



# Sculpting Narcissus: A dyadic perspective on narcissism and buffering effects of perceived ideal self affirmation on relationship commitment

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## ABSTRACT

Narcissistic self-regulation strategies aimed at pursuing a grandiose self can undermine relationship commitment. This study examined whether Michelangelo phenomenon mechanisms, whereby partners facilitate each other's ideal selves through affirmation processes, can mitigate these potentially detrimental effects. Across three dyadic survey-based studies ( $N_s = 107, 212, 213$  romantic couples), our findings demonstrated that perceiving a partner as affirming or facilitating the movement toward the ideal self buffered otherwise adverse effects of grandiose narcissism on commitment. In contrast, no moderation effects were observed for vulnerable narcissism – highlighting self-regulatory differences between these narcissism manifestations. Altogether, perceiving a partner as ideal-promoting may mitigate commitment by serving the narcissistic self-goal pursuit and hence present one way to foster interdependence without compromising the narcissistic ego.

## 1. Introduction

Narcissism is characterized by the primary goal of establishing and maintaining a grandiose self (Morf & Rhodewalt, 2001). To pursue this self-goal, individuals with narcissistic personality features adopt various self-regulation strategies which often impede relationship functioning (see Foster & Brunell, 2018 for a review). These strategies, for example, include seeking admiring “trophy partners” (Campbell, 1999; Seidman, 2016), inducing jealousy to exert control over the partner (Tortoriello et al., 2017), a game-playing love style (Dinić & Jovanović, 2021; Jauk et al., 2023), or habitually being on the lookout for alternative partners who might present a “better deal” (Campbell & Foster, 2002; Zeigler-Hill et al., 2020). Strategies such as these can be expected to undermine relationship commitment, a particularly central relationship mechanism, as it reflects the intention to sustain a long-term relationship (Rusbult et al., 1998).

Perhaps surprisingly, however, some relationships involving individuals with high narcissism levels<sup>2</sup> persist despite these potentially commitment-damaging tendencies. Consistent with this, findings regarding the association between narcissism and relationship commitment have been mixed (Campbell & Foster, 2002; Finkel et al.,

2009; Sedikides et al., 2004). A possible explanation for these inconsistencies may stem from specific mitigating factors that have been shown to buffer the otherwise negative associations between narcissism and commitment. Specifically, individuals with high levels of grandiose narcissism who reported that they felt satisfied or more invested in their relationship showed improved commitment levels (Foster, 2008). Similar findings emerged when communal feelings of love and nurturance had been triggered (Finkel et al., 2009).

Building on this research, we aimed to examine a further mechanism that could potentially moderate commitment. Given that narcissism centers on constructing and maintaining a grandiose self, we sought to examine whether perceiving partners as helpful in facilitating movement toward this self-goal could act as such a buffer. We made use of the *Michelangelo phenomenon* (Drigotas et al., 1999) – which describes a three-step interpersonal model of personal growth, whereby close partners who perceive and behave toward the self in a manner congruent with the self's ideals can promote movement toward the ideal self, leading to better relationship well-being (Drigotas, 2002). For individuals with higher levels of narcissism, such partner support may serve their focal narcissistic self-goal, hence motivating greater commitment and thus buffering potentially adverse effects on the

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<sup>1</sup> This research was conducted in partial fulfillment of the requirements for the first author's doctoral dissertation at the University of Bern.

<sup>2</sup> Throughout this paper, when referring to “individuals with high narcissism levels” or “narcissistic individuals” we mean relatively elevated scores on a continuous narcissism measure and do not mean to imply a categorical distinction.

relationship.

Across three dyadic studies, we investigated whether the Michelangelo mechanisms moderate the association between narcissism and relationship commitment. Expanding on prior research, we investigated such commitment-buffering effects not only in grandiose but also in vulnerable narcissism, which both share the goal of constructing a grandiose self but employ partially distinct regulation strategies to pursue this goal. Furthermore, we adopted a dyadic approach in order to explore how these mechanisms affect both partners' commitment, and thus offer a more comprehensive view of narcissistic relationship dynamics.

### 1.1. Narcissism: A multifaceted self-regulatory personality system

Current consensus conceptualizes the structure of narcissism along a spectrum from agentic to neurotic features, connected by antagonistic aspects such as entitlement or self-importance (Back & Morf, 2018; Krizan & Herlache, 2018; Miller et al., 2016). Combinations of these antagonistic features with either end of the spectrum form the "real-world" expressions of grandiose and vulnerable narcissism.

Grandiose narcissism combines antagonistic features with agentic factors, such as high self-confidence and grandiose exhibitionism (Krizan & Herlache, 2018). As a result, individuals with these features exhibit a reward-driven and bold regulatory style with an approach-oriented focus on self-promotion (Krizan & Herlache, 2018). This is further expressed through a tendency to dominate social interactions, strategically using charm, but also by exploiting others to fulfill egoistic needs and reacting aggressively to criticism or unmet expectations (Morf et al., 2011). In romantic contexts, grandiose narcissism often translates into successes in short-term contexts (e.g., first encounters) due to its agentic aspects but later results in long-term relational difficulties driven by its antagonistic features (Wurst et al., 2017).

Vulnerable narcissism, in contrast, combines antagonistic with neurotic features, such as hypersensitivity, insecurity, and an anxious interpersonal orientation (Krizan & Herlache, 2018; Pincus et al., 2009). This manifestation is marked by an avoidance-driven and self-protective self-regulatory style, leading to defensive hostility, withdrawal, and high reactivity to potential rejection (Mahadevan & Jordan, 2022; Pincus et al., 2009). The obsessive need for admiration, coupled with repeated failed attempts to affirm a grandiose self, results in chronic self-doubt, feelings of being underappreciated, and negative affect, including shame (Edershile & Wright, 2021; Jauk et al., 2023; Krizan & Herlache, 2018). These self-regulation patterns also affect romantic relationships, with evidence (though limited) for lower relationship satisfaction (Balzen et al., 2022; Biesen & Smith, 2023) and negative dynamics such as an obsessive, possessive love style marked by jealousy and dependence (i.e., mania; Dinić & Jovanović, 2021; Jauk et al., 2023; Rohmann et al., 2012).

### 1.2. Consequences of narcissistic self-regulatory dynamics for commitment

Both grandiose and vulnerable narcissism have been shown to be related to behaviors that typically undermine relationship stability, such as keeping a partner uncertain about one's commitment as a strategy to maintain power (i.e., ludus; Dinić & Jovanović, 2021; Jauk et al., 2023; Rohmann et al., 2012), or infidelity (Gewirtz-Meydan et al., 2023). However, despite these harmful behaviors, findings on the association between grandiose narcissism and relationship commitment have been mixed. Some studies have reported that higher levels of grandiose narcissism were associated with lower commitment (Campbell & Foster, 2002; Campbell et al., 2002; Foster et al., 2006), whereas others found no association (Finkel et al., 2009) or even positive relations (though the latter disappeared when self-esteem was controlled; Sedikides et al., 2004). For vulnerable narcissism, the only study we are aware of to date examining commitment found no significant associations (Biesen &

Smith, 2023). Furthermore, recent literature differentiating between the underlying facets of narcissism showed how these distinct features differentially affect commitment. The antagonistic facet, common to both grandiose and vulnerable narcissism, has consistently been related to lower commitment (Seidman et al., 2020; Wurst et al., 2017; Zeigler-Hill et al., 2024). Agentic narcissism has been shown to have neutral to even positive associations with commitment (Seidman et al., 2020; Wurst et al., 2017; Zeigler-Hill et al., 2024; Zeigler-Hill et al., 2020). Neurotic narcissism has received little empirical attention, with only one study that showed no direct associations with commitment (Zeigler-Hill et al., 2024). Turning to narcissism's relations with partner commitment, research is limited, with only two studies addressing these associations (Wurst et al., 2017; Zeigler-Hill et al., 2024). Both found that antagonistic features were associated with lower partner commitment, but the results were inconsistent across gender and other facets of narcissism.

Altogether then, while certain narcissistic motivations and relationship behaviors could be expected to undermine relationship commitment; findings in this regard are inconclusive. While the antagonistic facet seems to be a robust predictor of low commitment, evidence for other facets (i.e., agentic and neurotic) remains mixed. These inconsistencies suggest the need to move beyond direct associations and to consider moderating factors that may help to clarify under what conditions, and for which narcissism facets, commitment is either high or low.

One group of such commitment-mitigating factors found in previous research are all predictors of the Investment Model (i.e., satisfaction, investment, and low quality of alternatives; Rusbult et al., 1998). Each of these factors were found to buffer the otherwise negative relations between grandiose narcissism and commitment (Foster, 2008). In other research, communal activation – a process eliciting thoughts and motivations of nurturance or caring for the partner (e.g., through priming with images of caring behaviors) – was similarly found to have beneficial effects on commitment for grandiose narcissism (Finkel et al., 2009). A recent study also provided initial evidence that these buffering effects of communal activation may extend to individuals with higher levels of vulnerable narcissism, although this effect was only marginally significant (Biesen & Smith, 2023). Two other recent studies provided initial evidence that fulfilling narcissistic expectations may mitigate commitment even for high antagonistic narcissism through factors like perceived power (Vrabel et al., 2020) or partner respect (Vrabel et al., 2021). Notably, Vrabel et al. (2021) is also, to our knowledge, the only study to consider partners' outcomes as well, finding that perceived respect did not yield commensurable buffering effects on partners' outcomes.

In sum, while some narcissistic self-regulation dynamics may potentially undermine relationship commitment, these relations can be mitigated by certain relationship dynamics. Further research is needed to identify additional buffering factors for a better understanding of conditions under which relationships involving individuals with high levels of narcissism persist. It is also crucial to investigate whether these buffering effects extend to vulnerable narcissism, as well as how partners' commitment is affected. The Michelangelo phenomenon (Drigotas et al., 1999), wherein partners facilitate each other's ideal self pursuit, offers a particularly promising mechanism that could improve the motivation to sustain a relationship among individuals with high levels of narcissism, as ideal-self attainment is a focal goal across both grandiose and vulnerable manifestations.

### 1.3. The Michelangelo phenomenon and its role for narcissistic self-regulation dynamics

Given that romantic relationships are among the most interdependent contexts in adult life (Kelley & Thibaut, 1978), intimate partners can significantly influence each others' progress toward the ideal self – both hindering or facilitating it (Fitzsimons et al., 2015). The

Michelangelo phenomenon describes the interpersonal process whereby intimate partners facilitate each other's movement toward their ideal selves (Drigotas et al., 1999). It is based on behavioral confirmation processes (Darley & Fazio, 1980; Harris & Rosenthal, 1985) and unfolds as a cascade of three steps (Drigotas et al., 1999). The process begins with *perceptual partner affirmation*, where one partner perceives the target partner as the kind of person the target desires to be. This perception leads to *behavioral partner affirmation*, where the partner is perceived as having elicited traits and behaviors that align with the target's ideal self. These affirmational processes, in turn, promote the target's perceived *movement toward the ideal self*, enhancing the sense of becoming the person he or she aspires to be. To illustrate, suppose Ann desires to be a great leader, and Tom sees her as a natural-born leader. In that case, he will encourage her to pursue leadership opportunities, which will help Ann to see herself as capable of being a great leader. These Michelangelo processes repeatedly have been shown to be beneficial for both individual psychological health, as well as relational well-being (Drigotas, 2002; Rusbult et al., 2005).

We proposed that these Michelangelo mechanisms may be particularly relevant for individuals with high levels of narcissism as they facilitate their concerted effort of striving toward a grandiose self – a central goal across all narcissism manifestations. Importantly, the partner-facilitated personal growth could present one of a few ways to promote interdependence without impeding the narcissistic goal pursuit of affirming a grandiose self. Consequently, this type of partner support might result in beneficial effects for relationship dynamics – for instance, bolstering relationship commitment (among other things) for individuals with high levels of narcissism – as it fulfills narcissistic needs of affirmation (Morf et al., 2011). Before discussing these potential benefits for narcissistic relationships, we first briefly consider how narcissism might be related to direct perceptions of ideal-facilitating partner support.

As no prior research has directly examined associations between narcissism and the Michelangelo components, we base our expectations on findings for traits that are related to narcissism. For grandiose narcissism, the direction of association remains theoretically ambiguous. On the one hand, some traits associated with grandiose narcissism (extraversion; Jauk et al., 2023; or a promotion-driven self-regulation style; Hanke et al., 2019; Morf & Rhodewalt, 2001) have been shown to be related to perceptions of greater partner affirmation and movement towards the ideal self (Bühler et al., 2020; Righetti et al., 2010). On the other hand, other traits also related to grandiose narcissism (low agreeableness; Jauk et al., 2023) were found to undermine these positive perceptions (Bühler et al., 2020). Furthermore, the general self-centered nature of narcissism may hinder individuals from recognizing or acknowledging their partner's role in their ideal realization, as they tend to attribute success solely to themselves (Rhodewalt & Morf, 1998). Given these conceptually competing tendencies, it remains unclear what to expect regarding direct relations between grandiose narcissism and perceptions of partner affirmation, suggesting it is a question best approached exploratorily. Vulnerable narcissism, in contrast, can be expected to be negatively associated with direct perceptions of partner affirmation based on findings for related traits like low extraversion, high neuroticism (Jauk et al., 2023), and low promotion self-regulatory tendencies (Hanke et al., 2019). All of these characteristics have been associated with decreased perceptions of ideal-facilitating partner support (Bühler et al., 2020; Kumashiro et al., 2007; Righetti et al., 2010). Accordingly, one could expect that vulnerable narcissism would show negative associations with such perceptions.

The central aim of the present research, however, was to investigate moderation effects, namely whether perceiving a partner as facilitating the ideal self buffers the motivation to sustain a romantic relationship for individuals with high levels of narcissism. In line with theoretical conceptualizations of narcissism as a self-goal-driven personality system focused on affirming a grandiose self (Morf et al., 2011), perceiving a partner as facilitative for the pursuit of the ideal self could buffer the

potential of otherwise lower commitment for individuals with high levels of narcissism. Perceiving the partner as instrumental in this pursuit may enhance the appeal of a partner (Fitzsimons & Shah, 2008), rendering potential alternative romantic partners less desirable, and motivate greater investment and commitment in the current relationship (Orehek & Forest, 2016). Conversely, decreased commitment may result when such partner support is lacking. Hence, this indicates that the Michelangelo mechanisms could buffer the relationship between narcissism and commitment.

This pattern can be expected for grandiose narcissism in particular, based on past research showing commitment-mitigating effects for this manifestation only. It is further supported by the theoretical notion that individuals with high grandiose narcissism levels approach close relationships from an instrumental perspective, such that they value partners to the extent that they serve their narcissistic goals (Campbell et al., 2006; Morf et al., 2011). Given their reward-oriented focus on self-promotion (Krizan & Herlache, 2018), perceiving a partner as facilitating the ideal self may directly align with their narcissistic goals by affirming grandiose self-views, thereby fostering sustained commitment.

For vulnerable narcissism, predictions regarding moderating effects were less straightforward. On the one hand, vulnerable narcissism shares the self-centered motivation of constructing a grandiose self (Krizan & Herlache, 2018), which would lead one to expect similar commitment-mitigating effects. On the other hand, due to the self-insecurity and strong dependence-related needs characteristic of vulnerable narcissism (Pincus et al., 2009), no such moderation may occur. In particular, ideal self promoting support alone may be insufficient to bolster commitment, unless it is additionally accompanied by reassurance and responsiveness. Accordingly, moderation effects for vulnerable narcissism should be tested in an exploratory manner.

As previously noted, only one study has addressed buffering effects on partners' outcomes, finding no such effects for partners (Vrabel et al., 2021). Nevertheless, one might expect that supporting a narcissistic partner's ideal self may also benefit the sculpting partner's own commitment, as has been theorized for mutual benefits of such interpersonal goal support (Orehek & Forest, 2016). For instance, if Ann, who has high narcissism levels, feels supported by Tom in her striving for leadership opportunities, Ann's improved commitment and potentially better relationship behaviors could also benefit Tom's commitment. Building on this, potential effects on the sculpting partners' commitment were also explored.

#### 1.4. The present study

In the current study, we aimed to test a novel factor that could mitigate the potential detrimental effects of narcissism on relationship commitment by examining the role of an ideal self facilitating partner. Specifically, in three dyadic studies, we examined whether the three Michelangelo mechanisms (i.e., *perceived perceptual* and *behavioral partner affirmation*, and *movement toward the ideal self*) moderated associations between narcissism and relationship commitment. Importantly, this research extends prior work by including both grandiose and vulnerable narcissism and by accounting for both partners' characteristics and their effects on commitment.

Building on the rationale outlined above concerning their primary focus on affirming a grandiose self, we hypothesized that the Michelangelo mechanisms would moderate the relationship between grandiose narcissism and commitment. Specifically, we expected the commitment of individuals with high levels of grandiose narcissism to be on par with those low in narcissism when the partner was perceived as supportive of the ideal self pursuit. In contrast, when perceiving a partner as non-conducive to this pursuit, commitment was expected to be lower. In other words, the beneficial effects of the Michelangelo mechanisms should be more pronounced for these individuals. For vulnerable narcissism, we examined the moderating role of the Michelangelo mechanisms in an exploratory manner. This decision was based on the

limited existing research on potential mitigating effects for this manifestation, as well as its distinct features (e.g., insecurity and dependence needs), which may possibly shape responses to partner affirmation in different ways (Foster & Brunell, 2018).

In terms of the Michelangelo components, although each of these mechanisms represents a slightly different aspect of support for the ideal self, moderation effects were expected for all of them, as each contributes to fulfilling the narcissistic self-goal. Furthermore, given the lack of research on buffering effects on partners of narcissists, we examined these effects on an exploratory basis. Specifically, we explored whether perceiving a partner as a successful sculptor (i.e., as ideal self promoting) also had effects on commitment of partners of individuals with high narcissism levels. Finally, although individuals with high levels of narcissism may also be perceived as a sculpting partner, we examined potential moderating effects for narcissistic sculptors on an exploratory basis, as such dynamics likely entail different processes.

We tested these hypotheses in three dyadic studies, where both partners of romantic couples provided self-reports of their narcissism levels, their perceptions of partner support for their ideal selves, and their romantic commitment. Study 1 focused solely on grandiose narcissism, while Studies 2 and 3 expanded on this by examining both grandiose and vulnerable manifestations of narcissism. To determine the unique effects of narcissism, we controlled for self-esteem to account for its overlap with narcissism (Brummelman et al., 2016). We also controlled for relationship duration, given its potential impact on narcissistic relationship dynamics (Wurst et al., 2017). We did not pre-register the studies, but we provide supplementary material along with statistical codes and a link to request the data at <https://osf.io/q9wcj/>.

## 2. Study 1

Study 1 investigated whether perceptions of the Michelangelo phenomenon moderate the relation between grandiose narcissism and relationship commitment. We expected that perceiving a partner as supportive of the progress toward the ideal self would mitigate potential negative associations between grandiose narcissism and commitment.

### 2.1. Method

#### 2.1.1. Procedure

The data for this study stem from a larger five-part longitudinal study on interpersonal goal achievement dynamics<sup>3</sup> (including self-reports and laboratory sessions). The recruitment took place via newspaper ads and postings in the local community of Chapel Hill, North Carolina. At the beginning of the study, all couples were “newly committed” to their relationship – meaning that they either started cohabitating recently, got engaged, or got married within the previous year. As grandiose narcissism was measured only at Time 4 (18 months into the study), data from this assessment wave were used to test our hypotheses. During this wave, participants completed self-report questionnaires at home, which were sent to them by mail. Participants were instructed to complete all self-report measures independently. Couples were reimbursed with \$60 at Time 4.

#### 2.1.2. Participants

Participants were 110 male–female couples who participated in Time 4 of the study and provided data on the narcissism measure. We excluded two same-sex couples for analytical reasons (i.e., a statistical approach requiring distinguishable dyads). Three additional couples

<sup>3</sup> This dataset has been used in several published articles investigating the Michelangelo phenomenon (Kumashiro et al., 2007; Righetti et al., 2010; Rusbult et al., 2009), or narcissism (Finkel et al., 2009). However, none of these studies examined the relationship between narcissism and the Michelangelo phenomenon.

were identified as multivariate outliers, using Mahalanobis distance at the dyadic level compared against a threshold of  $\chi^2(30) = 59.70$ ,  $p < 0.001$ , and excluded them from the analyses. This resulted in a final sample of 107 couples ( $n = 214$  individuals). At Time 1, participants’ ages ranged from 21 to 49 years ( $M = 27.93$ ;  $SD = 4.28$ ), and they had been involved in the relationship for 3.53 years on average ( $SD = 2.02$ ; ranging from 0–10 years). Most of the couples were married (78%), shared a household (98%), and had no children (92%).

### 2.1.3. Measures

**2.1.3.1. Narcissism.** Grandiose narcissism was assessed with the widely used Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). This measure requires participants to make 40 forced-choice decisions regarding pairs of statements reflecting a narcissistic and a non-narcissistic option (e.g., 1 = “I think I am a special person.” vs. 0 = “I am no better or worse than most people.”;  $\alpha = 0.85$ ).

**2.1.3.2. Self-esteem.** This construct was measured with the 10-item Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965; e.g., “I am able to do things as well as most other people”; 0 = do not agree at all; 8 = agree completely;  $\alpha = 0.85$ ).

**2.1.3.3. Michelangelo phenomenon.** Perceived partner affirmation was measured with a reduced six-item version of the original scales (Drigotas et al., 1999), first introduced by Righetti et al. (2010). Participants answered on a 9-point scale (0 = do not agree at all; 8 = agree completely). Three of these items assessed perceptual affirmation (e.g., “My partner sees me as the person I ideally would like to be.”;  $\alpha = 0.93$ ), and the other three captured behavioral affirmation (e.g., “My partner behaves in ways that help me become who I most want to be.”;  $\alpha = 0.90$ ). To assess an individuals’ perceived movement toward the ideal self, participants were instructed to think about their ideal selves (i.e., the goals they have for themselves in various domains of life) and then rated their progress toward these ideals as a result of involvement with their partner. They did so regarding four specific domains (i.e., professional aspirations, personal traits, relationship goals, and other domains such as hobbies or health; from  $-4 =$  I have moved further from my ideal self to  $+4 =$  I have moved closer to my ideal self). The reported progress was averaged across the four domains ( $\alpha = 0.63$ ).

**2.1.3.4. Commitment.** Relationship commitment was assessed with 15 items ( $\alpha = 0.90$ ), such as “I am completely committed to maintaining our relationship.” or “I feel completely attached to my partner and our relationship.” which were answered on a 0 (do not agree at all) to 8 (agree completely) response scale (Rusbult et al., 2009).

#### 2.1.4. Statistical approach

To address the non-independence of the dyadic data, we employed the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006). This model allows the simultaneous estimation of intrapersonal (*actor effects*; e.g., how a person’s own narcissism is related to the degree of perceived affirmation) and interpersonal effects (*partner effects*; e.g. how the narcissism level of one partner is associated with the other partners’ perception of perceived affirmation). The most basic form of these dyadic models, the simple APIM, represents a multivariate regression with two predictor variables and two outcomes – one for each partner. Within distinguishable dyads, such as male–female couples, the APIM also allows to directly test potential gender differences by comparing constrained (i.e., parameter set equal across gender) and unconstrained (i.e., freely estimated) models for each parameter using a  $\chi^2$ -difference test ( $p < 0.05$ ). When theoretically and statistically appropriate (i.e., no significant difference in fit between nested models), gender-constraints across parameters can be implemented to establish more parsimonious models.

The moderated Actor-Partner Interdependence Model (APIMoM; Garcia et al., 2015) was used to examine whether the Michelangelo components moderate the associations between narcissism and relationship commitment. This model includes four interaction types, analyzed separately for male and female partners unless constrained to be equal across gender (see Fig. 1). Two of these interaction types test effects where the partner of the narcissist is the sculptor (i.e., the one perceived as supporting the other’s ideal self): First, an actor narcissism by actor moderator interactions (AXAM), for example, tests whether the association between Ann’s narcissism level (AX) and her own commitment (outcome) depends on perceiving Tom as ideal-self-promoting (AM). Second, partner narcissism by partner moderator interactions (PXPM) test whether the association of Ann’s narcissism with Tom’s commitment depends on whether she perceives Tom as supporting her ideal self. The primary focus of this study was on these two interactions, particularly AXAM, which tests the focal moderation hypothesis (i.e., that perceiving a partner as facilitating the ideal self development buffers potentially negative associations between an individual’s grandiose narcissism level and their own commitment). Conversely, the two other interactions – i.e., partner narcissism by actor moderator (PXAM), and actor narcissism by partner moderator (AXPM) – were not of primary interest as they address effects where the individual with high levels of narcissism acts as the sculptor (i.e., the partner being the target of sculpting).

Due to potential associations of relationship duration with narcissism-related relationship dynamics (Wurst et al., 2017) and with the Michelangelo phenomenon (Bühler et al., 2019), we controlled for relationship duration in all focal analyses. Additionally, given the conceptual overlap between self-esteem and narcissism (Brummelman et al., 2016), we controlled for self-esteem levels of both partners to be able to isolate the unique effects of narcissism. Differences in findings without these control variables are indicated with superscripts in the tables, and the results for the models without control variables are provided in the supplemental material.

All APIM models were estimated in R (Version 4.3.1) using the *sem*-function from the package *lavaan* (Version 0.6–16; Rosseel, 2012). We relied on full information maximum likelihood estimation (FIML) to handle missing data and used robust estimation methods to account for

potential non-normality of the data (MLR-estimator).

To our knowledge, no analysis tool is available to estimate the power of APIMoM models. To obtain a power estimation nevertheless, we conducted a post-hoc simulation-based power analysis with Mplus 8.8 (Muthén & Muthén, 1998–2017) using the model estimates of Study 1 as starting values (running 5000 iterations). This analysis indicated that the power for Study 1 (107 couples) to detect the given AXAM interaction was limited, ranging from 0.57 to 0.67 at  $\alpha = 0.05$ . The a-priori power simulation for Studies 2 and 3 based on the estimates of Study 1 suggested that a sample size of 200 dyads would provide adequate power (0.82 to 0.90) to detect the same effects. Therefore, despite the limited power in Study 1, testing these interactions in two additional larger samples (> 200 couples) in Studies 2 and 3 and across independent studies should provide insights into the robustness of the observed patterns.

## 2.2. Results

### 2.2.1. Descriptive statistics and preliminary results

Table 1 presents descriptive statistics and results of paired sample t-tests for all measures. See supplemental material for correlations between the variables, direct relations of narcissism with the control variables, and the replication of the associations between the Michelangelo components.

2.2.1.1. Preliminary direct relations of narcissism with the Michelangelo components and commitment. Simple APIMs (see Table 2) tested direct associations of actor and partners’ grandiose narcissism with the Michelangelo components (i.e., perceived partner perceptual or behavioral affirmation and target movement toward the ideal self) and commitment, controlling for self-esteem levels of both partners and relationship duration. The results showed that neither actor nor partner grandiose narcissism was significantly associated with any of the Michelangelo components. Actor narcissism, however, was negatively associated with commitment.

### 2.2.2. Moderating effects of the Michelangelo components on the association between narcissism and commitment

In three separate APIMoM models, we examined if associations between grandiose narcissism and relationship commitment depended on perceptions of a partner’s facilitative role for one’s ideal self. The moderation results (Table 3) revealed a recurring pattern of significant interaction effects between own grandiose narcissism and own perceptions across all three Michelangelo components (i.e., AXAM; though only marginally significant for perceived movement toward the ideal self). Simple Slope analyses (Table 4) showed that when individuals with high levels of grandiose narcissism perceived their partner to affirm their ideal self perceptually or behaviorally, or to facilitate the movement toward this ideal, their commitment was on par with individuals with low levels of grandiose narcissism (see Fig. 2a-c). Conversely, when they perceived low levels of affirmation or that the partner was not helpful for the movement toward the ideal self, they reported lower commitment compared to those low in narcissism. While individuals with low levels of narcissism also generally benefitted from the Michelangelo components, the buffering effects on commitment were much more pronounced for those with high grandiose narcissism.

Furthermore, a single PXPM interaction, indicating effects on partners’ commitment predicted by the interaction between the other partner’s grandiose narcissism and perceptions of movement toward the ideal self emerged (see Fig. 2d). While commitment levels did not differ between individuals with high compared to low grandiose narcissistic partners, those with partners characterized by low grandiose narcissism reported higher commitment when their partners perceived greater movement toward the ideal self (see Table 4 for simple slope effects). In contrast, this effect was small for male partners of women with high

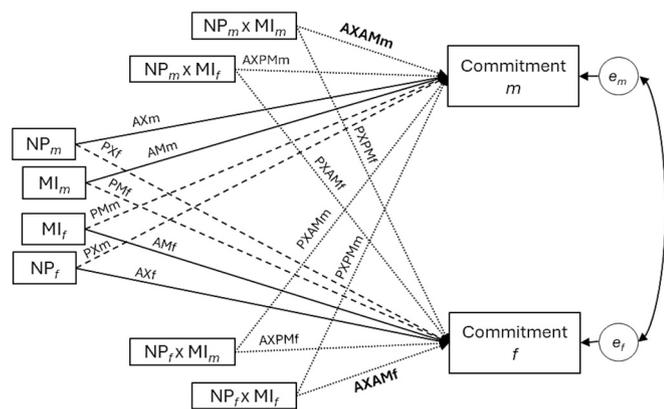


Fig. 1. Statistical model of the moderated actor-partner interdependence model predicting commitment. This figure displays the statistical model describing the conditional direct actor and partner effects of the predictor narcissism and the moderator Michelangelo components as moderators as well as interactions effects between predictor and moderator on the commitment of both partners. A = Actor; P = Partner; X = Predictor; M = Moderator; f = female; m = male; NP = Narcissism (Predictor); MI = Michelangelo components (Moderator; i.e., perceived perceptual affirmation, perceived behavioral affirmation, or perceived movement towards the ideal self through the partner); AXAM = Actor narcissism by actor moderator; PXAM = Partner narcissism by partner moderator; AXPM = Actor narcissism by partner moderator; PXPM = Partner narcissism by actor moderator; e = error term.

**Table 1**  
Descriptive statistics and paired-sample t-tests for Study 1.

	Study 1				Response range	t-Test		
	Women		Men			t	d	
	M	SD	M	SD				
Age	26.29	3.94	27.57	4.53	21–49	–5.71	***	–0.55
Relationship duration	3.50	1.99	3.55	2.07	0–10			
<b>Personality traits</b>								
NPI	14.99	6.87	15.84	7.17	0–40	–1.18		–0.12
Self-esteem	6.80	1.02	6.59	1.05	0–8	1.54		0.15
<b>Michelangelo components</b>								
Perceived perceptual affirmation	6.44	1.27	6.25	1.27	0–8	1.43		0.14
Perceived behavioral affirmation	6.41	1.33	6.39	1.24	0–8	0.19		0.02
Movement toward the ideal self	1.92	0.92	1.90	0.96	(–4)–4	0.15		0.01
<b>Relationship outcome</b>								
Commitment	6.87	0.88	6.76	0.87	0–8	1.45		0.14

Note. N = 107 male–female couples. d = Cohen’s d for dependent data; NPI = Narcissistic Personality Inventory.

\*\*\*p < 0.001.

**Table 2**

Simple APIMs for Study 1 with grandiose narcissism as predictor of the Michelangelo components and commitment (with self-esteem, and relationship duration as control variables).

Label	Perceived perceptual affirmation		Perceived behavioral affirmation		Perceived movement towards ideal self		Commitment						
	B	SE	B	SE	B	SE	B	SE					
<b>Grandiose narcissism</b>													
NPI actor	–0.01	(0.01)	–0.02	(0.01)	†	<sup>b</sup>	0.00	(0.01)	–0.02	(0.01)	*	<sup>b</sup>	
NPI partner	–0.02	(0.01)	–0.01	(0.01)			0.00	(0.01)	–0.01	(0.01)		<sup>c</sup>	
<b>Control variables</b>													
Self-esteem actor	0.45	(0.09)	***	0.47	(0.09)	***	0.13	(0.09)	<sup>c</sup>	0.30	(0.08)	***	<sup>c</sup>
Self-esteem partner	0.08	(0.09)		0.18	(0.08)	*	0.18	(0.07)	**	0.18	(0.06)	**	
Relationship duration	0.03	(0.04)		0.07	(0.05)		0.05	(0.03)	†	0.04	(0.03)		
				–0.07	(0.07)								

Note. The unstandardized coefficients are reported. In case of gender differences, coefficients for men and women are reported separately (men above, women below), otherwise effects are pooled across gender. NPI = Narcissistic Personality Inventory.

†p < 0.10. \*p < 0.05. \*\*p < 0.01. \*\*\*p < 0.001.

<sup>b</sup> Effect non-significant in model without self-esteem and relationship duration controlled. <sup>c</sup> Changes in gender differences without self-esteem and relationship duration controlled.

**Table 3**

Moderated APIMs for Study 1 with grandiose narcissism interacting with the Michelangelo components to predict commitment (with self-esteem, and relationship duration as control variables).

Moderator	Commitment										
	Perceived perceptual affirmation			Perceived behavioral affirmation			Perceived movement towards ideal self				
	Predictor	B	SE	B	SE	B	SE	B	SE		
<b>Grandiose Narcissism</b>											
NPI actor (AX)	–0.01	(0.01)		–0.01	(0.01)			–0.01	(0.01)		
NPI partner (PX)	0.00	(0.01)		0.00	(0.01)		<sup>a,c</sup>	0.00	(0.01)		
Moderator actor (AM)	0.23	(0.05)	***	0.27	(0.04)	***		0.29	(0.06)	***	
Moderator partner (PM)	0.14	(0.06)	*	0.07	(0.04)	†		0.30	(0.09)	***	
								0.12	(0.06)	†	
<b>Partner as sculptor</b>											
AX x AM	<b>0.02</b>	<b>(0.01)</b>	**	<b>0.01</b>	<b>(0.00)</b>	*		<b>0.01</b>	<b>(0.01)</b>	†	
PX x PM	0.00	(0.01)		–0.01	(0.00)			–0.01	(0.01)	*	
<b>Partner as target of sculpting</b>											
AX x PM	–0.02	(0.01)	**	–0.02	(0.01)	**		–0.02	(0.01)	*	
PX x AM	0.00	(0.01)		0.02	(0.01)		<sup>a,c</sup>	–0.01	(0.01)	†	<sup>b</sup>
				–0.01	(0.01)						

Note. The unstandardized coefficients are reported. In case of gender differences, coefficients for men and women are reported separately (men above, women below), otherwise effects are pooled across gender. Significant interaction effects are bold, and marginally significant interaction effects are bold and italic. NPI = Narcissistic Personality Inventory; AX x AM = Actor narcissism by actor moderator interaction; PX x PM = Partner narcissism by partner moderator interaction; AX x PM = Actor narcissism by partner moderator interaction; PX x AM = Partner narcissism by actor moderator interaction.

†p < 0.10. \*p < 0.05. \*\*p < 0.01. \*\*\*p < 0.001.

<sup>a</sup> Effect significant in model without self-esteem and relationship duration controlled. <sup>b</sup> Effect non-significant in model without self-esteem and relationship duration controlled. <sup>c</sup> Changes in gender differences without self-esteem and relationship duration controlled.

**Table 4**

Simple slope effects for the actor-by-actor interactions (AX x AM) and partner-by-partner interactions (PX x PM) between narcissism and the Michelangelo components to predict commitment for Study 1.

Study 1	NPI	Interaction	Men					Women					
			B	SE	z	95% CI	p	B	SE	z	95% CI	p	
Study 1	Perceived perceptual affirmation	AX x AM	High Mod	0.01 (0.01)	1.59	[0.00,0.03]	0.111	0.02 (0.01)	1.83	[0.00,0.04]	0.067	†	
			Low Mod	-0.03 (0.01)	-2.89	[-0.06,-0.01]	0.004	**	-0.03 (0.01)	-2.79	[-0.05,-0.01]	0.005	**
			High NPI	0.38 (0.06)	5.95	[0.26,0.51]	<0.001	***	0.36 (0.06)	6.02	[0.24,0.48]	<0.001	***
	Perceived behavioral affirmation	AX x AM	Low NPI	0.10 (0.06)	1.61	[-0.02,0.23]	0.107	0.09 (0.07)	1.40	[-0.04,0.22]	0.162		
			High Mod	0.01 (0.01)	0.60	[-0.01,0.02]	0.547	0.01 (0.01)	0.69	[-0.01,0.03]	0.492		
			Low Mod	-0.02 (0.01)	-1.81	[-0.04,0.00]	0.070	†	-0.02 (0.01)	-1.84	[-0.04,0.00]	0.066	†
	Perceived movement towards ideal self	AX x AM (trend interaction)	High NPI	0.34 (0.04)	7.95	[0.26,0.42]	<0.001	***	0.33 (0.04)	8.16	[0.25,0.41]	<0.001	***
			Low NPI	0.21 (0.06)	3.56	[0.09, 0.32]	<0.001	***	0.20 (0.06)	3.37	[0.08,0.32]	0.001	***
			High Mod	0.00 (0.01)	0.24	[-0.02,0.02]	0.808	0.00 (0.01)	0.21	[-0.02,0.02]	0.835		
	PX x PM		Low Mod	-0.02 (0.01)	-1.96	[-0.04,0.00]	0.051	†	-0.02 (0.01)	-1.94	[-0.04,0.00]	0.052	†
			High NPI	0.38 (0.08)	4.70	[0.22,0.54]	<0.001	***	0.37 (0.08)	4.81	[0.22,0.52]	<0.001	***
			Low NPI	0.20 (0.08)	2.50	[0.04,0.36]	0.012	*	0.20 (0.08)	2.35	[0.03,0.36]	0.019	*
			High Mod	-0.01 (0.01)	-1.29	[-0.03,0.01]	0.198		-0.01 (0.01)	-1.31	[-0.03,0.01]	0.191	
			Low Mod	0.01 (0.01)	1.45	[0.00,0.03]	0.148		0.01 (0.01)	1.50	[0.00,0.03]	0.133	
			High NPI	0.23 (0.10)	2.37	[0.04,0.41]	0.018	*	0.02 (0.07)	0.33	[-0.12,0.17]	0.739	
Low NPI	0.39 (0.09)	4.10	[0.20,0.58]	<0.001	***	0.20 (0.08)	2.58	[0.05,0.35]	0.010	**			

Note. The unstandardized coefficients are reported. High levels represent effects +1 SD and low levels -1 SD. Self-esteem and relationship duration were controlled in all models. Mod = Moderator; NPI = Narcissistic Personality Inventory; AX x AM = Actor narcissism by actor moderator interaction; PX x PM = Partner narcissism by partner moderator interaction.

†p < 0.10. \*p < 0.05. \*\*p < 0.01. \*\*\*p < 0.001.

grandiose narcissism and entirely absent for female partners. Results for the non-focal interactions between narcissism and the role of being a sculptor are detailed in the supplemental material.

2.3. Discussion

The results of Study 1 supported the moderation hypothesis for perceived partner affirmation (perceptual and behavioral) and showed a marginally significant interaction for movement toward the ideal self. These findings provide the first evidence that an ideal-supporting partner mitigates the otherwise lower commitment in individuals with high grandiose narcissism. This highlights the instrumental role of partners in narcissistic self-regulation. Specifically, perceiving a partner as facilitating the progress toward the grandiose self may fulfill narcissistic needs and, therefore, motivate individuals to maintain the current intimate relationship. This moderation effect did not extend to the commitment of partners of narcissists. Notably, controlling for self-esteem, which was positively associated with both the Michelangelo components and commitment, confirmed that the moderation effects were narcissism-specific and not driven by high self-esteem. Additionally, preliminary analyses revealed no direct associations between grandiose narcissism and the Michelangelo components.

Taken together, partner-facilitated personal growth may posit a promising avenue for buffering commitment among individuals with high levels of grandiose narcissism. However, it remains unclear whether these mitigating effects replicate in other samples or generalize to vulnerable narcissism. We addressed these gaps in the two following studies by investigating both grandiose and vulnerable manifestations in larger samples.

3. Study 2 and 3

Studies 2 and 3 aimed to replicate the findings of Study 1 in larger dyadic samples and expand them by testing moderation effects for both grandiose and vulnerable narcissism manifestations. Regarding moderation effects on individuals' own commitment, we hypothesized that higher perceptions of the Michelangelo affirmation mechanisms would buffer the association between a person's own grandiose narcissism and commitment. We expected individuals with high grandiose narcissism

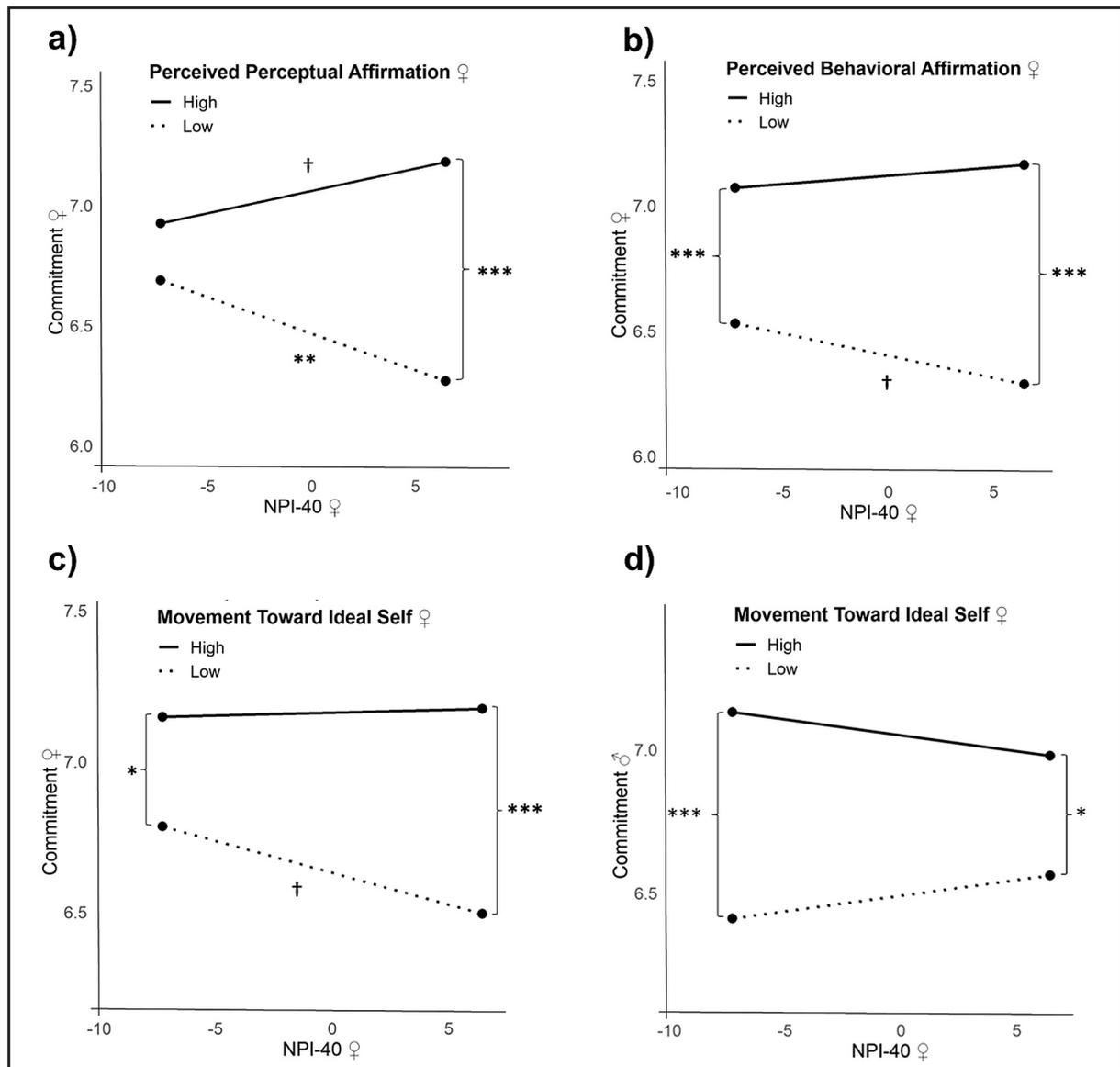
levels to report similarly high commitment levels to those with low narcissism when their partner is perceived as facilitating their progress toward the ideal self. Conversely, perceiving a partner as not providing the expected support would result in reduced commitment. Due to limited empirical evidence, we did not formulate specific hypotheses regarding moderation effects for vulnerable narcissism or potential buffering effects on the commitment of the sculpting partners.

3.1. Method

Although Studies 2 and 3 constitute two independent studies, we report the methods and results jointly, given that both studies employed almost identical procedures.

3.1.1. Procedure

Both samples were recruited in the German-speaking regions of Europe (Study 3 specifically targeting participants in Switzerland) as part of two larger couple studies under the topic of "Personality and Partnership". Recruitment was conducted through printed and electronic flyers distributed in the local communities, as well as social media advertisements (i.e., Instagram). Participants had to be involved in the current romantic relationship for at least three months. All study components were administered on online survey platforms: Study 2 in Qualtrics and Study 3 in formr (Arslan et al., 2020). Participants were instructed to individually complete the online self-report surveys. Study 2 involved a baseline assessment with a larger battery of self-reports and a follow-up assessment after one year. Study 3, on the other hand, consisted of a baseline questionnaire, followed by a 14-day diary phase and a follow-up assessment after 6 and 12 months. Participants had the chance to take part in a prize drawing for CHF 50 online shop vouchers after finishing the assessments (Study 2: 12 vouchers; Study 3: 8 vouchers). Additionally, couples who completed the diary phase in Study 3 received a CHF 40 voucher for a Swiss online shop. Both studies were approved by the ethical review board of the Faculty of Human Sciences at the University of Bern. All data were drawn from baseline assessments, except for the Michelangelo components in Study 3, which were assessed after completing the daily diary phase (approximately 15 days after the baseline).



**Fig. 2.** Simple slopes for commitment in Study 1 at low and high levels (1 SD below and above the grand mean, respectively) of grandiose narcissism and the Michelangelo components. Simple Slopes for the moderation effect of Michelangelo components on the association between grandiose narcissism and commitment (i. e., illustrated for female narcissism). NPI-40 = Grandiose narcissism as predictor. a & b Significant actor by actor (AXAM) interactions. c) Marginally significant actor by actor interaction. d) Significant partner narcissism by partner moderator (PXPM) interaction. Simple slopes look similar for narcissism levels of men.

### 3.1.2. Participants

**3.1.2.1. Study 2.** The sample consisted of 213 male–female couples. Due to our analytical approach requiring distinguishable dyads, 44 same-sex couples and 13 couples including gender-diverse or non-binary partners had been excluded before the analysis. One multivariate outlier couple, identified based on the Mahalanobis distance tested against a cutoff of  $\chi^2(30) = 59.70$ ,  $p < 0.001$ , was excluded from the analyses. This resulted in a total sample of 424 individuals nested in 212 couples. Participants were between 18 and 74 years old ( $M = 31.90$ ;  $SD = 14.57$ ) and had been involved in the current romantic relationship on average for 7.07 years ( $SD = 9.19$ ; ranging from 0–40 years). The majority lived in Switzerland (70%) or Germany (24%), and the sample was relatively well-educated (38% held a tertiary degree). Most couples were unmarried (78%), had no children (86%), and did share a household (48% and 9% part-time).

**3.1.2.2. Study 3.** Participants were 213 male–female couples who

completed the Michelangelo component assessment. We excluded 16 same-sex couples and 6 couples in which at least one partner identified gender-diverse or non-binary prior to conducting the analysis. As none of the couples was identified as a multivariate outlier – tested against the same cut-off as used in studies 1 and 2 – the sample size remained 426 individuals (nested in 213 couples). The age of participants ranged from 19 to 57 years ( $M = 28.12$ ;  $SD = 5.60$ ), and the average relationship duration was 4.86 years ( $SD = 3.98$ ; ranging from 0–22 years). Almost all participants lived in Switzerland (99%), and the majority held a higher education degree (58% tertiary education degree). Most couples were neither married nor engaged (80%), had no children (93%), but did share a household (58% and 9% part-time).

### 3.1.3. Measures

**3.1.3.1. Narcissism.** The German version of the 30-item Five Factor Narcissism Inventory – Brief Form (FFNI-BF; Jauk et al., 2023) was used to measure narcissism on a scale ranging from 1 (strongly disagree) to 5

(strongly agree). This measure captures the two primary manifestations of narcissism, with 22 items assessing the grandiose ( $\alpha_{\text{Study2/Study3}} = 0.84/.84$ ; e.g., “I am driven to succeed.”) and eight items assessing the vulnerable factor ( $\alpha_{\text{Study2/Study3}} = 0.74/.70$ ; e.g., “I often feel as if I need compliments from others in order to be sure of myself.”). The FFNI additionally allows the differentiation of narcissism’s lower-order factors, which were examined in a supplemental analysis: Agentic (part of grandiose), neurotic (part of vulnerable), and antagonistic (partly grandiose and partly vulnerable); more details about these scales are provided in the supplemental material. In Study 2, the grandiose narcissism score for one participant was identified as an extreme outlier (i.e.,  $> 4$  SDs above the mean) and corrected to three standard deviations above the mean to avoid distortion (as the data of this participant were otherwise unproblematic).

**3.1.3.2. Self-esteem.** The 10-item Self-Esteem Scale (RSE; Rosenberg, 1965; German version von Collani & Herzberg, 2003) was used to measure self-esteem (e.g., “I take a positive attitude toward myself.”, 1 = strongly disagree; 4 = strongly agree;  $\alpha_{\text{Study2/Study3}} = 0.89/.90$ ).

**3.1.3.3. Michelangelo components.** We assessed the three Michelangelo components with translated German versions (Bühler et al., 2019) of the original scale (Drigotas et al., 1999). As in Study 1, we used shortened 3-item versions of each original scale to measure perceived perceptual partner affirmation ( $\alpha_{\text{Study2/Study3}} = 0.87/.87$ ) and perceived behavioral partner affirmation ( $\alpha_{\text{Study2/Study3}} = 0.83/.86$ ), but with a response scale from 1 (does not apply at all) to 5 (fully applies). To measure movement toward the ideal self, we employed an approach following the original operationalization (Drigotas et al., 1999). We asked participants to list the four most important features of their ideal self, which allowed to capture the most personally meaningful aspects. For each of these characteristics, they then reported how much their romantic relationship affected their progress toward this ideal on a 7-point scale (1 = moved away; 4 = unchanged; 7 = moved closer;  $\alpha_{\text{Study2/Study3}} = 0.66/.59$ ).

**3.1.3.4. Commitment.** Both studies measured relationship commitment with the widely used seven items from the Investment Model Scale (e.g., “I am committed to maintaining my relationship with my partner”; Rusbult et al., 1998). However, although we employed the same items in both studies 2 and 3, a 5-point response scale was used in Study 2 ( $\alpha = 0.84$ ) and a 9-point scale in Study 3 ( $\alpha = 0.78$ ) to indicate low (1 = do not agree at all) or high agreement (5 or 9, respectively = agree completely) with the statements. This seven-item version of the commitment scale is primarily composed of a subset of items from the 15-item version used in Study 1, with most items closely resembling those in the longer scale.

### 3.1.4. Statistical approach

We employed identical statistical analyses as in Study 1, testing the preliminary direct effects using simple APIMs and moderation effects using APIMoMs.<sup>4</sup> Gender differences were tested and constrained when appropriate. Relationship duration and self-esteem were entered as control variables in all focal models.

## 3.2. Results

### 3.2.1. Descriptive statistics and preliminary results

Descriptive statistics and results of the paired sample t-tests for each

study can be found in Table 5. The t-tests revealed consistent gender differences in mean levels across both samples: Male partners reported higher self-esteem, grandiose, agentic, and antagonistic narcissism, whereas female partners reported higher vulnerable and neurotic narcissism. For correlations between variables, direct relations of narcissism with control variables, and replication of Michelangelo component associations, see supplemental material.

**3.2.1.1. Preliminary direct relations of narcissism with the Michelangelo components and commitment.** For the grandiose and vulnerable manifestation of narcissism, direct actor and partner associations only emerged in Study 3 (see Table 6). Specifically, individuals with higher levels of grandiose narcissism reported lower relationship commitment (the same as in Study 1), and those with higher levels of vulnerable narcissism perceived less movement toward the ideal self. Furthermore, partners of individuals with higher levels of grandiose narcissism perceived less perceptual affirmation, while partners of those with higher vulnerable narcissism levels perceived less behavioral affirmation and movement toward the ideal self.

### 3.2.2. Moderating effects of the Michelangelo components on the association between narcissism and commitment

The focus again is on interactions where the partner acts as the sculptor (i.e., AXAM and PXPm). In addition to grandiose narcissism (as in Study 1), we also present results for vulnerable narcissism. Furthermore, results from supplemental analyses of the three lower-level narcissism factors – agentic, antagonistic, and neurotic – are presented to provide additional insights into potential underlying self-regulatory dynamics. These are briefly summarized at the end of this result section and detailed results (incl. tables and figures) are presented in the supplementary materials.

**3.2.2.1. Grandiose and vulnerable narcissism.** Results indicated multiple moderation effects for grandiose but none for vulnerable narcissism (see Table 7). The interactions between a person’s own grandiose narcissism level and perceiving the partner as supportive of the ideal self (i.e., AXAM) exhibited a relatively robust pattern for all three Michelangelo moderators (even if the effects were not consistently significant). Specifically, the buffering moderation effects of high *perceived perceptual partner affirmation* on the commitment of individuals with high levels of grandiose narcissism were significant in Study 3 and marginally significant in Study 2 ( $p = 0.086$ ). In contrast, the moderation effect for *perceived behavioral affirmation* was significant only in Study 2. The beneficial moderating effect of high *perceived movement to the ideal self* on commitment for individuals with high levels of grandiose narcissism was significant in Study 2 and marginally significant in Study 3 ( $p = 0.070$ ). Simple slope analysis of these interaction effects revealed the expected pattern consistently so that low perceived perceptual affirmation, behavioral affirmation, or movement toward the ideal self had more detrimental effects on relationship commitment for individuals with high grandiose narcissism levels (of both genders). These individuals reported particularly low commitment levels. Conversely, when individuals with high levels of grandiose narcissism perceived high affirmation or movement toward the ideal self, their commitment was significantly higher and in line with that of individuals low in narcissism (see Fig. 3a-c for some illustrative plots & Table 8). These beneficial effects were consistently more pronounced for individuals with high grandiose narcissism, beyond the general positive relations of the Michelangelo components with commitment.

Apart from these moderating effects on the commitment of individuals with high narcissism levels, one moderation pattern with effects on partners’ commitment replicated across both studies – the interaction between the partner’s grandiose narcissism with partner’s perceived movement toward the ideal self (i.e., PXPm; see Fig. 3d). Specifically, when individuals with high levels of grandiose narcissism

<sup>4</sup> Initially, we also considered integrated data analysis (Hussong et al., 2013) due to similarities between the studies. However, model comparisons revealed inconsistencies between the data of the two studies and precluded a meaningful interpretation of pooled effects. Thus, results are presented separately for each study.

**Table 5**  
Descriptive statistics and paired-sample t-tests for Study 2 and 3.

	Study 2				Study 3							
	Women		Men		Women		Men		t-Test	Response range	t	d
	M	SD	M	SD	M	SD	M	SD				
Age	30.91	13.99	32.89	15.09	27.31	5.13	28.93	5.94	-6.50	19-57	***	-0.45
Relationship duration	7.03	9.07	7.11	9.32	4.87	3.99	4.85	3.98		0-22		
<b>Personality traits</b>												
FFNI-GN	2.10	0.45	2.42	0.49	2.17	0.46	2.52	0.53	-8.12	1-5	***	-0.54
FFNI-VN	2.78	0.70	2.44	0.61	3.09	0.60	2.62	0.70	5.59	1-5	***	0.53
FFNI-Agency	2.54	0.72	2.76	0.70	2.70	0.74	2.96	0.77	-3.71	1-5	***	-0.27
FFNI-Antagonism	1.98	0.45	2.23	0.51	2.06	0.45	2.31	0.57	-5.73	1-5	***	-0.37
FFNI-Neuroticism	3.20	0.87	2.63	0.78	3.63	0.72	2.91	0.85	7.56	1-5	***	0.65
Self-esteem	3.16	0.57	3.32	0.49	3.02	0.60	3.31	0.60	-3.30	1-4	***	-0.36
<b>Michelangelo components</b>												
Perceived perceptual affirmation	3.33	0.97	3.30	0.97	3.60	0.77	3.71	0.78	0.22	1-5		-0.10
Perceived behavioral affirmation	4.05	0.84	4.08	0.79	4.21	0.68	4.14	0.73	0.52	1-5		0.10
Movement toward the ideal self	5.10	0.88	5.21	0.92	5.12	0.81	5.27	0.83	-1.24	1-7		-0.13
<b>Relationship outcome</b>												
Commitment	4.60	0.52	4.59	0.58	8.27	0.85	8.22	0.92	0.16	1-5		0.05

Note.  $N_{Study 2,3} = 212/213$  male-female couples.  $d =$  Cohen's  $d$  for dependent data; FFNI = Five-Factor Narcissism Inventory; GN = Grandiose narcissism; VN = Vulnerable narcissism. For the purpose of consistency, we renamed FFNI-Agency factor compared to the original measure, where it was referred to as FFNI-Extraversion. \*\*\* $p < 0.001$ .

perceived more progress toward the ideal self, this had beneficial effects on their sculpting partner's commitment (see Table 8 for simple slope effects). This resulted in higher commitment for partners compared to those with low levels of grandiose narcissism. These partners also reported higher commitment compared to those with high grandiose narcissistic partners perceiving them as less effective sculptors (i.e., low levels of movement), with the exception of female partners' commitment in Study 3 which did not differ.

**3.2.2.2. Supplemental analysis with agentic, antagonistic, and neurotic narcissism facets.** To determine if certain moderation effects for grandiose and vulnerable narcissism can be attributed to underlying narcissism facets, we tested the same models using the trifurcated narcissism structure (i.e., agentic, antagonistic, and neurotic). Detailed results can be found in the supplemental material. The moderation effects between a person's own narcissism levels and own perception of the Michelangelo components (i.e., AXAM) largely mirrored those found for grandiose narcissism for the agentic and antagonistic narcissism features (even if they did not consistently replicate across the two samples and all moderators). Generally, they showed a buffering effect on commitment among individuals with high levels of agentic and antagonistic narcissism when perceptions of affirmation and movement toward the ideal self were high (see supplemental material for simple slope plots). The beneficial effects on partners' commitment (i.e., PXP) replicated for agentic narcissism features in Study 3 and for antagonistic narcissism features in Study 2. Neurotic narcissism was not qualified by any significant interaction effects.

**3.3. Discussion**

The results of Studies 2 and 3 provide further evidence for the anticipated buffering effects of the Michelangelo mechanisms (i.e., perceptual or behavioral affirmation, or movement toward the ideal self through the partner) on commitment among individuals with high levels of grandiose narcissism. Corroborating Study 1, higher perceptions of the Michelangelo affirmation mechanisms mitigated the otherwise lower commitment in individuals with high grandiose narcissism levels, bringing them on par with those low in narcissism. However, these effects were not entirely consistent across all Michelangelo components (i.e., one non-significant and two marginally significant effects). Supplemental analyses revealed that an ideal-facilitating partner mitigated commitment for both agentic and antagonistic features of narcissism but not neurotic ones. No moderations were observed for vulnerable narcissism. The lack of moderation effects observed for this narcissism manifestation may potentially be explained by the avoidance-oriented regulatory style aimed at preventing hurt and rejection (Krizan & Herlache, 2018). In contrast to the approach-oriented style of grandiose narcissism – marked by actively seeking admiration and a potentially stronger motivation to maintain relationships that reinforce a grandiose self – vulnerable narcissism is characterized by a more passive, self-defensive, and anxiety-driven interpersonal approach. Individuals with higher levels of vulnerable narcissism may therefore require emotional safety as a prerequisite for benefiting from commitment-mitigating effects through ideal self support, as they likely prioritize self-protection over self-growth.

Furthermore, one robust finding across both studies was that partners of individuals with high grandiose narcissism reported increased commitment when their narcissistic partner perceived greater movement toward the ideal self. This introduces the possibility that the Michelangelo mechanisms may play a broader role for narcissistic relationship dynamics, potentially enhancing not only the commitment of individuals with high narcissism levels but also that of their sculpting partners when they are perceived as effective sculptors.

Preliminary analyses of direct associations indicated limited and inconsistent actor and partner effects, with few findings replicating

**Table 6**  
Simple APIMs for Study 2 & 3 with the grandiose and vulnerable manifestation of narcissism as predictors of the Michelangelo components and commitment (with self-esteem, and relationship duration as control variables).

Predictor	Perceived perceptual affirmation				Perceived behavioral affirmation				Perceived movement towards ideal self				Commitment												
	Study 2		Study 3		Study 2		Study 3		Study 2		Study 3		Study 2		Study 3										
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE									
<b>Grandiose narcissism</b>																									
<i>FFNI-GN actor</i>	0.16	(0.10)	a.c	-0.03	(0.08)	0.05	(0.08)	a.c	-0.07	(0.06)	-0.15	(0.13)	c	-0.12	(0.08)	-0.08	(0.06)	-0.20	(0.09)	*					
<i>FFNI-GN partner</i>	0.05	(0.09)	a.c	-0.16	(0.08)	*	b	0.10	(0.08)	a.c	-0.03	(0.06)	-0.03	(0.09)	-0.03	(0.07)	0.03	(0.05)	0.10	(0.08)					
<b>Control variables</b>																									
<i>Self-esteem actor</i>	0.15	(0.09)		0.30	(0.07)	***	0.14	(0.07)	*	0.15	(0.06)	**	0.18	(0.08)	*	0.32	(0.07)	***	0.20	(0.06)	**	0.18	(0.07)	*	
<i>Self-esteem partner</i>	0.09	(0.09)		-0.07	(0.06)		0.13	(0.08)	†	-0.01	(0.05)		0.05	(0.09)		0.04	(0.07)		0.07	(0.05)		0.04	(0.07)		
<i>Relationship duration</i>	-0.03	(0.01)	***	-0.02	(0.01)	*	-0.03	(0.00)	***	-0.03	(0.01)	**	0.00	(0.01)		-0.02	(0.01)	†	0.00	(0.00)		-0.02	(0.02)		
																						0.02	(0.01)		
<b>Vulnerable narcissism</b>																									
<i>FFNI-VN actor</i>	0.01	(0.09)		0.02	(0.06)		0.05	(0.07)		-0.10	(0.05)	†	a	-0.07	(0.09)		-0.16	(0.07)	*	0.03	(0.05)		-0.03	(0.07)	
<i>FFNI-VN partner</i>	0.05	(0.09)		-0.11	(0.07)		-0.04	(0.07)		-0.14	(0.05)	*	b	0.01	(0.07)		-0.15	(0.07)	*	0.02	(0.05)		-0.04	(0.06)	
<b>Control variables</b>																									
<i>Self-esteem actor</i>	0.16	(0.10)		0.30	(0.08)	***	0.18	(0.08)	*	0.09	(0.06)		0.15	(0.10)		0.23	(0.08)	**	0.21	(0.08)	**	0.14	(0.08)	†	
<i>Self-esteem partner</i>	0.12	(0.10)		-0.13	(0.06)	*	0.10	(0.08)		-0.09	(0.06)		0.06	(0.10)		-0.04	(0.07)		0.09	(0.06)		0.03	(0.08)		
<i>Relationship duration</i>	-0.03	(0.01)	***	-0.02	(0.01)	*	-0.03	(0.00)	***	-0.03	(0.01)	**	0.00	(0.01)		-0.02	(0.01)	*	0.00	(0.00)		-0.02	(0.02)		
																						0.02	(0.01)		

Note. The unstandardized coefficients are reported. In case of gender differences, coefficients for men and women are reported separately (men above, women below), otherwise effects are pooled across gender. FFNI = Five-Factor Narcissism Inventory; GN = Grandiose narcissism; VN = Vulnerable narcissism.

† $p < 0.10$ . \* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

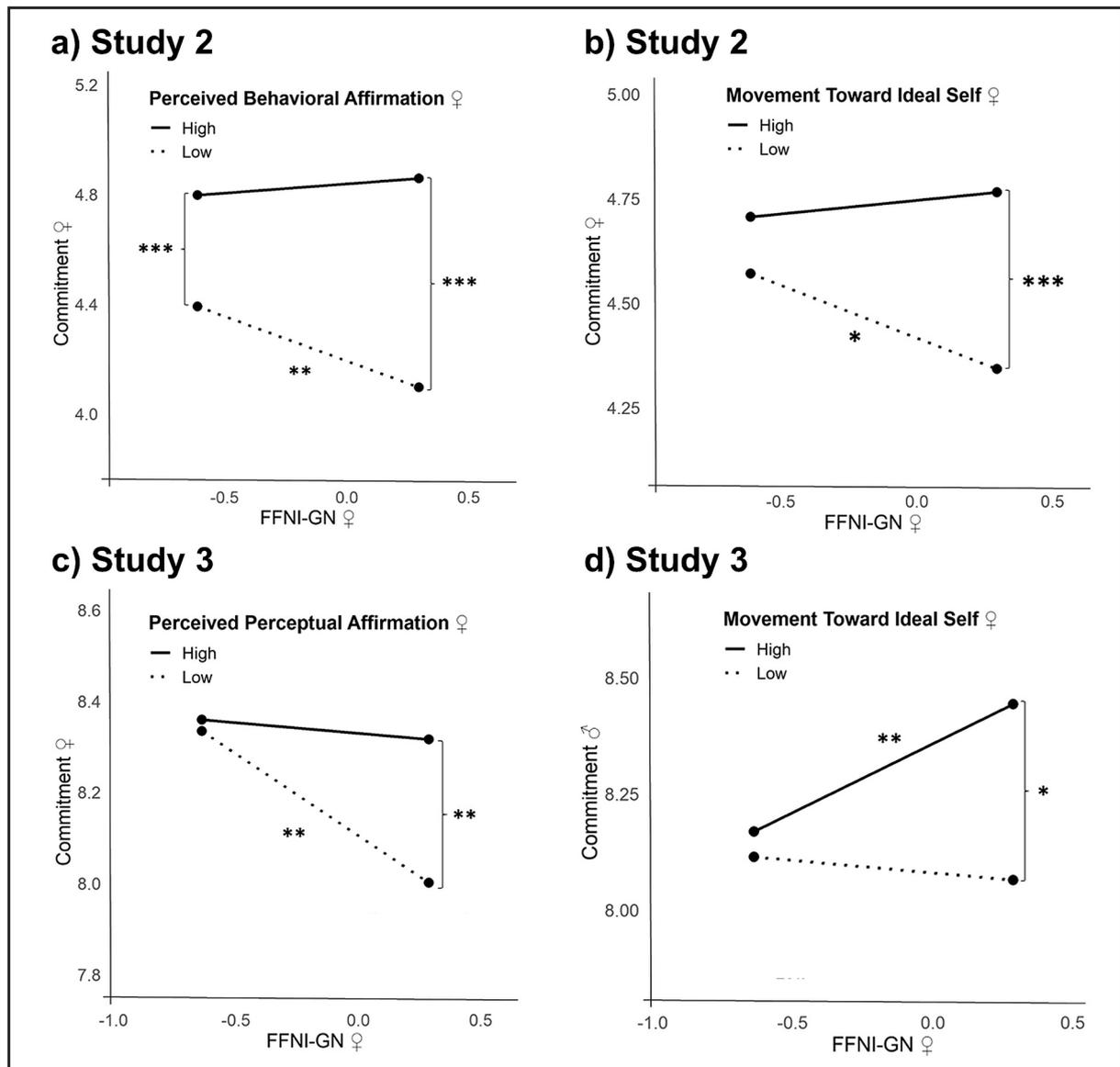
<sup>a</sup> Effect significant in model without self-esteem and relationship duration controlled. <sup>b</sup> Effect non-significant in model without self-esteem and relationship duration controlled. <sup>c</sup> Changes in gender differences without self-esteem and relationship duration controlled.

**Table 7**  
Moderated APIMs for Study 2 & 3 with grandiose and vulnerable narcissism manifestations interacting with the Michelangelo components to predict commitment (with self-esteem, and relationship duration as control variables).

Moderators	Commitment																					
	Perceived perceptual affirmation						Perceived behavioral affirmation						Perceived movement towards ideal self									
	Study 2			Study 3			Study 2			Study 3			Study 2			Study 3						
Predictors	<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		
<b>Grandiose narcissism</b>																						
<i>FFNI-GN actor (AX)</i>	-0.12	(0.06)	*	-0.19	(0.09)	*	-0.12	(0.06)	*	-0.16	(0.09)	†	<sup>a</sup>	-0.08	(0.05)		-0.13	(0.08)				
<i>FFNI-GN partner (PX)</i>	-0.01	(0.05)		0.12	(0.08)		0.00	(0.05)		0.12	(0.08)			0.02	(0.04)		0.14	(0.08)		†		
<i>Moderator actor (AM)</i>	0.13	(0.03)	***	0.15	(0.06)	*	0.20	(0.06)	***	0.41	(0.08)	***		0.19	(0.03)	***	0.20	(0.07)		**		
<i>Moderator partner (PM)</i>	0.10	(0.02)	***	0.04	(0.07)		0.19	(0.06)	**	0.13	(0.07)	†	<sup>b</sup>	0.05	(0.03)	*	0.17	(0.09)		†		<sup>b, c</sup>
							0.02	(0.06)									-0.07	(0.10)				<sup>c</sup>
<b>Partner as sculptor</b>																						
<i>AX x AM</i>	<b>0.09</b>	<b>(0.05)</b>	†	<b>0.20</b>	<b>(0.10)</b>	*	<b>0.23</b>	<b>(0.09)</b>	*	0.02	(0.16)			<b>0.18</b>	<b>(0.07)</b>	*	<b>0.17</b>	<b>(0.10)</b>		†		
<i>PX x PM</i>	0.05	(0.04)		0.09	(0.10)		<b>0.18</b>	<b>(0.10)</b>	†	0.02	(0.14)			<b>0.12</b>	<b>(0.05)</b>	*	<b>0.21</b>	<b>(0.10)</b>		*		
							0.00	(0.09)														
<b>Partner as target of sculpting</b>																						
<i>AX x PM</i>	<b>0.10</b>	<b>(0.06)</b>	†	<sup>a</sup>	-0.07	(0.11)		-0.04	(0.08)		-0.01	(0.12)		0.05	(0.05)		0.19	(0.14)				<sup>a</sup>
<i>PX x AM</i>	-0.01	(0.06)			-0.11	(0.11)		-0.03	(0.08)		-0.06	(0.13)		-0.04	(0.06)		-0.30	<b>(0.17)</b>		†		<sup>b</sup>
																	-0.07	(0.11)				
<b>Vulnerable narcissism</b>																						
<i>FFNI-VN actor (AX)</i>	0.01	(0.05)		<sup>a</sup>	-0.03	(0.07)		0.02	(0.04)		<sup>a</sup>	0.04	(0.07)		0.04	(0.04)		0.02	(0.06)			
<i>FFNI-VN partner (PX)</i>	0.00	(0.05)			-0.03	(0.06)		0.03	(0.04)			0.03	(0.07)		0.02	(0.05)		0.04	(0.07)			
<i>Moderator actor (AM)</i>	0.13	(0.03)	***		0.13	(0.06)	*	0.29	(0.04)	***	<sup>b</sup>	0.42	(0.08)	***	0.19	(0.03)	***	0.28	(0.08)		***	
<i>Moderator partner (PM)</i>	0.10	(0.02)	***		0.06	(0.06)		0.11	(0.05)	*	<sup>b</sup>	0.13	(0.07)	†	0.05	(0.03)	*	0.26	(0.09)		**	
								0.05	(0.05)									-0.04	(0.08)			
<b>Partner as sculptor</b>																						
<i>AX x AM</i>	0.02	(0.04)			-0.02	(0.09)		0.04	(0.05)			-0.03	(0.11)		0.04	(0.04)		<b>0.23</b>	<b>(0.13)</b>		†	
																		0.03	(0.12)			
<i>PX x PM</i>	<b>0.07</b>	<b>(0.04)</b>	†		0.15	(0.09)		0.00	(0.06)			-0.02	(0.10)		0.02	(0.04)		0.01	(0.09)			
<b>Partner as target of sculpting</b>																						
<i>AX x PM</i>	-0.02	(0.04)			0.14	(0.09)		-0.03	(0.05)			0.12	(0.10)		0.04	(0.04)		0.07	(0.07)			
<i>PX x AM</i>	0.04	(0.04)			-0.02	(0.07)		0.07	(0.05)			-0.12	(0.10)		0.00	(0.05)		-0.17	(0.15)			<sup>c</sup>
																		0.13	(0.11)			<sup>c</sup>

Note. The unstandardized coefficients are reported. In case of gender differences, coefficients for men and women are reported separately (men above, women below), otherwise effects are pooled across gender. Significant interaction effects are bold, and marginally significant interaction effects are bold and italic. FFNI = Five-Factor Narcissism Inventory; GN = Grandiose narcissism; VN = Vulnerable narcissism; AX x AM = Actor narcissism by actor moderator interaction; PX x PM = Partner narcissism by partner moderator interaction; AX x PM = Actor narcissism by partner moderator interaction; PX x AM = Partner narcissism by actor moderator interaction. † $p < 0.10$ . \* $p < 0.05$ . \*\* $p < 0.01$ . \*\*\* $p < 0.001$ .

<sup>a</sup> Effect significant in model without self-esteem and relationship duration controlled. <sup>b</sup> Effect non-significant in model without self-esteem and relationship duration controlled. <sup>c</sup> Changes in gender differences without self-esteem and relationship duration controlled.



**Fig. 3.** Simple slopes for commitment in Studies 2 & 3 at low and high levels (1 SD below and above the grand mean, respectively) of grandiose narcissism and the Michelangelo components. Simple Slopes for the moderation effect of Michelangelo components on the association between grandiose narcissism and commitment (i. e., illustrated for female narcissism). FFNI-GN = Grandiose narcissism as predictor. a-c) Significant actor by actor (AXAM) interactions. d) Significant partner narcissism by partner moderator (PXPM) interaction. Simple slopes look similar for narcissism levels of men.

across studies. Notably, grandiose narcissism was negatively associated with commitment in Study 3, consistent with Study 1. While some results, such as the negative association between vulnerable narcissism and movement toward the ideal self in Study 3, aligned with theoretical expectations, they lacked consistency.

Taken together, an ideal-facilitating partner can mitigate the otherwise low commitment for individuals with high grandiose narcissism, although inconsistencies across studies underscore the complexity of dyadic studies.

#### 4. General discussion

Previous research identified factors that buffer the potential for low relationship commitment in individuals with higher levels of grandiose narcissism, such as the fulfillment of the investment model components (i.e., relationship satisfaction, investment, lower quality of alternatives; Foster, 2008), or high communal activation (Finkel et al., 2009). Expanding this still limited knowledge, we proposed that perceiving a

partner as helpful in promoting the narcissistic self-goal of affirming a grandiose self could provide a further mitigating factor for relationship commitment. In this effort, we investigated the mechanisms of the *Michelangelo phenomenon* – a concept describing partner-facilitated personal growth through perceived affirmation of the ideal self (Drigotas et al., 1999). The current study provides the first evidence that a partner who is perceived as supportive of an individual's pursuit of the ideal self (including perceived perceptual or behavioral affirmation) can buffer the potential for negative associations between certain narcissism manifestations and relationship commitment. We first discuss the commitment-mitigating role of an ideal self facilitating partner and embed these findings within a framework of narcissistic self-regulation, then we discuss broader implications for narcissistic relationship dynamics, and conclude with limitations as well as future research directions.

**Table 8**  
Simple slope effects for the actor-by-actor interactions (AX x AM) and partner-by-partner interactions (PX x PM) between narcissism and the Michelangelo components to predict commitment for Study 2 and 3.

	Interaction		Men					Women							
			B	SE	z	95% CI	p	B	SE	z	95% CI	p			
Study 2	FFNI-Grandiose-Narcissism <i>Perceived perceptual affirmation</i>	AX x AM (trend interaction)	High Mod	-0.04	(0.06)	-0.56	[-0.16,0.09]	0.575	-0.03	(0.06)	-0.51	[-0.16,0.09]	0.611		
			Low Mod	-0.21	(0.09)	-2.39	[-0.38,-0.04]	0.017	*	-0.21	(0.09)	-2.39	[-0.37,-0.04]	0.017	*
		High FFNI-GN	0.19	(0.05)	3.94	[0.09,0.28]	<0.001	***	0.16	(0.03)	4.53	[0.09,0.23]	<0.001	***	
		Low FFNI-GN	0.10	(0.03)	3.36	[0.04,0.16]	0.001	***	0.08	(0.04)	2.00	[0.00,0.15]	0.045	*	
	<i>Perceived behavioral affirmation</i>	AX x AM	High Mod	0.06	(0.06)	1.04	[-0.06,0.18]	0.300	0.07	(0.06)	1.09	[-0.05,0.19]	0.278		
			Low Mod	-0.31	(0.11)	-2.68	[-0.53,-0.08]	0.007	**	-0.33	(0.12)	-2.68	[-0.56,-0.09]	0.007	**
		High FFNI-GN	0.35	(0.07)	4.89	[0.21,0.49]	<0.001	***	0.45	(0.07)	6.05	[0.31,0.60]	<0.001	***	
		Low FFNI-GN	0.12	(0.07)	1.62	[-0.02,0.26]	0.105	0.24	(0.06)	4.28	[0.13,0.35]	<0.001	***		
	<i>Perceived movement towards ideal self</i>	AX x AM	High Mod	0.09	(0.07)	1.36	[-0.04,0.22]	0.173	0.06	(0.06)	1.08	[-0.05,0.18]	0.279		
			Low Mod	-0.24	(0.10)	-2.49	[-0.43,-0.05]	0.013	*	-0.25	(0.10)	-2.51	[-0.45,-0.05]	0.012	*
			High FFNI-GN	0.30	(0.06)	5.17	[0.19,0.42]	<0.001	***	0.24	(0.04)	5.83	[0.16,0.32]	<0.001	***
		PX x PM	Low FFNI-GN	0.13	(0.04)	3.10	[0.05,0.21]	0.002	**	0.08	(0.05)	1.42	[-0.03,0.18]	0.156	
			High Mod	0.12	(0.06)	1.95	[0.00,0.23]	0.051	†	0.13	(0.07)	2.06	[0.01,0.26]	0.040	*
			Low Mod	-0.09	(0.07)	-1.38	[-0.22,0.04]	0.168	-0.08	(0.06)	-1.31	[-0.21,0.04]	0.192		
		High FFNI-GN	0.09	(0.03)	2.89	[0.03,0.15]	0.004	**	0.13	(0.04)	3.09	[0.05,0.21]	0.002	**	
		Low FFNI-GN	-0.02	(0.04)	-0.47	[-0.10,0.06]	0.640	0.01	(0.03)	0.43	[-0.05,0.08]	0.666			
Study 3	FFNI-Grandiose-Narcissism <i>Perceived perceptual affirmation</i>	AX x AM	High Mod	-0.02	(0.10)	-0.21	[-0.22,0.18]	0.833	-0.05	(0.10)	-0.48	[-0.24,0.14]	0.628		
			Low Mod	-0.34	(0.13)	-2.72	[-0.59,-0.1]	0.006	**	-0.36	(0.13)	-2.72	[-0.62,-0.10]	0.006	**
			High FFNI-GN	0.29	(0.11)	2.73	[0.08,0.50]	0.006	**	0.21	(0.08)	2.68	[0.06,0.36]	0.007	**
			Low FFNI-GN	0.07	(0.06)	1.17	[-0.05,0.20]	0.242	0.02	(0.08)	0.22	[-0.13,0.17]	0.830		
	<i>Perceived movement towards ideal self</i>	AX x AM (trend interaction)	High Mod	0.03	(0.09)	0.30	[-0.15,0.21]	0.767	0.00	(0.08)	-0.03	[-0.16,0.16]	0.973		
			Low Mod	-0.26	(0.13)	-1.98	[-0.52,0.00]	0.047	*	-0.28	(0.14)	-2.00	[-0.56,-0.01]	0.046	*
			High FFNI-GN	0.32	(0.10)	3.33	[0.13,0.51]	<0.001	***	0.25	(0.07)	3.34	[0.10,0.39]	<0.001	***
		PX x PM	Low FFNI-GN	0.14	(0.08)	1.79	[-0.01,0.29]	0.074	†	0.09	(0.09)	0.96	[-0.09,0.27]	0.336	
			High Mod	0.30	(0.10)	3.03	[0.10,0.49]	0.002	**	0.33	(0.11)	3.03	[0.12,0.55]	0.002	**
			Low Mod	-0.05	(0.13)	-0.42	[-0.30,0.20]	0.675	-0.02	(0.12)	-0.20	[-0.25,0.21]	0.840		
			High FFNI-GN	0.23	(0.10)	2.37	[0.04,0.42]	0.018	*	0.08	(0.09)	0.94	[-0.09,0.25]	0.349	
			Low FFNI-GN	0.03	(0.11)	0.30	[-0.19,0.26]	0.767	-0.15	(0.12)	-1.18	[-0.39,0.10]	0.236		
	FFNI-Vulnerable-Narcissism <i>Perceived movement towards ideal self</i>	AX x AM (trend interaction)	High Mod	0.24	(0.15)	1.56	[-0.06,0.53]	0.118							
			Low Mod	-0.15	(0.11)	-1.42	[-0.36,0.06]	0.156							
High FFNI-VN			0.39	(0.11)	3.46	[0.17,0.62]	<0.001	***							
Low FFNI-VN			0.07	(0.12)	0.54	[-0.17,0.31]	0.587								

Note. The unstandardized coefficients are reported. High levels represent effects +1 SD and low levels -1 SD. Self-esteem and relationship duration were controlled in all models. Mod = Moderator; FFNI = Five-Factor Narcissism Inventory; GN = Grandiose narcissism; VN = Vulnerable narcissism; AX x AM = Actor narcissism by actor moderator interaction; PX x PM = Partner narcissism by partner moderator interaction. †p < 0.10. \*p < 0.05. \*\*p < 0.01. \*\*\*p < 0.001.

#### 4.1. Commitment-buffering effects of an ideal self promoting partner: Differences between grandiose and vulnerable narcissism

Across all three dyadic studies, high levels of the Michelangelo mechanisms partially mitigated the otherwise lower commitment levels of individuals with high grandiose narcissism. When these individuals perceived their partners as supportive of their ideal self, their commitment was on par with that of individuals low in narcissism. This pattern paralleled the commitment-buffering effects found in previous studies with other moderators mentioned above (i.e., communal activation; Finkel et al., 2009; investment model components; Foster, 2008). For direct associations with commitment, consistent with the mixed findings shown in prior research (e.g., Campbell & Foster, 2002; Finkel et al., 2009), grandiose narcissism was negatively related to commitment in two of the three studies (though in one case, this effect emerged only after controlling for self-esteem and relationship duration). For vulnerable narcissism, no commitment-mitigating effects by the Michelangelo mechanisms were observed. Similarly, vulnerable narcissism showed no direct relation to commitment, which is consistent with prior research (Biesen & Smith, 2023).

Our findings empirically support the assumption that individuals with high levels of grandiose narcissism approach close relationships from an instrumental angle, staying motivated to maintain them to the extent that they benefit their personal needs (Morf et al., 2011). Results by Foster (2008) provided initial indirect evidence for this idea by showing that these individuals were less willing to endure non-rewarding times in relationships (i.e., less satisfying or better available alternatives). In this study, we more directly tested and confirmed the assumption that the commitment of individuals with higher grandiose narcissism levels benefits from a partner who is seen as supportive of their pursuit of an ideal self. Additionally, supplemental analyses revealed that these commitment-buffering dynamics emerged for both agentic and antagonistic features of grandiose narcissism. For agentic narcissism, ideal-affirming processes may directly feed into the reward-driven self-regulation (Krizan & Herlache, 2018), while for antagonistic narcissism, such affirmation could reduce threats to grandiosity and prevent destructive self-protective behaviors (Back, 2018; Morf et al., 2011). Both processes ultimately strengthen commitment. Interestingly, findings regarding direct associations showed that grandiose narcissism was generally unrelated to the Michelangelo mechanisms, suggesting that partner support for the ideal self was perceived similarly across narcissism levels. This indicates that, unlike promotion orientation, extraversion, or agreeableness, which have been linked to enhanced perceptions of partner affirmation of the ideal self (Bühler et al., 2020; Righetti et al., 2010), grandiose narcissism features may not shape such perceptions of partner affirmation.

The lack of moderation effects for vulnerable narcissism suggests that, despite the motivational focus on pursuing a grandiose self, the anxiety-driven, threat-oriented self-regulatory style (Krizan & Herlache, 2018) may hinder commitment-mitigating effects of an ideal-supporting partner. This highlights the dysfunctional nature of vulnerable narcissism (Miller et al., 2018) and suggests that these individuals may have other, or additional, predominant needs than their grandiose counterparts, which are not sufficiently met by an ideal self promoting partner. They potentially require support beyond affirming their ideal self to satisfy the increased interdependence needs (Mahadevan & Jordan, 2022; Roche et al., 2013). These individuals might benefit more from a reassuring partner who soothes their anxious tendencies by providing caring attention. This idea received initial support from a study that found communal activation to reduce some of the adverse relationship behaviors exhibited by individuals with high levels of vulnerable narcissism (Biesen & Smith, 2023). Briefly turning to the direct associations between vulnerable narcissism and the Michelangelo components, these results were largely non-significant (with two exceptions showing negative associations). This indicates that vulnerable narcissism may not necessarily undermine perceiving partner affirmation for

the ideal self, possibly due to distorted perceptions in order to protect the narcissistic self-image.

Turning the focus to effects on the sculpting partners' own commitment, our findings revealed very few effects, lacking a consistent pattern for either direct or moderation effects. However, one noteworthy result for the commitment of partners emerged: In Studies 2 and 3, partners of individuals with high levels of grandiose narcissism reported increased commitment, when they were perceived as effective sculptors who facilitated their partner's movement toward their ideal self. This suggests that successfully promoting a grandiose narcissistic partner's ideal self may enhance an individual's own motivation to remain in the relationship. One possible explanation for this finding is that individuals with higher grandiose narcissism levels may respond positively (e.g., higher engagement or less negative relationship behaviors) when their ideals are supported by their partners, which in turn could reinforce the partner's sense of commitment. In contrast, this pattern was not observed in Study 1. This discrepancy may stem from differences in sample size (and therefore limited power for partner effects). Alternatively, it could be due to differences in how movement towards the ideal self was measured across studies (self-defined ideals in Studies 2 and 3 vs. general ideal categories in Study 1). This may suggest that benefits on the sculpting partner's commitment may emerge only when narcissistic partners perceive movement concerning their most meaningful aspects of the ideal self. However, these findings are preliminary and require replication to confirm their robustness.

Overall, our results highlight differences in narcissistic interpersonal self-regulation (Krizan & Herlache, 2018). Individuals with high levels of grandiose narcissism were more committed to relationships when their partners served their narcissistic self-goal by facilitating the pursuit of their desired self. Vulnerable narcissism, in contrast, may instead require the fulfillment of interdependence and reassurance needs to maintain commitment levels (Roche et al., 2013). Thus, while an ideal self promoting partner seems to be able to fulfill needs related to grandiose narcissism, reducing the self-protective relationship dynamics of vulnerable narcissism may require additional support. As a result, individuals with high levels of vulnerable narcissism do not seem to experience the same benefits of an ideal-promoting partner as those with high grandiose narcissism.

#### 4.2. Broader implications for improving narcissistic relationship dynamics

Moving to broader implications, the Michelangelo phenomenon might be one way to promote interdependence without conflicting with narcissistic self-goals and, therefore, provide a basis for improved relationship functioning. Perceiving a partner as facilitating the narcissistic self-goal of buttressing a grandiose self may not only buffer commitment but also encourage beneficial downstream effects on relationship behaviors that stabilize relationships (Wieselquist et al., 1999). Furthermore, such perceptions may activate communal motivations, similar to what was found for individuals with high grandiose narcissism when they felt loved and cared for during discussions about a personal goal (Finkel et al., 2009). On a broader level, perceiving the partner as instrumental in pursuing focal goals (e.g., academic or career goals) led individuals to evaluate partners more positively and increased closeness (Fitzsimons & Shah, 2008). Processes such as these, which increase communal motivations and interdependence, hold considerable promise to create a sustainable buffering process. These effects of communal activation may stabilize relationship dynamics long-term by shifting the focus so that the dynamic is no longer dependent on the constant affirmation of the ideal self but is reinforced through mutual care and support.

At the same time, ensuring the sustainability of these dynamics requires avoiding the reinforcement of egocentric, narcissistic patterns. A strong focus on self-benefits risks resembling dynamics described for entitlement, wherein fulfilling expectations temporarily reduces distress but reinforces inflated expectations, ultimately resulting in conflict and

long-term problems (Grubbs & Exline, 2016). Thus, to mitigate these risks and promote the sustainability of these commitment-buffering effects, it is essential to foster mutual care and interdependence while avoiding the perpetuation of self-centered patterns among individuals with high levels of narcissism.

Importantly, our findings provide practical implications for identifying and addressing problematic commitment patterns in couples and highlight the need for tailored interventions depending on narcissism manifestations. They provide a theory-based and empirically tested basis for developing interventions aimed at managing narcissistic tendencies and promoting healthier, more enduring relationships (at least for individuals with high grandiose narcissism). For these individuals, encouraging both partners to actively support each other's goals (Orehek & Forest, 2016) may help balance self-oriented motivations with communal ones, promoting interdependence and improving relationships.

#### 4.3. Strengths, limitations, and future research directions

These studies have several strengths, including three independent dyadic samples of community couples and the examination of effects across different narcissism measures. Furthermore, the dyadic approach including both partners addressed the non-independence of the data and allowed to explore effects on both partners' commitment. One limitation, however, was the reliance on correlational data which prevents conclusions about causality. Second, although the study was based on US and European samples, these were still predominantly WEIRD (i.e., Western, Educated, Industrialized, Rich, and Democratic), potentially limiting the generalizability of the findings.

Third, despite replicating the hypothesized buffering moderation effect across all three studies, the results were partially inconsistent, with some effects marginally or even non-significant. These inconsistencies may be due to differences between measures across studies (e.g., for narcissism, movement towards the ideal self, or commitment). For example, commitment was measured using different response scales in each study, which may have subtly influenced participants' responses, thus limiting the direct comparisons between studies. Additionally, differences in sample characteristics may have contributed to variability in the results. For instance, Study 2 included a broader range of participant age and relationship duration, while the other two samples were more homogeneous in this regard.

A fourth limitation is the low reliability of the measures for movement toward the ideal self. This can likely be attributed to the multifaceted structure of the construct and the varying degrees of possible partner support for different ideal domains. Despite this, we argue that these measures validly captured the complexity of the construct of movement toward the ideal self, given its multifaceted nature. The replication of the buffering effects across studies also supports this conclusion.

In terms of future research, it would be useful to extend the current findings and investigate underlying mechanisms of these buffering effects by employing experimental or intensive longitudinal approaches (e.g., ecological momentary assessment). These approaches could provide valuable insights into moment-to-moment dynamics. For instance, one could examine in which specific situations individuals with high levels of narcissism perceive a partner as undermining the narcissistic self and how this affects momentary commitment. Similarly, it would be informative to identify which types of daily interactions most effectively promote commitment for individuals with high narcissism levels (e.g., capitalization processes).

Furthermore, longitudinal studies spanning several years are needed to assess the sustainability and long-term effects of these commitment-buffering mechanisms. Examining extended timeframes (e.g., multiple assessments over a decade) is crucial for capturing meaningful changes in commitment and relationship stability, as shorter-term longitudinal studies may miss these dynamics (Schoebi et al., 2012). Finally, these

commitment-buffering effects should be examined across different relationship stages, including zero-acquaintance, dating, newly married, or long-term relationships (Wurst et al., 2017). Examining these various stages would provide more nuanced insights into how narcissism-related self-regulation patterns manifest and affect romantic relationship maintenance at different stages.

#### 4.4. Conclusion

Across three dyadic studies, our findings provide empirical support for a novel buffering mechanism on relationship commitment for individuals with high levels of grandiose narcissism. Employing the *Michelangelo phenomenon* (Drigotas et al., 1999), we demonstrated that perceiving a partner as facilitating the pursuit of the ideal self mitigated the otherwise lower commitment in these individuals. No such buffering effects emerged for the vulnerable manifestation of narcissism. Our results support the assumption that individuals with higher grandiose narcissism levels approach their intimate relationships from an instrumental perspective (Campbell et al., 2006; Morf et al., 2011) and benefit from being in a relationship with a partner who helps them to move closer to their ideal self. This form of support seems to fulfill needs related to grandiose narcissism. In contrast, vulnerable narcissism may be characterized by other predominant needs, such as emotional reassurance, that are not met through ideal self affirmation alone but may require a different form of support. While we acknowledge that our findings require further replication, they simultaneously provide additional proof of concept that the role of narcissism in close relationships is more nuanced and complex than often assumed. Altogether, the partner affirmation mechanism of facilitating the ideal self within romantic relationships holds promise for fostering interdependence without jeopardizing the narcissistic self.

#### 5. Open practices

This study's design and its analysis were not pre-registered. Supplemental material, the R codes for the statistical analyses, and a link to request the data are publicly available at <https://osf.io/q9wcj/>.

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#### CRedit authorship contribution statement

**Sandra Gloor:** Writing – original draft, Writing – review & editing, Project administration, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Madoka Kumashiro:** Writing – review & editing, Project administration, Investigation, Conceptualization. **Carolyn C. Morf:** Writing – review & editing, Supervision, Project administration, Investigation, Funding acquisition, Conceptualization.

#### 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.

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