

THE RELATIONSHIP OF ADAPTIVE AND PATHOLOGICAL NARCISSISM
TO ATTACHMENT STYLE AND REFLECTIVE FUNCTIONING

By

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ABSTRACT

The relationship of adaptive and pathological narcissism to attachment style and reflective functioning

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This study examined the relationship of adaptive and pathological (grandiose and vulnerable) expressions of narcissism to attachment style and the capacity for reflective functioning (RF). Narcissism serves a relevant personality construct in clinical theory, social psychology and psychiatry but remains inconsistently defined across these disciplines.

Theoretical accounts support the notion that attachment difficulties and maladaptive patterns of mentally representing self and others serve as the substrates for narcissistic pathology but are less pronounced in adaptive narcissism. A multiple regression analysis was conducted in a college student sample of 345 participants applying a cross-sectional, survey design. It was hypothesized that pathological narcissism (grandiose or vulnerable) is associated with higher degrees of attachment-related anxiety and avoidance and lower levels of RF than is adaptive narcissism.

Results: With respect to convergent validity, measures of adaptive and pathological narcissism exhibited a differential pattern of correlations to general psychopathology, thereby supporting the notion that distinct constructs crystallize within narcissism's heterogeneity. Multiple regression analysis confirmed the two-component structure of pathological narcissism representing narcissistic grandiosity and narcissistic vulnerability. Narcissistic vulnerability significantly predicted higher levels of attachment anxiety, an effect that remained after controlling for narcissistic grandiosity and adaptive narcissism. In contrast, adaptive narcissism

significantly predicted lower levels of attachment anxiety. Contrary to expectation, this effect was not observed for avoidant attachment, i.e. pathological narcissism was not found to be a stronger predictor of avoidant attachment than adaptive narcissism. This study further found that pathological narcissism was not a stronger predictor of poor reflective functioning than was adaptive narcissism. In sum, these findings illustrate how overall psychopathology and attachment anxiety vary across the three narcissistic expressions, thereby weakening narcissism's clinical utility as currently defined in the DSM-5. Theoretical and treatment implications are also reviewed.

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CHAPTER 1: INTRODCUTION

Concepts of narcissism span the continuum from adaptive to pathological and find meaningful expressions in both clinical and nonclinical populations. There is a growing concern that narcissism contributes to problematic societal phenomena, including the inability to form and sustain enduring relationships, as well as corporate malfeasance and the cult of celebrity (Ronningstam, 2011; Pincus, 2011; Diamond, 2005). Traditionally, research on trait narcissism has been subsumed under the field of social psychology whereas pathological narcissism, or narcissistic personality disorder (NPD), has been studied predominantly through psychiatric and psychological case reports as well as psychoanalytic theory (Kernberg & Caligor, 2005; Ronningstam, 2005). In an attempt to improve NPD's clinical utility, the DSM-5 personality disorders work group developed a dimensional system aimed at integrating empirically based criteria with essential features in the clinical realm of personality functioning (DSM-5 Section III, American Psychiatric Association, 2013).

Following the inclusion of NPD as a discrete diagnostic category into the third edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM-III, American Psychiatric Association, 1980), clinical interest and theory construction in narcissistic pathology have engendered a prolific output of comprehensive reviews of pathological narcissism (Pincus & Lukowitsky, 2010; Cain, Pincus & Ansell, 2008; Levy, Reynoso, Wasserman, & Clarkin, 2007; Ronningstam, 2005, 2009; Ronningstam & Gunderson, 1990; Wink, 1991). However, when this long-standing interest in the clinical concept of narcissism is contrasted with the actual number of empirically orientated research studies on NPD, the imbalance is striking. A recent meta-analysis of the existing empirical literature on NPD found that more than 80 percent of peer-reviewed publications with "narcissistic personality disorder" in their title were either theoretical

in nature or reviews of existing research in which no new data were presented (61%), or presentations of N-of-one case studies (19.5%) (Miller & Campbell, 2010). In light of relevant conceptual overlaps between NPD and borderline personality disorder (BPD), it is particularly relevant to contrast the above findings with existing research on BPD for this study. While BPD engendered an equally large amount of theory construction, it has additionally attracted sizable resources for funding empirical research on its etiological basis, including newly available neurobiological and genetic technologies. The establishment of several parent advocacy groups (most notably the National Education Alliance for Borderline Personality Disorder) and the Borderline Personality Disorder Research Foundation set up by a bereaved Swiss family led to the adoption of BPD by major mental health organizations such as the National Alliance of Mental Health, the National Institute of Mental Health (NIMH), and even the US Congress (Gunderson, 2009). Against this background, BPD has achieved higher legitimacy as a subject for scientific study and for public awareness than NPD during the past decade.

The tendency of privileging pathological narcissism theory construction over empirical research has been widely considered as an indicator of NPD's underlying construct ambiguity (Cain, Pincus & Ansell, 2008; Miller & Campbell, 2008; Watson, 2005). However, as long as the nomological network of narcissistic pathology remains speculative in nature, efforts to synthesize clinical descriptions and empirical data will remain largely futile. From a clinical standpoint, the existing lack of validation studies creates a worrisome situation given that pathological narcissism has been associated with significant functional impairments and psychopathology, including DSM Axis I disorders (Tritt, Ryder, Ring, & Pincus, 2010; Stinson et al., 2008; Ronningstam, 1996, 1998), psychopathy (Paulhus & Williams, 2002; Ronningstam, 2005), relational dysfunction (Dickinson & Pincus, 2003; Campbell, Foster & Finkel, 2002),

aggression (Baumeister, Bushman, & Campbell, 2000), substance abuse (Luhtanen & Crocker, 2005) and suicidal behaviors (Ronningstam & Maltzberger, 1998; Ronningstam, Weinberg, & Maltzberger, 2008).

The DSM-5 Personality and Personality Disorder Work Group established empirically based criteria in order to enable clinicians to perform dimensional ratings on personality traits. The original proposal introduced two scales of impairments in “personality functioning” relating to an individual’s interpersonal interactions and sense of self. In addition, patients would be rated on five pathological personality traits, for narcissism the relevant traits included antagonism and impulsivity (DSM-5, Section III, APA 2013). Two factors have contributed to these suggested revisions of the DSM-IV diagnostic criteria: One is today’s growing support for dimensional trait models and measures of personality psychopathology in general (Siever & Weinstein, 2009; Widiger & Trull, 2007; Widiger, Simonsen, Krueger, Livesley, & Verheul 2005; Trull & Durrett, 2005) and the second impetus was provided by the existing dearth of narcissism validation studies in particular. Some clinicians, however, criticized the DSM-5 personality disorder proposal as too complex and not user-friendly from a clinical perspective. Following the heated debate between pro-dimensional and pro-categorical proponents of the DSM revisions, the Personality and Personality Disorder Work Group came up with the following compromise. It was decided to include the new trait-specific methodology in DSM-5 Section III to encourage further study on how this system could be applied to improve diagnoses of personality disorders in clinical practice. It is therefore highly opportune to gather empirical evidence on the level of impairment in personality functioning (self and interpersonal) of individuals exhibiting pathological trait narcissism.

Applying the concepts of attachment theory and reflective functioning (RF) to narcissistic pathology is particularly relevant as a substantive body of literature demonstrates that maladaptive patterns of mentally representing self and others serve as substrates for personality psychopathology (for a detailed review see Bender, Morey, & Sokol, 2011). Concepts of self-other representational disturbance have long been present in theories of personality pathology. Notably, Kernberg's (1984) structural theory of borderline organization identifies the quality of object relations as well as the quality of the representations of self and other along with identity diffusion as the crucial factors.

Through its explicit assertion that, "personality psychopathology fundamentally emanates from disturbances in thinking about self and others" (Skodol et al., 2011, p.5), the DSM-5 proposal recognizes the prominent roles of mentalization (reflective functioning) and self- as well as interpersonal emotion regulation mechanisms in contemporary psychodynamic theories (Fonagy, 1991; Fonagy & Target, 1997; Blatt, 2008; Kernberg & Caligor, 2005; Levy, Meehan, Kelly, Reynoso, Weber, Clarkin & Kernberg, 2006). Of course, concepts of self and interpersonal functioning are not limited to psychodynamic thinking, but are common to a number of conceptualizations, including social-cognitive (Andersen & Cole, 1990; Andersen & Chen, 2002), cognitive-behavioral (Wagner & Linehan, 1999) as well as trait (Cloninger, 2000; Livesley, 2003) approaches.

Statement of the Problem and Significance of Study

In line with the existing literature on narcissism conceptualization (Pincus & Lukowitsky, 2010, Levy, Chauhan, Clarkin, Wasserman & Reynoso, 2009; Cain, Pincus & Ansell, 2008; Ronningstam 2011, 2009), this study posits the existence of a tripartite structure of narcissism, comprised of adaptive as well as pathological elements (grandiose and vulnerable). The current

study will assess the relationship of these three distinct narcissistic expressions (grandiose, vulnerable, adaptive) to attachment and the capacity for mentalization (RF). More specifically, the study examines the interrelations among vulnerable narcissism, grandiose narcissism and adaptive narcissism as assessed by the Narcissistic Personality Inventory (NPI) and the Pathological Narcissism Inventory (PNI). The characteristics of the three types of narcissism (grandiose, vulnerable, adaptive) will be further explored by examining their relationship to self-report measures of adult attachment status (*Relationship Questionnaire, RQ*) and the capacity for mentalization (*The Reflective Functioning Questionnaire, RFQ*).

Individuals with personality pathology are often associated with insecure attachment status (e.g. Bender, Farber, & Geller, 1997; West, Keller, Links & Patrick, 1993; West & Sheldon-Keller, 1994). Also, impairments in RF have been indicators of psychiatric disturbances and greater interpersonal and attachment difficulties (Fonagy & Bateman, 2008; Fonagy et al., 1996; Slade, 2005). It is therefore highly relevant for a better diagnostic assessment of narcissistic personality pathology to establish how individuals who represent different types of narcissism (grandiose, vulnerable, adaptive) differ in their adult attachment status and their capacity for mentalization (RF). This is also a very timely project as the newly effective DSM-5 introduces a dimensional measure of personality pathology based on deficits in representations of self and others as a mandatory part of personality assessment in its Section III “Emerging Measures and Models.”

CHAPTER 2: LITERATURE REVIEW

The present study assesses the relationship of three distinct narcissistic expressions (grandiose, vulnerable, adaptive) to attachment style and the capacity for mentalization (RF). The literature review is presented in five sections, beginning with the conceptual distinction between narcissistic personality pathology and normative narcissism. This includes a review of both the normal and pathological expressions of the construct and a discussion of the limitations of the diagnostic criteria of narcissistic personality disorder (NPD) as derived from clinical observation and theoretical conceptualization. The next section takes a closer look at the operationalization of narcissism by analyzing and integrating the empirical research on pathological and normative narcissism and its utilization of available research methods. The third section provides a description and rationale of the reformulation of personality disorders in the Diagnostic and Statistical Manual for Mental Disorders (DSM) with particular emphasis on the proposed changes for narcissistic personality disorder. Implications for clinical assessment and diagnosis are being discussed. In the fourth section, an argument is made for the relationship between the development of narcissistic personality pathology and impairments in the underlying attachment organization. This section provides a review and critical examination of the clinical applications of attachment theory both theoretically and empirically. The final section analyzes the maladaptive ways in which impairments in mentalization (RF) and narcissistic personality psychopathology interact. Following the presentation of the theoretical basis for mentalization, this section reviews developmental, social-cognitive and affect concepts of RF and reviews empirical research documenting the relationship of RF to personality pathology in general and narcissism in particular.

1. Narcissistic personality pathology versus normative narcissism

Origins of pathological narcissism

Narcissism as a psychiatric construct dates back to Havelock Ellis (1898) who was the first to coin the “Narcissus-like” tendency to absorb sexual feelings into self-admiration. In “On Narcissism” (1914/1957), Freud’s seminal paper on the subject, excessive self-love was tied to the development of a pathological ego-ideal serving to maintain self-preservation and self-regard. Subsequently, psychoanalytic theory on narcissism shifted its focus towards secondary narcissism, which was presumed to occur due to frustration by the environment, most importantly disturbances in the early relationship between the infant and its caregiver (Balint, 1960, Rosenfeld, 1964; Lewin, 1954).

As psychoanalytic writing began to progressively move away from strictly drive based assumptions, theories that differentiated between healthy and pathological forms of self-esteem regulation, added considerably to the understanding of narcissism (Horney, 1939; Reich, 1960). With the advance of Kohut’s self psychology (1971, 1977), the failure to self-regulate one’s own emotional state was increasingly seen as the core pathology of narcissistic patients. Kohut introduced the term ‘narcissistic injury’ as a clinical description of a highly negatively charged affective state that is triggered by feelings of inadequacy (1971).

Kernberg (1967) whose work is based on a structural model of personality, placed the emphasis on the narcissistic personality structure as it is embedded within a broader borderline personality organization. Due to the presence of superego pathology, the narcissistic individual invests in an abnormal grandiose self, based on primitive and ideal self representations. Drawing on early object relations theory, the pathological narcissist is conceptualized as defensively avoiding negative aspects of the self by splitting off or projecting devalued or aggressively

determined self- and object representations (Kernberg, 1984). Kernberg views the severity of pathological narcissism as ranging from mild to malignant depending on the level of ego-syntonic aggression embedded within the personality structure (Kernberg & Caligor, 2005). Together, these two portraits confirm empirical findings on the pronounced dimensions of the narcissistic pathology spectrum, with Kernberg emphasizing one end of the continuum as the “unbridled grandiosity of these patients, their ruthless exploitation of others, and their emotional coldness and shallowness” and Kohut the other end, by drawing attention to the narcissistic individual’s “painful timidity and preoccupation with secret grandiose fantasies” (Diamond, 2005, p. 260).

Original considerations on normative narcissism

The notion that narcissism is not an inherently pathological construct but also includes adaptive components, has been promoted by the writings of Heinz Kohut (1977). Moving away from more traditional Freudian assumptions, Kohut narrowed the gap between adaptive and pathological narcissism by emphasizing their common roots. He writes, “Behind the seeming importance of a child’s overstimulation and conflicts with regard to his observations of parental sexual intercourse, for example, lies the much more important absence of the parents’ empathic responses to the child’s need to be mirrored and to find a target for his idealization” (1977, p.187). According to Kohut’s theory, a child’s self emerges as a bipolar structure, with the “cohesive grandiose-exhibitionist self” on the one hand, and the “cohesive idealized parent-*imago*” on the other (1977, p.185). The emerging nature of this nuclear bipolar self then becomes a function of the parents’ ability to be attuned to their child’s psychological state. Thus in a healthy development, marked by parental empathetic capacity, the child’s self moves from

the original immature grandiosity to an adult goal-directed assertiveness. With respect to the other, the idealized parental “selfobject” changes from a state of dependent submissiveness into the mature ability to recognize and value accomplishments of others. Kohut (1977) posits that only the chronic incapacity to respond appropriately to the child’s needs, results in a pathological development. In this scenario, the child is forced to compensate for the loss of external empathic reactions by employing what Kohut termed “transmuting internalizations,” which convert failed “selfobject functions” into independent but aggrandized “self-functions.” As a consequence, the narcissistic adult draws on maladaptive strategies that serve as self-preservative responses to ward off feelings of inadequacy. In short, according to Kohut (1971, 1977) pathological narcissism results from developmental deficits in the normal progression of the self, whereas normative narcissism is primitive grandiosity matured into confident assertiveness and high self-esteem.

Kernberg (1975), in contrast, offers a conceptual distinction between normal and pathological narcissism in terms of an intrapsychic structure consisting of multiple self representations and their related affect. Following Hartmann (1950), Kernberg (1975) defines normal narcissism as the libidinal investment of the self but with the caveat that such a libidinal investment of the self does not only stem from an instinctual source of libidinal energy. Crucial to Kernberg’s theory is that the self “actually constitutes a structure that integrates libidinally invested as well as aggressively invested components” (1975, p.316). Consequently, the regulation of normal narcissism can be best understood in terms of a self-concept that integrates rather than dissociates libidinal and aggressive aspects of the self.

Ronningstam (2005), in keeping with her focus on self-esteem and affect regulation, distinguishes healthy from pathological narcissism by the degree to which self-esteem serves to

protect and support a grandiose but fragile self and affect regulation is compromised by difficulties in modulating emotions, particularly anger, shame and envy. Yet, Ronningstam concedes that “vicissitudes between healthy and more or less severe pathological narcissism are constantly present, and the coexistence of and intertwined interaction between healthy and pathological aspects of narcissistic functioning can make it specifically challenging to identify and understand the narcissistic personality” (2005, p. 71).

The complexities resulting from the co-occurrence of adaptive and maladaptive features of narcissism are a central theme of the present study and will be more closely assessed by exploring the following issues: (i) the nature of the ‘normative versus pathological’ divide, (ii) empirical findings on adaptive narcissism and (iii) the implications for the clinical use of existing narcissism measures.

Normative narcissism versus narcissistic pathology: One continuum or two distinct dimensions

There has been a considerable amount of debate on the bifurcate nature of normative and pathological narcissism in the clinical and theoretical literature. Traditionally, clinical investigators, researchers and theorists have included both normal and pathological characteristics in their narcissism constructs reflecting aspects of adaptive and maladaptive personality organization (Kohut, 1977; Kernberg, 1984,1998; Emmons, 1984; Wink, 1991; Watson, 2005; Ronningstam, 2009; Pincus & Lukowitsky, 2010).

However, there is still a sizable divide over the question whether normative and pathological narcissism lie on a single continuum from healthy self-esteem to severe narcissistic pathology or rather constitute two potentially distinct personality dimensions in the form of

adaptive and pathological narcissism. In other words, whether an individual's expression of narcissism is a matter of degree or type.

Cain, Pincus and Ansell (2008) support the notion of normal and pathological narcissism as two distinct expressions of personality with the former being more commonly assessed in social-personality psychology research, and the latter more commonly assessed in clinical research and practice. While this view allows for a more clearly delineated application of available measures of narcissistic personality traits (NPI for social psychology and PNI for clinical psychology), it suggests a reductionist approach to personality traits as clearly dividable/separable into healthy and pathological dimensions.

Today, the majority of theorists and clinical researchers view narcissism on a continuum ranging from healthy aspects of self-promotion to pathological expressions reflecting maladaptive personality organization and regulatory mechanisms (e.g. Russ, Shedler, Bradley, & Westen, 2008; Ronningstam, 2005; Watson, 2005; pro-dimensional authors). This predominant view is representative of the latest proposed revisions of the personality disorder classification in the DSM (APA, 2011). The "acknowledgement of the continuous nature of personality and personality disorder" as stated on the official APA website (APA, 2011) has been considered as one of the key rationales for the proposed dimensional diagnostic system for personality disorder. In particular, granting clinicians the option of generating a personality trait profile for all of their patients and not just those with a personality disorder diagnosis is seen as an important achievement by the DSM-5 drafting committee (APA, 2012; Krueger, Eaton, South, Clark, & Simms, 2011).

Empirical associations of normative and pathological narcissism

Aiming at a neutral definition, Pincus et al. (2009) conceptualized narcissism as “one’s capacity to maintain a relatively positive self-image through a variety of self-, affect-, and field-regulatory processes, underlying the individual’s need for validation and affirmation as well as the motivation to overtly and covertly seek out self-enhancement experiences from the social environment” (p.365). According to this conceptualization, an individual who is operating within the normative range of narcissism is adept at making age and context appropriate provisions to maintain self-cohesion and a realistic level of self-esteem by eliciting confirming responses from the environment.

However, the distinction between normal narcissistic needs and motives and their pathological expression is not only a function of the degree to which the individual depends on external validation and affirmation but also gets reflected by the individual’s flexibility to access inner resources when faced with disappointments. In this regard, pathological narcissism is marked by significant regulatory deficits and maladaptive strategies making it hard to cope with real or imagined threats to positive self-esteem (Ronningstam 2005; Kernberg, 1984, 1998; Kohut, 1971, 1977). Research conducted by Morf and Rhodewalt, (2001) demonstrated that individuals with high scores on the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) are overly invested in promoting their self-perceived superiority and at the same time hypervigilant toward detecting a better performing other.

The self-regulation theory of narcissistic functioning thus suggests a workable but precarious way of being in the world. On the one hand, a stable positive sense of self promotes mental health, however, this effect is lessened if it becomes a contingency of an external factor, in this case the constant flow of validation and affirmation from the social environment and

interpersonal relationships. Traditionally, theory and research in personality and social psychology have entertained the hypothesis of a negative relation between narcissism and mental health. For example, Bushman and Baumeister (1998) found that high NPI scores are correlated with controlling behavior and intense anger and aggression in case of unmet expectations. Paulus and Williams (2002) reported an overlap with measures of psychopathy and Machiavellianism. Other studies found narcissists to be jealous and fearful of closeness (Rhodewalt, 2009), distrusting, suspicious and controlling of others (Davidov & Morf, 2004) as well as adopting an interactive style marked by hostility (Paulhus, 1998).

By contrast, repeated findings of narcissism's strong relation to self-esteem, a crucial mediator predictive of mental health, support the hypothesis of a healthy or adaptive form of narcissism (Campbell, Rudich, & Sedikis, 2002; Kernis & Sun, 1994; Raskin & Terry, 1998; Rhodewalt, Madrian, & Cheney, 1998; Raskin, Novacek & Hogan, 1991; Emmons, 1987). Similarly, the majority of empirical research on narcissism and depression points to a mutual exclusion of these characteristics within the same individual. For example, Rathvon and Holmstrom (1996) posit that narcissism is a defense against a primary depression and Sedikides et al. (2004) found an inverse relationship between depression and narcissism (but see Tritt et al., 2010, for a study that differentiates between vulnerable and grandiose subtypes correlations). Narcissism in non-clinical populations is also positively related to measures indicative of better adjustment and subjective well-being (Rose, 2002) and inversely related to anxiety (Watson & Biderman, 1993). In an attempt to parse apart the two main components of narcissism, overly high self-regard and using others for self-promotion, a longitudinal study by Zuckerman and O'Loughlin (2009) found that if the self-esteem portion is high, but no significant interpersonal exploitation takes place, narcissism seems to promote overall well-being and mental health.

Clinical utility and pathological narcissism

NPD's low score on clinical utility may be attributed to its unevenly distributed prevalence rates across populations, with estimates being the lowest for community samples. The Baltimore Epidemiological Catchment area study, for example, found that only 0.1% of the population met criteria for NPD (Samuels et al., 2002). In contrast, Zimmerman, Rothschild and Chelminski (2005) found a prevalence of 2.3% in psychiatric outpatients. Studies that survey clinicians indicate that the likelihood of receiving a diagnosis of NPD in an outpatient private practice setting is much higher than in hospital in- or outpatient departments (Westen, 1997; Doidge, Simon & Brauer, 2002). This variation in prevalence rates between populations might be reflective of the fact that narcissistic patients are more likely to be hospitalized when they are in a vulnerable self-state. Relying solely on DSM-IV 'grandiose' NPD may therefore impede clinical recognition of pathological narcissism (Pincus, Ansell et al., 2009).

Results from the 2004-2005 Wave 2 NESARC study on prevalence, correlates, disability, and comorbidity of DSM-IV narcissistic personality disorder confirm that NPD is a prevalent personality disorder in the general U.S. population and is associated with considerable disability among men, whose rates exceed those of women. In the total NESARC sample, the prevalence of NPD was 6.2%, 7.7% among men and 4.8% among women (NESARC Wave 2, Grant et al., 2004). Nevertheless, the study concludes that NPD may not be as stable as previously recognized or described in the DSM-IV. The results highlight the need for further research from numerous perspectives to identify the unique and common genetic and environmental factors underlying the disorder-specific associations with NPD observed in this study (Stinson et al., 2008).

Construct validity and pathological narcissism

Narcissism's criterion problems, such as its heterogeneity with regard to symptoms and traits, its phenotypic range and high comorbidity with other personality disorders, have limited and confounded validity research (Ronningstam, 2009, Trull & Durrett, 2005; Pincus et al., 2009). In contrast, recent studies on the expansion of the validity include investigations of the broader construct of pathological narcissism as well as narcissistic personality traits in the general population and provide significant evidence for validity (Miller & Campbell, 2010).

In sum, certain characteristics of narcissism, such as high self-esteem and high agency, are indicators of better adjustment (Saragovi, Aube, Koestner, & Zuroff, 2002), whereas others, especially the coupling of interpersonal exploitation with interpersonal vulnerability point in the opposite direction (Rhodewalt & Morf, 2005). It follows that in concurrent analysis, enhanced levels of narcissism are related to both maladaptive functioning as well as to indices of better mental health.

This inherent ambiguity of the narcissism construct is largely responsible for the controversy with regards to the structural validity of pathological narcissism. One of the problems is that existing studies have been mainly concerned with distinct phenotypic descriptions of narcissism ("self-importance," "entitlement,"). The phenomenology of narcissism in and of itself, however, is only a partial indicator for a clinical manifestation of personality pathology. Personality pathology is defined by broader themes of dysfunction, identified by contemporary psychodynamic and interpersonal theory as degrees of disturbance of the self and interpersonal domains (Blatt, 2008; Kernberg & Caligor, 2005).

What is therefore missing from the existing literature on narcissism is a demonstration of the interaction between self and interpersonal functioning on the one hand and descriptive narcissistic criteria on the other hand. The present study aims to illustrate the dual nature of narcissism (adaptive/normative and maladaptive/pathological) through distinct self and other correlates. It is expected that pathological narcissism will show stronger covariation with greater degrees of disturbances of the self and interpersonal domains.

The present study's aim converges with the DSM-5 Personality Task Force proposal which promotes "a two-step diagnostic process" that distinguishes between "significant impairment in self and interpersonal functioning" (Step 1) and the presence of "pathological personality traits in one or more trait domains" (Step 2) (APA, 2012). A more detailed review of the DSM-5 Personality Disorders Proposal will follow in Section 3 below.

2. The operationalization of narcissism

Measuring normative versus pathological narcissism

For the past three decades, narcissism research has been dominated by the use of the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981). Developed in parallel to the DSM-III version, which introduced Narcissistic Personality Disorder into the classification manual (DSM-III, American Psychiatric Association, 1980), the NPI originally provided a self-report measure closely based on criteria presented in DSM-III. However, given that the overwhelming majority of empirical research on narcissism has been conducted by social / personality psychology rather than by clinicians specializing in personality disorders, the NPI has been predominantly used to measure narcissistic traits in nonclinical samples. Cain, Pincus and Ansell (2008) conducted a PsychInfo literature search and found that since 1985 the NPI was

used as the main or only measure of narcissistic traits in approximately 77% of research studies on narcissism (p.643). This impressive body of research documents NPI's impact on today's conceptualization of narcissism across multiple disciplines including clinical psychology, social/personality psychology and psychiatry.

Research, however, also suggests a number of undesirable consequences resulting from equating narcissism to a high NPI score. Most relevant to clinicians specializing in personality pathology has been the suggestion that the NPI primarily assesses adaptive characteristics (e.g. Watson, Trumpeter, O'Leary, Morris, & Culhane, 2005) thereby rendering the measure unsuitable for clinical use. In support of this claim, a number of studies have found high NPI scores to be negatively associated with Neuroticism (Rhodewalt & Morf, 1995) and levels of depression (Watson et al., 1992) as well as positively correlated with achievement motivation and self-esteem (Lukowitsky, Roberts, Lehner, Pincus, & Conroy 2007). Consequently, some investigators have suggested limiting the use of the NPI to the assessment of "subclinical narcissism" (Paulhus & Williams, 2002; Wallace & Baumeister, 2002). Miller and Campbell (2008) conducted a study in which they compared the convergent correlates of the NPI and the Personality Diagnostic Questionnaire (PDQ-4; Hyler, 1994) and found that while both measures were associated with an antagonistic interpersonal style, the NPI portrayed an emotionally more resilient extraverted narcissistic style, whereas the PDQ-4 assessed a more emotionally unstable, negative-affect laden form of narcissism. Given the range of NPI's adaptive associations and the absence of studies that specifically compare normal and clinical populations on the NPI (see also Cain et al., 2008), a number of recent studies have concluded that the measure predominantly assesses the subgroup of non-distressed adaptive expressions of the narcissism construct (Pincus & Lukowitsky, 2010; Pincus et al., 2009; Cain et al., 2008).

Studies analyzing the factor structure of the NPI have revealed four dimensions, labeled Exploitativeness/Entitlement (E/E), Leadership/Authority (L/A), Superiority/Arrogance (S/A) and Self-Absorption/Self-Admiration (S-A/S-A) (Emmons, 1984, 1987; Kubarych, Deary & Austin, 2004; Del Rosario & White, 2005). Exploitativeness/Entitlement (EE) is the only dimension that is significantly related to suspiciousness, tenseness, anxiety and neuroticism, suggesting that this factor most clearly reflects maladaptive aspects of narcissism (Watson, Grisham, Trotter, & Biderman, 1984). Similarly, self-esteem is strongly related to the full scale and to all factors, except Exploitativeness/Entitlement (E/E), once again supporting the hypothesis that this factor is tapping the maladaptive aspects of the trait (Watson, Hickman, Morris, Milliron, & Whiting, 1995; Emmons, 1984, 1987). In a study by Watson, Little, Sawrie, and Biderman (1992), E/E was associated with lower levels of emotional and cognitive empathy and greater self-esteem was a correlate of the three “adaptive” NPI factors but not of E/E. The authors further showed that while superiority covaried directly with all four NPI factors, removing the three adaptive NPI factors, made superiority appear less adjusted because the connection with greater self-esteem was eliminated and a positive tie with personal distress was uncovered (Watson et al., 1992, p. 439). In another study by Exline and colleagues (2004), the E/E dimension is inversely related to forgiveness reflecting the narcissist’s difficulties in interpersonal functioning (Exline, Baumeister, Bushman, Campbell, & Finkel, 2004). In five separate studies conducted in the United Kingdom by Constantine Sedikis and Aiden Gregg (2004) of the *Center for Research on Self and Identity*, the authors established that self-esteem fully accounted for the relation between narcissism and psychological health. It should be noted, however, these studies concentrated on the correlations between narcissism measures and a variety of self-report well-being measures (see also Zuckerman & O’Loughlin, 2009) with the

hypothesis that narcissism functions as a distinct personality variable unrelated to attachment or object-relatedness.

This blend of adaptive and maladaptive item content of the NPI has inspired some researchers to manipulate NPI total scores in a variety of ways to better distill the healthy and unhealthy features inherent in the measure. For example, in a study by Horton, Bleau and Drwecki (2006), the authors used multiple regression analysis to partial the variance associated with trait self-esteem from narcissism (NPI) scores in order to investigate associations between both, ‘healthy narcissism’ and parenting, as well as ‘unhealthy narcissism’ and parenting.

In sum, narcissism as measured by the NPI has found to be beneficial for psychological health insofar as it is related to higher self-esteem (Campbell, Rudich, & Sedikis, 2002; Emmons, 1984, 1987; Morf & Rhodewalt, 1993; Raskin, Novacek & Hogan, 1991). At the same time factor analysis showed that E/E is the only dimension of the NPI that lacks this positive relation to self-esteem (Emmons, 1984, 1987; Watson et al., 1995).

For the present study, the literature review above provides the explanation for the decision to parse the total NPI score into two narcissism measures. The composite score of the three dimensions Leadership/Authority (L/A), Superiority/Arrogance (S/A) and Self-Absorption/Self-Admiration (S-A/S-A) reflects a participant’s degree of ‘adaptive narcissism’. Consequently, the Exploitativeness/Entitlement (E/E) score contributes to the measure on ‘pathological narcissism’.

Phenotypic heterogeneity within narcissistic pathology: Grandiose versus vulnerable

Following the addition of narcissistic personality disorder to the third edition of the *Diagnostic and Statistical Manual for Mental Disorders* (DSM-III, American Psychiatric Association, 1980) clinicians specializing in personality pathology began to notice that the

spectrum of narcissistic disturbances they encountered in their practice was not fully captured by the rather narrow DSM criteria (Gabbard, 1989, 1998; Gersten, 1991; Masterson, 1993). These clinical observations were soon taken up by personality researchers and contemporary theorists on pathological narcissism and engendered multiple empirical studies and clinical accounts supporting a two-factor structure indicative of two distinct phenotypes within pathological narcissism (Russ, Shedler, Bradley & Westen, 2008; Miller & Campbell, 2008; Cain et al., 2008; Fossati, Beauchaine, Grazioli, Carretta, Cortinovis & Maffai, 2005; Dickinson & Pincus, 2003; Wink, 1991).

The first, the grandiose subtype, is well captured by the representation of NPD in the DSM-IV (American Psychiatric Association, 1994), which focuses on attributes such as grandiosity, arrogance, entitlement, exploitativeness and envy. The second subtype captures the vulnerable narcissistic personality type, which has been depicted as “overtly self-inhibited and modest but harboring underlying grandiose expectations for oneself and others” (Dickinson & Pincus, 2003, p. 188-189) and as a “shame-ridden, and hypersensitive shy type, whose low tolerance for attention from others and hypervigilant readiness for criticism or failure makes him/her more socially passive” (Ronningstam, 2009, p.113).

The literature offers a large variety of dichotomous labels to distinguish between the more overtly antagonistic and the more inhibited narcissist, for example, overt versus covert or thick-skinned versus thin-skinned (for a comprehensive review see Cain, Pincus, & Ansell, 2008). For the sake of clarity and consistency, throughout this study, the predominant terminology, namely grandiose versus vulnerable, will be used to capture these two narcissistic expressions.

The grandiose subtype of pathological narcissism

In its original formulation in DSM-III, NPD still encompassed many of the characteristics underlying vulnerable themes, for example, “shameful reactivity or humiliation in response to narcissistic injury,” “alternating states of idealization and devaluation,” (DSM-III, American Psychiatric Association, 1980). The DSM-IV, however, has relegated these vulnerability characteristics to the “Associated Features and Disorders” section (American Psychiatric Association, 2000), which is rarely consulted by clinicians for formulating a diagnosis. The current DSM-IV-TR criteria for NPD focus exclusively on a grandiose sense of self-importance; a preoccupation with fantasies of unlimited power, success, brilliance, beauty, or ideal love; a belief that he/she is “special” or unique and can only be understood by, and should associate with, other special or high-status people or institutions; a need for excessive admiration; a sense of entitlement; interpersonal exploitativeness, a lack of empathy; often envious of others or believes that others are envious of him/her; and arrogant, haughty behaviors or attitudes (American Psychiatric Association, 2000). Miller and Campbell (2008) undertook a confirmatory factor analysis of these NPD criteria and found that they supported a one-factor solution.

This restricted focus on grandiosity has become a common criticism in the clinical literature (Miller, Widiger, & Campbell, 2010; Gabbard, 2009; Ronningstam, 2009; Cain et al., 2008; Levy et al., 2007) and has been used as an explanation for the discrepancy of prevalence rates between hospital inpatient settings (lower) and private practice (higher) (Lenzenweger, 2008). The authors of the Psychodynamic Diagnostic Manual (PDM; PDM Task Force, 2006) have tried to counterbalance this development by subdividing narcissistic personality disturbance into an Arrogant/Entitled subtype and a Depressed/Depleted subtype.

With the aim of verifying that the clinical phenomenon of narcissism may be broader than the DSM-IV formulation, Russ and his colleagues asked a substantial random sample of psychiatrists and clinical psychologists (N=1,201) to provide detailed psychological descriptions of their patients using the Shedler-Westen Assessment Procedure (SWAP-II) (Russ et al., 2008). Q-factor analysis identified three subtypes of narcissistic personality disorder which the authors labeled *grandiose/malignant*, *fragile* and *high-functioning /exhibitionistic*. The authors found that, “core features of the disorder included interpersonal vulnerability and underlying emotional distress, along with anger, difficulty in regulating affect, and interpersonal competitiveness, features that are absent from the DSM-IV description of narcissistic personality disorder” (p. 1473).

Personality researchers, Pincus and Lukowitsky (2010) undertook an in-depth analysis of NPD’s criterion problem and concluded that, “relying solely on the DSM-IV criteria may impede clinical recognition of pathological narcissism” (p.430). Along the same lines, Ronningstam (2011) recently tried to convince the DSM-5 Task Force of the need to retain NPD under a set of newly formulated diagnostic criteria by arguing that the current manual’s heavy reliance upon “grandiosity and external, social, and interpersonal conspicuous behavior” has rendered the diagnosis clinically non informative (p.249).

The vulnerable subtype of pathological narcissism

In response to the one-sided assessment of narcissism reviewed here, Hendin and Cheek (1997) developed the Hypersensitive Narcissism Scale (HSNS) by correlating the items of H.A. Murray’s (1938) Narcism Scale with an MMPI-based composite measure of covert narcissism. Given that the NPI scope is limited to adaptive or maladaptive aspects of narcissistic grandiosity,

it is not surprising that the HSNS is uncorrelated with the NPI total score. This lack of correlation supports narcissism's problematic convergent validity and the hypothesis that a so-called 'jingle fallacy' may exist in the measurement of narcissism (Hendin & Cheek, 1997). The jingle fallacy occurs when different constructs have been labeled with the same name, leading the unsuspecting researcher to believe that all scales which bear the same name are interchangeable (Thorndike, 1904, as cited in Block, 1995). In order to be able to assess both grandiose and vulnerable characteristics of narcissism, recent studies (e.g. Miller, Dir, Gentile, Wilson, Pryor & Campbell, 2010; Smolewska & Dion, 2005), have used the HSNS in conjunction with the NPI.

In sum, until recently the most widely used instruments for assessing narcissism either failed to distinguish between adaptive and maladaptive functioning (Narcissistic Personality Inventory, Raskin & Hall, 1979; Raskin & Terry, 1988), resulting in unstable factor structure (Kubarych et al., 2004; Del Rosario & White, 2005) and repeated findings of negative relations with psychological distress (Lukowitsky et al., 2007; Sedikides et al., 2004; Trull & McCrae, 2002; Watson et al., 1992; Emmons, 1984) or focused exclusively on only one of the two narcissistic phenotypes (Hypersensitive Narcissism Scale, Hendin & Cheek, 1997). The lack of measures tapping into the comprehensive core pathology of the construct was widely noticed and criticized in the field (Cain, Pincus & Ansell, 2008; Miller & Campbell, 2008; Watson, 2005).

Assessing the full range of pathological narcissism

Based on the argument that the NPI measures only a limited scope of pathological narcissistic characteristics, by assessing mainly grandiose aspects but neglecting more vulnerable narcissistic traits, Pincus and his colleagues recently developed a measure designed to assess a wide range of pathological narcissistic traits (Pincus et al., Pathological Narcissism Inventory, PNI, 2009). The PNI is a 52-item, multifactorial questionnaire that assesses seven components of narcissism: Contingent Self-Esteem (CSE); Exploitativeness (EXP); Self-Sacrificing Self-Enhancement (SSSE); Hiding the Self (HS); Grandiose Fantasy (GF); Devaluing (DEV) and Entitlement Rage (ER). Confirmatory factor analyses of the PNI yielded two higher-order components that reflect narcissistic grandiosity (EXP, GF, and SSSE) and narcissistic vulnerability (CSE, ER, DEV, and HS) (Tritt et al., 2009; Wright et al., 2008).

Given the problems associated with the NPI, the PNI was very well received by clinicians and researchers specializing in personality pathology. In a recent study, Miller, Dir, Gentile, Wilson, Pryor and Campbell (2010) identified a “Vulnerable Dark Triad” comprising the following related personality styles: vulnerable narcissism, psychopathy and borderline personality disorder. This study is a follow-up on Paulhus and Williams’s (2002) research on the co-occurrence between three pathological personality styles that have been titled the “Dark Triad”: narcissism, psychopathy and Machiavellianism. Miller and his colleagues (2010) argued that the presence of a second triad is necessary, in part, because of the heterogeneity of the conceptualization of narcissism. Their results showed that grandiose narcissism, as measured by the NPI (Raskin & Terry, 1988) differed from the “Vulnerable Dark Triad” personality styles on almost every criterion included, such as basic personality, impulsivity, etiological factors and

criterion constructs such as psychopathology, affect, attachment, and self-esteem (Miller et al., 2010).

Similarly, Tritt et al. (2009) demonstrated that narcissistic vulnerability but not narcissistic grandiosity was significantly associated with depression. A finding that is particularly interesting as it is contrary to past research showing that narcissism is uncorrelated, or inversely related to depression when using the NPI (Sedikis et al, 2004). Notably, Entitlement and Exploitativeness (E/E), the NPI's most pathological subscale, is positively related to depression when variance with the three adaptive subscales is removed (Watson & Bidermann, 1993).

It follows from the literature reviewed above that current DSM-IV criteria for narcissistic personality disorder are too narrowly focused on the grandiose subtype, leaving out other aspects of personality and inner experience that are empirically central to the narcissistic disorder. As Russ et al. (2008) have pointed out, “a richer and more differentiated view of narcissistic personality disorder may help bridge the gap between empirically and clinically derived concepts of the disorder” (p. 1473). The present study aims at contributing to this goal. However, in order for researchers and clinicians to benefit from each other's expertise and in order to advance the scientific understanding of personality pathology, they first have to agree on a common classification terminology. With regards to narcissistic pathology, these considerations led to intense negotiations and entailed multiple compromises on both sides before finding its way into Section III of the newly adopted DSM-5.

3. Narcissistic personality pathology in the DSM

Traditionally, personality research was subsumed under the field of social psychology whereas personality psychopathology was diagnostically crafted by psychiatrists and clinical psychologists. Over the last years, the DSM-5 preparation has offered itself as a lively forum where both personality traits researchers and clinicians specializing in personality disorders present their often markedly diverging views on potential ways of integrating their fields. Westen (2006) honed on this debate with his remark, “What is figure to clinicians often is ground to trait researchers” (p. 190). In line with this observation, the following serves as a brief elaboration and critical review of the main arguments put forward by both camps in defense of their diverging positions.

Trait researchers’ perspectives on personality classification

Advocates of a trait-based classification system are very invested in creating a strong empirical basis for personality psychopathology (Krueger, Eaton, Clark, Watson, Markon, Derringer, Livesley, 2011; Krueger & Eaton, 2010; Clark, 2005, 2007; Trull & Durret, 2005). In a paper by Krueger and Eaton (2010), which was highly influential for the proposed wording of the DSM-5 draft¹, the authors emphasized how quantitative models of personality trait variation have contributed to an “unequivocal conceptual clarity in personality research” (p.97). Their goal is to arrive at a similar utility when applied to psychopathology in a manner that “reflects the close links between personality trait variation and risk for psychopathology” (Krueger & Eaton, 2010, p.98).

¹ Krueger was a member of the Personality Disorders Work Group and co-author of the “Rationale for a trait dimensional diagnostic system” as published online by the DSM-5 Task Force (APA, 2011).

In addition to the strengthened scientific basis, trait researchers point to potential clinical benefits of a nosology change to a dimensional scheme. They argue that formal assessment of a patient's trait profile on multiple dimensions provides a comprehensive understanding of the patient's personality features, whereas a binary diagnosis of a DSM-IV personality disorder leaves additional information about the patient's personality out of the clinical picture (Widiger, Costa & Samuel, 2006).

In response to the criticism that a dimensional assessment lacks clinical utility (First, 2010; Gunderson 2010), a formal distinction has been created between the term 'clinical applicability,' i.e. effective translation of scientifically valid constructs to clinically applicable concepts, and 'clinical utility'. The latter term is being discarded by trait researchers, in deliberate pejorative language, as "practitioner's surveys" of model preference, which are denied any "weight in constructing a nosology" (Krueger & Eaton, 2010, p. 101).

Clinicians' perspectives on classification of personality psychopathology

The lively debate triggered by the DSM-5 preparation, exemplifies the complications of devising a classification scheme that adequately reflects the priorities of both the clinical and the research communities. At the core of this dispute lies the fact that clinicians and researchers are not necessarily guided by the same principles in their daily work. A clinician's priority is to gain a comprehensive clinical picture of the unique individual presenting as a patient, whereas researchers seek to hone in on the universal characteristics of a certain variable independent of its context.

Historically, a clinician's training and degree conveyed large discretionary power in diagnosing patients (the American classification system is barely 50 years old). However,

today's zeitgeist favors scientific scrutiny, which can be better upheld by subjecting isolated variables to empirical testing methods. By contrast, clinical salience is much more difficult to define in scientific terms. Gunderson (2010), referred to the existing personality disorders as, "rich clinical traditions that offer meaningful ways to understand patients and useful wisdom regarding the ways to treat or not to treat them effectively" (p. 120). Gunderson's (2010) critique is not an attempt to defend the construct validity of the existing ten personality disorders (he largely agrees with their low factor structure). Instead, he makes the argument that today's diagnosis of a specific personality disorder conveys valuable clinical wisdom that has been developed by the clinical community over many years. Such wisdom, he pointed out, "is not conveyed by trait domains called 'peculiar' or 'antagonistic,' the clinical implications of which need to be developed from scratch" (Gunderson, 2010, p.120). Wakefield (2008) raised similar concerns with respect to the static nature of traits, "it is the way the traits interact and what the interaction yields, not anything in the trait profile itself, that constitutes the disorder (p.382). To this, Skodol and Bender (2009) add a frank picture of clinical reality: "Dimensional models are unfamiliar to clinicians trained in the medical model of diagnosis, in which a single diagnostic concept is used to communicate a large amount of clinical information about a patient's problems, indicated treatment, and likely prognosis" (p.388).

While these authors grant the dimensional model its claim to greater scientific scrutiny, they bestow a meaning onto clinical diagnosis (or clinical naming) that transcends the classification intentions of the authors of the DSM. In other words, for an experienced clinician, a patient diagnosed with a certain personality disorder conveys more clinically useful information than the sum of the particular diagnostic criteria. This is a strong argument in favor of preserving valuable clinical understanding built by multiple generations of clinicians.

Implicitly, however, this view conveys a large discretionary power to practitioners and their ‘traditional’ understanding of psychopathology without subjecting it to empirical evidence. Notes from an early *APA Research Planning Work Group for DSM-V* reveal exactly this dilemma. On the one hand, there is an explicit wish for integration of scientific study, but on the other hand, the committee openly expressed doubts about the clinical approval of these changes: “If a dimensional system of personality performs well and is acceptable to clinicians, it might then be appropriate to explore dimensional approaches in other domains” [my emphasis] (Rounsaville et al., 2002, p.13).

During the process of revising the DSM-IV-TR, the personality disorders work group proposed a number of alternative models as a replacement of the entirely categorical system. To maintain the spirit of more stringent scientific accountability, the work group developed empirically based criteria for each personality disorder that would allow clinicians to perform dimensional ratings. This framework allows for patients to be evaluated by criteria based on (i) typical impairments in personality functioning (e.g. identity, self-direction, empathy and intimacy) and (ii) pathological personality traits in one or more trait domains.

The gestalt of this development gets expressed by a compromise referred to as the “hybrid dimensional-categorical model for personality and personality assessment and diagnosis” by the DSM-5 Task Force (APA, 2012). According to Skodol and Bender (2009) this approach “attempts to capitalize on the strengths of several dimensional models that have been offered as solutions to the problems raised by categories (p. 390).

During most of the preparatory phase of the DSM-5, it was unclear whether NPD would make the cut to be retained as a specific personality disorder type. NPD (in its current DSM-IV formulation) was regarded as a particularly weak diagnosis with regards to the following two criteria: (i) clinical utility of the syndrome (e.g. its frequency of use, its importance for making treatment decisions, the degree of attention to the diagnosis in professional groups) and (ii) construct validity of the category (the degree to which inferences can legitimately be made from the operationalization in empirical research to the theoretical construct) (Kendler et al., 2009).

However, the proposed deletion of NPD during the DSM-5 field testing triggered a flood of responses and critiques by highly distinguished clinicians and researchers in the published literature (most notably, Ronningstam, 2011; Pincus, 2011; Gunderson, 2010; First, 2010) and led to the eventual re-inclusion of NPD as a specific personality disorder type (APA, 2011). These authors make the argument that the deletion of NPD is hardly the right response to narcissism's fundamental criterion problem. Instead, they strongly favor the replacement of the overly narrow definition of DSM-IV narcissism by a well-defined diagnostic base in the DSM by placing the focus on enduring indications of pathological narcissism rather than on phenotypic appearance.

For a diagnosis of NPD based on the “Alternative DSM-5 model for personality disorders,” the following criteria must be met (DSM-5, Section III, 2013):

A. Significant impairments in **personality functioning** manifested by:

1. Impairments in **self** functioning (a or b):

- a. Identity: Excessive reference to others for self-definition and self-esteem regulation; exaggerated self-appraisal may be inflated or deflated, or vacillate between extremes; emotional regulation mirrors fluctuations in self-esteem.
- b. Self-direction: Goal-setting is based on gaining approval from others; personal standards are unreasonably high in order to see oneself as exceptional, or too low based on a sense of entitlement; often unaware of own motivations.

AND

2. Impairments in **interpersonal** functioning (a or b):

- a. Empathy: Impaired ability to recognize or identify with the feelings and needs of others; excessively attuned to reactions of others, but only if perceived as relevant to self; over- or underestimate of own effect on others.
- b. Intimacy: Relationships largely superficial and exist to serve self-esteem regulation; mutuality constrained by little genuine interest in others’ experiences and predominance of a need for personal gain.

B. Pathological **personality traits** in the following domain:

Antagonism, characterized by:

- a. Grandiosity: Feelings of entitlement, either overt or covert; self-centeredness; firmly holding to the belief that one is better than others; condescending toward others.
 - b. Attention seeking: Excessive attempts to attract and be the focus of the attention of others; admiration seeking.
- C. The impairments in personality functioning and the individual’s personality trait expression are relatively stable across time and consistent across situations.
 - D. The impairments in personality functioning and the individual’s personality trait expression are not better understood as normative for the individual’s developmental stage or socio-cultural environment.
 - E. The impairments in personality functioning and the individual’s personality trait expression are not solely due to the direct physiological effects of a substance (e.g., a drug of abuse, medication) or a general medical condition (e.g., severe head trauma).

This alternative DSM-5 NPD type offers thus a first step for enhanced construct validity by providing a more clinically nuanced conceptualization of pathological narcissism. However, extensive empirical research is needed to establish whether the revised approach to NPD can offer a well-defined diagnostic base for promoting integrative scientific advances in understanding and treatment of narcissism. The current study aims at contributing to this effort by examining how correlational findings of the relationship between narcissistic functioning and attachment as well as RF can enhance the clinical utility of an NPD diagnosis.

4. Adult attachment and narcissism

Attachment theory has long offered a persuasive theoretical paradigm for understanding personality psychopathology. Interest in adult attachment research has flourished in recent years (Ainsworth, 1989; Slade, 1999; Collins & Read, 1990; Carnelly, Pietromonaco, & Jaffe, 1994; Hazan & Shaver, 1990; Main, 1990). However, given attachment theory's relevance for the study of personality structure and organization (Bowlby, 1980; Sroufe & Waters, 1977), early adult attachment research was mainly concerned with normal personality functioning (Bartholomew & Horowitz, 1991; Duggan & Brennan, 1994; Shaver & Mikulincer, 2002). There has also been a considerable emphasis on research related to intergenerational transmission of attachment styles (Bretherton, 1991; Fonagy, Steele & Steele, 1991; Main & Hesse, 1990).

While general personality disorder research has found associations with insecure styles of attachment (Bender, Farber, & Geller, 2001; West, Keller, Links & Patrick, 1993; West and Sheldon-Keller, 1994), it is only recently, that psychopathology researchers have begun to apply attachment related constructs to specific personality pathology types, albeit mainly for borderline

personality disorder (Levy et al., 2006; Blatt & Levy, 2003; Fonagy, Gergely, Jurist & Target, 2002; Diamond, Yeomans, Clarkin, Levy, Kernberg, 2008). Thus far, very little has been written about the ways in which attachment research may be integrated with empirical studies on narcissistic personality pathology.

Attachment theory and research

Attachment theory postulates a universal human need to form close relationships. According to John Bowlby, the founder of attachment theory, the human infant is born with a biologically programmed system aimed at forming close emotional bonds with significant others (Bowlby, 1980). From an evolutionary perspective, the attachment system primarily ensures physical protection of the vulnerable human infant. According to attachment theory, this original function has been subsumed under a far more complex role of the attachment relationship, namely to serve as the first and foremost regulator of emotional experience (Sroufe, 1996; Ainsworth, 1989). Since humans lack the inborn capacity to regulate their own emotional reactions, the infant learns to seek the caregiver's help in a moment of emotional arousal in order to reestablish equilibrium. Over time these experiences with the caregiver are aggregated into representational systems that Bowlby (1969, 1973) termed the *internal working model*.

Fonagy and Bateman (2008) elaborated on this model by eliciting four mental representational systems implicated in attachment:

- 1) expectations of interactive attributes of early caregivers created in the first year of life and subsequently elaborated ;
- 2) event representations by which general and specific memories of attachment-related experiences are encoded and retrieved;

- 3) autobiographical memories by which specific events are conceptually connected because of their relationship to a continuing personal narrative and developing self-understanding; and
- 4) understanding of the psychological characteristics of other people and differentiating them from the characteristics of the self. (p. 211)

Thus, individuals approach the interpersonal world with a complex set of assumptions that have been largely shaped by early caregiving experiences and are then generalized to adult relationships later in life.

Research on personality disorders and attachment

A number of theories have drawn on Bowlby's ideas to account for personality psychopathology. Of all the ten personality disorders categorically classified in the DSM-IV, the single most widely researched diagnosis is borderline personality disorder (BPD). It is therefore not surprising that the bulk of empirical studies on personality dysfunction and attachment revolves around the BPD construct. Clinical researchers have repeatedly found that fundamental aspects of BPD, such as unstable and intense interpersonal relationships, feelings of emptiness, bursts of rage, chronic fears of abandonment, and a lack of a stable sense of self, are stemming from impairments in the underlying attachment organization (Levy, Beeney & Temes, 2010; Diamond et al., 2008; Blatt & Levy, 2003; Fonagy et al., 2002).

Gunderson (1996), for example suggested that intolerance of aloneness was at the core of borderline pathology and that the inability to invoke a "soothing introject" was due to early attachment failures of BPD patients. Another study assessed internal representations of attachment (via the Adult Attachment Interview) and found that individuals classified as BPD evinced the mental organization characteristic of preoccupied attachment (Patrick, Hobson, Castle, Howard, & Maughan, 1994).

Further research on other specific personality disorder types has found evidence for discriminating dependent and schizoid personality disorders on the basis of an enmeshed (“preoccupied”) versus a detached (“dismissing”) interpersonal style (West & Sheldon-Keller, 1994). Based on a sample of patients with avoidant personality disorder, Sheldon and West (1990) reported that heightened desire for and fear of attachment relationships were more diagnostic of avoidant personality disorder than were poor social skills.

The only study that used a sample large enough to empirically examine structural connections between adult attachment styles and 13 distinct personality disorders was conducted by Brennan and Shaver (1998). A nonclinical group of 1407 individuals, mostly adolescents and young adults, were surveyed about their attachment styles, parental marital status, parental mortality status, perceptions of treatment by parents in childhood, and 13 personality disorders. Results indicated substantial overlap between attachment and personality disorder measures. One of the substantial limitations of this study is the use of the *Personality Diagnostic Questionnaire* (PDQ-R, Hyler & Rieder, 1987) as the measure to assess for an existing personality disorder. This measure is known to suffer from an over-inclusion bias, as demonstrated in this study by the fact that 75% of all subjects had at least one personality disorder. Even though their results may not generalize well to clinical populations, the findings still suggest that patterns of insecure attachment significantly overlap with patterns of disordered personality organization. The finding that both personality disorders and attachment styles were associated with family of origin-variables further indicate that the “quality of one’s early attachment to caregivers accounts for some of the variance in abnormal or maladaptive personality functioning” (Brennan & Shaver, 1998, p.868).

Measuring adult attachment

Mary Ainsworth and her colleagues have demonstrated in numerous studies that an intrinsic part of a child's early emotional development is the creation of an individualized attachment relationship expressed through one of originally three alternative strategies, labeled as Secure attachment, Avoidant attachment or Anxious Ambivalent attachment. Because in a significant number of families children could not be categorized, a fourth classification, labeled Disorganized attachment, has been created (Ainsworth, Blehar, Waters & Wall, 1978).

Ainsworth's observational technique for the study of infant-parent relationships was subsequently extended through two major lines of research on adult attachment. One route, followed mostly by developmental and clinical psychologists, was based on coded narrative assessments, notably the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985), a clinical interview focused on mental representations of parent-child relationships. The second line of research was generated mainly by social psychologists (Hazan & Shaver, 1987) who applied Bowlby's and Ainsworth's ideas to the study of attachment-related thoughts and feelings in adult relationships and developed self-report measures suitable for use in experiments and surveys (Shaver & Mikulincer, 2002). While both major lines of research on adult attachment provided evidence for construct validity (for a review see Bartholomew & Shaver, 1998), there has been relatively little communication and cross-fertilization (Shaver & Mikulincer, 2002).

This study will use a self-report measure of a four-category model of adult attachment developed by Bartholomew and Horowitz (1991). Based on Bowlby's formulations, Bartholomew and colleagues proposed a fourfold typology of attachment (Griffin & Bartholomew, 1994). Bowlby systematized the internal working model by defining individual differences in attachment in terms of the intersections of two dimensions, ranging from a positive

to negative model of the self and a positive to negative model of others (1980). These internal working models are established in infancy and provide prototypes for later relationships. Since they function outside of awareness, they are largely change resistant (Crittenden, 1990). Thus, conceptually, individuals who are securely attached possess largely positive models of self and others (labeled as ‘secure’). Those individuals who possess a positive model of others coupled with a negative model of themselves, are termed ‘preoccupied’. In contrast, ‘dismissing’ individuals possess a positive model of themselves, but a negative model of others. The fourth category concerns ‘fearful’ individuals who hold both, negative models of themselves as well as of others.

Although the stability of attachment has been demonstrated by longitudinal studies of infants who were assessed with the Strange Situation and followed up in young adulthood with the Adult Attachment Interview (AAI), it would be too simplistic to claim that personality disorders originate in parent-infant attachment. Rather than follow a developmentally reductionist model, this study aims to examine the contribution of attachment to the complex and heterogeneous construct of narcissism in order to further enhance the clinical discrimination between narcissistic traits within the normative realm and pathological narcissistic expressions.

Research on narcissism’s underlying attachment organization

Functionally, attachment and narcissism can both be conceptualized as systems involved in regulating emotional experience. Further shared theoretical components involve cognitive-affective patterns and the joint accommodation of healthy as well as pathological development and functioning (Kernberg, 1998; Kohut, 1977; West & Sheldon-Keller, 1994; Pincus, Lukowitsky, & Wright, 2010). Attachment, however, is more firmly rooted in a developmental

deficit model, stressing the caregiver's role in reestablishing emotional equilibrium. Thus, the emphasis of attachment theory is on the interpersonal dyad and its representation, as the caregiver is conceptually portrayed as experienced as separate from the self (Silverman, 1991). In contrast, leading theoretical conceptions of narcissism hone in on undifferentiated or merged aspects of the self, or, as referred to in structural theory, the pathological ego organization (Kernberg, 1998).

As outlined in more detail above, the clinical construct of narcissism has been weakened by heterogeneity and low clinical utility leading up to its contested and rather precarious re-installment into the new diagnostic manual. Although relations between narcissistic phenomenology and adult attachment styles have been proposed in both theoretical and clinical accounts, there exists little empirical research to confirm this link. It is therefore highly relevant to gather empirical evidence on the level of impairment in personality functioning (self and interpersonal) of individuals exhibiting pathological trait narcissism.

Few studies have empirically examined the relationship between attachment and narcissism. Only one study, conducted by Brennan and Shaver (1998), compared all classified personality disorder types to categorical attachment styles. The authors used a fairly large number of participants (N= 1407), mostly adolescents and young adults, to explore connections between attachment styles and personality disorders in order to determine whether the two kinds of variables share a common underlying structure. Across all 13 personality disorders, their results indicated a substantial overlap between attachment style and personality-disorder measures. Securely attached individuals were nearly twice as likely not to have a personality disorder as to have one (75.0% versus 38.8%). A closer look at the narcissistic personality disorder subtype, however, reveals only marginally discriminating power for attachment style:

30.4% Secure, 34.3% Fearful, 19.6% Preoccupied and 15.7% Dismissing. These results exemplify narcissism's inherent criterion problem, stemming from its over-inclusion of both adaptive and pathological elements as well as its phenomenological diversity (grandiose versus vulnerable).

Aware of the low discriminatory power between adaptive and maladaptive components of narcissism as measured by the *Narcissistic Personality Index* (NPI; Raskin & Terry, 1988), Dickinson and Pincus (2003) parsed the measure into its two components, grandiose and vulnerable, and found that vulnerable narcissism was associated with high ratings on Fearful attachment (50%) and avoidant personality disorder. However, they also found that the majority of the grandiose group selected a Secure (60%) attachment style and only a minority was associated with Dismissive attachment (16%).

In a related study, Smolenska and Dion (2005) conducted a canonical correlation analysis in order to explore the multivariate relationship between overt and covert narcissism on one hand and adult attachment dimensions of anxiety and avoidance, on the other hand. Consistent with the findings by Dickinson and Pincus (2003), their analysis indicated that, by far, the highest canonical loading existed between covert (vulnerable) narcissism and anxiety attachment. It is noteworthy that the bivariate correlation coefficients between grandiose narcissism and anxious or avoidant attachment was insignificant ($r=.124$, and $r=-.037$, respectively).

One way of interpreting the results found in both studies, is that grandiose individuals' denial of interpersonal distress makes sense given their tendency to habitually dismiss personal and interpersonal difficulties (Kernberg, 1975; Kohut, 1971). In fact, this lack of interest and insight into the impact these individuals have upon others, is what prompted Gabbard (1989) to coin the label "oblivious narcissists." At the same time, prominent theories of grandiose

narcissism suggest that, clinically, the disorder presents at different levels of severity. The mildest cases present with symptoms that maybe treated without an effort to modify or resolve their narcissistic personality structure, whereas, at the other end of the spectrum, the syndrome of malignant narcissism includes, in addition to narcissistic personality disorder, severe antisocial behavior, significant paranoid trends, and self- or other-directed aggression (Kernberg, 2009). This suggests that individuals who report low interpersonal distress and are associated with a positive self-representation and high overall functioning might be experienced as oblivious and arrogant by others, but are to be clinically clearly distinguished from the aggressive antisocial behavior of patients with the syndrome of malignant narcissism. Confounding common social conceptions of the entitled ubiquitous narcissist among us, with a serious and debilitating personality pathology is highly problematic as it further dilutes narcissism's construct validity. During the DSM-5 drafting sessions, popular science journalism has already promulgated a picture of narcissism that is more akin to Woody Allen's satirical spin on the classic neurotic character rather than being descriptive of serious personality pathology². Given the detrimental behaviors associated with pathological narcissism, more research (beyond clinical case descriptions) is needed to reflect a greater balance of theory and empirical evidence. In light of today's scientifically minded zeitgeist, this is also the only route to ensure the diagnosis' continuous inclusion in future DSMs.

The current study aims at contributing to this need by conducting an empirical investigation that takes into account narcissism's significant criterion problem, including the boundaries between normal and pathological narcissism and its two pathological subtypes,

² Examples of popular psychology journalism: "A Fate that Narcissists Will Hate: Being Ignored," read the *New York Times* headline on November 9, 2010. "For decades a cure for narcissism has been elusive. Now we have one: simply take the diagnosis out of DSM-5," said a "Psychology Today" blogger on March 30, 2011.

narcissistic grandiosity and narcissistic vulnerability. Instead of using traditional measures, predominantly the NPI (Raskin & Terry, 1988), which, as outlined in more detail above, has been shown to reflect a confusing mix of adaptive and maladaptive content, this study will apply a blend of subscales of narcissism measures that represent all three phenomenological diverse subtypes (adaptive, grandiose, vulnerable) to the extent that they have shown to possess robust internal consistency (Rose & White, 2005).

In sum, attachment difficulties have been widely associated with greater psychiatric disturbances patients with personality disorders (Bender, Farber & Geller, 1997; West, Keller, Links & Patrick, 1993; West & Sheldon-Keller, 1994). Furthermore, the new approach to the assessment of narcissistic personality disorder in the DSM-5 proposal shifts the focus to the evaluation of the patient's core impairments in interpersonal and self functioning. Therefore, establishing the attachment correlates of different subtypes of narcissism may contribute to our theoretical understanding of this disorder as well as enlarge its clinical utility.

5. Reflective Functioning and Narcissism

During the past decade, mentalization has matured into a central theoretical concept for the study of personality development and pathology. Its corresponding research concept, referred to as Reflective Functioning (RF), has been employed for measuring the quality of mentalizing capacity in the context of specific attachment narratives. Existing literature on RF and personality psychopathology is mainly concerned with the implications for borderline personality disorder (BPD) diagnosis and treatment (Fonagy, Luyten & Strathearn, 2011; Fischer-Kern, Buchheim, Doering, Schuster, Taubner, Kapusta & Fonagy, 2010; Fonagy & Luyten, 2009; Fonagy & Bateman, 2007; Gunderson & Choi-Kahn, 2008). Although narcissistic pathology shares some conceptual ground with BPD, specific empirical data on RF and narcissistic personality expressions may prove essential in broadening our understanding of the disorder.

Theoretical considerations and empirical findings

The term mentalization has been coined by Fonagy and colleagues to describe the way in which individuals make sense of their own and others' actions as meaningful on the basis of intentional mental states such as beliefs, needs, feelings and motives (Bateman & Fonagy, 2004; Fonagy, Gergely, Jurist, & Target, 2002; Fonagy & Target, 1997). Expressed as a model of social cognition, mentalization theory integrates developmental research in attachment, theory of mind and psychoanalytic concepts. It builds on the assumption that in order to generate a representational system for internal emotional states, the infant must first internalize the representation of the caregiver's reflection of her or his experience (Gergely & Watson, 1996). However, mirroring alone, defined as contingency in time, space and emotional tone, is not enough. The mirroring has to be marked, or exaggerated, in order for the infant to understand the

caregiver's display as part of his experience rather than an expression of the adult (Fonagy et al., 2002; Gergely, 2002). This model states that the caregiver's marked and contingent mirroring helps the child convert sensory experience into contained awareness, or in other words, facilitates the child's capacity to mentalize. There is evidence to suggest that the absence of marked contingent mirroring of the infant's internal states is associated with later impairments of self-regulation and disorganized attachment (Fonagy et al., 2002; Gergely, & Koós, 2001; Gergely, Koos, & Watson, 2002).

The link between attachment and mentalization was investigated by a number of studies. The majority of the research showed that the quality of a child's primary attachment relationship was predictive of his or her mentalization capacity (Raikes & Thompson, 2006; Steele, Steele, Croft & Fonagy, 1999; Fonagy & Target, 1997). It should be noted, however, that not all studies find this relationship and that it is more likely to be observed for emotion understanding than theory of mind (Fonagy & Bateman, 2007). It is hoped that the current study will contribute to a better understanding of the conceptual overlap between attachment and mentalization for narcissistic personalities.

The link between mentalization and personality pathology

There exists an extensive literature demonstrating that personality pathology is associated with characteristic patterns of thinking about self and self-in-relation-to-others (Blatt, Stayner, Auerbach, & Behrends, 1996; Kernberg, 1984; Fonagy, 1991; Blatt, 2008; Kernberg & Caligor, 2005; Levy, Meehan, Kelly, Reynoso, Weber, Clarkin & Kernberg, 2006). Working from an object relations perspective, Kernberg formulated a classification of character pathology that encompasses personality types arrayed along a severity continuum (1970/1989). Central to

Kernberg's personality organization system is the quality of an individual's mental representation of self and others (1989). Other authors have portrayed individuals suffering from personality disorder as "possessing problematic self-states, inadequate self-representations, restricted self-narratives, and poor self-reflection and self-regulatory strategies" (Dimaggio, Semerari, Carcione, Procacci, & Nicolo, 2006, p.610). Coming from a personality traits perspective, Livesley and Jang (2000) have conceptualized personality problems as emanating from three self-other realms: (1) the adaptive self-system, which allows for forming and maintaining integrated representations of self and others; (2) the capacity to form intimate relationships; (3) the ability to function effectively in society. Applying a social-cognitive line of thinking, Anderson and Cole (1990), found that individuals tend to create social categories based on their preexisting mental modes of significant others.

The notion that maladaptive patterns of mentally representing self and others serve as the substrates for personality pathology are common to a wide range of conceptualizations, such as psychodynamic, interpersonal, social-cognitive and trait also found its way into the DSM-5 proposal (Skodol & Bender, 2009). By defining personality psychopathology as "emanating from disturbances in thinking about self and others," the proponents of the DSM-5, Section III (2013) validate rich theories on personality and psychopathology that have not been duly reflected in the phenomenological description of the DSM-IV personality disorders. Additionally, by including self and interpersonal impairments as core criteria for personality pathology, the revised diagnostic manual makes room for a more effective integration of clinical diagnosis and empirically supported theories. In particular, the new wording entails the recognition of the prominent roles of reflective functioning and self- and emotion regulation mechanisms in

contemporary psychodynamic theories (Fonagy, 1991; Fonagy & Bateman, 1997; Blatt, 2008; Kernberg & Caligor, 2005; Levy et al., 2006).

Related borderline personality disorder research

Over the past decade, clinical research interest in borderline personality disorder and mentalization impairments developed largely in tandem, leading to conceptually and empirically interrelated constructs. It is therefore not surprising that the majority of studies on RF and personality pathology concentrate on the BPD population. According to Kernberg's structural theory of borderline personality organization (1975), both, narcissistic and borderline personality constructs can be conceptualized in terms of poorly integrated representations of self and others as well as undifferentiated affect. Diagnostically, this translates into high rates of overlap between NPD and other Axis II disorders, especially within the dramatic cluster of histrionic, antisocial and borderline (cluster B personality disorders; Ronningstam, 2005; Gunderson, Ronningstam, & Smith, 1991).

A comparison between BPD and NPD diagnoses in a sample of treatment refractory patients, showed that patients with NPD present with more selected Axis II disorders and traits, specifically antisocial, histrionic, and passive-aggressive traits, but lower levels of anxiety and depression as well as fewer mood and anxiety disorders. In fact, the authors found that the more narcissistic traits present, the more Axis II disorders are present, but the fewer Axis I disorders are present (Clemence, Perry, & Plakun, 2009).

At the same time, there also exist some clear phenomenological distinctions between narcissistic and borderline presentations, such as the narcissist's higher social relatedness and greater overall functioning (Kernberg, 1975; Gunderson & Ronningstam, 2001). While findings on BPD and mentalization can therefore provide informative data for the current study, several

authors also caution that overly inclusive clusters of personality impairments hinder effective empirical research and result in muddled treatment implications (Pincus & Lukowitsky, 2010; Cain, Pincus & Ansell, 2007).

Nevertheless, when it comes to distortions in thinking about self and others, BPD research provides valuable information on central impairments of this personality malfunctioning. Notably, several studies have found that while borderline patients' representations of self and others are often more elaborated and complicated compared to those of other patients, they also include more distorted and openly hostile content (Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990). Similarly, facial expression studies have shown that BPD patients are significantly more likely to assign negative attributions and emotions to the picture of a face with a neutral expression (Wagner & Linehan, 1999).

Such difficulty integrating representations of themselves and others are also reflected in treatment settings. BPD patients struggle significantly more than patients with Axis I disorders to create a helpful mental image of the treatment provider and the therapeutic relationship (Bender, Farber & Geller, 1997; Zeeck, Hartmann, & Orlinsky, 2006). Likewise, if the treatment focuses on this difficulty by employing interpretation as the route to integration of these disparate perceptions and representations, as is the case in transference-focused psychotherapy (TFP), significant increases in RF were found as a function of treatment (Levy, Mehan, Keller, Reynoso, Weber, Clarkin & Kernberg, 2006).

Fonagy and Bateman (2007) elaborated on the concept of mentalization by proposing a complex relationship between early attachment, trauma and borderline personality disorder that incorporates three mechanisms by which mentalization becomes destabilized or impaired in BPD patients: first as a deficit, second as a defense and thirdly as a derailment due to dysregulated

affect (Fonagy & Bateman, 2007; Choi-Kahn & Gunderson, 2008). More recently, following the incorporation of neurobiological research, Fonagy and colleagues (2011, 2009) derived at a more complex theoretical paradigm that supports a developmental, bio-behavioral switch-model of the relationship between mentalization, stress and attachment. In addition to a highly sensitive activation of the attachment system, BPD is conceptualized as the phenomenological result of a low threshold for the deactivation of controlled mentalization, coupled with impairments in the ability to differentiate mental states of self and other (Fonagy, Luyten & Strathearn, 2011; Fonagy & Luyten, 2009).

A recent empirical study, aimed at examining the relationship and theoretical common ground of the concepts of personality organization (Kernberg, 1984, 1996) and that of mentalization (Fonagy, Gergely, Jurist, & Target, 2002; Fonagy & Target, 1996), found moderate associations between RF and the level of personality organization in a sample (N= 92) of female BPD patients (Fischer-Kern, Buchheim, Doering, Schuster, Taubner, Kapusta & Fonagy, 2010). In contrast, impairment in mentalizing capacity did not correspond to the severity of Axis I and Axis II pathology, a finding that the authors attributed to the “homogeneity” of the study sample” (Fischer-Kern et al., 2010, p. 406). In a previous study conducted by Bouchard and colleagues (2008), the investigators were able to show lower levels of mentalization to be significantly associated with the severity of both Axis I and Axis II pathology in a heterogeneous clinical and nonclinical sample (Bouchard, Lecours, Tremblay, Target, Fonagy, Schachter & Stein, 2008).

Narcissism and reflective functioning

In his extensive work on biopsychological origins of affect regulation, Schore (1994) suggested that patients with NPD lack “access to symbolic representation that can perform the important self-soothing, reparative functions encoded in evocative memory. They can not execute a reciprocal mode of autonomic control,” and “their ability to autoregulate affect are fundamentally impaired” (p. 429). Building their theory of mentalization on that proposed interface between genetics and environment, Fonagy, Gergely, Jurist and Target (2002) suggested that, “it is the manner in which the environment is experienced that acts as a filter in the expression of genotype into phenotype” (p.7). With regard to the etiology of narcissistic personality pathology, Fonagy et al. assume the following specific mirroring structure as predisposing a child to NPD:

When affect mirroring is appropriately marked but noncontingent, in that the infant’s emotion is misperceived by the caregiver, the baby will still feel the mirrored affect display to map onto his primary emotion state. However, as this mirrored state is incongruent with the infant’s actual feelings, the secondary representation created will be distorted. The infant will mislabel the primary, constitutional emotional state. The self-representation will not have string ties to the underlying emotional state. The individual may convey an impression of reality, but as the constitutional state has not been recognized by the caregiver, the self will feel empty because it reflects the activation of secondary representations of affects that lack the corresponding connections within the constitutional self.

(Fonagy et al., 2002, pp.10-11)

Growing out of these theoretical accounts are assumptions about the behavioral manifestations of these impairments, most notably, the need for individuals whose capacity for mentalization is not well-developed to use “controlling and manipulative strategies to restore

coherence to their sense of self” (Bateman & Fonagy, 2004, p.90). In this sense, the defensive inhibition of mentalization becomes apparent in the phenomenological presentation of the grandiose narcissist. There is, however, a paucity of empirical research to support these theoretical paradigms.

A recent study conducted by Fan et al. (2011) investigated the somewhat related concepts of decreased affective resonance (referred to as “empathy”) in subjects with high and low narcissistic traits. Psychological and neuroimaging data indicate higher degrees of alexithymia and lower deactivation during empathy in the insula in high narcissistic subjects (Fan, Wonneberger, Enzi, de Greek, Ulrich, Tempelmann, Bogerts, Doering, & Northoff, 2011). However, while empathy and mentalization share some conceptual ground, the two constructs overlap only partially. Both involve appreciation of mental states in others, yet empathy is primarily affectively focused and more other-oriented while mentalization is also a cognitive skill that is equally self and other oriented (Choi-Kain & Gunderson, 2008). The exploratory study by Fan et al. (2011) is thus informative as it confirms theoretical assumptions on narcissists’ decreased affective resonance, but it does not allow us to draw specific conclusions about narcissism’s relation to RF.

Diamaggio et al. (2008) explored the subjective experience of narcissistic patients through the analysis of psychotherapy session transcripts and found that the patients’ dominant states of mind were characterized by distrust towards others and feelings of being harmed or excluded (Dimaggio, Nicolo, Fiore, Centenero, Semerari, & Pedone, 2008). The data seems to support the assumption that a deactivation or suppression of the mentalizing process takes place during negative states of mind. The authors note that in particular, “unpleasant arousal may thus lead to anger, with the narcissistic person perceiving that the other has caused their suffering, in

turn biasing their perception that the latter is hostile and rejecting” (p. 477). For this reason, the quality of RF might serve as a valuable indicator for a better distinction between adaptive and non-adaptive narcissistic expressions.

In a recent publication by Bender, Morey and Skodol (2011) on various models for assessing levels of personality functioning in the revised DSM, the authors stressed that the ability to mentalize formed a crucial part in that exercise. They note, “specifically, impairments in mentalizing function make it difficult to create, maintain and use stable internal representations of self and other” (p.338). Furthermore, problems with the ability to mentalize have been identified as especially relevant to narcissistic and borderline difficulties, considering the association of these pathologies with difficulties in integrating multiple perspectives from self and other (Bender, 2012). In light of these considerations, the current study aims at providing further empirical knowledge about the interplay of three narcissistic expressions (grandiose, vulnerable, adaptive) and the capacity for reflective functioning.

6. Summary, Aims and Hypotheses

This study explores the relations of adaptive as well as pathological (grandiose and vulnerable) expressions of narcissism to attachment style and the capacity for mentalization (RF). Theoretical accounts support the notion that maladaptive patterns of mentally representing self and others serve as the substrates for narcissism. Specifically, insecure attachment status and poor integration of cognitive and affective aspects of mentalization are linked to pathological expressions of narcissism. However, very little empirical work has been done to investigate whether different phenotypic expressions of narcissism (adaptive, grandiose and vulnerable) differ in their relation to attachment and RF. Thus, this examination will offer a preliminary step for determining whether adaptive and non-adaptive levels of narcissism are predictive of attachment status and the capacity for mentalization.

The following aims and hypotheses are advanced to account for the expected differences:

Aim 1: To examine the association between attachment style and narcissistic personality traits (vulnerable, grandiose, adaptive).

Hypothesis 1:

1. All three types of narcissism (vulnerable, grandiose, adaptive) will be positively and significantly associated with attachment-related anxiety and avoidance. However, pathological narcissism (vulnerable or grandiose) will be more strongly related to attachment-related anxiety and avoidance than will adaptive narcissism.

Within the two subtypes of pathological narcissism:

- 1a. Vulnerable narcissism will be positively and more strongly related to anxious attachment than will grandiose narcissism.

- 1b. Grandiose narcissism will be positively and more strongly related to avoidant attachment than will vulnerable narcissism.

Aim 2: To examine the association between reflective functioning (RF) and narcissistic personality traits (vulnerable, grandiose, adaptive).

Hypothesis 2:

2. Pathological narcissism (vulnerable or grandiose) will be negatively and more strongly correlated with the capacity for reflective functioning (RF) than will adaptive narcissism.

Within the two subtypes of pathological narcissism:

- 2a. Vulnerable narcissism will be negatively and more strongly related to capacity for reflective functioning than will grandiose narcissism.
- 2b. Grandiose narcissism will be negatively related to both Other-Mentalizing and Self-Mentalizing. However, this negative relationship will be stronger for Self-Mentalizing.

CHAPTER 3: METHODS

Overview

For this study, participants were recruited from City University's Department of Psychology Research Subject Pool. The CCNY Psychology Department's website regularly posts ongoing studies, offering undergraduate students the opportunity to participate in current research projects. Participants must be at least 18 years of age and proficient in English in order to take part in the study. There were no other exclusion criteria. Participants received research credit for their participation. The study used an Internet based survey questionnaire to collect data. Informed consent was obtained from each participant through an online consent form. IRB approval was granted for all aspects of this study.

Participants

The sample is comprised of 345 participants, 36% are males and 64%, are females. On average, the sample is 21.08 years of age ($sd = 5.15$) and ranges from 18 to 63 years of age. The sample is ethnically and racially diverse with most of the respondents of Hispanic (32%), Asian (30%), Caucasian (14%) or African-American (10%) backgrounds. The remainder of the sample (14%) is comprised of "other" ethnic / racial backgrounds which include Native Americans, Native Hawaiians/Pacific Islanders, Mixed Races and "Others". With regard to their relationship statuses, 39% of the sample are currently in relationships, either dating or married, with the majority (61%) not currently in relationships, i.e., single (59%), divorced (1%) or separated (< 1%). The socio-economic background of the participants, as operationalized by yearly parental household income, indicates that most of the sample is middle class or lower

(<= \$50,000, 71%). With respect to religion, 29% report no religious affiliation, 36% identify as members of the Christian faith (Catholic or Protestant), 14% are Muslim, 7% are Hindus or Buddhists with the remainder of the sample (15%) reporting “Other” religious affiliations. Finally, 4% of the sample reports that they are currently in psychotherapy.

Procedure

The survey was converted into an electronic file and uploaded to a web-based data system specializing in Internet-based research for social science (see Appendix 1). Data were stored on a secure server to which only the principal investigator (PI) had access. The study used the working title “*In What Way Are You Special?*” and was uploaded to the CCNY Subject Pool. Interested participants who followed the link were presented with a detailed description of the research study, including the right to exit the survey at any time. Following the informed consent information, participants had the option to click “yes” to consent and to continue with the survey or “no” to decline participation and discontinue. A copy of the consent form is attached in Appendix 2. At the end of the survey participants were presented with a debriefing section, offering more information on the study’s purpose and explaining that the study title “*In What Way Are You Special?*” was kept intentionally vague in order not to influence participants’ responses (see Appendix 3). Participants were then offered a choice of allowing their data to be used for research purposes or withdrawing from the study altogether. Of four-hundred and thirty-one (n=431) participants who began the survey, two (n=2) refused to provide consent, eighty-three (n=83) failed to meet the criterion that they provide at least half of the information required for each measure, and one (n=1) requested that his/her data be removed from the database following the debriefing. Every participant who consented received research credit, irrespective

of whether they completed the survey. Once data collection was complete, the information was converted into an SPSS data file for analysis.

Measures

Demographic Information

The *demographic questionnaire* consisted of basic demographic questions such as gender, age, race/ethnicity, religion, parental household income, relationship status and whether participants were currently in psychotherapy.

Grandiose Narcissism

Pathological Narcissism Inventory – (PNI)

The PNI (Pincus et al., 2009) is a 52-item, multifactorial questionnaire that assesses seven dimensions of pathological narcissism: Contingent Self-Esteem (CSE); Exploitativeness (EXP); Self-Sacrificing Self-Enhancement (SSSE); Hiding the Self (HS); Grandiose Fantasy (GF); Devaluing (DEV) and Entitlement Rage (ER). Grandiose PNI subscales were associated with vindictive, domineering, intrusive, and overly nurturing interpersonal problems, and vulnerable PNI subscales were associated with cold, socially avoidant, and exploitable interpersonal problems (Pincus et al., 2009). In a small clinical sample, PNI scales exhibited significant associations with parasuicidal behavior, suicide attempts, homicidal ideation, and several aspects of psychotherapy utilization.

Confirmatory factor analysis supports the construct validity of the PNI as a measure of pathological narcissism (Pincus, Ansell, Pimentel, Cain, Wright, & Levy, 2009). The PNI

correlated negatively with self-esteem and empathy, and positively with shame, interpersonal distress, aggression, and borderline personality organization.

Each of the seven subscales demonstrated accepted levels of scale score reliability, CSE $\alpha=.95$; EXP $\alpha=.84$; SSSE $\alpha=.73$; HS $\alpha=.80$; GF $\alpha=.92$; DEV $\alpha=.91$; ER $\alpha=.91$, (Tritt, Ryder, Ring & Pincus, 2010). In the current study, the internal consistency reliability of the “total” PNI scale score is $\alpha=.94$ which is evidence of excellent reliability.

Pathological Narcissism Inventory – Grandiosity

The PNI grandiosity subscale, is comprised of three of the seven subscales, i.e., *Grandiose Fantasy (GF)*, *Exploitative (EXP)*, *Self-Sacrificing-Self-Enhancement (SSSE)* that have been identified in previous confirmatory factor analyses as a higher order component reflecting narcissistic grandiosity (Wright et al., 2010). The grandiose subscales are correlated with other measures of grandiose narcissism, most notably the *Exploitativeness and Entitlement (E/E)* component of the NPI and manifest good internal consistency (Pincus et al., 2009). In the current study these three scales (18 items) were used to operationalize grandiose narcissism. An internal consistency reliability analysis of the eighteen items finds that its reliability is quite satisfactory ($\alpha=.86$).

Vulnerable Narcissism

Pathological Narcissism Inventory – Vulnerability

The PNI's (Pincus et al., 2009) remaining four subscales, *Contingent Self Esteem (CSE)*, *Hiding the Self (HS)*, *Devaluing (DEV)* and *Entitlement Rage (ER)*, were identified in previous confirmatory analysis as the four sub-scales identifying vulnerable narcissism (Pincus et al., 2009; Wright et al., 2010). The vulnerable scales are correlated with other measures of

vulnerable narcissism and manifest good internal consistency (Pincus et al., 2009). In the current study these four scales (34 items) were used to operationalize vulnerable narcissism. The 34 items comprising these four scales were submitted to an internal consistency reliability analysis. The Cronbach's alpha coefficient is ($\alpha=.94$) which indicates substantial reliability.

Adaptive Narcissism

Narcissistic Personality Inventory (NPI)

The NPI (Raskin & Terry, 1988) is a 40-item self-report inventory designed to measure trait narcissism in non-clinical populations. Each item presents a pair of self-attitude statements and respondents were asked to choose the one statement they agree with most (forced-choice). Previous factor analyses identified 33 items, represented by the three components *Leadership/Authority (LA)*, *Superiority/Arrogance (SA)* and *Self-Absorption/Self-Admiration (SS)* as capturing healthy adaptive functioning (Emmons, 1984, 1987; Watson et al., 1992). For this reason, in the current study only these three components (33 items) were used to operationalize adaptive narcissism. The fourth component, *Exploitativeness and Entitlement (E/E)*, comprised of 7 items) identified by previous factor analysis as capturing the more pathological features of the narcissistic personality (Watson et al., 1992), was not included in the measure on adaptive narcissism used in this study. In the current study, the internal consistency reliability of this measure is ($\alpha=.68$), somewhat lower than has been the case for the other two measures of narcissism. In part, this may be the case because seven of the original 40 items have been deleted in this investigation.

Adult Attachment Measures

Experience of Close Relationship Scale Revised (ECR-R)

The ECR-R (Brennan, Clark, & Shaver, 1998) is a 36-item self-report measure. Eighteen items comprise the attachment-related avoidant scale, measuring discomfort with interpersonal closeness and depending on others. The other half of the scale, an additional 18 items, comprises an attachment-related anxious style, measuring fear of rejection or abandonment by others. Participants were asked to indicate how true each statement was of their current or past relationships, using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The measure was scored in accordance with Brennan et al.'s (1998) scoring instructions for the two dimensions, Attachment Avoidance and Attachment Anxiety. Higher scores reflect greater avoidance/anxiety. Previous research confirms the high reliability and validity of the two ECR-R scales (Shaver & Mikulincer, 2002). In the current study, the internal consistency reliability (alpha) coefficient for Anxious Attachment subscales was quite substantial ($\alpha=.90$). The internal consistency reliability coefficient for Avoidant Attachment was lower, i.e., ($\alpha=.66$). The correlation between the two scales in the study sample was $r = -.05$, $p > .05$ which indicates that the two subscales of the ECR are statistically independent as expected.

Reflective Functioning

Reflective Functioning Questionnaire (RFQ)

The Reflective Functioning Questionnaire (RFQ; Moulton-Perkins, Rogoff, Luyten & Fonagy, 2011) is a 54-item self-report measure on the ability to perceive and interpret human behavior in terms of intentional mental states. It is currently under development but there is some preliminary psychometric information available albeit based on a preliminary, eighteen item

version of this measure. Using this preliminary measure, the internal consistency reliability coefficients for the RFQ18TOTAL ($\alpha=.82$), RFQ18SELF ($\alpha=.75$), and the RFQ18OTHER ($\alpha=.76$) support the reliability of this preliminary version of the RFQ54. In the same report validity data for the preliminary measure is provided in the form of “validity correlations” with other clinical measures. For example, convergent construct validation is supported by positive, statistically significant correlations with Empathy ($r = .48, p < .001$) and Mindfulness ($r = .40, p < .001$). Divergent construct validation is supported by statistically significant, negative correlations with a measure of Eating Disorders ($r = -.36, p < .001$), Disability ($r = -.44, p < .001$), Alexithymia ($r = -.37, p < .001$), Borderline Personality Disorder ($r = -.54, p < .001$) and General Psychopathology ($r = -.51, p < .001$). In the current study, internal consistency reliability for the RFQ54TOTAL ($\alpha=.86$), RFQ54SELF ($\alpha=.63$), and the RFQ54OTHER ($\alpha=.75$) support the reliability of the RFQ54.

Current Psychological Functioning Measure

Brief Symptom Inventory (BSI)

The BSI (Derogatis, 1975) is a 53-item self-report measure of psychological symptoms that includes specific symptom scales and a global severity index (GSI). The BSI has been used to study the relations between these symptoms and an array of constructs. In the context of the present study only the global severity index will be used. Based on the current study sample, its internal consistency reliability is excellent ($\alpha=.97$).

Personality Disorder

Structured Clinical Interview for DSM-IV Personality Disorders–Personality Questionnaire (SCID-II-PQ).

The SCID-II-PQ (First, Gibbon, Spitzer, Williams, & Benjamin, 1997) is a 119-item self-report questionnaire designed to assess the diagnostic criteria for the DSM-IV PDs. Each criterion is being evaluated by specified questions and subsequent probes. This scale has been widely used in personality disorder research (Bagby, Vachon, Bulmash, & Quilty, 2008). In order to derive categorically based DSM-IV Axis II PD diagnoses, the SCID-II/PQ can be scored on dimensional symptom count scores. A diagnosis for any given personality disorder is conferred if the number of symptoms endorsed satisfies the diagnostic symptom criteria according to DSM-IV. The screening questionnaire version of the clinical interview is expected to produce a certain amount of false positives in comparison to interview ratings, but only few false negatives. Although its development was originally intended to save time in routine clinical practice, its format does offer considerable potential for use as a diagnostic screen in the context of a survey (Ullrich, Deasy, Smith, Johnson, Clarke, Broughton & Coid, 2008).

CHAPTER 4: RESULTS

1. Relationships Among Narcissism Measures:

Prior to evaluating the study's hypotheses, it is important to examine the relationships among the narcissism measures, which are the focal measures in the current investigation. As expected, the total score of the PNI, which incorporates both the grandiose and the vulnerable dimensions of pathological narcissism, is modestly, albeit significantly correlated with the adaptive narcissism scale which is the total score of the NPI measure minus the seven E/E items ($r = .19, p < .001$). With respect to the subscales of the PNI, the grandiosity subscale is positively, moderately and significantly related to the adaptive narcissism scale ($r = .34, p < .001$) whereas, as expected, the vulnerable subscale displays no relationship to the adaptive narcissism measure ($r = -.01, p = .91$).

The statistical significance of the difference between the correlations of grandiose subtype to adaptive ($r = .34$) and vulnerable subtype to adaptive ($r = -.01$) is shown by using Fisher's z-transformation. The resulting z-value of 4.77 (greater than +1.96) indicates that the difference between the two correlations is statistically significant.

Finally, the two subscales of the pathological narcissism measure, again, grandiosity and vulnerability, are positively, moderately and significantly related to each other ($r = .56, p < .001$). The findings are summarized in Table 1:

Table 1
Correlation Matrix among Narcissism Measures

	Pathological Narcissism (PNI Total)	Pathological Grandiosity (PNI subscale)	Pathological Vulnerability (PNI subscale)	Adaptive Narcissism (NPI - E/E)
Pathological Narcissism (PNI Total)	1.00	.880***	.886***	.189***
Pathological Grandiosity (PNI subscale)	.880***	1.00	.558***	.344***
Pathological Vulnerability (PNI subscale)	.886***	.558***	1.00	-.006
Adaptive Narcissism (NPI - E/E)	.189***	.344***	-.006	1.00

*** $p < .001$

2. Validity Correlations of Narcissism Measures:

The following section presents selected correlations between narcissism, attachment, reflective functioning and various measures of psychopathology, i.e., selected scales and subscales from the Brief Symptom Inventory and the SCID Screening Measure. The purpose of this section is to explore the -convergent validity of the “core” measures used in this study. The validity correlations are presented in Table 2 below.

The Brief Symptom Inventory was previously shown to be a valid and reliable measure of psychopathology. As such, it is almost certainly a “stronger” convergent validation criterion than is the SCID Screening Measure, which is mainly intended for use as a brief screening measure to be followed up with an interview administered by a clinician (Ullrich, Deasy, Smith, Johnson, Clarke, Broughton, & Coid, 2008). Moreover, within the BSI, the GSI is the most

“global” measure of psychopathology available in this investigation. As such, we first consider the validity of the narcissism, attachment and reflective functioning measures, i.e., the “focal” measures in this investigation with respect to the BSI-GSI.

As seen in Table 2 below, the pathological narcissism measures are positively and significantly related to the BSI-GSI measure, as expected. Specifically, pathological narcissism, which is comprised of both pathological grandiosity and pathological vulnerability, is positively, moderately strongly and significantly related to the BSI-GSI ($r = .47, p < .001$). Moreover, each of its components is also positively and significantly related to the BSI-GSI although the “strength” or magnitude of these associations, varies. That is, pathological vulnerability is moderately strongly, positively and significantly related to the BSI-GSI ($r = .55, p < .001$). Pathological grandiosity is somewhat more modestly correlated with this convergent validation measure ($r = .28, p < .001$). As also displayed in this table, the three pathological narcissism measures are positively and consistently related to each of the selected BSI subscales in this table. Turning to the SCID Screening Measure as a validation criterion, the three pathological narcissism measures are, again, positively and significantly related to the Borderline Personality Disorder cluster as well as the broader Cluster B measure which not only includes Borderline Personality Disorder but also Histrionic, Narcissistic and Antisocial Personality Disorder. These correlations range from “modest” correlations ($r = .24, p < .001$) to generally “moderate” correlations ($r \geq .30$).

With respect to adaptive narcissism, note that its correlations with the array of psychopathology validation measures are generally insignificant and hover around zero. Perhaps the most salient comment about these correlations is that they are all less positive than those seen for the three pathological narcissism measures. That is to say, adaptive narcissism does not

“predict” psychopathology as do the pathological narcissism measures. In this sense, Pincus’ assertion that adaptive narcissism is discriminately different from pathological narcissism is supported by the differential pattern of correlations seen in this study (Pincus et al., 2009; Pincus & Lukowitsky, 2010).

With respect to the attachment measures, the ECR-Anxiety subscale, as expected, exhibits positive, statistically significant correlations ranging in magnitude from “modest” to “moderate” with the various psychopathology validation measures. On the other hand, the ECR-Avoidance subscale is not significantly or generally positively correlated with the psychopathology measures, contrary to expectation.

Finally, with regard to the reflective functioning measures, these measures do not exhibit the expected negative correlations with the psychopathology validation measures. More specifically, and counter-intuitively, the reflective functioning total score is positively, albeit weakly, related to the BSI-GSI ($r = .11$, $p = .04$), BSI-Interpersonal Sensitivity ($r = .12$, $p = .03$), BSI-Obsessive-Compulsive ($r = .17$, $p < .01$) as well as the Borderline Personality Disorder cluster score of the SCID-II ($r = .15$, $p < .01$) and the Cluster B score ($r = .18$, $p = .001$). Neither of the subscale scores of the reflective functioning measure, i.e., Self- and Other-Mentalizing, generally exhibit significant correlations with either the Brief Symptom Inventory measures or the SCID Screening Measure components.

The statistical significance of the difference between the correlations of vulnerable subtype to GSI ($r = .55$) and adaptive narcissism to GSI ($r = -.034$) and is shown by using Fisher's z-transformation. The resulting z-value of 8.53 (greater than +1.96) indicates that the difference between the two correlations is statistically significant. The z-value of grandiosity to GSI and adaptive to GSI is 4.18, which is less pronounced but statistically significant.

The findings are summarized in Table 2:

Table 2

Validity (Pearson) Correlations Between Narcissism, Attachment, RF and the Brief Symptom Inventory and the SCID – Screening Measure

	GSI	BSI-IS	BSI-OC	BSI-PHOB	BSI-PARAN	BPD	CLUSTER-B
Pathological Narcissism (PNI Total)	.468***	.439***	.361***	.328***	.417***	.393***	.341***
Pathological Grandiosity (PNI subscale)	.278***	.228***	.192***	.199***	.280***	.243***	.289***
Pathological Vulnerability (PNI subscale)	.545***	.543***	.442***	.377***	.455***	.449***	.312***
Adaptive Narcissism (NPI - E/E)	-.034	-.095	-.084	.005	.080	.022	.151*
ECR – Anxiety	.392***	.367***	.339***	.252***	.268***	.415***	.277***
ECR – Avoidance	-.051	-.029	.017	-.006	-.108*	.016	.091
RF- Total	.110*	.116*	.166**	-.002	.009	.154**	.183***
RF – Self	-.054	.014	-.007	-.085	-.083	-.046	.005
RF – Other	.015	.005	.087	-.076	-.021	.047	.148**

Note. N=345. GSI=Global Severity Index; BSI-IS=Brief Symptom Inventory-Interpersonal Sensitivity; BSI-OC= Brief Symptom Inventory-Obsession-Compulsion; BSI-PHOB= Brief Symptom Inventory-Phobic Anxiety; BSI-PARAN= Brief Symptom Inventory-Paranoid Ideation; BPD=Borderline Personality Disorder on SCID Screening Measure; Cluster B=Histrionic, Borderline, Narcissistic and Antisocial Personality Disorder on SCID Screening Measure.

*p < .05; **p < .01; ***p < .001

3. A Priori Hypotheses on Narcissism and Attachment:

Hypothesis 1 predicted that pathological narcissism (grandiose or vulnerable) would be positively and more strongly related to attachment-related anxiety and avoidance than would adaptive narcissism.

This hypothesis was largely supported for attachment anxiety, but not for attachment avoidance.

Correlational Analysis for Anxious Attachment:

At the bivariate level, each of the three measures of narcissism is significantly related to anxious attachment. Specifically, pathological vulnerability is positively, moderately, and significantly related to anxious attachment ($r = .48, p < .001$), as is pathological grandiosity ($r = .22, p < .001$), although the former is noticeably larger. Adaptive narcissism is also significantly related to anxious attachment ($r = -.21, p < .001$) although its magnitude, like pathological grandiosity, is modest. Interestingly, this relationship is inverse rather than direct and indicates that individuals reporting higher levels of adaptive narcissism are less, not more, anxious in their relationships.

The statistical significance of the difference between the correlations of vulnerable subtype to ECR-Anxiety ($r = .48$) and adaptive narcissism to ECR-Anxiety ($r = -.21$) and is shown by using Fisher's z-transformation. The resulting z-value of 9.53 (greater than +1.96) indicates that the difference between the two correlations is statistically significant. The z-value of grandiosity to ECR-Anxiety and adaptive to ECR-Anxiety is 5.68, which is less pronounced but statistically significant.

The findings are displayed in Table 3:

Table 3

Pearson Correlations Among ECR-Attachment Anxiety, Pathological Grandiosity, Pathological Vulnerability and Adaptive Narcissism

	ECR-Anxiety	Pathological Grandiosity (PNI subscale)	Pathological Vulnerability (PNI subscale)	Adaptive Narcissism (NPI - E/E)
ECR-Anxiety	1.00	.219***	.475***	-.209***
Pathological Grandiosity (PNI subscale)	.219***	1.00	.558***	.344***
Pathological Vulnerability (PNI subscale)	.475***	.558***	1.00	-.006
Adaptive Narcissism (NPI - E/E)	-.209***	.344***	-.006	1.00

***p < .001

Multiple Regression Analysis for Anxious Attachment:

A hierarchical, multiple regression analysis was conducted in order to estimate the relative predictive power associated with pathological and adaptive narcissism. The two pathological predictors, taken as a “set”, are significantly related to, i.e., predictive of, anxious attachment ($R^2_{\text{Change}} = .23$, $F = 52.68$, $df = (2,341)$, $p < .001$). Although this is also the case for adaptive narcissism ($R^2_{\text{Change}} = .04$, $F = 18.91$, $df = (1,341)$, $p = .000$), the relative predictive power of the two measures of pathological narcissism is considerably greater than that of adaptive narcissism, which is consistent with the claim made in hypothesis 1.

Hypothesis 1a predicted that vulnerable narcissism would be positively and more strongly related to anxious attachment than would grandiose narcissism, controlling for adaptive narcissism. This hypothesis was fully supported.

A more focused examination of the specific components of pathological narcissism via inspection of the standardized partial regression coefficients (“beta weights”), finds that vulnerable narcissism ($\beta = .45$, $p < .001$) is, as predicted, more strongly related to anxious attachment than is grandiose narcissism. Grandiose narcissism is neither positively nor significantly related to anxious attachment ($\beta = .04$, $p = .47$).

Adaptive narcissism is, contrary to expectation, negatively, significantly albeit weakly, related to anxious attachment ($\beta = -.22$, $p < .001$). In other words, higher levels of adaptive narcissism correlate with lower scores on attachment anxiety.

To conclude, pathological narcissism is a stronger predictor of anxious attachment than is adaptive narcissism but only vulnerable narcissism is positively and significantly related to attachment anxiety. The findings are summarized in Table 4:

Table 4

Hierarchical Regression of ECR-Attachment Anxiety on Pathological Grandiosity, Pathological Vulnerability and Adaptive Narcissism

Variable	B	SE (B)	β
Pathological Grandiosity (PNI subscale)	.067	.092	.044
Pathological Vulnerability (PNI subscale)	.659	.085	.449***
Adaptive Narcissism (NPI-E/E)	-.063	0.15	-.222**

***p < .001; **p < .01

Hypothesis 1b predicted that grandiose narcissism would be positively and more strongly related to avoidant attachment than will vulnerable narcissism.

This hypothesis was not supported by the current findings.

Correlational Analysis for Avoidant Attachment:

At the bivariate level, contrary to expectations, neither of the pathological aspects of narcissism, i.e., vulnerability ($r = .05, p = .36$) and grandiosity ($r = -.02, p = .72$), displays any relationship to attachment avoidance.

The findings are summarized in Table 5.

Table 5

Pearson Correlations Among ECR-Attachment Avoidance, Pathological Grandiosity, Pathological Vulnerability and Adaptive Narcissism

	ECR-Avoidance	Pathological Grandiosity (PNI subscale)	Pathological Vulnerability (PNI subscale)	Adaptive Narcissism (NPI - E/E)
ECR-Avoidance	1.00	.050	-.019	.148
Pathological Grandiosity (PNI subscale)	.050	1.00	.558**	.344***
Pathological Vulnerability (PNI subscale)	-.019	.558**	1.00	-.006

***p < .001

**p < .01

Multiple Regression Analysis for Avoidant Attachment:

Again, a hierarchical, multiple regression analysis was conducted to estimate the relative predictive power associated with pathological and adaptive narcissism. The two pathological predictors, taken as a “set”, are not significantly related to, i.e., predictive of, avoidant attachment ($R^2_{\text{Change}} = .00$, $F = 0.09$, $df = (2,341)$, $p = .92$). However, this is not the case for adaptive narcissism ($R^2_{\text{Change}} = .02$, $F = 5.78$, $df = (1,341)$, $p < .02$), which is statistically significant but rather modestly related to avoidant attachment. Visual inspection of the specific components of pathological narcissism via the standardized partial regression coefficients finds that both vulnerable narcissism ($\beta = -.03$, $p = .68$) and grandiose narcissism ($\beta = .02$, $p = .82$) confirm the set-wise result reported above. With respect to adaptive narcissism, its relationship

to avoidant attachment is, as reported above, statistically significant but rather modest ($\beta = .14$, $p = .02$).

By way of summary, contrary to expectation, pathological narcissism is not a stronger predictor of avoidant attachment than is adaptive narcissism. In fact, the standardized regression coefficients for both vulnerable and grandiose narcissism are statistically insignificant. With respect to adaptive narcissism, and consistent with expectation, it is positively and significantly related to avoidant attachment although modestly so.

The findings are summarized in Table 6.

Table 6
Hierarchical Regression of ECR-Attachment Avoidance on Pathological Grandiosity, Pathological Vulnerability and Adaptive Narcissism

Variable	B	SE (B)	β
Pathological Grandiosity (PNI subscale)	.014	.061	.016
Pathological Vulnerability (PNI subscale)	-.023	.056	-.028
Adaptive Narcissism (NPI - E/E)	-.023	.019	.142*

* $p < .05$

4. A Priori Hypotheses on Narcissism and Reflective Functioning (RF):

Hypotheses 2 predicted that pathological narcissism (vulnerable or grandiose) would be negatively and more strongly correlated with the capacity for reflective functioning (RF) than would adaptive narcissism. This hypothesis was unsupported by the findings.

Correlational Analysis for RF:

At the bivariate level, two of the three measures of narcissism are significantly related to reflective functioning. Contrary to expectation, pathological grandiosity exhibits no relationship to reflective functioning ($r = .06, p = .31$). Also, pathological vulnerability is, counter-intuitively, positively albeit weakly and significantly related to reflective functioning ($r = .14, p < .02$). However, consistent with expectation, adaptive narcissism is negatively, again weakly and significantly related to reflective functioning ($r = -.13, p < .02$). See Table 7 below.

Table 7
Pearson Correlations Among Reflective Functioning (RF), Pathological Grandiosity and Pathological Vulnerability

	RF Total	Pathological Grandiosity (PNI subscale)	Pathological Vulnerability (PNI subscale)	Adaptive Narcissism (NPI - E/E)
RF Total	1.00	.055	.135*	-.133*
Pathological Grandiosity (PNI subscale)	.055	1.00	.558***	.344***
Pathological Vulnerability (PNI subscale)	.135*	.558***	1.00	-.006
Adaptive Narcissism (NPI - E/E)	-.133*	.344***	-.006	1.00

* $p < .05$; *** $p < .001$

Multiple Regression Analysis for RF:

A hierarchical, multiple regression analysis was conducted in order to estimate the relative predictive power associated with pathological and adaptive narcissism. The two pathological predictors, taken as a “set”, are significantly related to, i.e., predictive of, reflective functioning ($R^2_{\text{Change}} = .02$, $F = 3.38$, $df = (2,341)$, $p < .04$). This is also the case for adaptive narcissism ($R^2_{\text{Change}} = .02$, $F = 6.34$, $df = (1,341)$, $p < .02$), but relative predictive power of the two measures of pathological narcissism is essentially the same as that of adaptive narcissism, which is inconsistent with the claim made in hypothesis 2.

Hypotheses 2a predicted that - within the two subtypes of pathological narcissism - vulnerable narcissism would be negatively and more strongly related to reflective functioning than would grandiose narcissism.

This hypothesis was not supported by the findings.

A focused examination of the specific components of pathological narcissism via inspection of the standardized partial regression coefficients (“beta weights”), finds that vulnerable narcissism ($\beta = .11$, $p < .11$) is not, as predicted, significantly related to reflective functioning. Also, pathological grandiosity is not significantly related to reflective functioning ($\beta = .05$, $p = .52$).

By way of summary, contrary to expectation, pathological narcissism is not a stronger predictor of reflective functioning than is adaptive narcissism. Neither pathological narcissism nor adaptive narcissism is a predictor of reflective functioning. Only adaptive narcissism is significantly, albeit weakly associated with RF.

The findings are summarized in Table 8.

Table 8
Hierarchical Regression of Reflective Functioning (RF) on Pathological Grandiosity, Pathological Vulnerability and Adaptive Narcissism

Variable	B	SE (B)	B
Pathological Grandiosity (PNI subscale)	2.064	3.226	.045
Pathological Vulnerability (PNI subscale)	4.853	2.958	.109
Adaptive Narcissism (NPI - E/E)	-1.279	.508	-.147*

*p < .05

Hypothesis 2b predicted that grandiose narcissism would be negatively related to both Other-Mentalizing and Self-Mentalizing. However, this negative relationship was predicted to be stronger for Self-Mentalizing.

This hypothesis was not supported by the data.

The partial correlations between each of the two dimensions of reflective functioning and grandiosity are not significant. Specifically, the partial correlation between pathological grandiosity and Self-Mentalizing, controlling for Other-Mentalizing is partial $r = -.02$, $p = .74$. Similarly, the partial correlation between pathological grandiosity and Other-Mentalizing, controlling for Self-Mentalizing is partial $r = .00$, $p = .99$. Neither of the two dimensions of reflective functioning is negatively related to pathological grandiosity and neither partial correlation is statistically significant.

Table 9:

Comparison of Narcissism Subtypes by Race / Ethnicity

		N	Mean	Standard Deviation
Pathological Narcissism	African American	36	1.54	.60
	Hispanic	109	1.49	.67
	White	47	1.55	.61
	Asian	102	1.67	.67
Pathological Grandiosity	African American	36	1.86	.69
	Hispanic	109	1.76	.74
	White	47	1.81	.74
	Asian	102	1.86	.74
Pathological Vulnerability	African American	36	1.22	.71
	Hispanic	109	1.23	.76
	White	47	1.28	.66
	Asian	102	1.48	.75
Adaptive Narcissism	African American	36	9.26	3.77
	Hispanic	109	8.50	3.8
	White	47	7.76	4.20
	Asian	102	6.69	3.65

CHAPTER 5: DISCUSSION

The present study assessed the relationship of three distinct narcissistic expressions (grandiose, vulnerable, adaptive) to attachment style and the capacity for reflective functioning (RF). This project has generated two important clusters of findings: 1) In this sample, pathological levels of narcissism are predictive for anxious attachment, but not for avoidant attachment. Adaptive narcissism, on the other hand, appears to offset [mitigate] attachment anxiety. 2) The three expressions of narcissism (grandiose, vulnerable, adaptive) are not distinguishable by levels of reflective functioning. These results will be discussed in detail below.

1. Differentiating between narcissistic expressions

Prior to a more in-depth discussion of the results pertaining to the study's core hypotheses, it is essential to take a closer look at the pattern of convergence and divergence among the three narcissistic expressions. Correlational analysis explored the relationship between the narcissism measures used in this study. The present findings contribute to the growing evidence of divergent conceptualization of pathological versus adaptive narcissism. The PNI was constructed with the intention to assess the more vulnerable characteristics of narcissism in the clinical literature that were not assessed by the NPI or other measures emphasizing overt grandiosity (Cain, Pincus & Ansell, 2008). In the present study, as expected, the PNI total score was only modestly correlated with the NPI minus the Entitlement/Exploitation (E/E) factor (previous research has shown that the NPI E/E factor represents the core of pathological narcissism, e.g. Emmons, 1984, 1987; Watson et al., 1992; Besser & Priel, 2010).

More importantly, the PNI vulnerable subscale exhibited no correlation at all with the

NPI. These findings support the claim by recent clinical theory and research that adaptive and pathological narcissistic expressions display potentially distinct dimensions of personality (Pincus et al., 2009; Tritt et al., 2010; Miller et al., 2010).

It is important to keep in mind that in this study, the NPI scoring procedure was intentionally manipulated by leaving out those items that comprise the Entitlement/Exploitative (E/E) NPI factor, due to their association with maladjustment (Watson et al., 2005). The NPI total score has been repeatedly criticized as reflecting a confusing mix of adaptive and maladaptive content (Emmons, 1984, 1987; Watson, 2005; Tritt et al., 2009). Other researchers have previously recommended manipulating the NPI measure to assess both “healthy” and “unhealthy” forms of narcissism (e.g. Horton, Bleau, & Drwecki, 2006). Besser and Priehl (2010), for example, extracted and used solely the E/E subscale to measure grandiose narcissism, denoting the NPI Entitlement/Exploitative element as the “core of pathological narcissism” (p. 884).

Associations with relevant convergent constructs in the current study for both pathological and adaptive expressions of narcissism exhibited a pattern in line with this claim. While pathological narcissism (PNI), and in particular its vulnerability subscale, were highly correlated with themes of psychological dysfunction (.47 and .55 respectively), adaptive narcissism [NPI minus E/E] displayed no correlational pattern with overall dysfunctional symptomatology. These convergent correlates of the present study provide further evidence that the NPI hones in on more adaptive personality characteristics, by assessing a self-confident, non-distressed, yet arrogant self presentation (see also Miller & Campbell, 2008). It is also possible that adaptive narcissists are generally less aware of their symptoms as well as less likely to report any self-perception that could be interpreted as weak or negative (this aspect is discussed in more

detail under ‘Limitations’ below).

With regard to borderline personality organization, the results of this study displayed moderately strong correlational patterns between pathological narcissism (PNI total score), in particular its vulnerability subtype, and BPD (.39 and .45 respectively). Miller and his colleagues (2010) recently analyzed the overlap between these constructs and identified a construct that they labeled “Vulnerable Dark Triad,” comprised of Vulnerable Narcissism, Factor 2 Psychopathology and BPD. They found that Vulnerable Narcissism manifested a nomological network that was nearly identical to the BPD’s “net” with similarity scores for vulnerable narcissism and BPD across 65 correlates as .93, suggesting nearly identical patterns of correlates (Miller et al., 2010). Recent empirical literature concerning heterogeneity within narcissism has shown that vulnerable narcissism scores are significantly related to BPD symptomatology (Pincus et al., 2009; Miller & Campbell, 2008). The current study adds to our understanding of how these two disorders are related and highlights, in particular, the overlap between the vulnerable narcissistic subtype and BPD. This speaks to the importance of continuing the work on expanding the DSM-IV predominantly grandiose diagnostic criteria in order to more accurately assess vulnerable NPD.

A closer look at the grandiosity subtype in the present sample, revealed a much more moderate correlational pattern (.24) with BPD. Most notably, however, adaptive narcissism as measured by the NPI-33, manifested null effects with borderline personality symptomatology in the present study. Adding the current findings to the extant literature on narcissism’s heterogeneity problem, lends further support to the argument that different pathways may lead to more broadly observable narcissistic attitudes and behavior. Arrogant and aggressive behavior

in individuals high on adaptive narcissism may be exercised manipulatively, but in a more controlled manner and for specific instrumental reasons (status, financial gain), whereas individuals who present with vulnerable narcissism may be more dependent on primitive narcissistic defenses for their overall affect and self regulation. In an empirical study on NPD and BPD treatment refractory patients, Clemence, Perry and Plakun (2009) analyzed the defenses associations and found that NPD patients predominantly used devaluation, omnipotence and idealization, while repression was negatively related to NPD. The authors also noted that NPD was significantly and negatively related to overall defensive functioning when BPD was partialled out (Clemence et al., 2009).

These findings serve as valuable contributions to narcissism research and clinical practice from a number of perspectives: First, they provide further evidence for the need of a better defined phenotypic differentiation between adaptive and pathological narcissism in future theoretical and empirical work on narcissistic personality. Second, results of this study suggest that of the three narcissistic expressions (adaptive, grandiose, vulnerable), it is foremost narcissistic vulnerability that is associated with dysfunctional symptomatology, severe personality pathology and attachment anxiety. This association between narcissistic vulnerability and psychopathology suggests an urgent need to widen the current DSM-IV NPD criteria to include and better capture patients who present predominantly with vulnerable characteristics.

2. Pathological Narcissism and Anxious Attachment

The results in this study replicated the established two-dimensional model of pathological narcissism as comprised of narcissistic grandiosity and narcissistic vulnerability (Wright, Lukowitsky, Pincus, & Conroy, 2010; Cain et al., 2008; Pincus et al., 2009; Pincus & Lukowitsky, 2009). Of the two components of pathological narcissism the vulnerable subtype was found to be a moderately strong predictor of anxious attachment (.48), whereas grandiose narcissism was only modestly predictive of attachment anxiety (.22), and the NPI-33 (“adaptive” narcissism) even exhibited a negative correlation (-.20). These differences in the associations of vulnerable, grandiose and adaptive narcissism to attachment anxiety suggest that the defenses available in vulnerable narcissism do not serve as a sufficient protection against relationship anxiety. In contrast, defenses seem to function moderately well for those with grandiose narcissism, and even more efficiently for those with adaptive narcissism, where there is an inverse relationship between narcissistic traits and attachment anxiety. In sum, the current findings support the conceptual distinction between vulnerable, grandiose and adaptive expressions of narcissism, and are consistent with recent research on different phenotypic presentations of narcissistic pathology (Miller et al., 2010; Tritt et al., 2010, Besser & Priel, 2010; Pincus et al., 2009; Dickinson & Pincus, 2003).

Taken together, this body of work suggests that individuals who are high on vulnerable narcissism are more sensitive to interpersonal rejection and hyper-vigilant for perceived criticism from others than are grandiose or adaptive narcissists. The current results add further empirical support to Tritt et al.’s (2010) affective reaction model associated with narcissistic coping strategies. Tritt and her colleagues (2010) regard vulnerability items as indicators of negative affect when a narcissistic need is not met, whereas grandiosity items are seen as a reflection of

positive affect associated with narcissistic self-enhancement strategies. In their sample of university students, they found that narcissistic vulnerability significantly predicted depressive and anxious temperament, an effect that remained after controlling for narcissistic grandiosity. These findings further support the research that found individuals with vulnerable NPD to be more symptomatic and more likely to be help seeking as well as to stay in treatment (e.g. Russ et al., 2008).

A closer look at some external trait associations of the two PNI scales may help to view the present findings in the context of a more nuanced clinical picture. Vulnerable characteristics (*Contingent Self-Esteem, Hiding the Self, Devaluing, Entitlement Rage*) correlate positively with feelings of shame and identity diffusion and negatively with self-esteem (Cain et al., 2008; Pincus et al., 2009). The positive relationship between high scores on Attachment Anxiety and maladaptive affective laden interpersonal style is largely consistent with past research (Fraley & Shaver, 1998; Shaver & Mikulincer, 2002).

Ronningstam (2009, p.113) aptly described the vulnerable narcissist as being “inhibited, shame-ridden, and hypersensitive shy type, whose low tolerance for attention from others and hypervigilant readiness for criticism or failure makes him/her more socially passive...”. The present study provides empirical foundation for this clinical observation by showing how individuals with vulnerable narcissism are more prone to affective dysregulation in the context of interpersonal relationships than are grandiose or adaptive narcissists. These findings couple well with recent research linking grandiose versus vulnerable narcissism to emotional reactivity. Besser and Priel (2010) found that high levels of vulnerable narcissism were significantly associated with greater change in negative outcomes in the face of a high-level interpersonal

threat, but not a high-level achievement threat. In contrast, in the high achievement-threat group, but not in the high interpersonal-threat group, grandiose narcissism significantly predicted greater change in negative outcomes (Besser & Priel, 2010).

Attachment theory holds that adults with higher levels of attachment anxiety report fearful experiences when significant others were not available during times of need (Ainsworth, 1989; Bowlby, 1980; Fraley & Shaver, 1998; Shaver & Mikulincer, 2002). The present results suggest that the narcissistic vulnerability in anxiously attached individuals expresses itself through feelings of rejection and fear of abandonment when narcissistic needs are not met by important others. This constant vigilance and hypersensitivity with respect to acceptance and reinforcement by important others is more reflective of anxious cognitions and the need for reassurance and recognition in interpersonal transactions. By contrast, attachment avoidance is marked by continual direction of attention away from attachment relationships, which are experienced as discomfort. In considering the clinical ramifications of this, vulnerable narcissists may present with heightened emotional sensitivity in patient-therapist interactions, whereas grandiose narcissists may approach therapy in a competitive mindset in which early termination or no-shows are equated with “winning.” This is supported by a recent study on maladaptive schema, in which, Ziegler-Hill, Gree, Arnau, Sisemore, and Myers (2011) found that Grandiosity was negatively correlated with the Defectiveness schema domain and positively related to the Entitlement schema domain reflecting the attitude of perfect self-mastery and free self-determination. Whereas Vulnerability was associated with Emotional Inhibition and Unrelenting Standards suggesting unrealistically high expectations of significant others coupled with pronounced sensitivity for emotional reactions of others, which are easily interpreted as slights or rejection.

On a whole, these results provide additional support for the need to improve the clinical distinctions between vulnerable and grandiose narcissism and are in line with the findings of Besser and Priel (2010), who showed that the vulnerable narcissism dimension was significant in the face of threat of interpersonal rejection, with a specific effect on emotional reactivity in the face of the high-level threat of interpersonal rejection. They found that grandiose narcissism, in contrast, had only specific associations with emotional reactivity in the high-level threat of achievement failure.

Thus, it appears that the differences in the patterns of associations between grandiose and vulnerable narcissism load onto different self-regulation pathways. More specifically, these differences suggest the possibility that affect regulation in vulnerable narcissism is conducted via a search for non-critical acceptance and unquestioning validation from others whose continuous approval becomes crucial for self functioning. On the other hand grandiose narcissism thrives on external validation that is derived directly from the notion of success through competition and achievement (expressed by e.g. status, title, appearance, money). In this constellation, the grandiose narcissist relegates others to serve as mere facilitators in achieving these defined goals.

3. Pathological Narcissism and Attachment Avoidance

Results of this study, however, did not indicate a relationship between pathological narcissism and attachment avoidance. It has been suggested that the lack of significant findings regarding attachment avoidance may be partly attributed to the fact that avoidant individuals are less attentive to material with emotional, attachment-related themes, and as a result, avoidant individuals have greater difficulty relating to such material (Edelstein, 2006). An additional explanation for the lack of a relationship between pathological narcissism and avoidant

attachment may be due to self-selection of the present sample. City College students are free to choose among a wide range of research studies offered by the Psychology department in exchange for field credit (and, as required by IRB rules, have the option to select alternative ways of obtaining required research experience). It is conceivable that individuals with avoidant attachment prefer emotionally neutral questionnaires and are therefore less likely to select a survey announcing in its 'study description' that it "will ask about ideas and feelings you have about yourself and others". At the same time, however, the study's title "In what way are you special?" might have appealed to individuals high on narcissistic traits and avoidant attachment status.

In consideration of measurement issues, the range of scores obtained in this sample supports the validity of the statistical findings. It should be noted, however, that while the internal consistency reliability (alpha) coefficient for Anxious Attachment subscales was quite substantial ($\alpha=.90$), the internal consistency reliability coefficient for Avoidant Attachment was lower than ideal ($\alpha=.66$). While the large discrepancy between the two alphas remains unclear, a closer examination of the items in the Avoidance subscale revealed that statements that are formulated in the negative, e.g. "I prefer not to be too close to romantic partners" or "I prefer not to show a partner how I feel deep down," showed particularly high inconsistency ratings with respect to the overall scale. The Anxiety subscale contains only one negatively phrased item, whereas the Avoidance subscales contains five. It might be conceivable that participants, especially learners of English as a second language, were confused when contrasting these negative statements to the 7-point scale ranging from 1= strongly disagree to 7 = strongly agree, which unduly influenced the scale's internal consistency reliability.

Moving beyond this study sampling and selection considerations by taking into account available empirical data on NPD and attachment correlations leaves us with a similar dearth of significant findings. Brennan and Shaver (1998) administered attachment and personality measures to 1,407 adolescents and young adults and found that narcissistic personality disorder was not significantly associated with any one attachment style. Using a clinical sample of 149 psychiatric adult inpatient and outpatients, Meyer et al (2001) reported that while narcissistic personality disorder features correlated inversely with secure attachment, it did not correlate with attachment prototypes signifying preoccupied attachment or avoidant-dismissive attachment. In a recent study involving 273 undergraduate students, Sherry, Lyddon and Henson (2007) concluded that narcissistic personality disorder - as measured by the MCMI-III (Millon Clinical Multi-axial Inventory III, Millon, Davis and Millon, 1997) – was not predictive of any particular attachment style. Adding the current study’s insignificant findings to the existing body of research provides further evidence for the heterogeneity of narcissism as currently defined.

4. Adaptive Narcissism and Attachment

The results of this study provided further confirmation for the validity of the adaptive narcissistic subtype. In this sample, adaptive narcissists (NPI minus E/E factor) exhibited zero correlations with overall dysfunctional symptomatology as measured by the BSI and SCID-II screening questionnaires. With respect to interpersonal functioning this trend is even enhanced, as the current findings portray adaptive narcissism, contrary to expectation, as negatively, albeit weakly, related to anxious attachment. In other words, higher scores of adaptive narcissisms are predictive of lower attachment anxiety. In some ways the present empirical data supports clinical observations and case studies of the adaptive narcissist’s overly self-enhancing and outwardly confident self-perception in close relationships. The denial of interpersonal distress in the

present study also fits well with classical theory on narcissism that emphasizes the self-absorbed and unrealistic view these individuals have of themselves in relation to others and their tendency to downplay or altogether dismiss interpersonal difficulties (Kernberg, 1975; Kohut, 1971, 1977), even earning them the label “oblivious narcissists” to distinguish them from their more sensitive and vulnerable counterparts (Gabbard, 1989).

In the past, researchers on narcissism who included attachment measures in their studies consistently found, sometimes unexpectedly, strong relationships between grandiose presentation and secure attachment styles. Dickenson and Pincus (2003), who in this particular study used the NPI total score to determine Grandiosity, reported that a majority of the grandiose group selected Secure (60%) or Dismissive (16%) rather than Fearful (13%) or preoccupied (10%) attachment styles. These results are largely replicated by the present study, albeit it under different labels. Note that Dickenson and Pincus (2003) labeled the construct measured by the total NPI score “Grandiosity,” whereas the present study labeled the construct measured by the NPI minus E/E (Entitlement/Exploitation) as “Adaptive.” Given that its most maladaptive subscale was removed from the NPI scale, attachment difficulties were expected to be much lower than for the pathological narcissism measures. It is, however, not completely surprising to find an inverse, albeit weak, relationship between narcissistic traits and anxious attachment. Narcissism as defined by a purposefully modified NPI scale (minus E/E) might primarily capture the high on achievement motivation and self esteem and resistant to feedback and disconfirming of positive self-views- style (Morf, 2005; Paulhus & Williams, 2002), whereas the grandiose self-enhancing prone to manipulation, interpersonally aggressive and dominant type might have been largely filtered out by traits of entitlement and exploitativeness (E/E). The present findings couple well with Becker’s (2008) research on narcissism and object relations who found, contrary to

expectation, negative correlations between the NPI and object relation deficits. Similarly, Feintuch (1999) predicted negative correlations between NPI and secure attachment but found correlations opposite the prediction. Smolewska and Dion (2005) found significant correlations between vulnerable narcissism (as measured by the HSNS) and attachment anxiety, but no significantly shared variance between grandiose narcissism (as measured by the NPI) and attachment domains. Interestingly, when comparing attachment status using the Adult Attachment Interview (AAI) in a sample of adult female borderline patients with and without comorbid narcissistic personality disorder, Diamond and colleagues (in press) found that it was more difficult to discern a consistent attachment strategy. The NPD/BPD group was more likely to be categorized as ‘dismissing/avoidant’ in the AAI classification than were BPD patients without NPD, who were more likely to be classified as unresolved (U) and preoccupied (Diamond, Levy, Clarkin, Fischer-Kern, Cain, & Doering, in press).

Thus, in line with existing research, the present study further weakens the ties between adaptive narcissistic traits and interpersonal maladjustment. Taken together, this body of work suggests that, across non-clinical samples, high scores on adaptive narcissism are not predictive of attachment difficulties. While this may well be partly explained by this populations’ proneness to distorted self-enhancing reporting, this aspect does not account for the whole picture. Today’s fast growing research on personality disorders and personality traits has by now generated a substantial amount of correlational data across narcissistic traits and general personality inventories to allow for distinct and meaningful patterns to emerge. For example, high NPI scores are negatively associated with shame (Cain et al., 2008) and positively associated with achievement and self-esteem (Lukowitsky et al., 2007; Rhodewalt & Morf, 1995; Watson, Little, Sawrie, & Biderman, 1992). Miller and Campbell (2008) have pointed out that NPI narcissism

captured an emotionally resilient, extroverted form. With regard to impulsivity, grandiosity (as measured by the NPI) correlates positively with positive affect-based impulsivity and ‘sensation seeking’ and exhibited a negative correlation with interpersonal sensitivity (Miller et al., 2010). In terms of emotional reactions to threats, Besser & Priel (2010) found that grandiose narcissism significantly predicted negative outcomes in the high achievement-threat group, but not in the high interpersonal-threat group.

Individuals high on adaptive narcissism represent personality traits (e.g. high extraversion, manipulateness) and outcomes (e.g. high self esteem, assertiveness) that make them appear more psychologically robust (Sedikis et al., 2004) and even earned them the label “disagreeable extraverts” (Paulhus, 2001). The current investigation adds further support to the notion that adaptive narcissism captures a conceptually different phenotype than pathological narcissism.

5. Narcissism and Reflective Functioning (RF)

Correlational analysis explored whether more pathological expressions of narcissism were related to greater impairment in RF. The findings from the current study do not support the hypothesis that there is a relationship between pathological grandiosity and reflective functioning. Contrary to expectation, pathological vulnerability exhibits a positive, albeit a very weak relationship to RF. However, adaptive narcissism was found to be negatively, but again weakly, related to reflective functioning.

The following are possible explanations of these, somewhat counter-intuitive, findings:

- 1) Contrary to expectations, in the pathologically grandiose narcissistic population the relationship between the capacity for mentalization and symptom severity is not a linear one.
- 2) There does in fact exist a linear positive relationship between the pathological grandiosity construct and mentalization impairment, but the measure used in this study is unable to detect it due to an inherent measurement weakness.

Exploring grandiose narcissism's heterogeneity with respect to mentalization: It should be noted that the present study's sample size is considerably large (N=345) and therefore offers sufficient statistical power to detect potentially meaningful relationships; the statistical findings are furthermore supported by the wide range of RF scores among participants (spanning from well below average to high scores). This varied distribution suggests that the "mental process by which an individual implicitly and explicitly interprets the actions of himself or herself and others as meaningful on the basis of intentional mental states" (Bateman & Fonagy, 2004) may not be directly affected by an individual's narcissistic grandiosity. Furthermore, the hypothesis that grandiose narcissists are worse at Self-Mentalizing than at Other-Mentalizing was not supported by the findings in this study. While disturbances in thinking about self and others are a hallmark in the definition of personality psychopathology, grandiose narcissistic beliefs might not be mediated through high or low levels of mentalization. In other words, for some individuals, narcissistic symptom severity might be associated with high RF, whereas other pathologically grandiose individuals show low mentalizing capacity. The spectrum of RF found in this study suggests that self-aggrandizing behavior, manipulateness and exploitative tendencies might be able to co-exist with varying degrees of focus on one's own and the other's intentional mental states.

In comparing the capacity for mentalization by using the Adult Attachment Interview (AAI) in a sample of adult female borderline patients with and without co-morbid narcissistic personality disorder, Diamond and colleagues (2013) found no significant difference in the RF scores, which was low in both groups (Diamond et al., 2013). Interestingly enough, although the foregoing study only looked at NPD/BPD patients, the current study also found no significant differences in RF among the three variants of narcissism: vulnerable, grandiose and adaptive.

These findings suggest that even in higher functioning NPD patients such as those characterized by adaptive narcissistic traits, better or more efficient defense use may devolve from factors other than RF, such as the empirically well established association with high self-esteem (Lukowitsky et al., 2007; Rhodewalt & Morf, 1995; Watson et al., 1992; Sedikis et al., 2004).

With respect to vulnerable narcissism the present study did reveal a limited relationship to RF, however, directionally this relationship indicated a positive correlation. Conceptually, this may make sense when considering that vulnerable narcissists were found to be anxiously attached individuals who are more likely to be worried about interpersonal rejection and abandonment. This tendency to cognitively and affectively anticipate interpersonal ‘worst-case-scenarios,’ may incline these individuals to eagerly scan implicit or explicit signs of mental processes in oneself and others that indicate danger in the relational realm. This is consistent with Ronningstam’s (2009) picture of the vulnerable narcissist as someone who is hypervigilant and goes through life in an overly alert state of mind. Still, given the limited nature of the relationship between narcissistic vulnerability and capacity for mentalization, further research is needed to substantiate these findings in clinical and non-clinical samples.

Adaptive narcissism was found to be negatively, but again weakly, related to reflective functioning in this study. This is consistent with research on subclinical narcissism that shows that although the self-esteem component accounts for the link between normal narcissism and relative psychological health (Sedikides et al., 2004), high narcissists are interpersonally exploitative and abrasive and have an inflated sense of personal control over their environment (Watson, Sawrie, & Biderman, 1991). Thus, self-awareness and self-regulation are derived from a largely unreflective need for power and status. In contrast, the concept of mentalization as defined by Bateman and Fonagy (2004) concerns a more affectively and interpersonally complex understanding of oneself and others, requiring the understanding of other people's behavior in terms of their likely thoughts and feelings (Fonagy & Bateman, 2007). The obtained results suggest the possibility that elevated levels of self-esteem and an almost compulsive need for achievement make the adaptive narcissist override the more complex processes involved in mentalization.

6. Cross-cultural issues and Narcissism

An individual's personality is invariably shaped by cultural factors that are expressed through child-rearing practices, family values and customs, tradition and religious affiliations and the cultural specific development of coping mechanisms; one's race-ethnicity contributes one of the crucial components of culture (Alarcon, Westermeyer, Foulks, Ruiz, 1999). The NESARC (National Epidemiological Survey on Alcohol and Related Conditions) was the first nationally representative study to examine the relationship between race-ethnicity and NPD (Grant, Moore, Shepherd, & Kaplan, 2003). The 2004-2005 Wave 2 NESARC found that Blacks had a greater prevalence of NPD than Whites in the overall sample and Hispanic women had a higher rate of NPD than white women (NESARC; Grant, Kaplan & Stinson, 2005).

In the current study, the participants' pool was heterogeneous with respect to ethnic and racial diversity, but it should be noted that respondents from Hispanic (32%) and Asian (30%) background as well as young adults 18 to 25 years old were oversampled. This study did not find any statistical difference for pathological narcissism between African American, Asian and White participants. Interestingly, Asian respondents scored higher on vulnerable narcissism than African Americans. A similar pattern is noticeable with regard to adaptive narcissism with the highest mean scores held by African Americans and the lowest by Asian respondents (with Whites scoring in between). These results seem to indicate that less pathological expressions of narcissism may at least partly grow out of attitudes regarded as culturally desirable by some ethnic groups but not by others. The current findings support observations made by Komarraju and Cokley (2008) who reported that African Americans had significantly greater horizontal individualism scores and lower horizontal collectivism scores than Whites, indicating that the individual's uniqueness and specialness is particularly highly valued in the African American community. Similarly, Foster, Campbell and Twenge (2003) found that self-identified White and Asian participants reported less narcissism than did either Black or Hispanic participants (the authors used the NPI, which corresponds to 'adaptive narcissism' in this study). These findings bring up interesting questions, including from a dynamic perspective. It might be that higher adaptive narcissism serves as a defensive but also protective factor that buffers an individual's sense of security while also being increasingly accepted as a sign of personal strength by one's cultural and ethnical group of belonging. Among more recent immigrants of Asian descent, anxiety over fulfilling parental expectations and gaining parental approval might outweigh more individualistic defensive styles.

While the mechanism that might serve to explain the relatively higher narcissistic

vulnerability of Asian respondents in this study remain unclear, the present findings serve as reminder of the critical importance of cultural influences in psychiatric findings. The race-ethnicity differences observed in this study might be a further impetus for efforts to better understand the interaction of cultural experience and narcissistic expression by encouraging further research in this area.

7. Narcissism and Gender Differences

Early on, the categorical emphasis on NPD's grandiose criteria has generated concerns to what degree the DSM diagnosis can be generalized to women (Philipson, 1985; Perry & Perry, 1996). More recently, theorists have proposed that the distinction between vulnerable and grandiose narcissism may divide along gender lines, with the grandiose type representing a stereotypical male narcissist and the vulnerable type representing a stereotypical female narcissistic patient (Levy et al., 2007).

This study found no statistical difference of mean scores by gender across all three narcissistic expressions (grandiose, vulnerable and adaptive). Similarly, a small-scale (N=2053) epidemiological survey on personality disorders conducted in Oslo, Norway, did not yield any sex differences in the rates of NPD (Torgersen, Kringlen, & Cramer, 2001). However, the current findings are at variance with the NESARC Wave 2 study, which found a higher prevalence rate of NPD among men, a result that generalized across all age groups and among Whites and Blacks but not Hispanics (NESARC; Grant, Kaplan, & Stinson, 2005). Keeping in mind the current study's oversampling of young adults on the one hand and the ethnic homogeneity found in the Oslo study on the other hand, these inconsistent findings strongly

argue for future research on the influences of socio-demographic and cultural factors on gender differences in empirical studies on narcissism.

8. Clinical Implications

The present data supports a more differentiated picture of narcissism and thereby raises interesting questions on the ensuing clinical implications. Research has shown that treatment utilization looks quite different for grandiose and vulnerable subtypes of narcissism, however, an even more complex picture emerges when the adaptive type is taken into account. In a study that examines pathological narcissism and use of psychotherapy, Pincus et al (2009) found that Grandiosity exhibited negative correlations with treatment utilization (low adherence to medication regimen, inpatient admissions, partial hospitalizations) while being positively related to outpatient therapy no-shows. In contrast, Vulnerability exhibited positive relations to the use of telephone-based crisis services, inpatient admissions, as well as outpatient treatment sessions attended or cancelled. These findings support the view that narcissistic patients are more likely to seek out treatment when they experience a vulnerable self-state (see also Pincus et al., 2009).

However, more research on treatment utilization and narcissism is needed to parse apart the adaptive narcissist's more healthy and protective self-functioning from the brittle 'false-self' personality construct of pathological narcissism. For example, personality and social psychology researchers already use the term 'normative narcissism' to refer to individuals who combine high scores on narcissism (NPI) with good psychological health (defined by low dispositional neuroticism, depression and state anxiety versus high subjective well-being and couple well-being). These so-called "would-be" narcissists report feeling well and not overly concerned by aversive social environments (Sedikis et al., 2004). In this sense, adaptive narcissism represents

a personality style that is high on extraversion and manipulateness while exhibiting outcome criteria high on self-esteem and assertiveness without the negative emotions associated with pathological narcissism (Miller et al., 2010).

Similarly, the present study found no relationship between adaptive narcissism and general psychopathology or interpersonal difficulties. Further research is required to explore to what extent these findings may be qualified as a culturally syntonetic phenomenon. Tentatively, one approach could take into account the discernable sociological shift in Western society's values towards greater acceptance of individualistic goals (e.g. personal gain, status, open relationships, etc.) and competitive self-promotion. Individuals who most strongly embody these culturally accepted self-enhancement strategies may well present with disagreeableness (antagonistic, immodest, manipulative behavior) but may not qualify for the etiological pathways seen in clinical personality psychopathology. These considerations may play a part in current NPD's poor treatment utilization (early termination, high number of no-shows, etc.).

As discussed in chapter 1, the original DSM rendering of personality disorders has been widely criticized for lacking an empirical foundation. As the soon-to-be published DSM-5 is slowly beginning to integrate clinical experience and empirical evidence, it is hoped that NPD's revised diagnostic criteria will incorporate theory as well as research data in the attempt to strengthen narcissism's clinical utility.

9. Limitations of the Study

While the present study provides some promising data on the heterogeneity of narcissistic expressions, it is not without limitations. First, it is important to note that the study's working title "In what way are you special" is phrased in a way that might appeal to participants who aspire to be seen as special. This might have added a certain self-selective effect to the overall sample. At the same time, however, it should be noted that the online survey contained a debriefing section that clearly outlined the study's research question. At this point, participants were offered the choice to have their data withdrawn and not to be included in this research.

This study is further limited by the use of a non-clinical, undergraduate sample, from a predominantly lower middle class background, not screened for clinical disorders. Even though, in a college sample the variance in the applied measures is expected to be lower than what one would expect to find in a clinical sample, the results may well apply to patient populations, because personality structure is essentially the same in clinical and non-clinical samples (O'Connor, 2002). College populations also have some methodological benefits in that there is a reduced likelihood of other psychiatric disorders that could account for results (Kendall, Hollon, Beck, Hammen & Ingram, 1987). Nevertheless, future work would benefit from testing the relationship among these variables in a less ethnically heterogeneous and/or affluent (middle and upper middle class) sample as well as in a clinical sample. Furthermore the dependence on self-report data with respect to personality pathology may be problematic because individuals with personality disorders are frequently unable to view themselves realistically (Klonsky & Oltmanns, 2002; Russ et al., 2008) and may have limited psychological insight (Oltmanns & Turkheimer, 2006). The fact that questionnaire items tend to be worded more generally makes them also less liable to capture an individual's unique presentation when compared to more

individually calibrated in-depth clinical interviews conducted by trained professionals.

Respondents to self-reports may be tempted to purposefully portray a certain impression or may involuntarily deceive themselves in order to feel better about their self-presentation. While the examiner cannot control for these “built-in” disadvantages of self-report measures, the resulting interpretative limitations have been taken into account in the current study.

Measurement Limitations:

This study encountered some measurement limitations with regards to determining the participants’ RF level. Reflective functioning was measured by the RFQ-54, which assesses the ability to perceive and interpret human behavior in terms of intentional mental states. This scale is currently under development by Moulton-Perkins, Rogoff, Luyten and Fonagy (2011) and aims at facilitating the assessment of mentalization capacities through self-report, rather than via the lengthy clinician administered full Adult Attachment Interview (AAI). Preliminary psychometric information based on an earlier 18-item version of this measure supports the internal consistency reliability of this abbreviated RFQ version. This was supported by the current study as the RFQ 54-item version internal consistency reliability proved satisfactory. However, this project found the scale’s convergent validity correlations to be problematic as mentalization impairment did not exhibit the expected negative correlations with a range of psychopathology validation measures. This may be partially due to the specific characteristics of the current sample (young age group, lower socio-economic background, immigration status). In any event, the current results are in contrast to findings by Perkins and her colleagues (2011) for the preliminary 18-item RFQ measure, which is supported by a moderately strong convergent construct validation with Empathy and Mindfulness and a equally moderately strong divergent

construct validation with BPD and general psychopathology. Noting that the psychometric properties of the RFQ merit further development, it is important to keep in mind that validation process for the newly developed RFQ-54 is still ongoing and convergent validity correlations for the 54-item version have not yet been published.

Conclusion and Future Directions

In this study RF did not correlate with pathological narcissism. In light of the ongoing effort to align DSM criteria for personality disorders with evidence based research, future research should continue to investigate the links between narcissistic pathology and disturbances in thinking about self and others. This area of investigation seems particularly relevant in light of the newly introduced dimensional criteria for personality disorders in Section III of the DSM-5 (APA, 2013).

With regard to adult attachment, this study's findings support the notion that narcissism of the vulnerable subtype is most predictive of attachment anxiety. Further studies are needed to take a closer look at the contributing factors of this outcome, e.g. the degree of overlap of general personality traits from the Five-Factor Model of personality. This area of narcissism research seem particularly promising as the future DSM and ICD personality disorder classification already shows signs of moving into this direction.

This study's results with respect to narcissistic expressions across ethnic groups raise some very interesting questions and warrant a more in-depth post-hoc analysis on the interplay of the rise of narcissism in individual psychopathology and the variation of cultural values across racial lines.

Overall, the present study's findings lend support to the notion that each of the two pathological subtypes and the more adaptive form of narcissism manifest themselves quite differently in outcome measures. Vulnerable narcissism exhibited the highest degree of general psychopathology and appears to establish the most sensitive response to interpersonal threats, whereas grandiose narcissism showed less pathological symptomatology and exhibited no direct relationship to attachment anxiety. In contrast, adaptive narcissism did not predict elevated levels of general psychopathology and individuals who reported higher levels of adaptive narcissism were found to be slightly less, not more, anxious in their relationships.

These findings call attention to the noticeable nomological discrepancy between the three expressions of narcissism subject to this study. Despite their partial correlational overlap it remains unclear to what extent these three presentations of narcissism and narcissistic pathology are distinct phenotypes versus operating on a continuum. Naturally, evidence based diagnostic classification attempts are faced with new and challenging degrees of complexity, however, this should not act as a deterrent of future research into this fascinating realm of personality functioning.

The model of personality disorder diagnosis as proposed by the DSM-5 Task Force on Personality and Personality Functioning allows for a more differentiated approach to clinical diagnosis that takes into account dimensional impairments of personality functioning and adaptive versus maladaptive trait expressions. The current findings support this approach and it is hoped that the inclusion of the proposed diagnostic model into Section III of the DSM-5 (conditions designated for further study) will help spur future research in narcissistic personality disorders.

APPENDICES

Appendix 1: Survey items “In what way are you special?”

Demographics

1. Are you male or female?
2. What is your age?
3. What is your current relationship status?
4. What is your religious affiliation?
5. What is your ethnicity?
6. Are you currently in psychotherapy?
7. What is your parents' total household income?

NPI (minus 7 E/E items, see below)

1. I have a natural talent for influencing people. I am not good at influencing people.
2. Modesty doesn't become me. I am essentially a modest person.
3. I would do almost anything on a dare. I tend to be a fairly cautious person.
4. When people compliment me I sometimes get embarrassed. I know that I am good because everybody keeps telling me so.
5. The thought of ruling the world frightens the hell out of me. If I ruled the world it would be a better place.
6. I can usually talk my way out of anything. I try to accept the consequences of my behavior.
7. I prefer to blend in with the crowd. I like to be the center of attention.
8. I will be a success. I am not too concerned about success.
9. I am no better or worse than most people. I think I am a special person.
10. I am not sure if I would make a good leader. I see myself as a good leader.
11. I am assertive. I wish I were more assertive.
12. I like to have authority over other people. I don't mind following orders.
15. I don't particularly like to show off my body. I like to show off my body.
16. I can read people like a book. People are sometimes hard to understand.
17. If I feel competent I am willing to take responsibility for making decisions. I like to take responsibility for making decisions.
18. I just want to be reasonably happy. I want to amount to something in the eyes of the world.
19. My body is nothing special. I like to look at my body.
20. I try not to be a show off. I will usually show off if I get the chance.
21. I always know what I am doing. Sometimes I am not sure of what I am doing.
22. I sometimes depend on people to get things done. I rarely depend on anyone else to get things done.
23. Sometimes I tell good stories. Everybody likes to hear my stories.
26. Compliments embarrass me. I like to be complimented.
28. I don't care about new fads and fashions. I like to start new fads and fashions.
29. I like to look at myself in the mirror. I am not particularly interested in looking at myself in the mirror.

30. I really like to be the center of attention. It makes me uncomfortable to be the center of attention.
31. I can live my life in any way I want to. People can't always live their lives in terms of what they want.
32. Being an authority doesn't mean that much to me. People always seem to recognize my authority.
33. I would prefer to be a leader. It makes little difference to me whether I am a leader or not.
34. I am going to be a great person. I hope I am going to be successful.
35. People sometimes believe what I tell them. I can make anybody believe anything I want them to.
36. I am a born leader. Leadership is a quality that takes a long time to develop.
37. I wish somebody would someday write my biography. I don't like people to pry into my life for any reason.
40. I am much like everybody else. I am an extraordinary person.

PNI

The Grandiosity Subscale contains 18 items (1, 14, 26, 31, 42, 45, 49, 4, 10, 15, 23, 35, 6, 22, 25, 33, 39, 43)

The Vulnerability Subscale contains 34 items (2, 5, 8, 16, 19, 30, 32, 36, 40, 41, 47, 48, 7, 9, 13, 28, 44, 46, 50, 3, 17, 21, 24, 27, 34, 51, 11, 12, 18, 20, 29, 37, 38, 52)

- 1. I often fantasize about being admired and respected.
- 2. My self-esteem fluctuates a lot.
- 3. I sometimes feel ashamed about my expectations of others when they disappoint me.
- 4. I can usually talk my way out of anything.
- 5. It's hard for me to feel good about myself when I'm alone.
- 6. I can make myself feel good by caring for others.
- 7. I hate asking for help.
- 8. When people don't notice me, I start to feel bad about myself.
- 9. I often hide my needs for fear that others will see me as needy and dependent.
- 10. I can make anyone believe anything I want them to.
- 11. I get mad when people don't notice all that I do for them.
- 12. I get annoyed by people who are not interested in what I say or do.
- 13. I wouldn't disclose all my intimate thoughts and feelings to someone I didn't admire.
- 14. I often fantasize about having a huge impact on the world around me.
- 15. I find it easy to manipulate people.
- 16. When others don't notice me, I start to feel worthless.
- 17. Sometimes I avoid people because I'm concerned that they'll disappoint me.
- 18. I typically get very angry when I'm unable to get what I want from others.
- 19. I sometimes need important others in my life to reassure me of my self-worth.
- 20. When I do things for other people, I expect them to do things for me.

- 21. When others don't meet my expectations, I often feel ashamed about what I wanted.
- 22. I feel important when others rely on me.
- 23. I can read people like a book.
- 24. When others disappoint me, I often get angry at myself.
- 25. Sacrificing for others makes me the better person.
- 26. I often fantasize about accomplishing things that are probably beyond my means.
- 27. Sometimes I avoid people because I'm afraid they won't do what I want them to do.
- 28. It's hard to show others the weaknesses I feel inside.
- 29. I get angry when criticized.
- 30. It's hard to feel good about myself unless I know other people admire me.
- 31. I often fantasize about being rewarded for my efforts.
- 32. I am preoccupied with thoughts and concerns that most people are not interested in me.
- 33. I like to have friends who rely on me because it makes me feel important.
- 34. Sometimes I avoid people because I'm concerned they won't acknowledge what I do for them.
- 35. Everybody likes to hear my stories.
- 36. It's hard for me to feel good about myself unless I know other people like me.
- 37. It irritates me when people don't notice how good a person I am.
- 38. I will never be satisfied until I get all that I deserve.
- 39. I try to show what a good person I am through my sacrifices.
- 40. I am disappointed when people don't notice me.
- 41. I often find myself envying others' accomplishments.
- 42. I often fantasize about performing heroic deeds.
- 43. I help others in order to prove I'm a good person.
- 44. It's important to show people I can do it on my own even if I have some doubts inside.
- 45. I often fantasize about being recognized for my accomplishments.
- 46. I can't stand relying on other people because it makes me feel weak.
- 47. When others don't respond to me the way that I would like them to, it is hard for me to still feel ok with myself.
- 48. I need others to acknowledge me.
- 49. I want to amount to something in the eyes of the world.
- 50. When others get a glimpse of my needs, I feel anxious and ashamed.
- 51. Sometimes it's easier to be alone than to face not getting everything I want from other people.
- 52. I can get pretty angry when others disagree with me.

Exploitation/Entitlement (E/E factor of NPI)

- 13. I find it easy to manipulate people. I don't like it when I find myself manipulating people.
- 14. I insist upon getting the respect that is due me. I usually get the respect that I deserve.

24. I expect a great deal from other people. I like to do things for other people.
25. I will never be satisfied until I get all that I deserve. I take my satisfactions as they come.
27. I have a strong will to power. Power for its own sake doesn't interest me.
38. I get upset when people don't notice how I look when I go out in public. I don't mind blending into the crowd when I go out in public.
39. I am more capable than other people. There is a lot that I can learn from other people.

SCID-II PQ Cluster B

1. Do you like to be the center of attention?
2. Do you flirt a lot?
3. Do you often find yourself "coming on" to people?
4. Do you try to draw attention to yourself by the way you dress or look?
5. Do you often make a point of being dramatic and colorful?
6. Do you often change your mind about things depending on the people you are with or what you have just read or seen on TV?
7. Do you have lots of friends you are very close to?
8. Do people often fail to appreciate your very special talents or accomplishments?
9. Have people told you that you have too high an opinion about yourself?
10. Do you think a lot about the power, fame, or recognition that will be yours someday?
11. Do you think a lot about the perfect romance that will be yours someday?
12. When you have a problem, do you almost always insist on seeing the top person?
13. Do you feel it is important to spend time with people who are special who are special and influential?
14. Is it very important to you that people pay attention to you or admire you in some way?
15. Do you think that it's not necessary to follow certain rules or social conventions when they get in your way?
16. Do you feel that you are the kind of person who deserves special treatment?
17. Do you often find it necessary to step on a few toes to get what you want?
18. Do you often have to put your needs above other people's?
19. Do you often expect other people to do what you ask without question because of who you are?
20. Are you NOT really interested in other people's problems or feelings?
21. Have people complained that you don't listen to them or care about their feelings?
22. Are you often envious of others?
23. Do you feel that others are often envious of you?
24. Do you find that there are few people that are worth your time and attention?
25. Have you often become frantic when you thought that someone you really cared about was going to leave you?
26. Do your relationships with people you really care about have lots of extreme ups and downs?
27. Have you all of a sudden changed your sense of who you are and where you are headed?
28. Does your sense of who you are often change dramatically?
29. Are you different with different people or in different situations, so that you sometimes don't know who you really are?

30. Have there been lots of sudden changes in your goals, career plans, religious beliefs, and so on?
31. Have you done things impulsively?
32. Have you tried to hurt or kill yourself or threatened to do so?
33. Have you ever cut, burned or scratched yourself on purpose?
34. Do you have a lot of sudden mood changes?
35. Do you often feel empty inside?
36. Do you often have temper outbursts or get so angry that you lose control?
37. Do you hit people or throw things when you get angry?
38. Do even little things get you very angry?
39. When you are under a lot of stress, do you get suspicious of other people or feel especially spaced out?
40. Before you were 15, would you bully or threaten other kids?
41. Before you were 15, would you start fights?
42. Before you were 15, did you hurt or threaten someone with a weapon, like a bat, brick, broken bottle, knife, or gun?
43. Before you were 15, did you deliberately torture someone or cause someone physical pain and suffering?
44. Before you were 15, did you torture or hurt animals on purpose?
45. Before you were 15, did you rob, mug, or forcibly take something from someone by threatening him or her?
46. Before you were 15, did you force someone to have sex with you, to get undressed in front of you, or to touch you sexually?
47. Before you were 15, did you set fires?
48. Before you were 15, did you deliberately destroy things that weren't yours?
49. Before you were 15, did you break into houses, other buildings, or cars?
50. Before you were 15, did you lie a lot or "con" other people?
51. Before you were 15, did you sometimes steal or shoplift things or forge someone's signature?
52. Before you were 15, did you run away from home and stay away overnight?
53. Before you were 13, did you often stay out very late, long after the time you were supposed to be home?
54. Before you were 13, did you often skip school?

ECR-R Questionnaire

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.

9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.
22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

BSI [5-point Likert scale]

In the last week, how much were you distressed by:

1. Nervousness or shakiness inside
2. Faintness or dizziness
3. The idea that someone else can control your thoughts
4. Feeling others are to blame for most of your troubles
5. Trouble remembering things
6. Feeling easily annoyed or irritated
7. Pains in heart or chest
8. Feeling afraid in open spaces or on the streets
9. Thoughts of ending your life
10. Feeling that most people cannot be trusted
11. Poor appetite
12. Suddenly scared for no reason

13. Temper outbursts that you could not control
14. Feeling lonely even though you are with people
15. Feeling blocked in getting things done
16. Feeling lonely
17. Feeling blue
18. Feeling no interest in things
19. Feeling fearful
20. Your feelings being easily hurt
21. Feeling that people are unfriendly or dislike you
22. Feeling inferior to others
23. Nausea or upset stomach
24. Feeling that you are watched or talked about by others
25. Trouble falling asleep
26. Having to check and double-check what you do
27. Difficulty making decisions
28. Feeling afraid to travel on buses, subways or trains
29. Trouble getting your breath
30. Hot or cold spells
31. Having to avoid certain things, places or activities because they frighten you
32. Your mind going blank
33. Numbness or tingling in parts of your body
34. The idea that you should be punished for your sins
35. Feeling hopeless about the future
36. Trouble concentrating
37. Feeling weak in parts of your body
38. Feeling tense or keyed up
39. Thoughts of death or dying
40. Having urges to beat, injure or harm someone
41. Having urges to break or smash things
42. Feeling very self conscious with others
43. Feeling uneasy in crowds, such as shopping or at a movie
44. Never feeling close to another person
45. Spells of terror or panic
46. Getting into frequent arguments
47. Feeling nervous when you are left alone
48. Others not giving you proper credit for your achievements
49. Feeling so restless you couldn't sit still
50. Feelings of worthlessness
51. Feeling that people will take advantage of you if you let them
52. Feelings of guilt
53. The idea that something is wrong with your mind

Appendix 2: Consent Form

CITY UNIVERSITY OF NEW YORK
City College, Department of Psychology

CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

Project Title: In what way are you special?

Principal Investigator:

Petra Vospernik, M.A., Graduate Student
Clinical Psychology Doctoral Subprogram
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Faculty Advisor:

Diana Diamond, Ph.D., Professor
Clinical Psychology Doctoral Subprogram
The City College of New York
N.A.C. Building 8/106
Convent Avenue at 138th Street
Tel.: (212) 650-5662

Site where study is to be conducted:

The City College of the City University of New York, online survey administered through the Subject Pool that is administered by the Department of Psychology of City College.

Introduction/Purpose: You are invited to participate in a research study. You have been invited because you are 18 years or older. The study is conducted under the direction of Petra Vospernik, M.A., Graduate Student, Clinical Psychology Doctoral Subprogram. The purpose of this research study is to gain a better understanding of the different ways in which people see themselves and are viewed by others. The survey will ask about ideas and feelings you have about yourself and others. It will also ask about how you would handle different situations in your daily life.

Procedures:

You can complete the online survey all at once, or you can go over parts of it, save your answers, and come back later to finish it. The entire survey should take about one hour to complete. Some of the questions in the survey will ask about your behaviors, including some you might find sensitive or personal. You can skip questions you do not want to answer. This survey will not ask you for any identifiable information, so all of your answers will remain completely anonymous.

Possible Discomforts and Risks:

It is possible that some study questions might make you uncomfortable. If a question makes you uncomfortable, and you want to speak to someone about it, you can contact the Wellness Center at City College, at 212-650-8222, to speak to one of their staff.

Benefits: There are no direct benefits to participating in this study. Your participation, however, may be helpful in advancing the understanding of how our different ways of feeling special influence our lives.

Compensation: City University students who are in the subject pool will receive one credit for one hour of research participation in line with the policy of the Department of Psychology at City College. To receive this credit, you will need to fill out a second and completely separate survey (“name survey”), which only asks your name. The “name survey” is NOT linked in any way to the research survey. Once your name has been sent to the City College Psychology Department for credit allocation, it will be deleted without recovery option.

Alternative to Participation:

Alternatives to participation in this study will be offered by your instructor. However, at any time you can choose to not participate in this study.

Confidentiality: Once the study has been completed, the anonymous data collected will be stored for possible future research. Participants are encouraged to protect their own confidentiality by completing this survey in a private setting.

Voluntary Participation: Your participation in this study is voluntary, and you may decide not to participate without prejudice, penalty, or loss of benefits to which you are otherwise entitled.

Financial Considerations: Participation in this study will involve no cost to the subject.

Contact Questions/Persons: If you have any questions about the research now or in the future, you should contact the Principal Investigator, Petra Vospernik at inwhatwayspecial@gmail.com. If you have any questions concerning your rights as a participant in this study, you may contact the IRB Administrator at 212-650-7902.

Statement of Consent:

I have read the above description of this research and I understand it. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions that I may have will also be answered by the principal investigator of the research study. I voluntarily agree to participate in this study.

Please indicate your consent by ‘clicking’ the box below:

I have read this consent form and I understand the above information. I agree to take part in this study.

Appendix 3: Debriefing

Text of debriefing that appeared at the end of the research survey:

Dear participant,

Many thanks for taking part in this study. The study's title "In what way are you special?" remained intentionally vague. The real purpose of the study is to better understand if and how people with different levels of narcissism are able to reflect on their own and others' actions as well as their ability to form close relationships.

"Normal narcissism" can be understood as the capacity to maintain a positive self-image through a realistic level of self-esteem that is derived from within as well as through interpersonal relationships and the social environment.

In contrast, people with pathological levels of narcissism are overly invested in promoting their self-perceived superiority. They are also very sensitive to criticism and become easily aggressive. These people can only feel secure if they feel they are "better" than others, often alienating people along the way.

Today, the majority of theorists and clinical researchers view narcissism on a continuum ranging from healthy to pathological expressions of this personality trait.

The current study tries to contribute to a better understanding of the complex nature of narcissism. It was therefore necessary to keep the study title vague so as to ensure that participants answer questions as they truly apply to them. I apologize for the intentional ambiguity of the study title and hope you understand that this was necessary in order to keep with the principles of scientific research.

If you are interested in learning more about this topic, the following article is recommended as introductory reading:

Cain, N. M., Pincus, A. L., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28, 638 – 656.

Please remember that your answers to this survey will remain completely anonymous. In any case, following this further information about the study, you now have a choice to either continue or withdraw from the study by clicking one of two boxes below:

[box] Withdraw from the study

[box] Continue participation

REFERENCES

- Ainsworth, M. D. (1989). Attachments beyond infancy. *American Psychologist*, 44, 709-716.
- Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Alarcón, R. D., Westermeyer, J., Foulks, E. F., Ruiz, P. (1999). Clinical relevance of contemporary cultural psychiatry. *Journal of Nervous and Mental Disease*, 187(8), 465-471.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed., DSM-5). Washington, DC.
- American Psychiatric Association. (2012). DSM-5 proposal for personality and personality disorders. Retrieved from <http://www.dsm5.org>
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision, DSM-IV-TR). Washington, DC.
- Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review*, 109, 619–645.
- Andersen, S. M., & Cole, S. W. (1990). “Do I know you?”: The role of significant others in general social perception. *Journal of Personality and Social Psychology*, 59, 384–399.
- Bachar, E., Hadar, H., Shalev, A.Y. (2005). Narcissistic Vulnerability and the Development of PTSD: A Prospective Study. *Journal of Nervous and Mental Disease*, 193(11), 762-765.
- Bagby, R. M., Vachon, D. D., Bulmash, E., Quilty, L. C. (2008). Personality disorders and pathological gambling: A review and re-examination of prevalence rates. *Journal of Personality Disorders*, 22(2), 191-207.
- Balint, M. (1960). Primary Narcissism and Primary Love. *Psychoanalytic Quarterly*, 29:6-43.
- Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Personality and Social Psychology*, 61, 226-244.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 25-45). New York: Guilford.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25–45). New York: Guilford.

- Bateman A., & Fonagy P. (2006). *Mentalization-based treatment for borderline personality disorder: a practical guide*. New York: Oxford University Press; 2006.
- Bateman A., & Fonagy P. (2004). *Psychotherapy for borderline personality disorder: a mentalization-based treatment*. Oxford: Oxford University Press.
- Bateman, A., & Fonagy P. (2004). Mentalization-based treatment of BPD. *Journal of Personality Disorders*, 18(1), 36- 51.
- Baumeister, R.F., Bushman, B.J. Campbell, W.K. (2000). Self-esteem, narcissism, and aggression: Does violence result from low self-esteem or from threatened egotism? *Current Directions in Psychological Science*, 9(1), 26-29.
- Becker, K. A. (2008). A construct validity study of two measures of narcissism. Dissertation Abstracts International: Section B: The Sciences and Engineering, 69(6-B), pp. 3891.
- Bender, D. S. (2012). Mirror, mirror on the wall: Reflecting on narcissism. *Journal of Clinical Psychology*, 68(8), 877-885.
- Bender, D. S., Farber, B. A., & Geller, J. D. (1997). Cluster B personality traits and attachment. *Journal of the American Academy of Psychoanalysis*, 29, 551–563.
- Bender, D.S., Morey, L.C., & Skodol, A.E. (2011). Toward a model for assessing level of personality functioning in DSM-5, Part-I: A review of theory and methods. *Journal of Personality Assessment*, 93(4), 332-346.
- Besser, A., & Priel, B. (2010). Grandiose Narcissism versus Vulnerable Narcissism in Threatening Situations: Emotional Reactions to Achievement Failure and Interpersonal Rejection. *Journal of Social and Clinical Psychology*, 29, 874–902.
- Blais, M. A., Little, J. A. (2010). Toward an integrative study of narcissism. *Personality Disorders: Theory, Research, and Treatment*, 1(3), 197-199.
- Blatt, S. (2008). *Polarities of Experience: Relatedness and Self-Definition in Personality Development, Psychopathology and the Therapeutic Process*. Washington, DC: American Psychological Association.
- Blatt, S. J., & Levy, K.N. (2003). Attachment Theory, Psychoanalysis, Personality Development, and Psychopathology. *Psychoanalytic Inquiry*, 23, 104-152.
- Blatt, S. J., Stayner, D. A., Auerbach, J. S., & Behrends, R. S. (1996). Change in object and self-representations in long-term, intensive, inpatient treatment of seriously disturbed adolescents and young adults. *Psychiatry*, 59, 82–107.

- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss, sadness, and depression*. New York: Basic Books.
- Brennan, K. A., Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, parental death, and perceptions of parental caregiving. *Journal of Personality*, 66(5), 835-878.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York, NY: Guilford.
- Bretherton, I. (1991). Pouring new wine into old bottles: The social self as internal working model. In M. R. Gunnar & L. A. Sroufe (Eds.), *Self processes and development: The Minnesota symposia on child development* (Vol. 23, pp. 1 -41). Hillsdale, NJ: Erlbaum.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, 75, 219–229.
- Cain, N. M., Pincus, A. L., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28, 638 – 656.
- Campbell, W. K., Foster, C.A., Finkel, E.J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology*, 83(2), pp. 340-354.
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, 28, 358–368.
- Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1996). Attachment, caregiving, and relationship functioning in couples: Effects of self and partner. *Personal Relationships*, 3, 257-278.
- Choi-Kain, L. W., Gunderson, J. G. (2008). Mentalization: ontogeny, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, 165(9), 1127-35.
- Clark, L. A. (2005). Temperament as a unifying basis for personality and psychopathology. *Journal of Abnormal Psychology*, 114, 505–521.

- Clark, L. A. (2007). Assessment and diagnosis of personality disorder. Perennial issues and an emerging reconceptualization. *Annual Review of Psychology*, 58, 227-257.
- Clemence, A. J., Perry, J. C., Plakun, E. M. (2009). Narcissistic and borderline personality disorders in a sample of treatment refractory patients. *Psychiatric Annals*, 39(4), 175-184.
- Cloninger, C.R. (2000). A practical way to diagnosis personality disorders: A proposal. *Journal of Personality Disorders*, 14, 99–108.
- Collins, N. L., Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644-663.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Crittenden, P. M. (1990). Internal representational models of attachment relationships. *Infant Mental Health Journal*, 11, 259–277.
- Cuthbert, B. (2002). Social anxiety disorder. Trends and translational research. *Biological Psychiatry*, 51, 4–10.
- Davidov, M., & Morf, C. C. (2004). Narcissism and interpersonal relationships: Putting away the ones we need. Unpublished data, University of Toronto.
- Del Rosario, P. M., & White, R. M. (2005). The Narcissistic Personality Inventory: Test–retest stability and internal consistency. *Personality and Individual Differences*, 39, 1075–1081.
- Derogatis, L. R. (1975). *Brief Symptom Inventory*. Clinical Psychometric Research: Baltimore.
- Diamond, D. (2005). Narcissism as a clinical and social phenomenon. In: Auerbach, J.S. Levy, K.N. Schaffer, (Eds.). *Relatedness, Self-Definition and Mental Representation*. New York: Routledge/Taylor & Francis Group.
- Diamond, D., Levy K. N., Clarkin J., Fischer-Kern, M., Cain, N. N., Doering, S. (in press). Attachment and mentalization in patients with co-morbid narcissistic and borderline personality disorders.
- Diamond, D., Yeomans, F. E., Clarkin, J. F. Levy, K. N. Kernberg, O. F. (2008). The reciprocal impact of attachment and transference-focused psychotherapy with borderline patients. (270-294). In H. Steele & M. Steele (Eds.), *Clinical applications of the Adult Attachment Interview*. New York, NY, US: Guilford Press.
- Dickinson K.A., Pincus A.L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders* 17:188–207.

- Dimaggio, G., Nicolò, G., Popolo, R., Semerari, A., Carcione, A. (2006). Self-Regulatory Dysfunctions in Personality Disorders: The Role of Poor Self Monitoring and Mindreading. *Applied Psychology: An International Review*, 55(3), 397-407.
- Dimaggio, G., Nicolò, G., Fiore, D., Centenero, E., Semerari, A., ... & Pedone, R. (2008). States of minds in narcissistic personality disorder: Three psychotherapies analyzed using the grid of problematic states. *Psychotherapy Research*, 18(4), 466-480.
- Doidge, N., Simon, B., Brauer, L., Grant, D., First, M., & Mosher, P. (2002). Psychoanalytic patients in the U.S., Canada, and Australia: DSM-III-R disorders, indications, previous treatment, medications, and length of treatment. *Journal of the American Psychoanalytic Association*, 50(2), 75-614.
- DSM-5 Personality Disorders Workgroup. (2012). Reformulation of Personality Disorders in DSM-5. American Psychiatric Association. Retrieved from <http://www.dsm5.org>
- Duggan, E. S., & Brennan, K. A. (1994). Social avoidance and its relation to Bartholomew's adult attachment typology. *Journal of Social and Personal Relationships*, 11, 147–153.
- Edelstein, R. S. (2006). Attachment and emotional memory: Investigating the source and extent of avoidant memory impairments. *Emotion*, 6(2), 340-345.
- Emmons, R.A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, 52, 11-17.
- Emmons, R. A. (1984). Factor analysis and construct validity of the Narcissistic Personality Inventory. *Journal of Personality Assessment*, 48, 291-300.
- Exline, J. J., Baumeister, R. F., Bushman, B. J., Campbell, W. K., Finkel, E. J. (2004). Too Proud to Let Go: Narcissistic Entitlement as a Barrier to Forgiveness. *Journal of Personality and Social Psychology*, 87(6), 894-912.
- Eysenck, H.J. (1987). The definition of personality disorders and the criteria appropriate for their description. *Journal of Personality Disorders*, 1, 211–219.
- Fan, Y., Wonneberger, C. Enzi, B. de Greek, M. Ulrich, C. Tempelmann, C. Bogerts, B. Doering, S. Northoff, G. (2011). The narcissistic self and its psychological and neural correlates: An exploratory fMRI study. *Psychological Medicine*, 41(8), 1641-1650.
- Feintuch, B. (1999). Adult attachment, narcissism, shame, and defensiveness. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 59(10-B), pp. 5575. [Dissertation]

- First, M. B. (2010). Commentary on Krueger and Eaton's "Personality traits and the classification of mental disorders: Toward a more complete integration in DSM-5 and an empirical model of psychopathology": Real-world considerations in implementing an empirically based dimensional model of personality in DSM-5. *Personality Disorders: Theory, Research, and Treatment*, 1(2), 123-126.
- First, M. (2010). Clinical utility in the revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM). *Professional Psychology: Research and Practice*, 41(6), 465-473.
- First, M. B., Gibbon M., Spitzer R. L., Williams, J. B. W., Benjamin L. S. (1997). *Structured Clinical Interview for DSM-IV Axis II Personality Disorders, (SCID-II)*. Washington, D.C.: American Psychiatric Press.
- Fischer-Kern M., Buchheim A., Hörz S., Schuster P., Doering S., ... & Fonagy P (2010). The Relationship between Personality Organization, Reflective Functioning and Psychiatric Classification in Borderline Personality Disorder. *Psychoanalytic Psychology* 27(4), 395-409
- Fonagy, P. (1991). Thinking about thinking: Some clinical and theoretical considerations in the treatment of a borderline patient. *International Journal of Psychoanalysis*, 72, 1-18.
- Fonagy, P., Steele, M., & Steele, H. (1991). Intergenerational patterns of attachment: Maternal representations during pregnancy and subsequent infant- mother attachments. *Child Development*, 62, 891-905.
- Fonagy, P., Luyten, P., & Strathearn, L. (2011). Mentalization and the Roots of Borderline Personality Disorder in Infancy. In H. E. Fitzgerald, K. Puura, M. Tomlinson, & C. Paul (Eds.), *International Perspectives on Children and Mental Health: Volume 1: Development and Context*. New York: Praeger.
- Fonagy P., & Bateman, A.W. (2008). The development of borderline personality disorder – A mentalizing model. *Journal of Personality Disorders*, 22, 4-21.
- Fonagy P., Gergely G., Jurist E., Target M. (2002). *Affect regulation, mentalization, and the development of the self*. New York: Other Press.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9, 679–700.
- Fonagy, P., & Target, M. (2006). The mentalization-focused approach to self pathology. *Journal of Personality Disorders*, 20, 544-576.

- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21, 1355-1381
- Fonagy P, Bateman A. W. (2007). Mentalizing and borderline personality disorder. *Journal of Mental Health*, 16(1), 83-101.
- Fonagy P, Bateman A. W. (2006). Mechanisms of change in mentalization-based treatment of BPD. *Journal of Clinical Psychology*, 62(4), 411-30.
- Fonagy P, Bateman A. W. (2006). Progress in the treatment of borderline personality disorder. *British Journal of Psychiatry*, 188(1), 1-3.
- Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., Mattoon, G., & Gerber, A., (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. *Journal of Consulting and Clinical Psychology*, 64, 22–31.
- Fossati, A., Beauchaine, T., Grazioli, F., Carretta, I., Cortinovis, F., Maffei, C. (2005). A Latent Structure Analysis of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Narcissistic Personality Disorder Criteria, *Comprehensive Psychiatry*, 46(5), 361-367.
- Foster, J. D., Campbell, W. K., Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality*, 37(6), 469-486.
- Fraley, R. C., Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. Simpson & W. S. Rholes (Eds.) *Attachment theory and close relationships* (pp. 249-279). New York, NY, US: Guilford Press.
- Freud, S. (1914/1957). On narcissism: An introduction. In J. Strachey (Ed. And Trans.), *The standard edition of the complete works of Sigmund Freud* (Vol. 14, pp. 73-102). London, England: Hogarth Press.
- Freud. S. (1916/1991) Some character types met with in psychoanalytic work. In M.F.R. Kets de Vries & S.M. Perzow (Eds.), *Handbook of character studies: Psychoanalytic explorations* (pp.27-50). Madison, CT: International Universities Press.
- Gabbard, G. (2009). Transference and countertransference: Developments in the treatment of narcissistic personality disorder. *Psychiatric Annals*, 39, 129-136.
- Gabbard, G. (1989). On "doing nothing" in the psychoanalytic treatment of the refractory borderline patient. *International Journal of Psychoanalysis*, 70:527-534.
- Gabbard, G. (1998). *Love and Hate in the Analytic Setting*. Jason Aronson, Northvale, NJ.

- George, C., Kaplan, N., & Main, M. (1984/1985/1996). Adult Attachment Interview. Unpublished manuscript, Department of Psychology, University of California, Berkeley.
- Gergely, G. & Watson, J. (1996). The social biofeedback model of parental affect-mirroring. *International Journal of Psycho-Analysis*, 77, 1181–1212.
- Gergely, G. (2002). *The development of understanding self and agency*. In U. Goshwami (Ed.), *Blackwell handbook of childhood cognitive development* (pp. 26–46). Oxford: Blackwell.
- Gergely, G. & Koós, O. (2001). The ‘flickering switch’ hypothesis: A contingency-based approach to the etiology of disorganized attachment in infancy. In J. Allen (Ed.), *Cognitive and interactional foundations of attachment*, Special Issue of the *Bulletin of the Menninger Clinic*, 65, 397–410.
- Gersten, S. P. (1991). Narcissistic personality disorder consists of two distinct sub-types. *Psychiatric Times*, 8, 25-26.
- Grant, B. F., Moore, T. C., Shepherd, J., & Kaplan, K. (2003). *Source and accuracy statement: Wave 1 national epidemiologic survey on alcohol and related conditions (NESARC)*. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Grant B.F., Stinson F.S., Dawson D.A., Chou S.P., Dufour M.C., Compton W., ...Kaplan K. (2004). Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry* 61:807-816.
- Grant, B.F., Kaplan K., & Stinson, F.S. (2005). *Source and accuracy statement for the wave 2 national epidemiologic survey on alcohol and related conditions (NESARC)*. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Griffin, D.W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. *Advances in Personal Relationships*, 5, 17-52.
- Gunderson, J. G. (1996). Borderline patient’s intolerance of aloneness: Insecure attachments and therapist availability. *American Journal of Psychiatry*, 153(6), 752–758.
- Gunderson J.G. & Ronningstam, E. (2001). Differentiating narcissistic and antisocial personality disorders. *Journal of Personality Disorders*, 15(2), 103-109.
- Gunderson J.G, Ronningstam, E., & Smith, L. E. (1991). Narcissistic Personality Disorder: A review on data on DSM-III-R descriptions. *Journal of Personality Disorders*, 5, 167-177.
- Gunderson, J. G. (2009). Borderline Personality Disorder: Ontogeny of a Diagnosis American. *Journal of Psychiatry*, 166, 530– 539.

- Gunderson, J. G. (2010). Commentary on “Personality traits and the classification of mental disorders: Toward a more complete integration in DSM-5 and an empirical model of psychopathology”. *Personality Disorders: Theory, Research, and Treatment*, 1(2), 119-122.
- Hartmann, H. (1950). Psychoanalysis and developmental psychology. *Psychoanalytic Study of the Child*, 5, 7–17.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, 59, 270-280.
- Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray’s Narcism Scale. *Journal of Research in Personality*, 31, 588–599.
- Horney, K. (1939). What is a neurosis? *American Journal of Sociology*, 45, 426-432.
- Horton, R. S., Bleau, G., & Drwecki, B. (2006). Parenting narcissus: What are the links between parenting and narcissism? *Journal of Personality*, 74, 345–376.
- Hyler, S. E. (1994). Personality Diagnostic Questionnaire—4. Unpublished test, New York State Psychiatric Institute.
- Hyler, S. E., & Rieder, R. O. (1987). Personality diagnostic questionnaire-revised (PDQ-R). New York: New York State Psychiatric Institute.
- Hyman, S. (2002). Neuroscience, genetics, and the future of psychiatric diagnosis. *Psychopathology*, 35, 139-144.
- Kamphuis, J. H., & Noordhof, A. (2009). On categorical diagnoses in DSM–V: Cutting dimensions at useful points? *Psychological Assessment*, 21, 294 –301.
- Kendall, P. C , Hollon, S. D., Beck, A. T., Hammen, C. L., & Ingram, R. E. (1987). Issues and recommendations regarding use of the Beck Depression Inventory. *Cognitive Therapy and Research*, 11, 289- 299.
- Kernberg O.F. (1967). Borderline personality organization. *Journal of American Psychoanalytic Association*, 15:641–85.
- Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- Kernberg, O. F. (1984). *Severe personality disorders*. New Haven, CT: Yale University Press.

- Kernberg O.F. (1998). Pathological narcissism and narcissistic personality disorder: theoretical background and diagnostic classification. In E.F. Ronningstam (ed.) *Disorders of Narcissism: Diagnostic, Clinical, and Empirical Implications*. Washington, DC: American Psychiatric Association, 29–51.
- Kernberg, O. F., & Caligor, E. (2005). A psychoanalytic theory of personality disorders. In J. Clarkin & M. Lenzenweger (Eds.), *Major theories of personality disorders* (2nd ed., pp.114-156). New York: Guilford Press.
- Kernberg O. F. (2007). The almost untreatable narcissistic patient. *Journal of the American Psychoanalytic Association*, 55:503–39
- Kernberg O. F. (2009). Narcissistic personality disorders: part 1. *Psychiatric Annals*, 39:105–67
- Kernberg P. F. (1989). Narcissistic personality disorder in childhood. *Psychiatric Clinical North America*, 12, 671–94
- Kernis, M. H., & Sun, C. (1994). Narcissism and reactions to interpersonal feedback. *Journal of Research in Personality*, 28, 4–13.
- Klonsky, E. D., Oltmanns, T. F., Turkheimer, E. (2002). Informant-reports of personality disorder: Relation to self-reports and future research directions. *Clinical Psychology: Science and Practice*, 9(3), 300-311.
- Kohut, H. (1972). Thoughts on Narcissism and Narcissistic Rage. *Psychoanalytic Study of the Child* (27), 360-400.
- Kohut, H. (1971). *The analysis of the self*. New York: International University Press.
- Kohut, H. (1977). *The restoration of the self*. New York: International University Press.
- Komaraju, M., Cokley, K. O. (2008). Horizontal and vertical dimensions of individualism-collectivism: A comparison of African Americans and European Americans. *Cultural Diversity and Ethnic Minority Psychology*, 14(4), 336-343.
- Krueger, R. F., Markon, K. E., Patrick, C. J., & Iacono, W. G. (2005). Externalizing psychopathology in adulthood: A dimensional-spectrum conceptualization and its implications for DSM–V. *Journal of Abnormal Psychology*, 114, 537–550.
- Krueger, R. F., & Eaton, N. R. (2010). Personality traits and the classification of mental disorders: Toward a more complete integration in DSM-5 and an empirical model of psychopathology. *Personality Disorders: Theory, Research, and Treatment*, 1, 97–118.
- Krueger, R. F., Eaton, N. R., Clark, L. A., Watson, D., Markon, K. E., Derringer, J., Livesley, W. J. (2011). Deriving an empirical structure of personality pathology for DSM-5. *Journal of Personality Disorders*, 25 (2), pp.170-191.

- Krueger, R. F., Eaton, N. R., South, S. C., Clark, L. A., & Simms, L. J. (2011). Dimensions, prototypes, and disorders: Conceptualizing personality and personality disorders for DSM-V. In D.A. Regier, W.E. Narrow, E.A. Kuhl, & D.J. Kupfer (eds), *The Conceptual Evolution of DSM-V* (pp. 97-117). Arlington, VA: American Psychiatric Association.
- Krueger, Robert F.; Skodol, Andrew E.; Livesley, W. John; Shrout, Patrick E.; Huang, Yueqin. (2008). Synthesizing dimensional and categorical approaches to personality disorders: Refining the research agenda for DSM-V axis II. In: J. Helzer, H. Kraemer, R.F. Krueger, H.U. Wittchen, P. Sirovatka, D. Regier, Darrel A. (Eds.) *Dimensional approaches in diagnostic classification: Refining the research agenda for DSM-V*. (85-99) Washington, DC, US: American Psychiatric Association.
- Kubarych, T. S., Deary, I. J., & Austin, E. J. (2004). The Narcissistic Personality Inventory: Factor structure in a nonclinical sample. *Personality and Individual Differences*, 36, 857–872.
- Kupfer, D. J., First, M. B., & Regier, D. E. (2002). Introduction. In D. J. Kupfer, M. B. First, & D. E. Regier (Eds.), *A research agenda for DSM–V*. Washington, DC: American Psychiatric Association.
- Lenzenweger, M. F. (2008). Epidemiology of personality disorders. *Psychiatric Clinics of North America*, 31(3), 395-403.
- Levy, K. N., Reynoso, J. S., Wasserman, R. H., & Clarkin, J. F. (2007). Narcissistic personality disorder. In W. T. O’Donohue, K. A. Fowler, & S. O. Lilienfeld (eds.), *Personality disorders: Toward the DSM-V* (pp. 233–277). California: Sage.
- Levy, K., Meehan, K., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology*, 74(6), pp. 1027-1040.
- Levy, K.N., Chauhan, P., Clarkin, J.F., Wasserman, R.H., Reynoso, J.S., (2009). Narcissistic pathology: Empirical approaches. *Psychiatric Annals*, 39(4), Special issue: Narcissistic Personality Disorders: Part 2., 203-213.
- Levy, K. N., Beeney, J. E., & Temes, C. M. (2011). Attachment and its vicissitudes in borderline personality disorder. *Current Psychiatry Reports*, 13, 50-59.
- Lewin, B.D. (1954). Sleep, Narcissistic Neurosis, and the Analytic Situation. *Psychoanalytic Quarterly*, 23:487-510.
- Livesley, W. J. (2001). *Conceptual and taxonomic issues*. In W. J. Livesley (Ed.), *Handbook of personality disorders. Theory, research, and treatment* (pp. 3–38). New York: Guilford Press.

- Livesley, W. J. (2003). Diagnostic dilemmas in classifying personality disorder. In K. A. Phillips, M. B. First, & H. A. Pincus (Eds.), *Advancing DSM. Dilemmas in psychiatric diagnosis* (pp. 153–190). Washington, DC: American Psychiatric Association.
- Livesley, W. J., & Jang, K.L. (2000). Toward an empirically based classification of personality disorder. *Journal of Personality Disorders*, 14, 137-151.
- Lilienfeld, S. O., Waldman, I. D., & Israel, A. C. (1994). A critical examination of the use of the term “comorbidity” in psychopathology research. *Clinical Psychology: Science and Practice*, 1, 71–83.
- Lowe, J., & Widiger, T. (2009). Clinicians’ judgments of clinical utility: A comparison of the DSM–IV with dimensional models of general personality. *Journal of Personality Disorders*, 23, 211–229.
- Luhtanen, R.K., Crocker, J. (2005). Alcohol Use in College Students: Effects of Level of Self-Esteem, Narcissism, and Contingencies of Self-Worth. *Psychology of Addictive Behaviors*, 19(1), 99-103.
- Lukowitsky, M. R., Roberts, N. R., Lehner, A. N., Pincus, A. L., & Conroy, D. E. (2007). Differentiating forms of narcissism by achievement-related motives and interpersonal problems. Paper presented at the annual meeting of the Society for Interpersonal Theory and Research, Madison, WI.
- Lynam, D. R., & Widiger, T. A. (2001). Using the five factor model to represent the DSM–IV personality disorders: An expert consensus approach. *Journal of Abnormal Psychology*, 110, 401–412.
- Main, M. (1990). Cross-cultural studies of attachment organization: Recent studies, changing methodologies, and the concept of conditional
- Main, M., & Hesse, E. (1990). Parents’ unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 161–18). Chicago and London: University of Chicago Press.
- Masterson, J. F. (1993). *The emerging self: A developmental, self, and object relations approach to the treatment of the closet narcissistic disorder of the self*. New York: Brunner/Mazel.
- Miller J. D., & Campbell W. K. (2008). Comparing clinical and social-personality conceptualizations of narcissism. *Journal of Personality*, 76:449–76

- Miller, J. D., & Campbell, W. K. (2010). The case for using research on trait narcissism as a building block for understanding narcissistic personality disorder. *Personality Disorders: Theory, Research, and Treatment*, 1, 180–191.
- Miller, J. D.; Dir, A., Gentile, B., Wilson, L., Pryor, L., Campbell, W. K. (2010). Searching for a vulnerable dark triad: Comparing factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality*, 78(5), 1529-1564.
- Miller, J. D., Widiger, T. A., Campbell, W. K. (2010). Narcissistic personality disorder and the DSM-V. *Journal of Abnormal Psychology*, 119(4), 640-649.
- Millon, T., Davis, R. D., Millon, C. M., Wenger, A. W., Van Zuilen, M. H., Fuchs, M., & Millon, R. B. (1996). Disorders of personality. DSM–IV and beyond. New York: Wiley.
- Morey, L.C. (2005). *Personality pathology as pathological narcissism*. In M. Maj, H.S. Akiskal, J.E. Mezzich, & A. Okasha (Eds.), World psychiatric association series: Evidence and experience in psychiatry (pp.328-331). New York: Wiley.
- Morf, C. & Rhodewalt, F. (1993). Narcissism and Self-Evaluation Maintenance: Explorations in Object Relations. *Personality and Social Psychology Bulletin*, 19, 668- 676.
- Morf, C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Moulton-Perkins, A., Rogoff, S., Luyten P., & Fonagy, P. (2011). Development and validation of a new self-report measure of mentalisation: the 54-item Reflective Function Questionnaire. Unpublished paper presented at the research conference of the British Association for Counselling & Psychotherapy.
http://www.bacp.co.uk/research/conf_archive/2011.php
- O'Connor, B. P. (2002). The search for dimensional structure differences between normality and abnormality: a statistical review of published data on personality and psychopathology. *Journal for Personality and Social Psychology*, 83, 962-982.
- O'Donohue, W., Fowler, K. & Lillienfeld, S. (2007) (eds.). *Personality Disorders. Toward the DSM-V*. Thousand Oaks, CA: Sage Publications.
- Oltmanns, T. F., & Turkheimer, E. (2006). Perceptions of Self and Others Regarding Pathological Personality Traits. In R. F. Krueger and J. L. Tackett (Eds.); *Personality and psychopathology* (pp. 71-111). New York, NY, US: Guilford Press.
- Patrick, M., Hobson, R.P., Castle, D., Howard, R., & Maughan, B. (1994). Personality disorder and the mental representation of early social experience. *Development and Psychopathology*, 6, 375–388.

- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology*, 21, 913–938.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197–1208.
- Paulhus, D. L. (2001). Normal narcissism: Two minimalist accounts. *Psychological Inquiry*, 12(4), 228-230.
- Paulhus, D.L., Williams K.M. (2002). The dark triad of personality: narcissism, Machiavellianism and psychopathy. *Journal of Research in Personality Disorder*, 36:556–63.
- Perry, J. D., Perry, J. C. (1996). Reliability and convergence of three concepts of narcissistic personality. *Psychiatry: Interpersonal and Biological Processes*, 59(1), 4-19.
- Philipson, I. (1985). Gender and narcissism. *Psychology of Women Quarterly*, 9(2), 213-228.
- Pincus, A.L., & Gurtman, M.B. (1995). The three faces of interpersonal dependency: Structural analysis of self-report dependency measures. *Journal of Personality and Social Psychology*, 69, 744–758.
- Pincus, A.L., Ansell, E.B., Pimentel, C.A., Cain, N.M., Wright, A. G. C., & Levy, K.N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, 21, 365-379.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology*, 6, 421– 446.
- Pincus, A.L., Lukowitsky, M. R., Wright, A. G. (2010). The interpersonal nexus of personality and psychopathology. In: *Contemporary directions in psychopathology: Scientific foundations of the DSM-V and ICD-11* (523-552). Millon, Theodore (Ed.); Krueger, Robert F. (Ed.); Simonsen, Erik (Ed.); New York, NY, US: Guilford Press.
- Pincus, A. L. (2011). Some comments on nomology, diagnostic process, and narcissistic personality disorder in the DSM-5 proposal for personality and personality disorders. *Personality Disorders: Theory, Research, and Treatment*, 2 (1), 41-53.
- Raikes, H.A., & Thompson, R.A. (2006). Family emotional climate, attachment security, and young children's emotion knowledge in a high-risk sample. *British Journal of Developmental Psychology*, 24, 89-104.
- Raskin, R., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45, 590.

- Raskin, R., & Hall, C. S. (1981). The Narcissistic Personality Inventory: Alternate form reliability and further evidence of construct validity. *Journal of Personality Assessment*, 45, 159–162.
- Raskin, R. N., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54, 890–902.
- Raskin, R., Novacek, J., & Hogan, R. (1991). Narcissism, self-esteem, and defensive self-enhancement. *Journal of Personality*, 59, 20–38.
- Rathvon, N., & Holmstrom, R. W. (1996). An MMPI-2 portrait of narcissism. *Journal of Personality Assessment*, 66, 1–19.
- Reich, A. (1960). Pathologic forms of self-esteem regulation. *Psychoanalytic Studies of the Child*, 15, 215-232.
- Rhodewalt, F. P., Madrian, J. C., & Cheney, S. (1998). Narcissism, self-knowledge organization, and emotional reactivity: The effect of daily experiences on self-esteem and affect. *Personality and Social Psychology Bulletin*, 24, 75–87.
- Rhodewalt, F., & Morf, C. C., (1995). Self and interpersonal correlates of the Narcissistic Personality Inventory: A review and new findings. *Journal of Research in Personality*, 29, 1-23.
- Rhodewalt, F. & Morf, C.C. (2005). Reflections in troubled waters: Narcissism and interpersonal self-esteem regulation. In A. Tesser, J. Wood, and D. Stapel (Eds.), *On Building, Defending, and Regulating the Self*. (pp. 127-151). New York: Psychology Press.
- Rhodewalt, F. P. (2009). Narcissism. In M. R. Leary, and R.H. Hoyle, (Eds.), *Handbook of individual differences in social behavior* (pp. 547-560). New York, NY: Guilford Press.
- Ronningstam, E. (1996). Pathological narcissism and narcissistic personality disorder in Axis I disorders. *Harvard Review of Psychiatry*, 3, 326-340.
- Ronningstam E.F. (1998). Disorders of Narcissism: Diagnostic, Clinical, and Empirical Implications. Washington, DC: American Psychiatric Association.
- Ronningstam E., Maltzberger J.T. (2008). Pathological narcissism and sudden suicide related collapse. *Suicide and Life-Threatening Behavior*, 28 (3), 261-271.
- Ronningstam, E. F., Gunderson, J. G. (1990). Identifying criteria for narcissistic personality disorder. *American Journal of Psychiatry*, 147, 918– 922.
- Ronningstam, E. (2005). Identifying and understanding the narcissistic personality. New York: Oxford University Press.

- Ronningstam E., Weinberg I., Maltzberger J.T. (2008). Eleven deaths of Mr. K. - contributing factors to suicide in narcissistic personalities. *Psychiatry* 71:169–82.
- Ronningstam, E. (2009). Narcissistic personality disorder: Facing DSM–V. *Psychiatric Annals*, 39, 111–121.
- Ronningstam, E. (2010). Narcissistic personality disorder – A current review. *Current Psychiatry Reports*, 12, 68-75.
- Ronningstam E. (2011). Narcissistic personality disorder in DSM-V- in support of retaining a significant diagnosis. *Journal of Personality Disorders*, Vol. 25 (2), 248-59.
- Rose, P. (2002). The happy and unhappy faces of narcissism. *Personality and Individual Differences*, 33, 379–391.
- Rosenfeld, H. (1964). On the Psychopathology of Narcissism a Clinical Approach. *International Journal of Psycho-Analysis*, 45, 332-337.
- Rottman, B. M., Ahn, W., Sanislow, C. A., & Kim, N. S. (2009). Can clinicians recognize DSM–IV personality disorders from five-factor model descriptions of patient cases? *American Journal of Psychiatry*, 166, 427–433.
- Rounsaville, B. J., Alarcón, R. D., Andrews, G., Jackson, J. S., Kendell, R. E., Kendler, K. (2002). Basic nomenclature issues for DSM-V. In: *A research agenda for DSM–V*. Kupfer, David J. (Ed.); First, Michael B. (Ed.); Regier, Darrel A. (Ed.); Washington, DC, US: American Psychiatric Association.
- Russ, E., Shedler, J., Bradley, R., Westen, D. (2008). Refining the construct of narcissistic personality disorder: Diagnostic criteria and subtypes. *The American Journal of Psychiatry*, 65(11), 1473-1481.
- Sanderson, C. & Clarkin, J. F. (2002). Further use of the NEO-PI-R personality dimensions in differential treatment planning. In P.T. Costa, & T.A. Widiger, (Eds.); *Personality disorders and the five-factor model of personality* (2nd ed. pp. 351-375). Washington, DC, US: American Psychological Association.
- Saragovi, C., Aubé, J., Koestner, R., Zuroff, D. (2002). Traits, motives, and depressive styles as reflections of agency and communion. *Personality and Social Psychology Bulletin*, 28(5), 563-577.
- Schore, A.N. (1994). *Affect regulation and the origin of the self: The neurobiology of emotional development*. Mahwah, NJ: Erlbaum.

- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy? Self-esteem matters. *Journal of Personality and Social Psychology*, 87, 400–416.
- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development*, 4, 133-161.
- Shea, M. T., Glass, D. R., Pilkonis, P. A., Watkins, J., & Docherty, J. P. (1987). Frequency and implications of personality disorders in a sample of de-pressed inpatients. *Journal of Personality Disorders*, 1, 27–42.
- Shedler, J., & Westen, D. (2004). Refining personality disorder diagnosis: Integrating science and practice. *American Journal of Psychiatry*, 161, 1350 –1365.
- Sherry, A., Lyddon, W., & Henson, R. K. (2007). Adult attachment and developmental personality styles: An empirical study. *Journal of Counseling & Development*, 85(3), 337-348.
- Siever, L.J., & Davis, K.L. (1991). A psychobiological perspective on the personality disorders. *American Journal of Psychiatry*, 148, 1647–1658.
- Siever, L., & Davis, K. (2004). The pathophysiology of schizophrenia disorders: Perspectives from the spectrum. *American Journal of Psychiatry*, 161, 398 – 413.
- Siever, L. & Weinstein, L. (2009). *The neurobiology of personality disorders: Implications for psychoanalysis*. *Journal of the American Psychoanalytic Association*, 57(2), pp. 361-398.
- Skodol, A., & Bender, D. (2009). The future of personality disorders in DSM-V? *American Journal of Psychiatry*, 166, 388–391.
- Skodol, A., Bender, D., Oldham, J., Clark, L., Morey, L., Verheul, R., Krueger, Robert F.; & Siever, L. (2011). *Personality Disorders: Theory, Research, and Treatment*, 2(1), pp. 23-40.
- Slade, A. (1999). Attachment theory and research: Implications for the theory and practice of individual psychotherapy with adults. In J. Cassidy and P. R. Shaver (Eds.): *Handbook of attachment: Theory, research, and clinical applications* (575-594). New York, NY, US: Guilford Press.
- Slade, A. (2005) Parental reflective functioning: An introduction. *Attachment & Human Development*, 7, 269-281.
- Smolewska, K., & Dion, K. L. (2005). Narcissism and adult attachment: A multivariate approach. *Self and Identity*, 4, 59–68.

- Soeteman, H., Van Roijen, L., Verheul, R., & Busschbach, J. J. (2008). The economic burden of personality disorders in mental health care. *Journal of Clinical Psychiatry*, 69, 259–265.
- Spitzer, R. L., First, M. B., Shedler, J., Westen, D., & Skodol, A. E. (2008). Clinical utility of five dimensional systems for personality diagnosis: A “consumer preference” study. *Journal of Nervous and Mental Disease*, 196, 356–374.
- Sroufe, L.A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development*, 48, 1184-1199.
- Sroufe, L. A. (1996). Emotional development: The organization of emotional life in the early years. New York: Cambridge University Press.
- Steele, H., Steele, M., Croft, C., & Fonagy, P. (1999). Infant-Mother Attachment at One Year Predicts Children’s Understanding of Mixed Emotions at Six Years. *Social Development* (8: 2). 161-178.
- Stinson, F.S., Dawson, D.A., Goldstein, R.B., Chou, S.P., Huang, B., Smith, S.M., ... Grant, B.F. (2008). Prevalence, correlates, disability, and comorbidity of DSM-IV narcissistic personality disorder: results from the wave 2 national epidemiologic survey on alcohol and related conditions. *Journal of Clinical Psychiatry*, 69 (7), 1033-1045.
- Stucke, T.S., & Sporer, S.L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality*, 70(4), 509-532.
- Torgersen, S., Kringlen, E., & Cramer, V. (2001). The prevalence of personality disorders in a community sample. *Archives of General Psychiatry*, 58, 590-596.
- Tritt, S., Ryder, A. G., Ring, A., & Pincus, A. L. (2010). Pathological narcissism and the depressive temperament. *Journal of Affective Disorders*, 122, 280 –284.
- Trull, T. J. McCrae, R. R. (2002). A five-factor perspective on personality disorder research. In: *Personality disorders and the five-factor model of personality (2nd ed.)*. Paul T. Costa, Jr. and T. A. Widiger, (Eds.); Washington, DC, US: American Psychological Association.
- Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, 1, 355–380.
- Ullrich, S., Deasy, D., Smith, J., Johnson, B., Clarke, M., Broughton, N., & Coid, J., (2008). Detecting personality disorders in the prison population of England and Wales: Comparing case identification using the SCID-II screen and the SCID-II clinical interview. *Journal of Forensic Psychiatry & Psychology*, 19(3), 301-322.

- Verheul, R., & Widiger, T. A. (2004). A meta-analysis of the prevalence and usage of the personality disorder not otherwise specified (PDNOS) diagnosis. *Journal of Personality Disorders*, 18, 309–319.
- Wagner, A. W., & Linehan, M. M. (1999). Facial expression recognition ability among women with borderline personality disorder: Implications for emotion regulation? *Journal of Personality Disorders*, 13, 329–344.
- Wakefield, J. (2008). “The perils of dimensionalization: Challenge in distinguishing negative traits from personality disorders. *Psychiatric Clinics of North America*, 31, 379–393.
- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology*, 82, 819–834.
- Watson, P. J., Grisham, S. O. Trotter, M. V., Biderman, M. D. (1984). Narcissism and empathy: Validity evidence for the Narcissistic Personality Inventory. *Journal of Personality Assessment*, 48(3), 301-305.
- Watson, P. J., Little, T., Sawrie, S. M., & Biderman, M. D. (1992). Measures of the narcissistic personality: Complexity of relationships with self-esteem and empathy. *Journal of Personality Disorders*, 64, 434 – 449.
- Watson, P. J., Hickman, S. E., Morris, R. J., Milliron, J. T., Whiting, L. (1995). Narcissism, self-esteem, and parental nurturance. *Journal of Psychology: Interdisciplinary and Applied*, 129(1), 61-73.
- Watson, P. J., Trumpler, N., O’Leary, B. J., Morris, R. J., & Culhane, S. E. (2005). Narcissism and self-esteem in the presence of imagined others: Supportive versus destructive object representations and the continuum hypothesis. *Imagination, Cognition and Personality*, 25, 253–268.
- Watson, P. J., & Biderman, M. D. (1993). Narcissistic Personality Inventory factors, splitting and self-consciousness. *Journal of Personality Assessment*, 61, 41–57.
- Watson, P. J. (2005). Complexity of narcissism and a continuum of self-esteem regulation. In M. Maj et al. (eds.) *Evidence and Experience in Psychiatry*. Volume 8: Personality Disorders. New York: Wiley pp. 336–38
- West, M., Keller, A., Links, P., & Patrick, J. (1993). Borderline disorder and attachment pathology. *Canadian Journal of Psychiatry*, 18, 16–22.
- West, M. L., & Sheldon-Keller, A. E. (1994). *Patterns of relating: An adult attachment perspective*. New York, NY: Guilford.

- Westen, D., Ludolph, P., Lerner, H., Ruffins, S. & Wiss, C. (1990). Object relations in borderline adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29 (3), 338-348.
- Westen, D., & Shedler, J. (2000). A prototype matching approach to diagnosing personality disorders: Toward DSM–V. *Journal of Personality Disorders*, 14, 109–126.
- Westen, D., Shedler, J., & Bradley, R. (2006). A prototype approach to personality disorder diagnosis. *American Journal of Psychiatry*, 163, 846– 856.
- Westen, D. (2006). Commentary on Trull. Drizzling on the 5 +/- 3 Factor Parade. In T.A. Widiger et al. (eds.) *Dimensional Models of Personality Disorders. Refining the research agenda for the DSM-V*. Washington, DC: American Psychiatric Association.
- Widiger, T. A., & Clark, L. A. (2000). Toward DSM–V and the classification of psychopathology. *Psychological Bulletin*, 126, 946–963.
- Widiger, T.A., & Costa, P.T. (2002). Five-Factor Model personality disorder research. In P.T. Costa & T.A. Widiger (Eds.), *Personality disorders and the Five-Factor Model of Personality (2nd ed., pp. 59–87)*. Washington, DC: American Psychiatric Association.
- Widiger, T. A., & Simonsen, E. (2005). Alternative dimensional models of personality disorder: Finding a common ground. *Journal of Personality Disorders*, 19, 110–130.
- Widiger, T. A., Simonsen, E., Krueger, R. F., Livesley, W. J., & Verheul, R. (2005). Personality disorder research agenda for the DSM–V. *Journal of Personality Disorders*, 19, 317–340.
- Widiger, T. A., & Samuel, D. B. (2005). Diagnostic categories or dimensions: A question for DSM–V. *Journal of Abnormal Psychology*, 114, 494–504.
- Widiger, T.A., Costa, P. T., Jr., Samuel, D. B. (2006). Assessment of Maladaptive Personality Traits. In: *Differentiating normal and abnormal personality (2nd ed., 311-335)*. Strack, S. (Ed.); New York, NY, US: Springer.
- Widiger, T., & Trull, T. (2007). Plate tectonics in the classification of personality disorder: Shifting to a dimensional level. *American Psychologist*, 62, 71–83.
- Widiger T.A., Mullins-Sweatt S.N., (2005). Categorical and dimensional models of personality disorders. In Oldham, Skodol & Bender (eds) *The American Psychiatric Publishing Textbook of Personality Disorders*, 35–53. Arlington, VA.
- Williams, J. (1997). The DSM–IV multiaxial system. In T. Widiger, A. Frances, H. Pincus, R. Ross, M. First, & W. Davis (Eds.), *DSM–IV Sourcebook (Vol. 3, pp. 393–400)*. Washington, DC: American Psychiatric Association.

- Wink P. 1991. Two faces of narcissism. *Journal of Personality and Social Psychology*, 61,590–97.
- Wright, A. G., Lukowitsky, C. M., Pincus, A. L., & Conroy, D. E. (2010). The higher order factor structure and gender invariance of the Pathological Narcissism Inventory. *Assessment*, 17(4), 467-483.
- Zeeck, A., Hartmann, A., Orlinsky D. E., (2006). Internalization of the Therapeutic Process: Differences Between Borderline and Neurotic Patients. *Journal of Personality Disorders* 20:1, 22-41
- Zeigler-Hill V., Green, B. A., Arnau, R. C., Sisemore, T. B., & Myers, E. J. (2011). Trouble ahead, trouble behind: Narcissism and early maladaptive schemas. *Journal of Behavior Therapy and Experimental Psychiatry*, 42(1), 96-103.
- Zimmerman M., Rothschild L., & Chelminski, I. (2005). The prevalence of DSM-IV personality disorders in psychiatric outpatients. *American Journal of Psychiatry*, 162, 1911-1918.
- Zimmerman, M. (2011). Is there adequate empirical justification for radically revising the personality disorders section for DSM-5? *Personality Disorders: Theory, Research, and Treatment*.
- Zuckerman, M. (2002). Zuckerman–Kuhlman Personality Questionnaire (ZKPO): *An alternative five-factorial model*. In B. de Raad & M. Perugini (Eds.), *Big Five assessment* (pp. 377–397). Kirkland, WA: Hogrefe & Huber.
- Zuckerman, M., & O'Loughlin, R. E. (2009), Narcissism and well-being: A longitudinal perspective. *European Journal of Social Psychology*, 39: 957–972.