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**AN INTEGRATIVE TWO-DIMENSIONAL MODEL OF NORMAL AND  
PATHOLOGICAL NARCISSISM TO RECONCILE THE SCHISM BETWEEN  
CLINICAL PSYCHOLOGY AND SOCIAL-PERSONALITY PSYCHOLOGY**

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## Abstract

The conceptualization and assessment of narcissism is inconsistent across research disciplines, leading to a criterion problem which weakens the nomological net. Clinical psychology commonly considers narcissism to be a pathological personality characteristic (e.g., Narcissistic Personality Disorder) and employs measures targeted at assessing maladaptive narcissistic functioning and outcomes. Narcissism is also a widely studied personality trait in social-personality psychology. However, this large literature, mainly employing the Narcissistic Personality Inventory (NPI), often suggests narcissism is a relatively adaptive personality trait associated with mental health. I offer an integrative approach suggesting that normal narcissism and pathological narcissism are distinct personality dimensions. The present research examined the associations of two narcissism inventories, the NPI (a social-personality measure) and the Pathological Narcissism Inventory (a clinical measure) across the psychologically meaningful domains of developmental antecedents, personality, self conscious emotions, adjustment, and externalizing problems and found a pattern of convergent and divergent external correlations establishing each as an adequate measure of normal and pathological narcissism respectively. An integrative two-dimensional model of normal and pathological narcissism is constructed from the narcissism scores from each measure to demonstrate the utility of the proposed nomological net. Conceptualizing the nature of narcissism as two distinct but theoretically related dimensions (normal, pathological), organizes a variety of important personality, psychopathology, and affective constructs in a theoretically synthetic and clinically meaningful way.

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## Chapter 1. Introduction

Narcissism is a personality characteristic that has drawn the interest of both social-personality psychology and clinical psychology (Cain, Pincus, & Ansell, 2008; Miller & Campbell, 2008). However, the assessment of narcissism is not calibrated across these disciplines, making it increasingly difficult to reconcile social-personality and clinical research on narcissism (Cain, et al., 2008; Miller & Campbell, 2008; Pincus & Lukowitsky, 2010). Specifically, ambiguity surrounding the assessment of pathological versus normal narcissism, and the limited scope of most instruments to capture pathological narcissism in full has led to inconsistent expectations for what narcissism measures should relate to (Pincus et al., 2009). This heterogeneity forms the basis of a fundamental criterion problem (Austin & Villanova, 1992; McGrath, 2005; Pincus, in press-a; Pincus & Lukowitsky, 2010; Wiggins, 1973) that weakens the nomological net and limits the synthesis of empirical findings into a more complete understanding of the construct.

The current paper aims to review how narcissism is assessed through self report in the fields of social-personality and clinical psychology, focusing on how each field addresses inconsistencies in narcissism assessment (normal versus pathological, limitations in scope). The current paper then provides an alternative conceptualization of narcissism to reconcile research in social-personality and clinical psychology through an integrative model, and presents an empirical study to test this conceptualization.

### *Narcissism Assessment in Social-Personality Psychology*

The Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981) is the most popular self-report measure of narcissism (Cain et al., 2008), used in the vast majority of research in social-personality psychology (Pincus et al., 2009). The original inventory was

designed to reflect the description of Narcissistic Personality Disorder included in the Diagnostic and Statistical Manual of Mental Disorders III (DSM-III; American Psychiatric Association, 1980); however the external correlates of the NPI call this into question and lead to inconsistent interpretations of what the NPI assesses. NPI assessed narcissism is positively related to self enhancement, manipulation, agentic/dominant interpersonal style, and aggression (Cain et al., 2008; Paulhus & Williams, 2002; Bushman and Baumeister, 1998; Paulhus, 1998), leading some authors to conceptualize the NPI as a measure of pathological narcissism at a subclinical level (e.g. Bushman & Baumeister, 1998; Miller et al., 2010; Paulhus & Williams, 2002). This interpretation is consistent with what the NPI was designed to measure. However, the NPI also correlates positively with measures of leadership/authority, achievement motivation, and self esteem, and negatively with measures of trait neuroticism, shame, and depression (Miller & Campbell, 2008; Pincus et al., 2009; Rhodewalt & Morf, 1995; Samuel & Widiger, 2008; Sedikides et al., 2004; Watson, Little, Sawrie, and Biderman, 1992), leading other authors to conclude the NPI measures normal/adaptive narcissism (e.g. Pincus et al., 2009; Pincus & Lukowitsky, 2010), and others to suggest it measures both normal and pathological expressions of narcissism (e.g. Ackerman et al., in press; Corry, Merritt, Mrug, & Pamp, 2008; Kubarych, Deary, & Austin, 2004; Watson & Morris, 1991). This inconsistency regarding what the NPI assesses is problematic for calibrating research within the field of social-personality psychology.

Researchers have pointed out the NPI total score may reflect a confusing mix of adaptive and maladaptive content (Ackerman et al., in press; Emmons, 1984, 1987; Watson, 2005; Watson, Little, Sawrie, & Biderman, 1992; Watson, Varnell, & Morris, 1999-2000). Accordingly, subsequent revisions of the NPI have been aimed at articulating a factor structure to disaggregate adaptive and maladaptive content. Emmons (1984, 1987) identified four

subscales of the NPI: leadership/authority, self-admiration/self-absorption, superiority/arrogance, and exploitativeness/entitlement, with *only* the final factor considered characteristic of pathological/maladaptive narcissism. Raskin and Terry (1988) offered a 40-item seven factor version of the NPI, although others have suggested both three factor and two factor solutions better fit this 40-item version (Kubarych et al., 2004). More recently, Ackerman and colleagues (in press) proposed a three factor model of leadership/authority, grandiose exhibitionism, and entitlement/exploitativeness with *only* the first factor considered characteristic of normal narcissism.

Dividing the NPI into adaptive and maladaptive components falls short of addressing the concerns regarding normal versus pathological narcissism for several reasons. Few of the scales based on the proposed NPI factor structures exhibit acceptable levels of internal consistency (del Rosario & White, 2005), including the most recent (Ackerman et al., in press) where the entitlement/exploitativeness factor was low ( $\alpha = .46$ ). In addition, the inconsistent use of the NPI (ranging from 1 to 7 scale or factor scores) among different research programs results in difficulty calibrating research findings, since the measurement of pathological and normal narcissism is inconsistent across studies.

Rosenthal and Hooley (2010) provided an alternative argument to address the confusing mix of content in the NPI. The authors suggested that the NPI was intended to measure sub-clinical levels of narcissism, and should therefore not be viewed separately from pathological narcissism. They demonstrated removing NPI items deemed poor indicators of narcissism brings the NPI into closer alignment with clinical definitions of narcissism. Importantly, the deleted items are not identified as “normal narcissism”, and are instead understood as other constructs (leadership, self esteem) that confound the definition of pathological narcissism.

The current review demonstrates the considerable heterogeneity in using the NPI to assess pathological narcissism. However, limitations in the scope of pathological content may suggest that any partitioning of the NPI (or the total score for that matter) will be too narrow to capture pathological narcissism in full. The maladaptive content in the NPI encompasses mainly entitlement and exploitativeness (Cain et al., 2008; Emmons, 1987; Pincus et al., 2009; Watson et al., 1992) indicative of narcissistic grandiosity. Unfortunately, the NPI does not assess narcissistic vulnerability, an aspect of narcissism central to clinical theory and consistently identified as an essential component of pathological narcissism (Cain et al., 2008; Levy et al., 2009; Pincus & Lukowitsky, 2010; Pincus & Roche, in press). Thus, narcissism research in social-personality psychology is dominated by a single measure which is inconsistently used across research programs, and does not seem to possess the content necessary to assess pathological narcissism in full.

#### *Narcissism Assessment in Clinical Psychology*

In contrast to social-personality psychology research, clinical psychology consistently identifies narcissism as a pathological characteristic, and is primarily concerned with developing instruments to assess pathological narcissism. The field of clinical psychology has produced a variety of self report measures to assess pathological narcissism (see for a review: Pincus & Lukowitsky, 2010; Pincus & Roche, in press) but many of these measures are limited in scope. Self report measures of narcissism in clinical psychology are typically informed by The Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV-TR; American Psychiatric Association, 2000), which offer criteria to assess narcissistic personality disorder. These criteria have increasingly defined narcissistic pathology exclusively through narcissistic grandiosity (Cain et al., 2008). Consequently, DSM informed narcissism inventories often share the same

limitation of lacking items to assess narcissistic vulnerability. Alternative inventories that were designed to measure narcissistic vulnerability, such as the Hypersensitive Narcissism Scale (NHS; Hendin & Cheek, 1997) still must be combined with a scale measuring grandiosity in order to comprehensively assess pathological narcissism. Recently, Pincus and colleagues developed the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) to assess seven characteristics of narcissistic grandiosity and narcissistic vulnerability, finding both grandiose and vulnerable components related to measures of maladjustment. The PNI is currently the only multi-faceted measure assessing clinically identified characteristics spanning the full phenotypic range of pathological narcissism (Wright, Lukowitsky, & Pincus, 2010).

In clinical psychology, the importance of assessing narcissistic grandiosity and vulnerability has been increasingly recognized, but considerably less attention has been given to the distinction between normal and pathological narcissism. While it is tempting to reason that clinical psychology has just not been interested in narcissism as a normal developmental phenomenon, several prominent clinical theories of narcissism include both normal and pathological aspects of narcissistic development. For example, Otto Kernberg (1998, 2010) defined three classifications of narcissism; *normal adult narcissism* exemplified through normative self esteem regulation, *normal infantile narcissism* as an age appropriate developmental trajectory of narcissism where one can become fixated/regressed at a certain developmental level, and *pathological narcissism* where an individual uses others superficially to obtain self esteem. Similarly, Heinz Kohut (1966) described a primary narcissistic process which is gradually replaced by a healthier self structure that promotes more realistic ambitions and motivations promoting self esteem and success, pursued in culturally appropriate ways. Given the emphasis in clinical theory on both normal and pathological narcissism, the under researched

aspect of normal narcissism in clinical psychology forms a potential gap between clinical theory and clinical assessment.

*Toward and Integrated System of Narcissistic Functioning*

The difficulty in integrating narcissism research across disciplines stems from the reality that narcissism is operationalized and assessed differently across fields of study. In order to begin reconciling narcissism research, one must first calibrate how narcissism is operationalized and assessed. Many efforts have been made to bring the NPI into alignment with clinical definitions of pathological narcissism. However, the lack of vulnerable content in the NPI suggests that no matter how the NPI is partitioned, it will likely remain an inadequate measure that does not concord with clinical conceptualization of pathological narcissism. Rather than continuing to divide the NPI into normal and pathological content, the present study suggests the NPI should be viewed as a measure of normal narcissism.

A two dimensional model of narcissism is proposed that integrates normal and pathological narcissism as separate and orthogonal dimensions giving rise to a structurally meaningful two-dimensional space (see also Ansell, 2006). This would allow both normal and pathological processes to exist concomitantly within the individual, each dimension contributing to guide affect, behavior and interpersonal relations. Much like the five factor model employs personality factors that exist together and combine to understand the entire matrix of the individual, pathological and normal narcissism dimensions could combine in this way to understand the complex system of narcissistic functioning.

Importantly, conceptualizing the NPI as a measure of normal narcissism allows for the integration of social-personality and clinical psychology research by the recognition that both normal and pathological narcissism are integral parts of a complete model of narcissism. Such a

model is consistent with clinical theory which identifies both normal and pathological aspects of narcissistic development (Kernberg, 1998; Kohut, 1977; Pincus, 2005; Ronningstam, 2009; Stone, 1998), and the NPI would fill an important gap between clinical theory of normal narcissism and corresponding research.

Recently, Miller and Campbell (2010) suggested that empirical literature on trait narcissism (largely measured using the NPI) could be used as a building block for understanding narcissistic personality disorder. Blais and Little (2010) noted many limitations of the NPI in a response article, concluding that the NPI was not the ideal instrument to inform future research of pathological narcissism; however, the original article did not clearly specify how trait narcissism literature could be used as a building block to aid in future research of pathological narcissism. Conceptualizing normal (measured using the NPI) and pathological narcissism as discrete dimensions incorporates the vast empirical literature of trait narcissism within a broader understanding of the narcissistic system (i.e. including both normal and pathological dimensions). This would seemingly satisfy the goals of connecting pathological narcissism to more empirical literature (Miller & Campbell, 2010; Miller, Widiger, & Campbell, in press) while maintaining an adequate definition of narcissistic pathology, and providing an opportunity to incorporate knowledge and methodologies across disciplines (Blais & Little, 2010).

#### *Preliminary Evidence for Distinguishing Normal and Pathological Narcissism*

Past research has identified normal and pathological expressions of narcissism showing differential relationships to life adjustment (Russ, Shedler, Bradley, & Westen, 2008; Wink 1992; Wink, Dillon & Fay, 2005). Using the California Q-set (Block, 1961, 1978), Wink (1992) identified the Autonomous, Willful, and Hypersensitive prototypes, and each of these narcissistic prototypes correlated differently with measures of life outcomes. The Author concluded the

autonomous prototype expressed a healthy form of narcissism associated with positive life outcomes and the hypersensitive prototype expressed a pathological form of narcissism associated with negative life outcomes. Similarly, the Shedler-Westen Assessment Procedure (SWAP-200; Shedler & Weston, 2007) was used to identify high-functioning, grandiose, and [vulnerable]/fragile prototypes of narcissism (Russ et al., 2008). The authors concluded there is evidence for different subtypes of narcissism, which relate to differences in healthy and pathological functioning.

Miller and Campbell (2008) correlated a clinical measure (PDQ-4; Hyler, 1994) and social-personality measure (NPI) of narcissism across personality profiles, finding the NPI related to an emotionally resilient, extraverted form of narcissism, whereas the clinical narcissism measure related to an emotionally unstable, affect laden, introverted form of narcissism. The authors reported both clinical and social-personality measures positively related to an antagonistic interpersonal style (e.g. low agreeableness), offering an area of convergence among disciplines. Pincus and colleagues (2009) reported differential relations between normal and pathological narcissism across relevant psychotherapy variables.

In an earlier study, Ansell (2006) submitted a variety of narcissism measures to principal component analysis, resulting in two orthogonal components used to identify normal and pathological themes (it should be noted that this work was conducted before the PNI was developed in full). Both components inversely related to empathy, but pathological narcissism correlated positively with shame and identity diffusion, while normal narcissism correlated negatively with these measures. Based on item-level multidimensional scaling, Ansell (2006) concluded the best balance between descriptive parsimony and complexity is a two dimensional structure of narcissism spanning both normal and pathological dimensions.

Despite these promising findings, few researchers connect empirically derived normal and pathological factors of narcissism to a comprehensive model that can explain how both processes exist and influence each other within the person. Validating an integrative model of normal and pathological narcissism is the first step in developing a foundation for discussing how these processes may relate to each other.

### *The Current Investigation*

The current research is concerned with how narcissism is assessed (through self report), and how these instruments drive theory across social-personality and clinical psychology domains. I hypothesized that normal narcissism and pathological narcissism are distinct dimensions and therefore, measures of normal (NPI) and pathological (PNI) narcissism should be relatively uncorrelated across samples, as has been reported in previous studies (see Pincus et al., 2009). Further, I hypothesized that normal and pathological dimensions of narcissism will relate differently to theoretically meaningful domains, confirming through criterion relationships that these dimensions assess distinct normal and pathological constructs. The specific predictions for criterion relationships across each domain are reviewed below to articulate the expected differences across narcissism measures. To test these predictions, each criterion variable was correlated with normal (NPI) and pathological (PNI) narcissism measures, and a Steiger Z statistic (Steiger, 1979) was computed to test whether the correlations between the criterion variable differs across narcissism inventories. Finally, I hypothesized that normal and pathological narcissism dimensions provide additive effects in the prediction of theoretically meaningful domains, indicating that assessing distinct normal and pathological dimensions adds important information to the understanding of narcissism. Confirmation of such a two-dimensional model of narcissism holds promise to reconcile the schism between social-

personality and clinical psychology and promote a broader integrative nomological net. In addition to testing these additive effects through multiple regression, the present study will test for interaction effects between these two narcissism measures.

In order to adequately test these hypotheses, the current study broadly draws from a variety of substantive domains theoretically and empirically linked to the understanding of narcissism across clinical and social-personality psychology. The specific content areas include developmental antecedents, personality, self-conscious emotions, adjustment, and externalizing problems, which will be reviewed presently.

*Developmental Antecedents.* Several clinical theories suggest the development of narcissism may be rooted in early negative childhood experiences (Kohut, 1971, 1977; Kernberg, 1984, 1998). In fact, narcissistic personality disorder is related to self-reported childhood abuse (Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000). Similarly, insecure attachment styles have been linked to narcissistic vulnerability (Dickinson & Pincus, 2003; Smolewska & Dion, 2005). Childhood abuse and insecure attachment are expected to positively relate to the PNI, forming a picture of a child without the experiences needed to develop a cohesive sense of self, which leads to a constant need for others to bolster their fragile self-esteem. Conversely, the NPI should be unrelated to childhood abuse, and unrelated or negatively related to insecure attachment styles, suggesting normal narcissism develops from a relatively healthy environment of experiences (Kohut, 1977).

*Personality.* Personality is an obvious choice for understanding how different dimensions of narcissism fit within a broader lens of personality literature. Past research used the Five Factor Model (FFM) as a framework of general personality structure as a basis for comparing seemingly different personality constructs (Ozer & Reise, 1994). Samuel and Widiger (2008) used this

framework to test different measures of narcissism across the FFM, but did not include an inventory which adequately captured pathological narcissism spanning narcissistic grandiosity and vulnerability. Informed by this research (see also Miller & Campbell, 2008), the NPI is expected to correlate positively with extraversion, negatively with agreeableness and neuroticism, and unrelated to conscientiousness and openness. Conversely, the PNI is expected to correlate negatively with extraversion and agreeableness, and positively with neuroticism, reflecting a vulnerable theme of narcissistic pathology. There are no a priori predictions for conscientiousness or openness. Using the PNI to capture a more complete picture of pathological narcissism will provide a more robust comparison of pathological and normal narcissism dimensions.

Other personality structures such as borderline personality organization (Pincus et al., 2009) and dependency (Ansell, 2006) have been used to differentiate normal and pathological narcissism. Borderline personality organization was unrelated to NPI assessed narcissism, but positively related to a measure of pathological narcissism, supporting the understanding of NPI assessed narcissism as a normal/adaptive trait showing limited relationships to pathological variables (Pincus et al., 2009). The current study is expected to confirm this finding. Dependency is a ubiquitous construct in personality, social, and clinical psychology, often associated with both adaptive and maladaptive functioning (Bornstein, 1992). Ansell reported a combination of low narcissistic grandiosity and high narcissistic vulnerability predicts dependency (Ansell, 2006). Since dependency is studied in a variety of disciplines, and relates to both adjustment and maladjustment, this personality variable seems particularly suited to study the effect of normal and pathological narcissism dimensions on the expression of dependency. Given the NPI only assesses grandiosity (and not vulnerability), the NPI is expected to negatively correlate with

dependency. The PNI contains both grandiosity and vulnerability, making an a priori prediction more difficult. It is tentatively hypothesized the PNI will correlate positively with dependency, given expectations that narcissists are dependent on others to be admired (Morf & Rhodewalt, 2001). Using the FFM, borderline personality organization, and dependency will provide a useful framework to contrast the normal and pathological narcissism dimensions across theoretically meaningful personality variables.

*Self-conscious Emotions.* Self conscious emotions relate to self regulation and self concept, two components essential to the definition of narcissism (Morf & Rhodewalt, 2001; Pincus & Lukowitsky, 2010). Shame and guilt proneness are closely related negative emotions concerned with negative appraisal of the self as well as one's behaviors (Abe, 2004). Shame can be thought of as a public emotion, and guilt a private emotion (Buss, 1980). Morf and Rhodewalt (2001) suggest the narcissist is concerned with making sure others view them admirably, often resulting in thwarted attempts at self enhancement. It follows that shame would positively relate to pathological definitions of narcissism. The NPI was negatively related to shame (Harder, Cutler & Rockart, 1992; Harder & Zalma, 1990; Hibbard, 1992; Pincus et al, 2009; Wright, O'Leary & Balkin, 1989) and guilt (Strelan, 2007), suggesting either a denial of emotions, or further evidence that the NPI measures a trait like expression of narcissism rooted in a positive and relative stable sense of self. Measures of pathological narcissism were positively related to shame, consistent with clinical theory of pathological narcissism (Pincus et al., 2009; O'Brien, 1987, Tracy, Cheng, Robins, & Trzesniewski, 2009). It is therefore predicted that shame will relate positively to the PNI, and negatively to the NPI. There are no a priori predictions for guilt.

Pride is another self conscious emotion impacting conceptualizations of narcissism. Authentic pride can be thought of as pride rooted in requisite accomplishments (Tracy et al.,

2009). In other words, the feelings of pride are deserved based on a job well done. Hubristic pride can be understood as pride not based in requisite accomplishments, meaning feelings of pride that have not (yet) been earned. Research has shown the NPI correlates positively with both authentic and hubristic pride, while a measure of narcissistic personality disorder correlated positively only with hubristic pride (Tracy et al., 2009). This demonstrates pathological and normal narcissism dimensions are related to normal positive illusions and self enhancement biases indicative of exaggerated feelings of pride, but only normal narcissism is also rooted in pride based in real accomplishments. The current study is expected to replicate these findings.

*Adjustment.* Adjustment is an important and often misrepresented domain in the assessment of narcissism. Normal and pathological dimensions should not be defined by their relationship to adjustment, although their definitions would suggest expected criterion relationships. Accordingly, mental health has shown positive relationships to the NPI (Rose, 2002), and negative relationships to measures of pathological narcissism (see Wink, 1992; Lapsley & Aalsma, 2006), including the PNI (Pincus et al., 2009).

Many clinical researchers propose narcissism, as well as other personality pathology, is manifested through disturbed interpersonal relations (e.g. Benjamin, 1996; Pincus, 2005). For example, Morf and Rhodewalt (2001) suggested the treatment of nearly all interpersonal situations as an opportunity to establish one's autonomy (i.e. dominance) cuts to the heart of narcissistic dysfunction. *The Inventory of Interpersonal Problems Circumplex* (IIP-C; Alden, Wiggins, & Pincus, 1990) is a unique measure that can examine both the quality and intensity of interpersonal distress. NPI assessed narcissism corresponded to interpersonal dominance (Brown & Zeigler-Hill, 2004; Pincus et al., 2009) exclusively, but did not significantly relate to interpersonal distress. Conversely, the PNI was related to a variety of interpersonal problems

across interpersonal dimensions, and was significantly related to interpersonal distress. The present study will confirm these results and extend the findings into a theoretically meaningful distinction between normal and pathological dimensions of narcissism.

Self esteem is a marker of adjustment that highlights a key discrepancy in the conceptualization of narcissism across disciplines (Rosenthal & Hooley, 2010). Social-personality research includes high self esteem in conceptualizing narcissism, while clinical psychology typically links narcissism to low self esteem (Pincus et al., 2009; Rosenthal & Hooley, 2010), particularly as it relates to narcissistic vulnerability (Pincus & Lukowitsky, 2010), making it difficult to reconcile perspectives on this construct (Cain et al., 2008). While some suggest the relationship between normal narcissism and self esteem is due to the assessment limitations of the NPI (Rosenthal & Hooley, 2010), the proposed model of normal and pathological narcissism incorporates these seemingly discrepant findings within an integrative model. The NPI is expected to positively correlate with self esteem, while the PNI is expected to negatively relate to self esteem, forming an important difference in the nature of narcissistic functioning across these dimensions.

Narcissism across both normal and pathological definitions seems to converge on the expectation of low empathy. Watson and Morris (1991) found the NPI was negatively correlated with empathy, and even dividing the NPI into components yielded similar results (correlations ranging from -.11 to -.39). This is consistent with other studies demonstrating a negative association between empathy and the NPI (Pincus et al., 2009; Watson, Grisham, Trotter, & Biderman, 1984). The DSM also identifies lack of empathy as a symptom of narcissistic personality disorder (APA, 2000), and several theories of narcissism identify the lack of empathy as an important feature of narcissism, particularly related to grandiosity (Morf & Rhodewalt,

2001; Ronningstam, 2005). It is expected empathy will negatively relate to both narcissism measures, providing a meaningful area of convergence.

*Externalizing problems.* Externalizing problems related to problematic behavior (aggression) and thought processes (cheating neutralizations, alcohol expectancies) are indicators of maladjustment useful in determining how narcissistic dimensions combine to influence the expression of maladaptive functioning. Pincus and colleagues (2009) reported aggression correlated positively with both NPI (see also Twenge & Campbell, 2003; Bushman & Baumeister, 1998) and PNI assessed narcissism, though the correlation of PNI assessed narcissism was higher. Neutralizations are pre-behavioral cognitions used to justify engaging in amoral behavior (Sykes & Matza, 1957), which in effect defend against feelings of low self worth associated with contemplating whether to engage in deviant actions. Given this emphasis on self-enhancement regulation, it is not surprising to find that both the NPI and PNI positively correlate to neutralizations (Roche, Lukowitsky, & Pincus, 2009). Finally, Alcohol expectancies have been linked to the onset and maintenance of alcohol abuse (Sher, Wood, Wood, & Raskin, 1996; Smith, Goldman, Greenbaum, & Christiansen, 1995), conceptualized as a coping mechanism to replenish a grandiose sense of self, or to combat fears of narcissistic injury (Morf & Rhodewalt, 2001; Luhtanen & Crocker, 2005). In line with past findings, aggression is expected to correlate positively to both the NPI and PNI, but the correlation should be stronger for the PNI. Alcohol expectancies and neutralizations are understood as cognitive strategies for defending against negative consequences, and are expected to positively relate more strongly to the PNI than the NPI.

While many of the criterion variables used in the current paper have been used in other studies in a piecemeal fashion, the current study provides a unique opportunity to synthesize these results into an integrative framework to understand the nature of narcissism.

## Chapter 2. Methods

### *Participants*

Sample 1 consisted of 3330 predominantly Caucasian (84.5%) adult college students (43% male) with a mean age of 19.37. Participants completed an online survey to earn extra course credit. The relevant variables associated with this sample were: childhood abuse, borderline personality organization, dependency, mental health, aggression, and alcohol expectancies.

Sample 2 consisted of 871 predominantly Caucasian (80.6%) adult college students, who volunteered to participate in an online research study for extra-credit. The mean age was 21.23, and 62% of the sample was male. The relevant variables assessed in this sample were: attachment styles, Five-Factor Model of personality, and neutralization techniques for cheating behaviors.

Sample 3 was 600 predominantly Caucasian (87.2%) undergraduate introductory psychology students who volunteered for this study to receive extra credit. The mean age was 19.03, and 48.3% of the sample was male. The relevant variables assessed in this sample were: interpersonal problems, pride, guilt, and shame.

Sample 4 was 798 predominantly Caucasian (83.2%) undergraduate introductory psychology students who volunteered for this study to receive extra credit. The mean age was 19.21, and 25% of the sample was male. The relevant variables assessed in this sample were: self esteem and empathy.

### *Narcissism Measures*

*Normal Narcissism- Narcissistic Personality Inventory (NPI-16; Ames, Rose, & Anderson, 2006).* The NPI-16 is an abbreviated form of the original forty item measure (NPI; Raskin & Hall, 1979, 1981). Participants are instructed to choose one of two paired items that best describes themselves (i.e. forced choice format), and items are summed to create a single normal narcissism score.

*Pathological Narcissism- (PNI; Pincus, in press-b; Pincus, et al., 2009).* The PNI is a 52 item measure using a 6 point scale ranging from 0 (not at all like me) to 5 (very much like me). The PNI draws from clinical theory, structural studies of narcissistic traits, and DSM NPD conceptualizations to broadly assess both grandiose and vulnerable characteristics of pathological narcissism, and is currently the only multi-faceted instrument capable of capturing clinically identified characteristics spanning the full phenotypic range of narcissism (Pincus & Lukowitsky, 2010). The present study uses the PNI total score, calculated by averaging the 52 items. Reliabilities for the NPI and PNI across all studies are presented in Table 1.

### Criterion Measures—Developmental Antecedents

*Child Abuse and Trauma Scale (CATS; Sanders & Becker-Lausen, 1995).* The CATS is a 38-item self-report questionnaire, measuring child sexual abuse ( $\alpha = .870$ ), child physical abuse ( $\alpha = .479$ ), and child neglect ( $\alpha = .897$ ). For each item, participants rate how frequently an abusive experience occurred during their childhood and adolescence, using a 0-4 (never; always) scale. Each subscale is calculated using the mean score for the items comprising the scale.

*Experiences in Close Relationship Scale-Short Form (ECR-SF; Wei, Russell, Mallinckrodt, & Vogel, 2007),* is a 12 item measure assessing attachment anxiety ( $\alpha = .749$ ) and

attachment avoidance ( $\alpha = .800$ ). Participants rate how well each statement describes their typical feelings in romantic relationships, from a 1 (disagree strongly) to 7 (agree strongly) scale.

#### Criterion Measures—Personality

*Big Five Inventory-10 (BFI-10; Rammstedt & John, 2006)*. The BFI is a 10 item abbreviated inventory which uses two-item scales to assess personality across the five factors of neuroticism ( $\alpha = .582$ ), extraversion ( $\alpha = .594$ ), openness ( $\alpha = .338$ ), agreeableness ( $\alpha = .289$ ) and conscientiousness ( $\alpha = .465$ ). An eleventh item is available, and was used to improve reliability in the agreeableness scale. Agreeableness was assessed by summing three items and all other personality traits were summed using two items. Items are measured using a five point scale, with higher scores indicating increased prevalence of the personality trait. Rammstedt and John (2006) found the BFI-10 correlated .83 to the full scale, BFI-44. The abbreviated scale also accounted for 70% of the variance found in the BFI-44 scale and 85% of the test-retest reliability.

*Inventory of Personality Organization (IPO; Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001)*. The IPO is an 83-item measure ( $\alpha = .978$ ) that captures the core diagnostic components of borderline personality organization on a 5-point scale ranging from 1 (never true) to 5 (always true). The relevant items were summed to create a total borderline score.

*3 Vector Dependency Inventory (3VDI; Pincus & Wilson, 2001)*. The 3VDI is a 27-item self report scale used to measure three facets of dependency referred to as love ( $\alpha = .828$ ) exploitable ( $\alpha = .856$ ), and submissive ( $\alpha = .789$ ). Participants were asked to indicate how well each statement described them on a 6 point scale ranging from 1 (not at all like me) to 6 (very much like me).

#### Criterion Measures—Self Conscious Emotions

*Test of Self-Conscious Affect-3 (TOSCA-3; Tangey, Dearing, Wagner, & Gramzow, 2000).* The TOSCA-3 is an abbreviated form of the TOSCA (Tangey, Wagner, & Gramzow, 1989) which assesses reactions to moral dilemmas across 11 negative and 5 positive scenarios. After given a scenario, participants rate how likely each potential response would be for them on a 1 (not likely) to 5 (very likely) scale. Responses are summed to create subscales measuring shame proneness ( $\alpha = .797$ ) and guilt proneness ( $\alpha = .743$ ).

*Trait Pride Facet Scale (TFPS; Tracy & Robins, 2007).* The TPFS is a 14-item measure that assesses authentic ( $\alpha = .850$ ) and hubristic ( $\alpha = .850$ ) pride. Participants rate the extent the word captures how they generally feel, on a five point scale ranging from 1 (not at all) to 5 (extremely).

#### Criterion Measures—Adjustment

*Mental Health Index (MHI-5; Berwick, Murphy, Goldman, Ware, Barsky, & Weinstein, 1991).* The MHI-5 is a brief 5-item questionnaire ( $\alpha = .816$ ) assessing mental health. Participants are asked how they felt in the previous four weeks using a 5 point scale ranging from 1 (none of the time) to 5 (all).

*Inventory of Interpersonal Problems-Circumplex (IIP-C; Alden, Wiggins, & Pincus, 1990).* The IIP-C is a 64-item measure of interpersonal dysfunction. Thirty-nine items target behaviors that the respondent finds difficult to engage in, “It is hard for me . . .” Twenty-five items target behaviors the respondent over expresses, “These are things I do too much . . .” Items are rated on a 5-point scale ranging from 0 (*not at all*) to 4 (*extremely*). The IIP-C has been extensively validated in personality and clinical research. Alpha ranges for the IIP-C were highest for the HI octant ( $\alpha = .848$ ), and lowest for the NO octant ( $\alpha = .703$ ).

*Rosenberg Self-Esteem Inventory (RSI; Rosenberg, 1965)*. The RSI is a widely used 10-item measure ( $\alpha = .900$ ) of global self-esteem rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Visions of Morality Scale (VMS; Shelton & McAdams, 1990)*. The VMS is a 45-item measure ( $\alpha = .900$ ) that assesses empathy and morality from cognitive, behavioral, and social perspectives rated on a 7-point scale ranging from 1 (*definitely would not do*) to 7 (*definitely would do*).

#### Criterion Measures—Externalizing Problems

*Aggression Questionnaire (AQ; Buss, & Perry, 1992)*. The AQ is a 29-item instrument consisting of four scales: Physical Aggression (9 items), Verbal Aggression (5 items), Anger (7 items), and hostility (8 items). Participants rate each item on a scale of 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). The items were summed to create an overall aggression score ( $\alpha = .918$ ).

*Neutralization Scale (Haines, Diekhoff, LaBeff, & Clark, 1986; Ball 1966)*. The neutralization scale was adapted from Ball (1966) to assess neutralization techniques specific to academic cheating. Participants indicated the extent to which they agreed a student is justified cheating in 11 circumstances, on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score was calculated by summing the 11 items, and demonstrated adequate internal consistency ( $\alpha = .942$ ).

*Alcohol Outcome Expectancies Scale (AOE; Leigh & Stacy, 1993)*. The AOE is a 34-item self report inventory designed to assess respondent's positive ( $\alpha = .958$ ) and negative ( $\alpha = .896$ ) expectations about the effects of alcohol. Participants rated the likelihood of expectancies when drinking alcohol using a 6 point scale ranging from 1 (no chance) to 6 (certain to happen).

### *Review of Data Analytic Strategy*

Total scores for the NPI and PNI were correlated in each sample to examine their independence. Each criterion variable was correlated with the normal and pathological narcissism inventories, and differences in these dependent correlations were computed using Steiger's (1979) MULTICORR approach for testing pattern hypotheses on correlation matrices. Each dependent variable was examined through hierarchical linear regression to test for additive and interactive effects of normal and pathological narcissism on the variable of interest. For all criterion variables, step 1 included the main effects of the NPI and PNI. Step 2 included an interaction term (NPIxPNI) to test whether an interaction occurs.

## Chapter 3. Results

### *Correlations Among Narcissism Scales*

Across the four samples, the NPI and PNI correlated modestly with each other (see Table 1), ranging from .18 (sample 4) to .22 (sample 2).

### *Narcissism Measures Across Developmental Antecedents*

The NPI was significantly positively correlated with child sexual abuse, physical abuse, and neglect and uncorrelated with attachment anxiety and attachment avoidance (see Table 2). The PNI was significantly positively correlated with child sexual abuse, physical abuse, neglect, attachment anxiety, and attachment avoidance. Tests of correlations revealed that child sexual and physical abuse correlations did not significantly differ across narcissism scales. However, childhood neglect did significantly differ in magnitude across narcissism scales such that the PNI was more strongly positively related to childhood neglect than was the NPI. Attachment style correlations were significantly different in magnitude across narcissism measures such that the PNI exhibited significantly stronger correlations than the NPI.

Hierarchical linear regression demonstrated significantly positive main effects for the NPI and PNI on sexual and physical abuse, and a significant negative main effect for the NPI and positive main effect for the PNI on attachment anxiety, indicating additive effects of narcissism dimensions (see Table 3). There was a positive main effect for the PNI on neglect and attachment avoidance, while the NPI was not significant. None of the NPI x PNI interactions added significantly to predictions.

#### *Narcissism Measures Across Personality*

The NPI was significantly positively related to extraversion, openness, and conscientiousness, and negatively related to neuroticism and agreeableness (see Table 4). The NPI was modestly positively correlated to borderline personality organization, and was negatively related to dependency, with the negative relationship strengthening as the dependency subscales measured more immature forms of dependency (see Pincus & Wilson, 2001). The PNI was positively related to neuroticism and openness to experience, and negatively related to extraversion, agreeableness, and conscientiousness. The PNI was strongly correlated with borderline personality organization, and demonstrated a positive relationship to dependency which strengthened as subscales measured more immature forms of dependency. Correlations with openness to experience and agreeableness did not significantly differ in magnitude across narcissism scales. However, neuroticism was positively correlated with the PNI and negatively correlated with the NPI, representing a significant difference in magnitude. Extraversion and conscientiousness were positively correlated with the NPI and negatively correlated with the PNI, representing significant differences in magnitude among narcissism measures. Borderline personality organization was more strongly positively correlated with the PNI than the NPI. Correlations with dependency subscales were significantly different in magnitude across

narcissism measures, as the NPI negative relationship and PNI positive relationship with dependency both became stronger in opposite directions as the subscales measured increasingly more immature forms of dependency.

Hierarchical linear regression demonstrated a significant negative main effect for the NPI and a significant positive main effect for the PNI on neuroticism indicative of an additive effect of narcissism dimensions on neuroticism (see Table 5). Similarly, a significant positive main effect for the NPI and a significant negative main effect for the PNI were found for extraversion and conscientiousness, also indicative of additive effects. A significant positive main effect for the NPI and a non significant effect for the PNI were found for openness. Negative main effects for the NPI and PNI were found for agreeableness, indicative of an additive effect. None of the NPI x PNI interactions added to significantly to predictions.

Hierarchical linear regression demonstrated a significant positive main effect for the PNI and a non significant effect for the NPI on borderline personality organization (see Table 6). A significant interaction with the narcissism measures on love dependency was found, suggestive of an interactive effect. Significant negative main effects for the NPI and significant positive main effects for the PNI were found for both exploitable and submissive dependency, indicative of additive effects. The NPI x PNI interactions did not add significantly to the predictions of exploitable or submissive dependency.

#### *Narcissism Measures Across Self Conscious Emotions*

The NPI was significantly negatively related to shame and guilt, and positively related to authentic and hubristic pride (see Table 7). In contrast, the PNI was significantly positively related to shame and demonstrated a non significant relationship with guilt. The PNI was negatively related with authentic pride, and positively related to hubristic pride. The Steiger Z

test of correlations suggested hubristic pride did not differ in magnitude across narcissism measures. However, shame, guilt, and authentic pride all demonstrated significant differences in magnitude.

Hierarchical linear regression demonstrated negative main effects of the NPI on guilt and shame, with positive main effects of the PNI on guilt and shame indicating an additive effect (see Table 8). There was a positive main effect for the NPI and a negative main effect for the PNI on authentic pride, indicating an additive effect. There were positive main effects for both the NPI and PNI on hubristic pride, indicating an additive effect. None of the NPI x PNI interactions added significantly to predictions.

#### *Narcissism Measures Across Adjustment Variables*

The NPI was positively related to mental health, agentic interpersonal problems, and self esteem, negatively related to communal interpersonal problems and empathy, and unrelated to interpersonal distress (see Table 9). The PNI was negatively related to mental health, self esteem, and empathy, positively related to agentic interpersonal problems and interpersonal distress, and unrelated to communal interpersonal problems. The Steiger Z test of correlations revealed the positive correlation between the NPI and mental health was significantly different in magnitude from the negative correlation between the PNI and mental health. The NPI demonstrated a significantly stronger positive correlation in magnitude to agentic problems and a stronger negative correlation to communal problems than the PNI. The NPI non significant relationship to interpersonal distress was significantly different in magnitude from the PNI positive relationship to interpersonal distress. The positive correlation of the NPI and self esteem was significantly different in magnitude from the negative correlation of the PNI and self esteem. Empathy did not differ in magnitude across narcissism measures.

Hierarchical linear regression demonstrated a positive main effect for the NPI on mental health, and a negative main effect for the PNI, indicative of an additive effect (see Table 10). There was a negative main effect for the NPI predicting communal interpersonal problems, and the PNI was not significantly related to communal interpersonal problems. There was an interactive effect for narcissism dimensions predicting agentic interpersonal problems. A significant negative effect for the NPI and positive effect for the PNI on interpersonal distress, suggested additive effects. There was a positive main effect for the NPI and negative main effect for the PNI on self esteem, suggestive of an additive effect. Significant negative main effects for the NPI and PNI on empathy were demonstrative of an additive effect.

#### *Narcissism Measures Across Externalizing Problems*

Both the NPI and PNI were positively correlated with Aggression and neutralizations (see Table 11). The NPI was not significantly correlated with positive or negative alcohol expectancies, whereas the PNI was positively correlated with positive and negative alcohol expectancies. The positive relationship between aggression and neutralizations were stronger in magnitude for the PNI than for the NPI. The PNI correlations with positive and negative alcohol expectancies were stronger in magnitude than their respective correlations with the NPI.

Hierarchical linear regression demonstrated significant positive main effects for the NPI and PNI on aggression, with no interaction effect, indicative of an additive effect (see Table 12). There was a positive main effect for the PNI on cheating neutralizations, and the NPI was not significant. A positive main effect for the PNI was found for positive alcohol expectancy, while the NPI was not significantly related. A negative main effect for the NPI and positive main effect for the PNI was found for negative alcohol expectancy, indicative of an interactive effect. None of the NPI x PNI interactions added significantly to predictions.

### *Summary*

As predicted, the pattern of criterion correlations suggests the NPI assesses normal narcissism and the PNI assesses pathological narcissism. Of the 28 variables examined, hierarchical linear regression revealed 19 additive effects (3 of 5 developmental antecedents, 6 of 9 personality measures, 4 of 4 self-conscious emotions, 4 of 6 adjustment variables, 2 of 4 externalizing problems), while interaction effects were far less common (0 of 5 developmental antecedents, 1 of 9 personality measures, 0 of 4 self-conscious emotions, 1 of 6 adjustment variables, 0 of 4 externalizing problems). Five variables were predicted exclusively by the PNI (neglect, attachment avoidance, borderline personality organization, cheating neutralization, positive alcohol expectancy), and two variables were predicted exclusively by the NPI (openness to experience and communal interpersonal styles).

### Chapter 4. Discussion

The current study hypothesized that pathological and normal narcissism are distinct dimensions that could be assessed using the PNI and NPI, respectively. The correlation between narcissism measures in each of the four studies was low ( $r$  ranging from .18 to .22) if one considers them to measure the same construct, but consistent with the conceptualization of normal and pathological narcissism as distinct but related dimensions of narcissism. The majority of the regression analyses produced additive effects, suggesting that both dimensions of narcissism are important in accounting for the psychologically meaningful variables in this study.

Narcissism measures differed in important ways across developmental antecedents. Pathological narcissism is related to insecure attachment (particularly anxious attachment), and is also modestly positively correlated with childhood neglect, while normal narcissism is unrelated

to insecure attachment. However, both narcissism measures were weakly related to child sexual and physical abuse and these relationships did not differ in magnitude across narcissism measures. These findings correspond with the view that pathological narcissism has its roots in early developmental disturbances (such as parental coldness and insecure attachment) that may shape pathological expressions of narcissism (Kernberg & Caligor, 2005; Kohut, 1977). The findings also highlight the importance of early attachment in the development of narcissism. This is consistent with object relations theory (Winnicott, 1965; see also Kohut, 1966) which suggests healthy development is not about a perfect childhood (i.e. free from traumatic experiences), but one where a child feels a consistent bond with their caretakers (i.e. attachment).

The personality profiles in this study also differed across narcissism measures. Normal narcissism related to an emotionally stable, extraverted and conscientious profile, while pathological narcissism related to a neurotic, introverted, and unconscientious profile. These differences replicated with past research (Miller & Campbell, 2008) and demonstrated the measures relate to distinct expressions of narcissism. Low agreeableness remained an area of convergence among narcissism scales (see also Miller & Campbell, 2008; Samuel & Widiger, 2008).

Borderline personality organization typifies a poorly integrated, superficial, and unstable sense of self and others, along with a hindered ability to invest in others (Kernberg & Caligor, 2005). Consistent with expectations, borderline pathology was significantly more strongly correlated to pathological narcissism than to normal narcissism. The chaotic and unstable nature of self described in borderline personality organization mirrors nicely the conceptualization of pathological narcissism as extreme motivations for self-enhancement give rise to a dynamic and

dysfunctional self regulation process (Morf & Rhodewalt, 2001; Morf, Torchetti, & Schürch, in press; Pincus, in press-b).

Similarly, the subscales of the 3VDI dependency inventory are conceptualized as ranging in maturity, with love dependency representing the most mature form of dependency, and submissive dependency the least mature form of dependency. Normal narcissism was negatively related to all dependency scales, and this negative relationship strengthened as the subscale measures increasingly more immature forms of dependency. The opposite effect is true for pathological narcissism, as increasingly more immature forms of dependency strengthened its positive relationship with dependency. Morf and Rhodewalt (2001) described a narcissistic paradox where narcissists are dependent upon others to feel admired, but often engage in interpersonally insensitive behaviors that do not lead to successful self enhancement experiences. This description is consistent with finding pathological narcissism positively related to dependency while simultaneously correlating negatively with agreeableness.

Self conscious emotions also differed considerably across narcissism measures. Past research suggested guilt and shame are closely related constructs (Rüsch, Corrigan, Bohus, Jacob, Brueck, & Lieb, 2007), however shame may be more indicative of a public emotion, while guilt can be conceptualized as a private emotion (Buss, 1980). Pathological narcissism is unrelated to guilt, but positively related to shame. This indicated sensitivity to negative emotions when they are public as opposed to private, illustrating pathological narcissism as a mechanism of obtaining self esteem through social validation and support (Besser & Ziegler-Hill, in press; Pincus et al., 2009). In contrast, normal narcissism relates negatively to both guilt and shame, and does not seem to distinguish between these two emotions. This supports the

conceptualization of normal narcissism corresponding to a positive self image that is less prone to vulnerability surrounding negative views of one's self and one's behaviors.

Normal narcissism correlated positively with authentic and hubristic pride. This might indicate that the dimension of normal narcissism represents feelings of pride that, while grounded in requisite accomplishments, at times are overextended to experience pride when pride has not been earned. In fact, many clinical theorists suggest the development of narcissism through parental figures providing an overvaluation of worth not based in requisite skills (e.g., Benjamin, 1996; Millon, 1981; Fiscalini, 1993). Otway and Vignoles (2006) tested this hypothesis, finding the NPI positively related to parental overvaluation, yet interestingly a measure of narcissistic vulnerability (a component of pathological narcissism) was not significantly related. Since normal narcissism was related to parental overvaluation, and unrelated to insecure attachment, this might suggest a positive, but perhaps idealized, parent-child dynamic could lead to a fundamentally positive view of self, which may carry into adulthood through internalized assumptions of self worth that may manifest itself through feelings of hubristic pride.

Pathological narcissism was positively related to hubristic pride, but negatively related to authentic pride. Rather than an overextension of deserved pride, it seems pathological narcissism related only to pride that is unearned. Tracy and colleagues (2009) suggested hubristic pride may act as a regulatory mechanism to combat low self esteem. It follows that pride may be important for different reasons across each dimension of narcissism, further promoting the conceptualization of pathological and normal dimensions as discrete processes. An individual high in normal narcissism might experience pride as a feeling that confirms and validates a positive view of self, while an individual high in pathological narcissism might approach pride as

an unattainable goal, which can be masked by an exaggerated outward appearance of pride to hide the painful realization that one does not feel authentically successful. This is similar to Russ and colleagues (2008) who suggested a high functioning subtype of narcissism which corresponds to adaptive functioning and the use of narcissistic grandiosity as a motivation to succeed, while other forms of pathological narcissism may use grandiosity to defend against feelings of inadequacy and anxiety.

The results replicated past literature where normal narcissism was generally unrelated to psychological maladjustment, while pathological narcissism was positively related to psychological adjustment. Normal narcissism related to agentic and communal interpersonal problems, however a non significant relationship to interpersonal distress suggested the agentic and communal relationships are better understood as an interpersonal theme, rather than indicative of interpersonal problems. Conversely, pathological narcissism significantly correlated with interpersonal distress, but was not strongly linked to a specific interpersonal theme. Said another way, normal narcissism was linked to an agentic interpersonal theme that was not significantly distressing, while pathological narcissism related to a variety of interpersonal behaviors seen as causing problems and distress. Self esteem was correlated positively with normal narcissism and negatively with pathological narcissism, while empathy negatively related to both normal and pathological narcissism. Despite being an area of convergence, lower empathy could be important for different reasons across narcissism dimensions. Empirical associations linking normal narcissism to lower empathy combined, an authentic sense of pride, and high self esteem might correspond to an overinvestment of self due to exaggerated feelings of self worth (which is consistent with the positive association between NPI and hubristic pride). Conversely, pathological narcissism related to lower empathy combined with low authentic pride

and low self esteem which might correspond to an overinvestment in self to cope with feelings of inadequacy and self esteem regulation, as has been illustrated elsewhere (e.g. Ronningstam, 2005).

Pathological narcissism related more strongly to externalizing problems than normal narcissism. For example, pathological narcissism had a stronger positive relationship with aggression, neutralizations, and positive alcohol expectancy. Interestingly, the PNI correlated positively with both positive and negative alcohol expectancies, suggesting an awareness of the negative consequences of drinking, but also endorsing the benefits (positive expectancies) of drinking. The NPI was not significantly related to alcohol expectancies, and was correlated less strongly to cheating neutralizations; demonstrating normal narcissism is less strongly related to cognitive justifications than pathological narcissism.

#### *Synthesizing results of pathological and normal narcissism dimensions*

The conceptualization of normal and pathological narcissism as concurrent dimensions of the narcissistic system allows for greater integration of the results into an organizing framework than has been accomplished previously. Figures 1 and 2 present the criterion measures in a two dimensional space. The horizontal axis represents the main effect standardized beta weights for the NPI (normal narcissism) and the vertical axis represents the main effect standardized beta weights for the PNI (pathological narcissism). For visual clarity, the criterion variables were plotted on two separate figures, but conceptually they overlay one conceptual space. Plotting the criterion variables in this way reinforces the idea that the entire nomological net of narcissism cannot be comprehensively identified using just one dimension. For example, using only the NPI scores, one might conclude narcissism was simply disagreeable extraversion and dominance (e.g., Paulhus, 2001). Alternatively, by using the PNI in conjunction with the NPI the criterion

variables begin to differentiate in a pattern that suggests a higher level of pathological narcissism is associated with more maladaptive outcomes. Conceptually this approach provides a more nuanced view of the construct. Methodologically, this approach seems superior to parsing the NPI into maladaptive pieces, particularly given the NPI item pool seems incapable of capturing the construct of pathological narcissism in full, regardless of its factor structure. Further it would allow for the integration of much of the existing social-personality and clinical research rather than continued arguments over how to correctly score the NPI.

The Y axis (PNI St. Beta coefficients) seems to be indicative of pathology, with positive beta scores containing variables such as borderline personality organization, aggression, and interpersonal distress, and negative beta scores containing variables such as mental health, conscientiousness, and empathy. These findings reflect a dimension of personality pathology. The X axis (NPI St. Beta coefficients) seems to represent a dimension reflecting pride and assertiveness versus self-depletion. For example, when the NPI standard beta is negative, the variables reflect internalizing themes such as neuroticism, shame, guilt, immature dependency, and attachment anxiety. When the NPI standard beta is positive, the variables appear reflective of ambition (agency/dominance, extraversion, pride, self-esteem). Taken together, quadrants emerge where low levels of normal narcissism and high levels of pathological narcissism give rise to internalizing pathology; while high levels of normal narcissism and high levels of pathological narcissism give rise to externalizing pathology. This implies that the nature of pathological symptoms and expression (internalizing versus externalizing) may be simultaneously influenced by one's relative levels of normal and pathological narcissism. The bottom half of the figures denotes when the PNI beta is negative, indicative of low pathological narcissism. When combined with high levels of normal narcissism, individuals are extraverted

and exhibit authentic pride. Perhaps this reflects a healthy balance of interest in other people as well as personal achievements. Individuals who are low in both normal and pathological narcissism are the most agreeable and empathic. Admittedly, the quadrant with low PNI and NPI scores is underrepresented in the sample, but perhaps this is understandable given the purpose of the investigation was to select psychologically meaningful variables in relation to the construct of narcissism.

Conceptualizing the nomological net of narcissism in this way improves the study of narcissism in several ways. The present model refocuses the debate over normal and pathological aspects of narcissistic functioning by suggesting that there are measures better equipped to assess each definition. Pathological narcissism is more comprehensively assessed through a measure capable of capturing both grandiose and vulnerable characteristics (PNI), and avoids the pitfall of parsing a less than optimal measure (NPI) into components that are incapable of examining pathological narcissism in full (e.g., Ackerman et al, in press; Corry et al, 2008; Rosenthal & Hooley, 2010). Some researchers suggest the NPI should be retained simply because there is inertia in the field to support a measure which already has thirty years of cumulative research (Ackerman et al., in press). Yet this reasoning is unsatisfying in that it does not provide a reason to continue using the NPI based on its merit and explanatory power. The present model retains the NPI based on its unique ability to measure of normal narcissism which not only links the considerable research base of the NPI within a broader system of narcissism (see Miller & Campbell, 2010; Miller et al., in press), but could also fill a critical gap between clinical theory and clinical assessment of normal narcissism (Kohut, 1977; Kernberg, 1998; Russ et al., 2008; Stone, 1998). Employed in this way, the NPI is utilized to improve the study of narcissism, which justifies its continued use in a promising manner.

The most significant contribution of the proposed model is the ability to connect clinical and social-personality descriptions of narcissism and their associated empirical literature in a synthetic structure that appropriately distinguishes normal and pathological definitions. In contrast to endless debates about alternative NPI factor structures and subscales, this approach begins to reconcile the definitions of narcissism across disciplines, allowing for better calibration of research findings and a more sophisticated nomological net.

#### *Limitations and Future Directions*

Several limitations in this study should be acknowledged. The dimensions of narcissism and its relationships to other constructs were assessed here exclusively through self report. This may present a motivation for individuals to represent themselves in an overly positive way. Past studies have shown conflicting results involving social desirability, some finding a positive association with normal narcissism (e.g. Fukunishi, Hattory, Nakamura, & Nakagawa, 1994) and others finding a negative association with normal narcissism (e.g. Watson & Morris, 1991). Paulhus (1998) reported narcissism related more strongly to self deceptive enhancement than impression management, suggesting the narcissist engages in socially desirable responses more to affirm their grandiose self views than to try to manipulate how others think of them. Regardless of why socially desirable responses are given, this is an inherent limitation of self report, and future studies using alternative assessment methods (e.g. clinical interviews, peer reports) would be useful in unpacking this limitation, especially as it pertains to pathological narcissism.

The current study assessed pathological narcissism as a combination of narcissistic grandiosity and vulnerability used to provide a comprehensive assessment of pathological narcissism. This aggregation of phenotypic expressions may have left additional avenues for

discovery underexplored as the distinction between grandiosity and vulnerability is important enough to assess as interrelated dimensions (Pincus, in press-b; Pincus & Lukowitsky, 2010; Pincus & Roche, in press; Wright et al., 2010). Future research is needed to fully understand how narcissistic grandiosity and narcissistic vulnerability interface with the construct of normal narcissism.

The statistical methods used in this study required normal and pathological narcissism dimensions to be tested as stagnant structures of personality. A review of the narcissism literature indicated that many researchers feel pathological narcissism reflects pathological processes, and is in many ways defined by its stormy and uneven pattern of intense self enhancement motivation coupled with deficiencies in regulation (e.g. Morf & Rhodewalt, 2001; Pincus et al., 2009). Similarly, normal narcissism was conceptualized here as a stagnant trait, but preliminary evidence suggests normal narcissism is associated with fluctuations in self esteem particularly linked to social events (Morf & Rhodewalt, 2001; see also Zeigler-Hill, Myers, & Clark, 2010) and achievement sensitivity (Besser & Priel, 2010). This suggests each dimension of narcissism (and perhaps the relationship between narcissism dimensions) should be studied with more advanced longitudinal methods capable of capturing complex and time- and context-sensitive ebbs and flows of emotion and behavior (e.g. Pincus, Conroy, Hyde, & Ram, 2010).

Finally, and perhaps most importantly, it is conceivable that the NPI is just not an adequate measure of narcissism, regardless of the conceptualization. Ackerman and colleagues (in press) suggested a framework where only the dimension of leadership/authority be considered normal/adaptive narcissism. If normal narcissism can be assessed through the sole factor of leadership/authority, it begs the question of how useful the construct of normal narcissism is, and whether it may be more parsimonious to just call the construct leadership. The current paper

argues that normal narcissism encompasses more than this, but until the definition of narcissism moves beyond “what the NPI assesses”, the theory of normal narcissism will be limited, along with the understanding of its connection to pathological narcissism and narcissistic dysfunction.

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Table 1

*Characteristics of Narcissism Measures Across Samples*

Sample	NPI			PNI			$R_{npi.pni}$	N
	Sum	St. Dev.	$\alpha$	Mean	St. Dev.	$\alpha$		
1	5.17	(3.10)	.70	2.30	(.70)	.96	.19	3161
2	6.02	(2.96)	.65	2.34	(.61)	.94	.22	833
3	4.84	(2.94)	.68	2.40	(.62)	.93	.19	591
4	5.00	(3.23)	.74	2.12	(.70)	.95	.18	798

Table 2

Correlations of Normal and Pathological Narcissism across Developmental Antecedents <sup>a</sup>

Developmental Antecedent	NPI Correlation	PNI Correlation	Steiger's Z	Significance of Steiger Z
Child Sexual Abuse <sup>a</sup>	.090**	.072**	.80	<i>ns</i>
Child Abuse Physical <sup>a</sup>	.044*	.052**	-.35	<i>ns</i>
Child Abuse Neglect <sup>a</sup>	.055**	.278**	-10.09	<.01
Attachment Anxiety <sup>b</sup>	-.053	.512**	-13.78	<.01
Attachment Avoidance <sup>b</sup>	.064	.200**	-3.15	<.01

Note. N= a-3167, b-833. \*p&lt;.05, \*\*p&lt;.01,

Table 3

*Regression Results of Normal and Pathological Narcissism across Developmental Antecedents*

Variable	Sexual Abuse <sup>a</sup>		Physical Abuse <sup>a</sup>		Neglect <sup>a</sup>		Attachment Anxiety <sup>b</sup>		Attachment Avoidance <sup>b</sup>	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1										
NPI	.050**	.011	.035**	.017	.009	.046	-.387**	.070	.053	.082
PNI	.134*	.050	.162*	.077	3.233**	.205	6.076**	.336	2.201**	.396
R <sup>2</sup>	.010		.003*		.075**		.288**		.038**	
Step 2										
NPI	.072	.039	-.074	.060	-.153	.161	-.304	.361	.492	.422
PNI	.182	.094	-.071	.146	2.886**	.390	6.223**	.711	2.997**	.848
NPIxPNI	-.009	.016	.046	.024	.069	.066	-.391	1.67	-2.072	1.95
$\Delta R^2$	.000		.000		.000		.000		.000	
R <sup>2</sup>	.010		.003*		.075**		.287**		.038**	

Note. N= a-3167, b-833. \*p<.05, \*\*p<.01

Table 4

*Correlations of Normal and Pathological Narcissism across Personality Variables*

Variable	NPI Correlation	PNI Correlation	Steiger's Z	Significance of Steiger Z
FFM – Neuroticism <sup>a</sup>	-.184**	.307**	-11.56	<.01
FFM – Extraversion <sup>a</sup>	.305**	-.136**	10.36	<.01
FFM – Openness to Experience <sup>a</sup>	.104**	.077*	.62	<i>ns</i>
FFM – Agreeableness <sup>a</sup>	-.241**	-.231**	-.24	<i>ns</i>
FFM – Conscientiousness <sup>a</sup>	.073*	-.134**	4.78	<.01
Borderline Personality Organization <sup>b</sup>	.154**	.639**	-16.14	<.01
Dependency – Love <sup>c</sup>	-.135**	.207**	-10.61	<.01
Dependency – Exploitable <sup>c</sup>	-.234**	.368**	-19.14	<.01
Dependency – Submissive <sup>c</sup>	-.314**	.382**	-22.32	<.01

Note. N= a-833, b-1303, c-1531. \*p<.05, \*\*p<.01

Table 5

*Regression Results of Normal and Pathological Narcissism across the Five Factor Model*

Variable	Neuroticism		Extraversion		Openness to Experience		Agreeableness		Conscientiousness	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1										
NPI	-.092**	.011	.120**	.011	.029*	.011	-.050**	.008	.032**	.011
PNI	.611**	.055	-.348**	.054	.087	.054	-.225**	.041	-.227**	.051
R <sup>2</sup>	.158**		.133**		.012**		.090**		.027**	
Step 2										
NPI	-.105	.058	.051	.058	.072	.057	-.085*	.043	.049	.054
PNI	.587**	.115	-.472**	.115	.165	.114	-.288**	.086	-.197	.107
NPIxPNI	.064	.267	.326**	.266	-.203	.263	.165	.198	-.081	.248
$\Delta R^2$	.000		.002		.001		.001		.000	
R <sup>2</sup>	.057**		.137**		.011**		.089**		.025**	

Note. N= 833. \* $p < .05$ , \*\* $p < .01$

Table 6

*Regression Results of Normal and Pathological Narcissism across Personality Measures*

Variable	Borderline Personality Org. <sup>a</sup>		Dependency Love <sup>b</sup>		Dependency Exploitable <sup>b</sup>		Dependency Submissive <sup>b</sup>	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1								
NPI	.032	.230	-.446**	.058	-.861**	.058	-.932**	.047
PNI	29.586**	.999	2.595**	.255	5.107**	.254	4.688**	.208
R <sup>2</sup>	.416**		.079**		.251**		.323**	
Step 2								
NPI	-.503	.799	-.873**	.200	-1.189**	.199	-.756**	.163
PNI	28.426**	1.936	1.657**	.492	4.385**	.490	5.074**	.401
NPIxPNI	.225**	.321	.182*	.081	.140	.081	-.075	.066
$\Delta R^2$	.000		.003*		.001		.001	
R <sup>2</sup>	.416**		.082**		.252**		.323**	

Note. N= a-1303, b-1531. \*p<.05, \*\*p<.01

Table 7

*Correlations of Normal and Pathological Narcissism across Self Conscious Emotions*

Variable	NPI Correlation	PNI Correlation	Steiger's Z	Significance of Steiger Z
Shame <sup>a</sup>	-.265**	.380**	-12.75	<.01
Guilt <sup>a</sup>	-.250**	.034	-5.48	<.01
Authentic Pride <sup>b</sup>	.167**	-.256**	8.14	<.01
Hubristic Pride <sup>b</sup>	.338**	.246**	1.86	<i>ns</i>

Note. N= a-591, b-586. \*p<.05, \*\*p<.01

Table 8

*Regression Results of Normal and Pathological Narcissism across Self Conscious Emotions*

Variable	Shame <sup>a</sup>		Guilt <sup>a</sup>		Authentic Pride <sup>b</sup>		Hubristic Pride <sup>b</sup>	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1								
NPI	-.071**	.007	-.046**	.007	.047**	.008	.056**	.007
PNI	.425**	.034	.068*	.033	-.299**	.040	.167**	.034
R <sup>2</sup>	.259**		.066**		.111**		.146**	
Step 2								
NPI	-.019	.029	-.072*	.028	.050	.033	.030	.028
PNI	.534**	.068	.014	.066	-.293**	.079	.110	.068
NPIxPNI	-.021	.011	.011	.011	-.001	.013	.011	.011
$\Delta R^2$	.004		.001		.000		.001	
R <sup>2</sup>	.262**		.066**		.114**		.146**	

Note. N= a-591, b-586. \*p<.05, \*\*p<.01

Table 9

*Correlations of Normal and Pathological Narcissism across Adjustment Variables*

Variable	NPI Correlation	PNI Correlation	Steiger's Z	Significance of Steiger Z
Mental Health <sup>a</sup>	.046**	-.401**	20.58	<.01
Agentic Interpersonal Problems <sup>b</sup>	.514**	.081*	8.96	<.01
Communal Interpersonal Problems <sup>c</sup>	-.127**	-.005	-2.31	<.05
Interpersonal Distress <sup>d</sup>	-.018	.460**	-9.54	<.01
Self Esteem <sup>e</sup>	.306**	-.364**	15.34	<.01
Empathy <sup>f</sup>	-.188**	-.133**	-1.23	<i>ns</i>

Note. N= a-3167, b-587, c-581, d-580, e-796, f-798. \*p<.05, \*\*p<.01

Table 10

*Regression Results of Normal and Pathological Narcissism across Adjustment variables*

Variable	Mental Health <sup>a</sup>		Agentic Interpersonal Problems <sup>b</sup>		Communal Interpersonal Problems <sup>c</sup>		Interpersonal Distress <sup>d</sup>		Self Esteem <sup>e</sup>		Empathy <sup>f</sup>	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1												
NPI	.131**	.017	.103**	.007	-.028**	.009	-.025**	.009	.884**	.071	-1.648**	.342
PNI	-1.969**	.075	-.014	.034	.019	.041	.518**	.040	-4.594**	.326	-4.588**	1.572
R <sup>2</sup>	.180**		.262**		.013**		.220**		.274**		.043**	
Step 2												
NPI	.169**	.059	.021	.028	.025	.034	-.010	.034	.847**	.235	-2.016	1.138
PNI	-1.887**	.142	-.190*	.067	.131	.081	.550**	.080	-4.678**	.607	-5.428	2.930
NPIxPNI	-.016	.024	.034**	.011	-.022	.014	-.006	.013	.017	.103	.168	.496
$\Delta R^2$	.000		.012**		.004		.000		.000		.000	
R <sup>2</sup>	.180**		.272**		.016**		.219**		.273**		.042**	

Note. N= a-3167, b-587, c-581, d-580, e-796, f-798. \*p<.05, \*\*p<.01

Table 11

*Correlations of Normal and Pathological Narcissism across Externalizing Problems*

Variable	NPI Correlation	PNI Correlation	Steiger's Z	Significance of Steiger Z
Aggression <sup>a</sup>	.227**	.512**	-14.16	<.01
Cheating Neutralizations <sup>b</sup>	.077*	.182**	-2.45	<.05
Positive Alcohol Expectancies <sup>c</sup>	.047	.225**	-5.43	<.01
Negative Alcohol Expectancies <sup>c</sup>	-.017	.280**	-9.02	<.01

Note. N= a-3168, b-833, c-1440. \*p<.05, \*\*p<.01

Table 12

*Regression Results of Normal and Pathological Narcissism across Externalizing Problems*

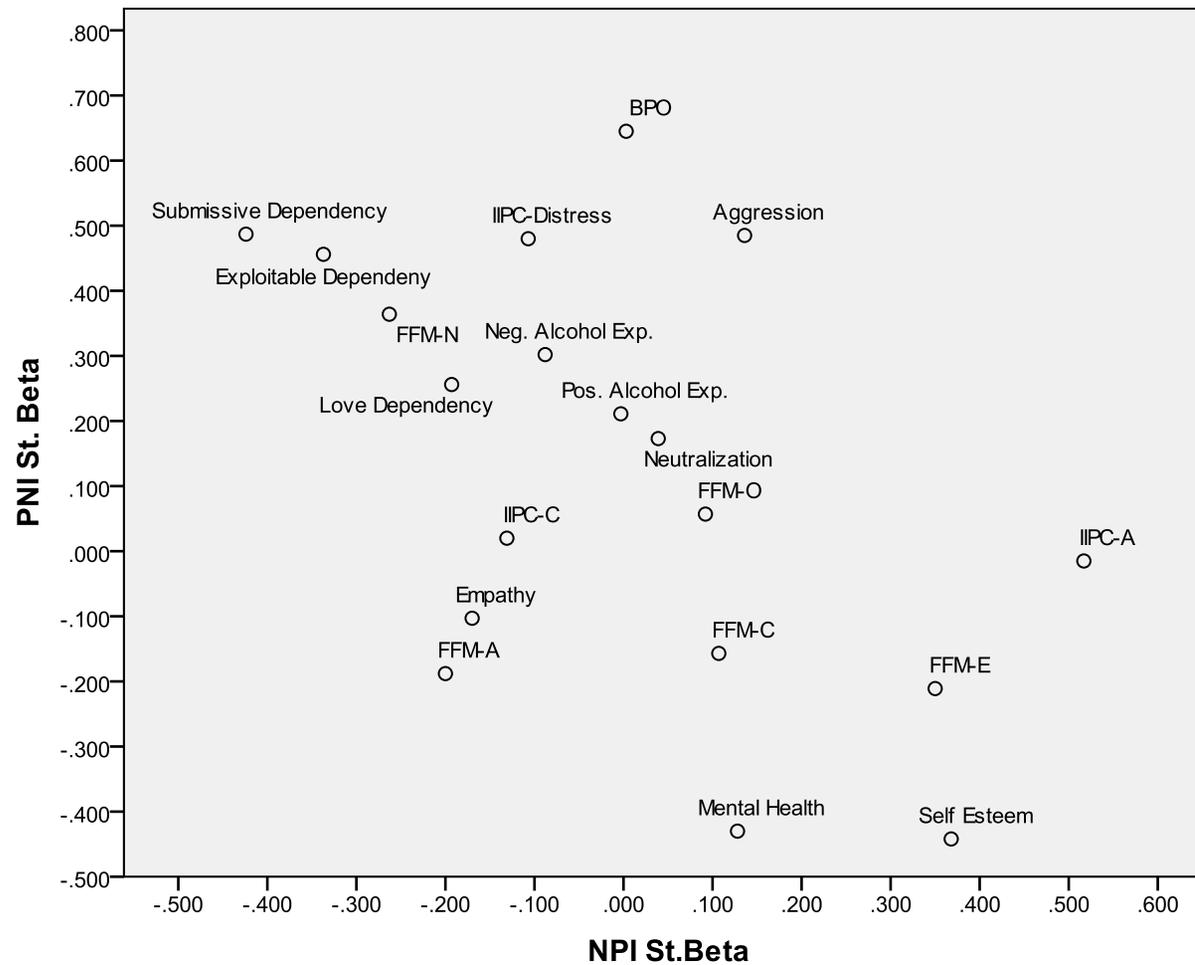
Variable	Aggression <sup>a</sup>		Cheating Neutralizations <sup>b</sup>		Positive Alcohol Expectancy <sup>c</sup>		Negative Alcohol Expectancy <sup>c</sup>	
	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b	$\beta$	SE b
Step 1								
NPI	.759**	.086	.119	.106	-.018	.142	-.343**	.102
PNI	12.106**	.384	2.525**	.509	4.993**	.624	5.205**	.447
R <sup>2</sup>	.278**		.032**		.043**		.085**	
Step 2								
NPI	.632*	.301	-.015	.540	.749	.488	-.083	.347
PNI	11.834**	.729	2.285*	1.075	6.674**	1.199	5.779**	.857
NPIxPNI	.054	.123	.630	2.487	-.326	.199	-.111	.141
$\Delta R^2$	.000		.000		.002		.000	
R <sup>2</sup>	.278**		.031**		.044**		.085**	

Note. N= a-3168, b-833, c-1440. \*p<.05, \*\*p<.01

### Figure Caption

Figure 1. Relationships of Criterion Variables Across Normal and Pathological Narcissism Measures.

Figure 2. Relationships of Criterion Variables Across Normal and Pathological Narcissism Measures Continued.



Note. FFM-N= Neuroticism; FFM-E= Extraversion; FFM-O= Openness; FFM-A= Agreeableness; FFM-C= Conscientiousness; IIPC-Distress= Interpersonal Distress; IIPC-A/C= agentic/communal interpersonal problems; BPO= Borderline Personality Organization; Neg. Alcohol. Exp.= Negative Alcohol Expectancies; Pos. Alcohol Exp.= Positive Alcohol Expectancies.

