Can Narcissistic Vulnerability be Distinguished from General Psychopathology: an examination within the interpersonal context

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Studies suggest a conceptualization of narcissism using a three-factor model, where a core feature of entitlement/antagonism links narcissistic vulnerability and narcissistic grandiosity. The degree to which these factors uniquely relate to narcissism prompts disagreement. Past research supports the idea that vulnerability, particularly, is not unique to narcissism and, rather, associates with a wide range of psychopathology and negative affectivity. The current study reevaluates the ongoing argument by exploring the domains of narcissism in everyday life. How facets of narcissism associate with various interpersonal variables, including ratings of one's own warmth and dominance and perceptions of the interacting partners warmth and dominance, is explored. Results revealed entitlement most strongly and consistently associated with interpersonal behavior. Specifically, entitlement negatively associated with perceptions of interacting partner's warmth and dominance, and one's own warmth. These effects remained similar after controlling for negative affectivity. Vulnerability very modestly negatively associated with one's own dominance, and this effect becomes non-significant after negative affectivity was controlled. Agentic extraversion modestly positively associated with one's own warmth and dominance, and these effects are similar after controlling for negative affectivity. These findings reinforce that entitlement is at the core of narcissism and provide a few key suggestions for future research aiming to examine the unique effects of narcissistic vulnerability, above and beyond negative affectivity.

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1.0 Introduction

Narcissism is recognized as a person's persistent pursuit to preserve their self-image through processes grounded in the need for excessive affirmation and validation from their social surroundings (Wright & Edershile, 2018). Such processes are maintained and precipitated by engaging in self-enhancement strategies within one's social environment (Pincus et al., 2009). Despite diagnostic cutoffs for a narcissistic personality disorder (NPD) diagnosis, as laid out in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013), it is generally agreed that narcissism is a dimensional construct (Aslinger et al., 2018). Traditionally, the clinical literature has emphasized the components of grandiosity and vulnerability within narcissism. Narcissistic grandiosity is described as an inflated self-image, a tendency to be exploitative, and an increased desire for admiration from others. In contrast, narcissistic vulnerability is characterized by having fragile and unstable self-image, covetousness, shame proneness, and a tendency for social withdrawal (Dashineau et al., 2019; Dickinson & Pincus, 2003; Pincus & Lukowitsky, 2010). Despite somewhat opposing phenotypic descriptions, what grandiosity and vulnerability share is high levels of antagonism or entitlement. Antagonism (e.g., disagreeableness and insensitivity) and entitlement (e.g., arrogance and self-centeredness) help to conceptually link grandiosity and vulnerability together (Krizan & Herlache, 2018; Miller et al., 2017). Indeed, most recently, structural models of narcissism have emphasized a three-dimensional model which includes the core of entitlement/antagonism, vulnerability, and attention-seeking/agentic grandiosity.

1.1 The Difficulties in Defining Narcissism and its Phenotypic Manifestations

Over the years, scientific understanding of narcissism has made considerable advancements, including establishing that narcissism appears to be multidimensional (Miller et al., 2017). However, across the fields of clinical psychology, social/personality psychology, and psychiatry a precise and consensual definition of narcissism has remained elusive (e.g., Cain et al., 2008; Pincus & Lukowitsky, 2010). Cain and colleagues (2008) noted that clinical theories (e.g., Ronningstam, 2009) describe fluctuations in grandiosity and vulnerability within a single individual. Clinical observation suggests that it is displays of low self-esteem, distress, and expressions of shamefulness—characteristic of vulnerable narcissism—in narcissistic patients that leads them to seek treatment. The clinical perspective of narcissism, however, is highly theoretical and differences in manifestations of grandiosity and vulnerability seen across patients makes conceptualizing *what* narcissism is even more complicated.

Despite the growing recognition that grandiosity and vulnerability are both important expressions of narcissism, how best to understand each component within a single individual remains a topic of debate (Miller et al., 2017). Clinical theories of narcissism suggest that the narcissistic individual may display periods of both grandiosity and vulnerability (Horowitz, 2009; Morf & Rhodewalt, 2001; Ronningstam, 2005). However, such a description is at odds with how grandiosity and vulnerability are currently assessed, which primarily relies on dispositional scales or clinical interviews. As noted above, contemporary empirical models of narcissism aim to reconcile this controversy by posing a three-factor structure of narcissism (Krizan & Herlache, 2017; Miller et al., 2017). Two near-identical structural models—one presented by Krizan and Herlache (2017) and another by Miller and colleagues (2017)—suggest that narcissism anchors on entitlement, and grandiosity and vulnerability serve as "peripheral" features of narcissism. What

these models suggest is that antagonism serves as the "core" of narcissism. All three features (grandiosity, antagonism, and vulnerability) can co-occur to some extent, yet an individual cannot be elevated on both grandiosity and vulnerability concurrently. This conceptualization lays a framework to integrate and distinguish the descriptive manifestations (e.g., grandiosity and vulnerability) of narcissism.

A question that emerges as a biproduct of these structural models of narcissism is the extent to which vulnerability is a unique feature to narcissism, or whether it may just represent generalized negative affectivity. Narcissistic vulnerability is conceptualized as introversion, hypersensitivity, and low self-esteem; such trait-like descriptors have considerable overlap with neuroticism and negative affectivity (Thomas et al., 2012). The noticeable overlap between the construct of neuroticism and narcissistic vulnerability has recently garnered attention (e.g., Miller et al., 2018) because of how strongly narcissistic vulnerability is associated to general personality psychopathology (Edershile, Simms, & Wright, 2019; Wright, 2016) as well as general psychopathology and distress (Dashineau et al., 2019). The key question is whether narcissistic vulnerability, as assessed by dedicated scales, reflects unique processes, or whether the scales capture general processes of high trait neuroticism/negative affectivity. In sum, it is vital to address this potential lack of specificity of vulnerable narcissism as it could warrant a reexamination of past research and a reconceptualization of the component features of narcissism.

1.2 The Unresolved Role of Narcissistic Vulnerability and its Difficulties

Miller and colleagues (2017) demonstrated that vulnerable narcissism and neuroticism shared similar, if not highly overlapping, profiles of associations with other trait-based

psychological assessments. The authors suggest that once accounting for shared variance in grandiosity and vulnerability (i.e., antagonism), what is left is agentic extraversion and neuroticism, respectively. In the previous section, it can be concluded that vulnerable narcissism is characterized by internalizing symptoms (e.g., negative affectivity) along with psychological distress, and grandiose narcissism is characterized by opposing manifestations (i.e., externalizing behaviors) to vulnerability. This is to say that there are high levels of neuroticism and low levels of extraversion in vulnerable narcissistic individuals and low levels of neuroticism and high levels of extraversion in grandiose narcissistic individuals (Miller et al., 2018). Tackett and colleagues (2013) suggest that neuroticism is a hallmark feature across many forms of psychopathology, such as in mood disorders. Some argue (e.g., Miller et al., 2018) that vulnerable narcissism should be viewed as a disorder of neuroticism because disagreeableness—an important trait within this conceptualization—lacks strong representation in current measures of vulnerability. Accordingly, placing vulnerability in the conceptualization of narcissism would be questionable under the assumption that it mainly serves as a marker for the impairment associated with NPD rather than acting as a central characteristic (Kendler, 2014). In this vein, vulnerable narcissism may reflect general psychopathology (Tackett et al., 2013), which includes intense negative emotionality or emotional dysregulation (Miller et al., 2018).

However, the research that has called into question the non-specificity of narcissistic vulnerability has largely been monomethod and cross-sectional assessments, relying on global self-report of dispositional traits. This type of research is well-known to amplify associations among constructs, which could explain, in part, the high degree of overlap between narcissistic vulnerability scales and general negative affectivity scales. Clinical theory suggests that what is unique to narcissistic vulnerability is the conditions under which it will manifest. That is,

theoretically, vulnerability will manifest most strongly in particular situations rather than being continuously activated. Because of this, testing the associations of narcissistic vulnerability and negative affectivity while considering behavior in relevant situations would be informative for understanding their degree of overlap.

1.3 Interpersonal Manifestation of Narcissistic Vulnerability

Emerging research (e.g., Edershile & Wright, 2021; Roche et al., 2013; Wright et al., 2017) has explored how narcissism plays out across various interpersonal situations. Most frequently, maladaptive behavioral expressions associated with narcissism are thought to occur in the interpersonal domain. Pincus and colleagues (2009) argue that the conceptualization of narcissism is a disorder of one's self and of interpersonal dysfunction, and it is the occurrence of dysfunction, itself, that reinforces these interpersonal problems (Dashineau et al., 2019; Dickinson & Pincus, 2003; Roche et al., 2013; Wright et al., 2017). As such, the majority of research exploring narcissism in daily life has done so in interpersonal situations (e.g., Edershile & Wright, 2021; Roche et al., 2013; Wright et al., 2017). Understanding that the most central manifestations of personality appear through interpersonal contexts supports the use of interpersonal theory to examine how features of narcissism associate with interpersonal behavior (Pincus & Ansell, 2013). Ro and colleagues (2017) demonstrate that it is the unique antagonistic core that is shared by grandiosity and vulnerability in a narcissistic person that prompts the dysfunction in interpersonal situations. As such, analyzing the individual differences in interpersonal behavior would be helpful to disentangle the controversies between neuroticism and vulnerable narcissism.

Wright and colleagues (2017) explored how narcissistic personality disorder features were associated with perceptions, behaviors, and affect present in interpersonal interactions. Their work suggests that narcissism strengthens the link between perceiving the interacting partner as dominant and experienced negative affect. Accordingly, their results show that narcissism has associations with key interpersonal and affective processes wherein antagonistic behavior is initiated from the sensitivity to other's dominance. Edershile and Wright (2021b) explored how expressions of grandiosity and vulnerability associated with dominance and warmth in the interpersonal context. It was found that, on average, those individuals who displayed grandiosity acted more dominant and colder and tended to perceive others as colder. On the other hand, narcissistic vulnerability was associated with tending to perceive others as cold and rating their own behavior as cold.

This literature situates vulnerable narcissism apart from the assertions made by Miller and colleagues (2017) that equates vulnerable narcissism and neuroticism. A person who demonstrates high levels of narcissistic vulnerability exhibits many overlapping features of neuroticism (e.g., low mood, anxiety); however, vulnerability has strong central features (e.g., interpersonal detachment and antagonism) that are uncharacteristic of neuroticism (e.g., Wright & Edershile, 2018). In this respect, exploring the grandiose, vulnerable, and antagonistic interpersonal manifestations of narcissism as they associate with interpersonal perceptions and behavior in daily life may help to resolve differences between trait-based profile similarities of narcissistic vulnerability and neuroticism.

1.4 The Current Study

The overarching goal of the current study is to build on existing research that has studied the role of narcissism in interpersonal behavior in social situations, and then test whether any observed associations remain after adjusting for negative affectivity. The current study will help contribute to the growing body of literature that explores the domains of narcissism and daily life. An analysis of which interpersonal signatures are unique to narcissism and which are reflective of general pathology (as captured by neuroticism/negative affectivity) will be conducted. In particular, the purpose is to explore how trait-based assessments of narcissism and trait-based assessments of negative affectivity associate with perceptions of interpersonal behavior of both the self and other. The three research questions that will be investigated are (1) *What does narcissism look like in daily life as it associates with interpersonal behavior?*, (2) *Does narcissistic vulnerability demonstrate unique interpersonal signatures that differentiate it from general psychopathology?*, and (3) *If interpersonal styles can be differentiated for narcissism and general psychopathology, are there specific facets of narcissism that primarily contribute to this differentiation?*.

If the interpersonal signatures of narcissism (and vulnerable narcissism, more specifically) and neuroticism are similar, this will add to the body of research suggesting little distinction between the two. If the traits that make up vulnerable narcissism are heavily captured by neuroticism within a social context, then we must reevaluate both theoretical and clinical frameworks. However, if vulnerable narcissism and neuroticism differentially associate with interpersonal perception and behavior in daily life, this would suggest that vulnerable narcissism may be crucial to the maintenance of narcissistic pathology, specifically. As such, while neuroticism is seen as a reinforcer of narcissistic vulnerability, both should be seen as independent

entities wherein maintenance processes of narcissistic pathology are different from those of general psychopathology. All associations among facets of the Five-Factor Narcissism Inventory (FFNI; Glover et al., 2021), perceptions of dominance and affiliation, and self-reported dominance and affiliation in social interactions will be examined, leveraging a 10-day ecological momentary assessment study. Though I have no specific predictions for my coefficients, I did anticipate the following: entitlement would associate with cold and dominant interpersonal styles for one's own rating and of their interacting partners, agentic extraversion would have associations with perceiving the interacting partner and one's own behavior as dominant and warm, and neuroticism would associate with submissive and cold behavior and perceiving the interacting partner as dominant and cold. Additionally, I will examine the facets of the Negative Affectivity domain scales from the Personality Inventory for DSM-5 (Krueger et al., 2012) and the same interpersonal behaviors. Finally, using multiple regression, I will analyze the unique association of the FFNI domain scores (antagonism, agentic extraversion, vulnerability) and the PID-5 Negative affectivity domain using multivariable regression models.

2.0 Methods

2.1 Participants

A community sample (N = 342) of individuals who were oversampled for low modesty (in a representation of 2-1-1 of low, moderate, and high levels of modesty), a feature related to narcissism, were recruited during 2018 and 2019. Participants had to be age 18 to age 40 (M_{age} = 27.99, SD = 5.01) at the time of participation and users of a smartphone running iOS or Android software. To recruit a distinct community sample, participants could not be enrolled in a full-time undergraduate program to be eligible to participate in the study. The sample was roughly split between males and females (52% female). The majority of participants identified as White (85%; 7.6% Asian; 3.2% Black; 3.2% multiracial).

2.2 Procedure

There were two components to the study: (1) baseline questionnaires (trait-based measures: individual assessments in a single sitting) and (2) an Ecological Momentary Assessment (EMA) portion. During the baseline surveys, participants completed several different measures, including demographics and assessments of trait-manifestations of narcissism, and assessments of other forms of psychopathology. For the EMA portion, participants completed up to 10 days of surveys on their smartphones. Participants could complete up to seven prompts per day (i.e., a maximum of 70 surveys over the sampling period). Participants received a notification on their phone when

a survey was available. Surveys were delivered at random to participants with a minimum of 90-minutes between survey periods. At each assessment period, participants were asked whether they experienced an interpersonal interaction since the previous prompt. If so, they completed questions related to their behavior and perceptions of their interacting partner's behavior during the exchange.

2.3 Materials

2.3.1 Baseline Measures

2.3.1.1 Five-Factor Narcissism Inventory–Short Form (FFNI-SF; Sherman et al., 2015).

The FFNI-SF 60-item self-report measure that consists of 15 subscales and was designed to measure both a two-factor (grandiosity and vulnerability) and three-factor structure (extraversion, neuroticism, antagonism) of narcissism in a similar fashion to the FFNI; (Glover et al., 2012) but with a smaller time burden. A 5-item Likert scale was used was used for each item (0 – Very Untrue of Me, 1 – Moderately Untrue of Me, 2 – Neither True nor Untrue of Me, 3 – Moderately True of Me, 4 – Very True of Me)

2.3.1.2 Personality Inventory for DSM-5–Faceted Brief Form (PID-5-FBF; Maples et al., 2015).

The Personality Inventory of DSM-5 (PID-5; Krueger et al., 2012) is provided by the American Psychiatric Association as a patient-report assessment of five pathological personality traits (Negative Affectivity, Detachment, Antagonism, Disinhibition, and Psychoticism). The PID-

5-FBF is comprised of 100 items from the PID-5 (4 for each of 25 trait facets) which are rated on a four-point Likert scale (0 – Very False or Often False; 1 – Sometimes or Somewhat False; 2 – Sometimes or Somewhat True; 3 – Very True or Often True). For the purposes of the present study, the subscales for Negative Affectivity will be used as a measure of general psychopathology/neuroticism.

2.3.2 Momentary Assessments

2.3.2.1 Visual Interpersonal Analogue Scale (VIAS; Woods et al., in preparation).

Dominant behavior was assessed using a visual analogue slider bar ranging from - 50 ("Accommodating/Submissive Timid") to 50 ("Assertive/Dominant/Controlling"). Affiliative behavior was rated on a similar visual slider bar ranging from - 50 ("Cold/Distant/Hostile") to 50 ("Warm/Friendly/Caring").

2.4 Data Analytic Plan

To examine whether and how narcissistic vulnerability differs from negative affectivity/general psychopathology, I first examined correlations between the four interpersonal variables (self-dominance, self-warmth, other dominance, other warmth) and narcissism and between the four interpersonal variables and negative affectivity. Included in the correlations were the three domains of narcissism (exhibitionistic grandiosity, entitlement, and vulnerability) as well as the subscales of each. Similarly, subscales of negative affectivity also were included in the correlations. Next, I estimated a series of multiple regressions. In each of these models, narcissism

scores and/or negative affectivity will serve as predictors, and between-person aggregates of each of the within-person interpersonal variables served as outcomes (self-dominance, self-warmth, other dominance, other warmth), separately. In the first model, I included the three-factor higher order structure of narcissism as a predictor of each of the four interpersonal variables. While also focusing on the correlations between negative affectivity and the interpersonal variables, I analyzed the unique association between the three-factor structure of narcissism and interpersonal behavior, controlling for negative affectivity.

3.0 Results

Refer to Figure 1 for correlations between variables. Standardized regression coefficients (βs) values for narcissism domains predicting each of the within-person interpersonal variables are detailed in Table 1 and Table 2 shows predictions once controlling for Negative Affect. Both tables report exact *p*-values and are indicated as significant with one or more asterisks ($p<.05$*, $p<.01$**, $p<.001$***).

3.1 Results for Perceptions of Other's Warmth

Examining associations between perceptions of the interacting partner's warmth and the three narcissism domains, results were fairly consistent between the correlations and regressions. FFNI Antagonism was moderately negatively correlated with perceiving the interacting partner as warm, and this effect was strengthened when controlling for the overlapping variance with FFNI Extraversion and FFNI Neuroticism in the regression models. FFNI Extraversion was very weakly positively correlated with perceptions of other's warmth, and this effect was also strengthened by controlling for the overlapping variance with FFNI Antagonism and FFNI Neuroticism in the regression models. Finally, FFNI Neuroticism was very weakly and non-significantly associated with perceptions of other's warmth, and this effect was similar once accounting for the overlapping variance with FFNI Antagonism and FFNI Neuroticism in the regression models.

When controlling for negative affect, associations between the three narcissism domains and perceptions of the interacting partner's warmth were similar. FFNI Antagonism maintained a

moderate negative association with perceptions of the interacting partner's warmth, FFNI Extraversion maintained a modest positive association, and FFNI Neuroticism continued to be non-significantly associated with perceptions of the interacting partner's warmth. Negative Affect was non-significantly associated with the interacting partner's warmth.

3.2 Results for Perceptions of Self Warmth

FFNI Antagonism had a moderate negative correlation with perceiving one's self as warm, and this effect was strengthened when controlling for the overlapping variance with FFNI Extraversion and FFNI Neuroticism. FFNI Extraversion had a near-zero correlation with perceptions of one's own warmth and was modestly positively associated with perceptions of one's own warmth when controlling for the overlapping variance with FFNI Antagonism and FFNI Neuroticism. Lastly, FFNI Neuroticism had a near-zero association with perception of one's own warmth from both the correlation and regression perspective.

When controlling for Negative Affect, FFNI Antagonism maintained a moderate negative association with perceptions of one's own warmth, FFNI Extraversion maintained a modest positive association, and FFNI Neuroticism continued to have a non-significant association with perceptions of one's own warmth. Negative Affect was non-significantly associated with one's own warmth.

3.3 Results for Perceptions of Other's Dominance

When looking at the associations between the perceptions of the interacting person's dominance and the three narcissism domains, results were very consistent between the zero-order effects and regression coefficients. FFNI Antagonism was modestly negatively correlated with perceiving one's partner's dominance, and this effect was similar once controlling the overlapping variance with FFNI Extraversion and FFNI Neuroticism in the regression model. FFNI Extraversion had a near-zero association with perceptions of the interacting partner's dominance across both the correlation and regression model. FFNI Neuroticism was very weakly associated with perceiving the interacting partner as dominant across both the correlation and regression model.

When controlling for Negative Affect, FFNI Antagonism's association with perceptions of the interacting partner's dominance became non-significant, FFNI Extraversion maintained a weak, positive association, and FFNI Neuroticism showed a moderate increase in its association with perceptions of the interacting partner's dominance and became significant in the regression model. Negative Affect's association with perceptions of the interacting partner's dominance demonstrated significance.

3.4 Results for Perceptions of Self Dominance

The associations between perceiving one's own dominance and the three narcissism domains yielded similar results between the correlations and regressions. FFNI Antagonism had a comparable near-zero association across the correlation and regression coefficients. FFNI

Extraversion was weakly positively correlated and had a similar effect once controlling for the overlapping variance of FFNI Antagonism and FFNI Neuroticism. FFNI Neuroticism was modestly negatively correlated and was significant in its association with perceptions of one's own dominance.

When controlling for Negative Affect, FFNI Antagonism maintained a near-zero association with perceptions of one's own dominance, FFNI Extraversion maintained a non-significant association, and FFNI Neuroticism was no longer significantly associated with rating one's own behavior as dominant. Negative Affect was significantly associated with one's own dominance.

4.0 Discussion

The purpose of this study was to perform an in-depth examination of the relationship between dispositional narcissism and perceptions of interacting partners' behavior and one's own behavior. Behavior was assessed across both dominance (ranging from submissive-dominant) and warmth (ranging from cold-warm). Further, of interest is whether the interpersonal signatures of narcissistic vulnerability could be differentiated from negative affectivity. The present analyses were exploratory.

There has been some debate as to how best to refer to the three-factor structure of narcissism (Krizan & Herlache, 2018; Miller et al., 2017; Wright & Edershile, 2018). For clarity, as has been done elsewhere (Edershile & Wright, 2021a; Wright & Edershile, 2018), the current study will use "entitlement," "agentic extraversion," and "vulnerability," when referencing findings from FFNI Antagonism, FFNI Extraversion, and FFNI Neuroticism, respectively and "grandiosity" and "vulnerability" when referencing FFNI Grandiosity and FFNI Vulnerability, respectively.

Contemporary, empirical models of narcissism support a three-factor structure of narcissism, such that entitlement is the core and grandiosity and vulnerability serve as more "peripheral" features (e.g., Krizan & Herlache, 2017; Miller et al., 2017). Though clinical theories of narcissism suggest that narcissistic individuals display periods of grandiosity and vulnerability in a fluctuating fashion (Horowitz, 2009; Morf & Rhodewalt, 2001; Ronningstam, 2005), there has been criticism for *how* unique vulnerability is to narcissism (e.g., Miller et al., 2018). Specifically, it has been demonstrated that narcissistic vulnerability yields substantial overlap with general personality psychopathology (Edershile, Simms, & Wright, 2019; Wright, 2016), as well

as with general psychopathology and distress (Dashineau et al., 2019). Since neuroticism (or negative affectivity) presents itself as a principal feature of most forms of psychopathology (Tackett et al., 2013), it is possible that vulnerable narcissism is not a feature distinct to the conceptualization of narcissism.

Findings from the current study reveal entitlement as being the most consistently and strongly associated with interpersonal behavior. This provides further support for literature concluding the core of narcissism is entitlement (Krizan & Herlache, 2018; Miller et al., 2017). My results demonstrated entitlement tended to associate with cold interpersonal styles in which the interacting partner was rated as submissive and cold. Though the current study did not reveal a significant effect between entitlement and ratings of one's own dominance, these findings align moderately well with prior literature suggesting a cold, dominant interpersonal style for people high in entitlement where they are likely to perceive their interacting partner as cold and submissive (Vize et al., 2022).

Findings between entitlement and interpersonal behavior were weakened slightly by controlling for negative affectivity. Particularly, after controlling for negative affect, entitlement was only significantly associated with perceiving the interacting partner as cold and rating one's own behavior as cold. Entitlement's association with the cold interpersonal styles, however, is not particularly unexpected. This suggests that to the extent narcissism is linked to hostile interpersonal interactions (e.g., Wright et al., 2017), a central feature of a hostile environment is one in which an individual perceives their own and their interacting partner's behavior as cold. Such a link between entitlement and hostile behavior has been proposed elsewhere (e.g., Edershile & Wright, 2022). This is indicative of the important role entitlement plays in the presentation and maintenance of narcissistic behavior. Moreover, it solidifies that the antagonistic core is uniquely

characteristic of narcissism (Wright & Edershile, 2018), a linkage for its phenotypic descriptors, and contributes to interpersonal dysfunction (Ro et al., 2017).

In contrast to entitlement, vulnerability had a consistently weak association across all four interpersonal variables. Examining the unique effects of vulnerability, it was significantly associated with rating one's own behavior as submissive. Once negative affectivity was controlled for, however, this effect became non-significant, and vulnerability was associated with rating their interacting partner's behavior as dominant. These findings are somewhat incongruent with prior work suggesting that vulnerability is associated with perceiving the interacting partner as dominant and cold and views their own behavior as cold in the moment (Edershile & Wright, 2021b). An important difference between findings from Edershile and Wright (2021b) and results from the current study is that whereas Edershile and Wright (2021b) examined contemporaneous *momentary* associations, the current study examined between-person aggregates of momentary data predicted by trait-level data. Indeed, between-person results from Edershile and Wright (2021b) align slightly closer to those of the current study where it was found that vulnerability was associated with perceiving the interacting partner as cold and rating one's own behavior as cold.

Negative affectivity showed consistent associations with dominance in that the interacting partner's behavior and one's own behavior were rated as submissive. My results coincide with findings by Ringwald and colleagues (2021) who also found that trait negative affectivity was associated with less dominant behavior (i.e., submissiveness) in social interactions. Such conclusions are plausible especially when looking at the subfactors of that make up negative affect (e.g., emotional lability, anxiousness, and separation insecurity). Taking anxiousness, for example, it was found that socially anxious individuals perceived their own behavior and their partner's as submissive (Oakman et al., 2003). The subfactors that relate to submissive behaviors, thus, make

it understandable for negative affect to also have associations with submissive interpersonal behaviors.

While my expectation was to see a consistent pattern of associations between vulnerability and the interpersonal behaviors, vulnerability was not associated with interpersonal behavior in a consistently meaningful way, particularly after accounting for negative affectivity. Roche and colleagues (2013) results also demonstrated a lack of association between narcissistic vulnerability alone and interpersonal behavior patterns. This makes disentangling whether vulnerability is unique to narcissism challenging. It could be reasonable to believe that my results reflect the problems associated with comparing across methods. In particular, the current study examined between-person aggregates of momentary interpersonal behavior (e.g., self-warmth) and dispositional self-report scales (e.g., FFNI Vulnerability). Cross-method associations, such as those performed in the current research, are typically substantially weakened (Edershile et al., 2019; Fleeson & Gallagher, 2009).

Agentic extraversion showed a modest positive association with one's own warmth and perceptions of the interacting partner's warmth, and when controlling for negative affectivity, the effects were similar. Overall, the results demonstrate that agentic extraversion tended to associate with warm interpersonal styles consistently and strongly. Looking from the two-factor model (e.g., grandiosity and vulnerability), Edershile and Wright (2021b) found that grandiosity was associated with perceiving interacting partners as submissive and warm and rating their own behavior as dominant and warm, in the moment. On average, grandiosity was associated with rating one's own behavior as dominant and cold and perceiving their interacting partner as cold. Recall that agentic extraversion is the unique effect of grandiosity after controlling for vulnerability and entitlement (i.e., FFNI Antagonism). Thus, once controlling for entitlement, agentic extraversion may look

similar to extraversion as characterized in the Big Five personality traits. This assertion is suggested from research by Du and colleagues (2021) and DeYoung and colleagues (2013) who found that Big Five extraversion has consistent associations with warm interpersonal behaviors.

Overall, results showed the complexities associated with narcissism. Entitlement is a central feature across the majority of interpersonal behaviors and agentic extraversion closely aligns with warm interpersonal styles whereas vulnerability is less discernable regarding dominance styles once negative affect was controlled. It appears that entitlement and agentic extraversion do a consistent job at differentiating interpersonal styles between narcissism and general psychopathology. Miller et al. (2021) reviews and parses the behavioral dynamics specifically characteristic of antagonistic (e.g., aggressive, exploitative) and agentic (e.g., expressive, confident) behaviors described by research by Back and colleagues (2018) which look at the dual-pathway that leads to social problems of narcissistic grandiosity. While antagonistic expressions are more commonly seen in smaller and interactive situations, agentic expressions are easily observed and expressed. However, vulnerability's uniqueness to interpersonal signatures that differentiates it from general psychopathology is still elusive, based on the current results. A point to make, here, is how the associations are subject to be weakened through aggregating across momentary analyses which could contribute to such difficulties in deciphering vulnerability from general psychopathology.

4.1 Limitations and Future Directions

The current study benefitted from several notable strengths, including a fairly large sample size in a community sample enriched for features of interest for the research questions (i.e., low

modesty). An additional strength of the study to consider is the substantial amount of dispositional data that was applied to examine interpersonal behaviors with and without controlling for negative affect. Nonetheless there were some limitations. First, the response latency—that is, the period of time it took for the participant to record their encounter (i.e., self-report) upon ending their interaction with someone (i.e., stimulus)—was unknown. In some cases, participants may have completed interaction reports immediately follow the social interaction. In other cases, participants may not have completed an interaction report until up to 90 minutes after the interaction. Understanding that reactions and perceptions in social interactions are instantaneous and fleeting, dominance and warmth reports of the current study may not be fully representative of "in–the–moment" perceptions, feelings, and reactions. Future research may wish to compare results of the current study against those leveraging event-contingent reporting (e.g., participants are instructed complete reports immediately following a social interaction).

This study collapsed across all types and forms of interactions. In other words, the relationship between the participant and the interacting partner was not considered. As such, it is possible, and even likely, that the *type* of relationship greatly influences ratings of dominance and warmth. For example, consider someone who is, on average, a fairly dominant individual. This behavior is evident across interactions with friends, family members, and acquaintances. However, as one would expect, when this individual is interacting with their boss, they rate themselves as submissive and their interacting partner as dominant. Considering the results of the current study collapsed across all interactions, results of the current study would accurately reflect that this individual is dominant on average. However, the influence of different relationships (e.g., the effect of a boss versus friend) on interpersonal behavior could not be assessed. Future research should explore whether the *type* of relationship influences one's own and their interacting partner's

interpersonal behavior. For example, in an effort to differentiate vulnerable narcissism from negative affectivity, of interest might be comparing whether interpersonal behavior is different within the same *type* of relationship. Discovering such patterns, that could be distinctive of vulnerability and negative affectivity, could be beneficial for clinical theorist to conceptualize under what sorts of relationships pathology is most evident in and specific to narcissism versus general psychopathology.

It should also be recognized that the present study gathered individuals' perceptions of their interacting partner's behavior. This means that all dominance and coldness ratings were subjective measurements of behavior. The current study's results reflect a narcissistic pathology which was suggested by an individual's perception of their behavior and interacting partner's rather than through an objective consideration such as an interaction occurring in certain environment (e.g., a cold and dominant versus a warm and submissive). In other words, pathology might also be contingent on the setting where an interacting is taking place. It could be beneficial for future research to consider, objectively, how an interaction partner usually behaves in interpersonal situations. Future research might consider replicating the current study while also considering implementing an objective measure to also rate the interacting partner and one's own behavior. For instance, integrating a computer task that measures across dominance and warmth scales based on how a player interacts with the game would make perceptions of one's own behavior and the interacting partner's more consistent and reliable. This would allow researchers to pinpoint distinctions between vulnerable narcissism and negative affectivity in an unbiased way.

4.2 Conclusion

The present study has enhanced our scientific understanding of the relationship between narcissism and interpersonal behavior. Results contribute to the large body of literature suggesting that entitlement is at the core of narcissistic expression (Krizan & Herlache, 2017; Miller et al., 2017). Though more work needs to be done to disentangle whether and how narcissistic vulnerability and negative affectivity can be differentiated, the exploratory research demonstrated effects between vulnerability and negative affectivity have similar patterns of warm-cold interpersonal styles but an unclear pattern of association regarding dominance-submissive styles. Nonetheless, the interpersonal context proves to be promising in uncovering the distinctions between vulnerability and negative affectivity.

Appendix A Tables & Figures

Table 1 Associations between the three domains of narcissism and interpersonal behaviors

		Interpersonal Behaviors					
		Perceptions of Other's Warmth			**Perceptions of Self Warmth**		
Predictor/outcome		β	r	p-value	β	r	p-value
Narcissism domains	FFNI Antagonism	-.35	-.26	<.001***	-.36	-.28	<.001***
	FFNI Extraversion	.19	.04	.001**	.18	.03	.002**
	FFNI Neuroticism	.06	.03	.276	.04	.01	.404
		Perceptions of Other's Dominance			**Perceptions of Self Dominance**		
Predictor/outcome		β	r	p-value	β	r	p-value
Narcissism domains	FFNI Antagonism	-.14	-.13	.019*	-.03	.01	.661
	FFNI Extraversion	.03	-.04	.669	.10	.09	.113
	FFNI Neuroticism	.04	.03	.486	-.11	-.12	.043*

Note: N = 342. FFNI-SF = Five-Factor Narcissism Inventory-Short Form. This table shows four models where each of the interpersonal variables is the outcome, and the three narcissism domains are the predictors.

* indicates p<.05, ** indicates p<.01, and *** indicates p<.001. Exact p-values are reported.

Table 2 Associations between the three domains of narcissism and interpersonal behaviors while controlling for negative affect

		Interpersonal Behaviors					
		Perceptions of Other's Warmth			**Perceptions of Self Warmth**		
Predictor/outcome		β	r	p-value	β	r	p-value
Narcissism domains	FFNI Antagonism	-.37	-.26	<.001***	-.38	-.28	<.001***
	FFNI Extraversion	.19	.04	.001**	.18	.03	.002**
	FFNI Neuroticism	.02	.03	.806	.01	.01	.945
	PIDSF Negative Affect	.07	-.02	.319	.07	-.03	.339
		Perceptions of Other's Dominance			**Perceptions of Self Dominance**		
Predictor/outcome		β	r	p-value	β	r	p-value
Narcissism domains	FFNI Antagonism	-.09	-.13	.166	.03	.01	.656
	FFNI Extraversion	.02	-.04	.694	.09	.09	.118
	FFNI Neuroticism	.16	.03	.023*	.01	-.12	.921
	PIDSF Negative Affect	-.20	-.13	.005**	-.20	-.18	.006**

Note: *N* = 342. FFNI-SF = Five-Factor Narcissism Inventory-Short Form. PIDS = Personality Inventory for DSM-5–Faceted Brief Form. This table shows four models where each of the interpersonal variables is the outcome, and the three narcissism domains are the predictors while controlling for Negative Affect.

* indicates *p*<.05, ** indicates *p*<.01, and *** indicates *p*<.001. Exact *p*-values are reported.

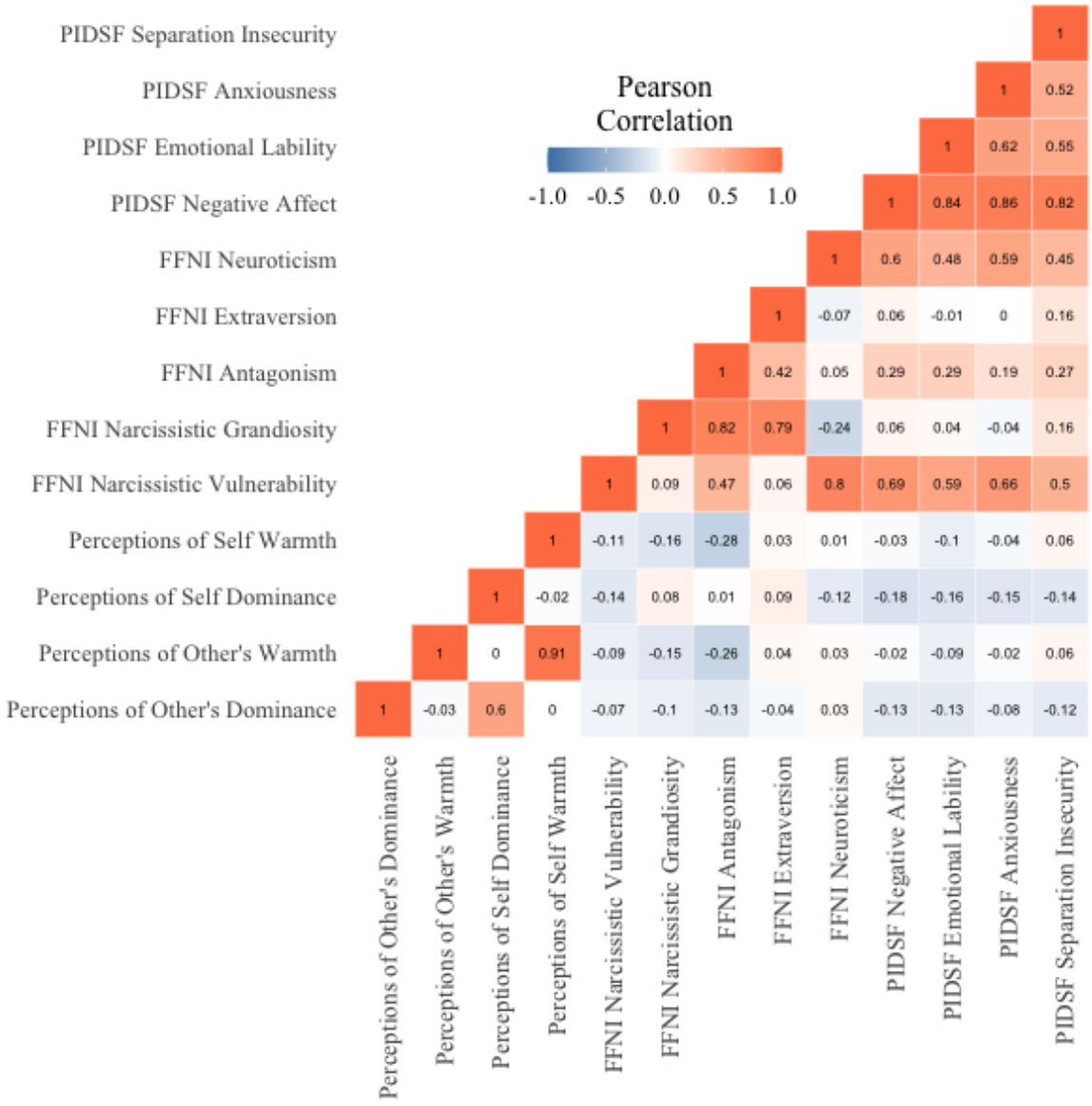

Figure 1 Correlation matrix

Note. Correlation matrix between the four interpersonal variables, narcissism's three domains and its subscales, and negative affectivity and its subscales.

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