero indicate self-enhancement ( $\alpha = 0.73$ ).

**Narcissism.** We assessed this variable with the 34-item Narcissistic Personality Inventory (NPI— Raskin & Hall, 1979; Polish version: Bazińska & Drat-Ruszczak, 2000;  $\alpha = 0.91$ ; e.g., “I am an extraordinary person.”). The response scale ranged from 1 (*does not apply to me*) to 5 (*applies to me*).

2.2. Results and discussion

We report intercorrelations and descriptive statistics in Table 1. We standardized variables, with the exception of the dependent variable, prior to conducting a hierarchical regression analysis. In Step 1, we entered narcissism and relationship duration as predictors. In Step 2, we added the interaction term of narcissism and relationship duration.

In Step 1, narcissism negatively predicted partner-enhancement ( $b^* = -0.38, p = .001$ ), whereas relationship duration was not a significant predictor ( $b^* = -0.18, p = .120$ ). This pattern replicated in Step 2 (Table 2). Thus, narcissism, but not relationship duration, was a robust (negative) predictor of partner-enhancement. In Step 2, narcissism moderated the association between relationship duration and partner-enhancement, and this interaction increased significantly the amount of variance explained ( $\Delta R^2 = 0.05, p = .037$ ). Simple slope analysis revealed that relationship duration negatively predicted partner-enhancement among low narcissists ( $-1SD: b = -0.01, t = -2.60, p =$

Table 1 Intercorrelations and descriptive statistics across all studies.

	Narcissism	Relationship Duration	Partner-Enhancement	Self-Esteem
<b>Study 1</b>				
Relationship Duration	-0.125			
Partner-Enhancement	-0.363**	-0.129		
Self-Esteem	0.074	-0.047	0.075	
M	2.99	29.69	0.01	3.88
SD	0.54	27.05	0.93	0.58
<b>Study 2</b>				
Relationship Duration	0.026			
Partner-Enhancement	-0.052	-0.048		
Self-Esteem	0.048	0.046	-0.202***	
M	2.70	41.52	3.62	5.09
SD	1.04	47.99	12.39	1.17
<b>Study 3</b>				
Relationship Duration	-0.115			
Partner-Enhancement	-0.265**	-0.142		
Self-Esteem	0.495**	-0.009	-0.220**	
M	3.92	38.93	0.12	4.70
SD	0.94	27.43	0.97	1.30

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

Table 2 Prediction of partner-enhancement.

	Study 1			
	$b^*$	SE	t	p
Narcissism	-0.324	0.104	-3.132	0.003
Relationship Duration	-0.137	0.103	-1.329	0.189
Narcissism × Relationship Duration	0.209	0.099	2.124	0.037
<b>Study 2</b>				
	$b^*$	SE	t	p
Narcissism	-0.557	0.607	-0.919	0.358
Relationship Duration	-0.604	0.613	-0.986	0.325
Narcissism × Relationship Duration	1.430	0.661	2.136	0.031
<b>Study 3</b>				
	$b^*$	SE	Z	p
<b>Women’s Partner-Enhancement</b>				
Actor’s Narcissism (a1)	-0.320	0.063	-5.082	0.000
Partner’s Narcissism	0.320	0.092	3.476	0.000
Relationship Duration	0.030	0.091	0.333	0.739
Actor’s Narcissism × Relationship Duration (a2)	0.151	0.061	2.483	0.013
Partner’s Narcissism × Relationship Duration	-0.206	0.081	-2.547	0.011
<b>Men’s Partner-Enhancement</b>				
Actor’s Narcissism (a1)	-0.320	0.063	-5.082	0.000
Partner’s Narcissism	0.156	0.080	1.953	0.051
Relationship Duration	-0.347	0.080	-4.331	0.000
Actor’s Narcissism × Relationship Duration (a2)	0.151	0.061	2.483	0.013
Partner’s Narcissism × Relationship Duration	0.170	0.092	1.856	0.063

Note.  $b^*$  denotes estimated values of standardized regression coefficients in regression analyses (American Psychological Association, 2019, p. 428). a1 and a2 represent the regression coefficients that are restricted to be equal across partners in Study 3. For Study 3, we calculated the standardized coefficients, standard errors, Z-test, and p-values following Kenny et al. (2006, p. 179).

$= .011$ ), but not among high narcissists ( $1SD: b < 0.01, t = 0.05, p = .635$ ; Fig. 1). Low narcissists enhanced their partner at short, but not long, relationship duration. High narcissists, in contrast, did not partner-enhance regardless of relationship duration.

Adding self-esteem, and the interaction between self-esteem and relationship duration,<sup>3</sup> to the equation did not change the results pattern, though the significance of the interaction decreased slightly (to  $p = .052$ ; Supplementary Materials, Table S1, upper panel). Further, in exploratory analyses, we found no significant moderation by gender, but the negative association between relationship duration and partner-enhancement was descriptively more pronounced among men than women, and achieved significance only among men (Supplementary Materials, Tables S2 and S3).

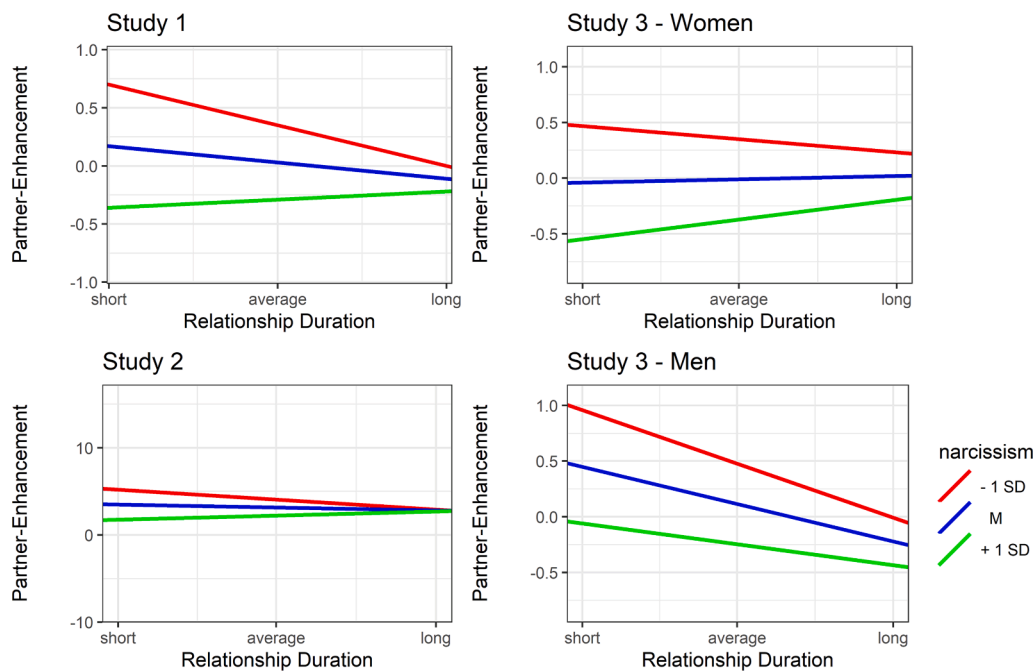
2.2.1. Summary

H1 was unsupported: Relationship duration did not predict partner-enhancement. H2, though, was supported: Narcissism was a negative predictor of partner enhancement. H3 was also supported, given that narcissism moderated that link between relationship duration and partner-enhancement. Put otherwise, low narcissists enhanced their partner at an earlier (but not later) relationship stage, but high narcissists did not enhance their partner across relationship stages.

3. Study 2

In the next—also online—study, we tested the replicability of Study 1 findings using a larger sample and including different

<sup>3</sup> We controlled for self-esteem and its interaction with relationship duration, because, as Yzerbyt et al. (2004, p. 424) stated, “In general, the interaction between the two independent variables will be estimated without bias only when the interaction between the covariate and the manipulated independent variable is included in the analysis.”



**Fig. 1.** Plots of Simple Slopes for the Narcissism  $\times$  Relationship Duration Interaction. Note. Values on the Y axis indicate raw partner-enhancement (presented for values from  $-1SD$  to  $1SD$ ). Positive values reflect the presence of partner-enhancement. We plotted low, average, and high narcissism at Mean and  $\pm 1SD$  from the sample-centered mean. In all study plots, we probed the interaction at exactly the same points in time: at 2.7 months ( $-1SD$  in relationship duration in Study 1: short relationship duration) and 56.7 months ( $1SD$  in relationship duration in Study 1: long relationship duration). We did so to keep the plots directly comparable across studies.

operationalizations of narcissism and partner-enhancement.

### 3.1. Method

#### 3.1.1. Participants

A sample of at least 130 participants was needed to detect a small-size interaction effect ( $f^2 = 0.06$ —as observed in Study 1) in a multiple hierarchical regression analysis (i.e.,  $f^2 = 0.15$ ; Cohen, 1988) at  $\alpha = 0.05$ , power = 0.80 (Soper, 2021). We recruited participants through snowball sampling. We oversampled, testing 412 community members (371 women, 41 men;  $M_{\text{years}} = 23.33$ ,  $SD_{\text{years}} = 4.92$ ) who were involved romantically (89.60% unmarried, 10.40% married). The sample granted over 0.99 power to detect the hypothesized effects.

#### 3.1.2. Measures

**Relationship Duration.** We assessed this variable in months.

**Self-Esteem.** We assessed this variable as in Study 1 ( $\alpha = 0.89$ ).

**Partner-Enhancement.** We assessed this variable by subtracting participants' mean self-ratings ( $\alpha = 0.78$ ) from their mean partner-ratings ( $\alpha = 0.83$ ) on 10 positive attributes of the Interpersonal Qualities Scale (Murray et al., 1996; e.g., "sociable," "intelligent," "attractive;" 1 = *not at all*, 9 = *a lot*). Higher scores indicate greater partner-enhancement. We controlled for the sum of the difference components in our analyses to prevent confounding and to render the analysis of this difference score equivalent to the Study 1 analyses (Griffin et al., 1999; Iida et al., 2018).

**Narcissism.** We assessed this variable with the 4-item narcissism subscale of the Dark Triad Dirty Dozen scale (Jonason & Webster, 2010; Polish version: Czarna et al., 2016;  $\alpha = 0.85$ ; e.g., "I want others to admire me;" 1 = *not at all*, 5 = *very much*).

### 3.2. Results and discussion

We report intercorrelations and descriptives in Table 1. In a hierarchical regression analysis, neither relationship duration (Step 1:  $b^* = -0.45$ ,  $p = .461$ ) nor narcissism (Step 1:  $b^* = -0.57$ ,  $p = .353$ ) were significant predictors of partner-enhancement in Steps 1 or 2 (Table 2). However, narcissism moderated the link between relationship duration and partner-enhancement, and this interaction significantly increased the amount of variance explained ( $\Delta R^2 = 0.01$ ,  $p = .031$ ). Relationship

duration negatively predicted partner-enhancement among low ( $-1SD$ :  $b = -2.03$ ,  $t = -2.14$ ,  $p = .033$ ), but not among high ( $1SD$ :  $b = 0.83$ ,  $t = 0.85$ ,  $p = .331$ ) narcissists (Fig. 1).

Adding self-esteem, and the interaction between self-esteem and relationship duration, to the equation did not alter the results pattern (Supplementary Materials, Table S1, middle panel). Lastly, as in Study 1, although moderation by gender was not significant, the negative effect of relationship duration on partner-enhancement was descriptively more pronounced, and significant, in men (Supplementary Materials, Tables S2 and S3).<sup>4</sup>

#### 3.2.1. Summary

H1 and H2 were unsupported: Neither relationship duration nor narcissism predicted partner-enhancement. However, similar to Study 1, H3 was supported: low narcissists partner-enhanced at an earlier (but not later) relationship stage, but high narcissists refrained from partner-enhancement across relationship stages. The results discrepancies in Studies 1 and 2 might be due to the different operationalizations of partner enhancement or narcissism. In particular, the Study 2 measure of partner-enhancement did not necessitate direct comparisons between partner and self, and contained more relational and fewer agentic and attractiveness items. Also, we assessed narcissism with the 4-item subscale of the Dirty Dozen, a measure that has come under some criticism (Jones & Paulhus, 2014; Maples et al., 2014; Miller et al., 2012; but see Rogoza et al., 2021). Finally, our sample comprise mostly (90%) women. We addressed these possible limitations in Study 3.

### 4. Study 3

In Study 3, we tested both couple members in an effort to disentangle actor effects, partner effects, and interactive processes between partners. This issue is relevant for narcissists, who may be prone to homophily (i.

<sup>4</sup> Participants provided separate judgments for partner and self, which allowed us to compute a partner-self discrepancy score. In addition, we applied Humberg et al.'s (2018) condition-based analysis to test for partner-enhancement. The results were consistent with the reported ones, also indicating that partner-enhancement decreased at long relationship duration among very low narcissists (Supplementary Materials, Table S4, Figures S1).

e., entering relationships with fellow narcissists; Grosz et al., 2015; Lamkin et al., 2015). As targets of perception, narcissists elicit more positive impressions earlier (than later) in relationships (Czarna et al., 2016; Leckelt et al., 2015), with corresponding implications for partner-enhancement.

We relied on the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006), which takes partner similarity into account and provides estimates of the effect of a person's narcissism (and of the Narcissism  $\times$  Relationship Duration interaction) not only on her/his partner-enhancement, but also on the partner's partner-enhancement. Additionally, the APIM allowed us to address thoroughly gender-specific processes in couples.

#### 4.1. Method

##### 4.1.1. Participants

We estimated the sample size required to test the hypothesized interaction effect at  $\alpha = 0.05$  with power 0.80 using the semPower package (Moshagen & Erdfelder, 2016). We conservatively assumed the lower of the gender-specific effect size estimates of Studies 1–2 (Table S3), and small effect sizes (standardized estimate = 0.10) for non-estimated effects (partner effects). A sample of 60 dyads was sufficient to detect main effects of actor narcissism, whereas 74 dyads were required to detect the hypothesized Actor Narcissism  $\times$  Relationship Duration interaction at  $\alpha = 0.05$ , power = 0.80. We recruited 84 couples (168 individuals;  $M_{\text{years}} = 24.04$ ,  $SD_{\text{years}} = 3.17$ ; 71.43% unmarried, 28.57% married or engaged) via flyers, e-mail lists, advertisements on social networking websites, and word-of-mouth. A female experimenter collected the data by visiting each couple in their own home. Couple members completed the questionnaires in separate rooms.

##### 4.1.2. Measures

**Relationship Duration.** We assessed this variable in months.

**Self-Esteem.** We assessed this variable with the Single-Item Self-Esteem Scale (Robins et al., 2001b; translated into Polish for the current purposes; e.g., "I have high self-esteem;" 1 = *strongly disagree*, 7 = *strongly agree*).

**Narcissism.** We assessed this variable with the 13-item version of the Narcissistic Personality Inventory (Gentile et al., 2013; Polish version: Żemojtel-Piotrowska et al., 2017;  $\alpha = 0.84$ ; e.g., "I like having authority over people;" 1 = *I completely disagree*, 7 = *I completely agree*).

**Partner-Enhancement.** We assessed this variable as in Study 1 ( $\alpha = 0.72$ ).

#### 4.2. Results and discussion

We report intercorrelations and descriptives in Table 1. We used structural equation modeling (lavaan R package; Rosseel, 2012) to estimate the Actor-Partner Interdependence Moderation Model. We followed Garcia et al.'s (2015) recommendations for testing the expected moderation effect. We used relationship duration as the predictor and narcissism as the moderator. We standardized both variables on a full sample, and allowed means and variance to vary between partners. We simultaneously tested (a) actor effects of narcissism and their interaction with relationship duration, and (b) partner effects of narcissism and their interaction with relationship duration.

First, we ran a series of model comparisons to address the question of which effects can be set equal across genders (Table 3). To select the best fitting model, we specified a fully restricted model in which all path coefficients were set equal across partners (Table 3, Model 1—fully restricted model) and compared its fit with that of a fully unrestricted model in which all paths were allowed to vary freely across partners (Table 3, Model 2—saturated model). Model 1 fit the data significantly worse than Model 2,  $\chi^2(5) = 18.29$ ,  $p = .003$ . We then searched to improve model fit by relaxing each constraint in an exploratory manner and testing model fit against the saturated model. Allowing the effects of

partner narcissism and the Partner Narcissism  $\times$  Relationship Duration interaction to vary between genders (Model 4, candidate) led to a model that fit the data no worse than the saturated one,  $\chi^2(2) = 1.95$ ,  $p = .377$  (Model 2). In absolute terms, the candidate model showed excellent fit to the data (Table 3, Model 4). For a conceptual and statistical diagram of the candidate model, see Figure S2 and S3, respectively, in [Supplementary Materials](#).

Next, we tested whether the hypothesized moderation effect (Actor Narcissism  $\times$  Relationship Duration) was necessary. We ran a formal comparison of the selected—candidate—model (Table 3, Model 4) that showed good fit against another model that differed from it by a single parameter: the moderation effect of interest was set to zero (Table 3, Model 3, interaction effects zeroed). The fit of the candidate model was significantly better than the fit of a model with zeroed moderation effect of actor's narcissism with relationship duration,  $\chi^2(1) = 6.03$ ,  $p = .014$ , which indicated that the interaction term is necessary. Narcissism moderates the link between relationship duration and partner-enhancement. We present the results of the model comparison in Table 3.

##### 4.2.1. Actor narcissism

We report the estimated coefficients of the selected (candidate) model in Table 2. Actor narcissism negatively and significantly predicted participants' level of partner-enhancement. Thus, narcissists placed themselves above their partners. The main effect of relationship duration was negative and significant among men, but not among women. Hence, men showed less partner-enhancement in long-term than in short-term relationships. Further, actor narcissism significantly moderated the effect of relationship duration on partner-enhancement. We plotted this interaction in Fig. 1 (right panel).

We then ran simple slope analyses to unpack the Actor Narcissism  $\times$  Relationship Duration interaction. Relationship duration negatively predicted partner-enhancement among men low on narcissism ( $-1SD$ :  $b = -0.50$ ,  $SE = 0.11$ ,  $Z = -4.70$ ,  $p < .001$ ). It also did so among men high on narcissism, but substantially less strongly ( $1SD$ :  $b = -0.20$ ,  $SE = 0.10$ ,  $Z = -2.07$ ,  $p = .038$ ; Fig. 1). Importantly, the latter slope was significantly less steep than the former,  $p = .047$ . However, the effects of relationship duration were not significant for women low ( $-1SD$ :  $b = -0.12$ ,  $SE = 0.13$ ,  $Z = -1.12$ ,  $p = .265$ ) or high ( $1SD$ :  $b = 0.18$ ,  $SE = 0.11$ ,  $Z = 1.65$ ,  $p = .100$ ) on narcissism. Additionally, these two slopes were not significantly different. As indicated above, a formal test showed that the omnibus interaction (a1) among men was not significantly different than among women, suggesting no three-way interaction (involving gender). In all, although women low on narcissism partner-enhanced at short and long relationship duration (just less so at long relationship duration), those high on narcissism self-enhanced at short and long relationship duration. Further, although men low on narcissism partner-enhanced less the longer the relationship was (hence the effect was detectable at short but not at long relationship duration), those high on narcissism self-enhanced both at short and long relationship duration.

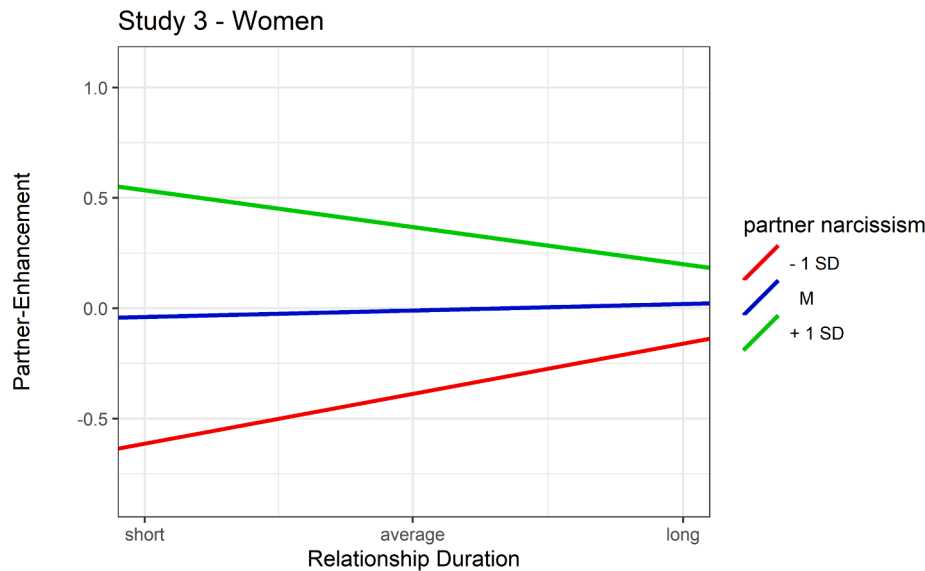
##### 4.2.2. Partner narcissism

Subsequently, we addressed partner's level of partner-enhancement. The partner effect of narcissism was positive and significant for female actors and positive but trending for male actors. Narcissists' partners thus viewed narcissists positively in comparison to how the narcissists' partners viewed themselves. The interaction between partner narcissism and relationship duration on partner-enhancement was significant among women, and a formal test showed that it was significantly different from its counterpart among men (suggesting a three-way interaction). We proceeded with simple slope analyses. Partner narcissism positively and significantly predicted partner-enhancement at short relationship duration (2.7 months:  $b = 0.611$ ,  $SE = 0.149$ ,  $Z = 4.099$ ,  $p < .001$ ), and positively but trendingly at long relationship duration (56.7 months:  $b = 0.192$ ,  $SE = 0.107$ ,  $Z = 1.791$ ,  $p = .073$ , Fig. 2). Women who had a narcissistic partner engaged in partner-enhancement

**Table 3**  
Model Comparison in Study 3.

Model	$\chi^2$	df	p	CFI	Fit RMSEA	pClose	AIC	SABIC	R <sup>2</sup> f/m
1. fully restricted	18.29	5	0.003	0.767	0.178	0.009	1567.98	1546.27	0.18/0.22
2. saturated	–	0	–	1.000	0.000	–	1559.69	1534.36	0.22/0.36
3. interaction effects zeroed	7.98	3	0.047	0.913	0.141	0.085	1561.66	1538.51	0.20/0.30
4. candidate	1.95	2	0.377	1.000	0.000	0.450	1557.64	1533.76	0.24/0.32

Note.  $N = 84$  couples. CFI = comparative fit index; RMSEA = root mean square error of approximation; pClose = probability of close fit (i.e., probability that RMSEA is greater than 0.05); AIC = Akaike's information criterion; SABIC = sampling-error-adjusted Bayesian information criterion; R<sup>2</sup> f/m = R<sup>2</sup> estimates among women and men. The candidate model is the one in which we constrained only the main effect of actor narcissism and the Actor Narcissism  $\times$  Relationship Duration interaction to be equal across genders.



**Fig. 2.** Plot of Simple Slopes for the Interaction of Partner's Narcissism and Relationship Duration in Time for Women in Study 3. Note. The values on the Y axis indicate raw partner-enhancement. Low and high partner narcissism plotted at mean and  $\pm 1SD$  from the gender-centered mean. We probed the interaction at exactly the same temporal points: 2.7 months (short relationship duration) and 56.7 months (long relationship duration).

early on in their relationships. We will not interpret the interaction for men, as the relevant omnibus effect was not significant. Adding self-esteem, and the interaction between self-esteem and relationship duration, as controls did not change the results pattern (Supplementary Materials, Table S1, lower panel).

#### 4.2.3. Summary

The results were partially consistent with H1: Relationship duration negatively predicted partner-enhancement, albeit only among men.<sup>5</sup> As a reminder, we obtained a similar pattern in Studies 1–2: whereas there was no significant moderation by gender, the negative effect of relationship duration on partner-enhancement was descriptively more pronounced, and statistically significant, among men. The results were consistent with H2: High (compared to low) narcissists engaged in less partner-enhancement. Lastly, the results generally aligned with H3. In

particular, among men, low narcissists partner-enhanced at an earlier (but not later) relationship stage, whereas high narcissists self-enhanced throughout. Among women, low narcissists partner-enhanced at an earlier and later (albeit less so) relationship stage, whereas high narcissists self-enhanced throughout.

In addition, we observed several partner effects, suggesting that a person's level of narcissism is consequential for the partner's level of partner-enhancement. Narcissism had a positive partner effect on partner-enhancement (albeit trendingly among men): narcissists were enhanced by their partners. Furthermore, the partner effect of narcissism was moderated by relationship duration for women, implying that particularly during an earlier relationship stage male narcissists were enhanced by their partners. This suggests that, as indicated in the introduction to Study 3, narcissists (especially men) elicit more positive impressions earlier than later in relationships.

## 5. General discussion

We addressed the association between relationship duration and partner-enhancement, and the possibility that this association is different for low versus high narcissists. We formulated three hypotheses and tested each of them in three studies. We used varied operationalizations of narcissism and partner-enhancement, and relied on diverse samples. Further, in one study (Study 3), we considered narcissism levels and partner-enhancement of both couple members.

<sup>5</sup> We obtained the same pattern in a model that included only main effects of narcissism and relationship duration (and no interaction effects). The actor effect of narcissism was negative and significant for both men and women ( $\beta = -0.32$ ,  $SE = 0.07$ ,  $Z = -4.90$ ,  $p < .001$ ), whereas the partner effect of narcissism was positive and significant for women ( $\beta = 0.30$ ,  $SE = 0.10$ ,  $Z = 3.13$ ,  $p = .002$ ), but positive and trending for men ( $\beta = 0.14$ ,  $SE = 0.08$ ,  $Z = 1.70$ ,  $p = .089$ ). Further, relationship duration was negatively and significant for men ( $\beta = -0.31$ ,  $SE = 0.08$ ,  $Z = -3.74$ ,  $p < .001$ ), but not for women ( $\beta = 0.00$ ,  $SE = 0.09$ ,  $Z = 0.00$ ,  $p = .998$ ). The model that included only main effects had worse fit than the model that included interactions.

### 5.1. Summary of findings

H1, that relationship duration negatively predicts partner-enhancement, received support (among men) only in Study 3. H2, that narcissism negatively predicts partner-enhancement, received support in Studies 1 and 3. The discrepancies in results between these studies and Study 2 might be due to different operationalizations of partner-enhancement and narcissism in Study 2. Importantly, H3, our core hypothesis, was supported in all studies. Narcissism moderated the association between relationship duration and partner-enhancement. Although low narcissists enhanced their partner at an earlier (but not later) relationship stage, high narcissists did not partner-enhance for the duration of the relationship; if anything, they self-enhanced (Study 3). Lastly, narcissists—particularly male ones and especially at short relationship durations—were enhanced by their partners.

### 5.2. Implications

The findings pertinent to H1 raise the possibility that partner-enhancement at an earlier relationship stage, identified in prior work (Campbell et al., 2006; Swami et al., 2009, 2010), is mostly due to low narcissists. Yet, in Study 3, relationship duration negatively predicted partner-enhancement among men, but not among women. This preliminary finding is in need of replication.

Also, the findings pertinent to H2 are congruent with the literature depicting narcissists as putting themselves above their partners (Campbell et al., 2002; Krizan & Bushman, 2011; Rohmann et al., 2011; Tortoriello et al., 2017). Most critically, the findings pertinent to H3 contradict a line of theorizing (Campbell & Foster, 2002; Kernberg, 1974; Masterson, 1988; Morf & Rhodewalt, 2001), but reinforce another (Campbell, 1999; Krizan & Bushman, 2011; Rohmann et al., 2011; Tortoriello et al., 2017; Seidman, 2016), namely that narcissists are unlikely to partner-enhance for the entirety of the relationship trajectory. Elucidating the dynamics of partner perceptions in intimate relationships has implications for couples counseling. Narcissists' desire for self-enhancement appears to be a force overrunning relationship needs. Not only did high narcissists refrain from partner-enhancement as their relationship progressed (Studies 1–3), but they instead self-enhanced (Study 3). These result patterns attest to the self-centered, entitled, and calculating character, as well as the relational ineptness, of high narcissists (Brunell & Campbell, 2011; Sedikides, 2021; Sedikides et al., 2002). After all, and as mentioned previously, partner-enhancement can be beneficial to romantic relationships, as it helps couples to overcome difficulties, and conduces to productive communication and relationship satisfaction (Busby et al., 2009; Morry et al., 2010, 2014).

In Study 3, narcissism moderated the link between relationship duration and partner enhancement similarly across partners (men and women). Yet, relationship duration was linked more strongly to partner enhancement among men than women (see slopes in Fig. 1, right panel). We may have been unable to detect this pattern in Studies 1 and 2, because these studies (a) did not focus on the couple (i.e., male and female partner within the same relationship), and (b) did not control for partner narcissism. Also, in Study 3, we observed that male narcissists were enhanced by their female partners early on in the relationship. This partner-conferred confirmation of one's narcissism may reflect masculinity norms in cultures with more traditional gender roles, such as Poland (Scharle, 2015; Suwada, 2017). Although not hypothesized, this finding has implications for the phenomenon of narcissists being well-liked at the initial stages of attraction, but disliked later. Nevertheless, the finding needs to be replicated. Lastly, our results illustrate a key difference between narcissism and self-esteem. Narcissism and self-esteem are characterized by positive self-views, yet they often have divergent effects on interpersonal functioning (Brummelman et al., 2016, 2018). This was also the case for partner-enhancement. Although narcissism was consistently a negative predictor of partner-

enhancement, self-esteem was not so and did not account for the effects of narcissism.

### 5.3. Limitations and future directions

We used cross-sectional designs and so we cannot preclude the role of self-selection of participants to long-term relationships. In none of our studies, however, did we find a significant association between narcissism and relationship duration, and hence at least level of narcissism was likely unrelated to self-selection. Regardless, future research should implement longitudinal dyadic designs to assess change in partner-enhancement over time.

Although the dyadic design that we used in Study 3 is a rarity in narcissism research, our samples featured relatively young participants in predominantly short, heterosexual relationships and from a single culture. Follow-up work would include more diverse samples on age, relationship duration, sexual orientation, and cultural background. Finally, future research could explore whether other forms and facets of narcissism (e.g., admiring, rivalrous, communal, vulnerable; Back et al., 2013; Gebauer & Sedikides, 2018; Miller et al., 2018) moderate the link between relationship duration and partner-enhancement.

### 5.4. Conclusion

Our research examined the role of narcissism in romantic relationships. Compared to low narcissists, high narcissists' view of their partners did not change as the relationship progressed, and instead their self-view remained inflated. The discrepancy in the way high narcissists perceive their partner versus themselves likely has consequences for their relationship quality.

Open Practices Statement.

We provide open access to the data, materials, and preregistration information at [https://osf.io/8j4td/?view\\_only=dee38744aef04831b98484076616d98d](https://osf.io/8j4td/?view_only=dee38744aef04831b98484076616d98d). We registered the plan prior to examination of the data or observing the outcomes. We made no additional registrations for the study other than the one reported. We reported all (slight) deviations from the preregistered plan in [Supplementary Materials](#).

Declaration of Conflicting Interests.

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics Approval Statement.

The project was approved by the Ethics Committee of the first author's institution.

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### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Data Availability Statement

The data that support the findings of this research are openly available at [https://osf.io/8j4td/?view\\_only=dee38744aef04831b98484076616d98d](https://osf.io/8j4td/?view_only=dee38744aef04831b98484076616d98d).

### Additional Disclosures

Studies 1-2 were not preregistered. The expected interaction effect in Study 3 was preregistered.

### Author Contributions

A.Z.C., M.Ś., and M.W. were involved in data collection for all three studies; A.Z.C. analyzed the data; A.Z.C., M.Ś., M.W., M.D., and C.S. wrote the manuscript.

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## Appendix A. Supplementary material

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