THE IMPACT OF INTERPERSONAL REJECTION ON SELF-ESTEEM AND MOOD
IN VULNERABLE NARCISSISTIC PERSONALITIES, GRANDIOSE
NARCISSISTIC PERSONALITIES, AND AVOIDANT PERSONALITIES:
EXPERIMENTAL VALIDATION OF VULNERABLE NARCISSISM AND THE
VULNERABLE NARCISSISM SCALE

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Abstract

Theoretical writings have proposed two phenotypic expressions of narcissistic pathology: grandiose and vulnerable. While the grandiose narcissistic expression is adequately represented in diagnostic and assessment instruments, the vulnerable is not. The Vulnerable Narcissism Scale (VNS; Pimentel et al., 2004) is a measure that was developed to assess the vulnerable phenotypic expression of narcissistic pathology. Past research has shown that vulnerable narcissism is often misdiagnosed as avoidant personality pathology. The goals of this study were twofold: (1) to provide further empirical data supporting the construct validity of the VNS; and (2) to provide experimental evidence for the validity of vulnerable narcissism by distinguishing this phenotype from the grandiose phenotypic expression of narcissism and from avoidant personalities. Using a non-clinical population, this study compared vulnerable narcissistic personalities’, grandiose narcissistic personalities’, and avoidant personalities’ overt presentations, conscious and unconscious self-views, and ability to modulate self-esteem and affect following a self-esteem threat. The findings of this study provide further validity for the VNS and corroborate theoretical writings that describe the differences between the two phenotypic expressions of narcissistic pathology. While this study provides evidence for the similarities in the overt presentation and conscious self-views of vulnerable narcissistic personalities and avoidant personalities, it was less successful in identifying the differences between these personality types. Limitations and directions for future research are discussed.
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Several clinical theorists have delineated two distinct phenotypic expressions of narcissistic personality pathology, grandiose narcissistic personality pathology and vulnerable narcissistic personality pathology (e.g., Akhtar, 2003; Akhtar & Thompson, 1982; Cooper, 1998; Gabbard, 1989, 1998; Masterson, 1993; Rovik, 2001). However, clinical theory has outpaced empirical research. Empirical research regarding the clinical presentation and assessment of narcissism has focused almost exclusively on the grandiose phenotypic expression (Ronningstam, 1988). For example, the description of Narcissistic Personality Disorder (NPD) in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000) only encompasses characteristics associated with grandiose narcissistic personality pathology. Similarly, contemporary assessment of narcissism relies heavily on the characteristics of the grandiose phenotype and often fails to assess vulnerable aspects of narcissism. The dearth of empirical research regarding the clinical presentation and assessment of vulnerable narcissism has led to significant confusion within the field regarding the scope of narcissistic pathology (Gunderson, Ronningstam, & Smith, 1991).

The present study is part of a larger effort to expand the narrow definition and assessment of narcissistic pathology. Recently, Dickinson and Pincus (2003) conducted one of the first empirical studies examining the construct of vulnerable narcissism. They compared grandiose and vulnerable narcissistic personalities on personality disorder criteria, interpersonal problems, and adult attachment and found evidence supporting the validity of these two phenotypic expressions of narcissism. Cain, Pincus, and Ansell (2007) reviewed the literature on narcissism and concluded that two broad themes of
narcissistic dysfunction are also represented in the literature. Cain and Pincus (2006) provided recommendations for how to revise the current diagnostic criteria for NPD to encompass both phenotypes of narcissism. In order to address the current difficulties in the assessment of vulnerable narcissism, Pimentel et al. (2004) developed the Vulnerable Narcissism Scale (VNS) and found evidence in support of the structural, convergent, and divergent validity of this measure. The purpose of this study is twofold: first, this study will provide further empirical data supporting the construct validity of the VNS; second, this study will attempt to provide experimental evidence for the validity of vulnerable narcissism by distinguishing this phenotype from the grandiose phenotypic expression of narcissism and from avoidant personalities.

_Narcissism: Theoretical Contributions_

Havelock Ellis introduced the term “narcissism” in 1898 to describe a sexual perversion involving the self as a sexual object. The term was elaborated further by Freud (1914/1986) in a paper titled “On Narcissism: An Introduction.” Freud described narcissism in terms of primary and secondary states. Primary narcissism refers to libidinal investment of psychic energy in the ego during a state of symbiosis. He proposed that as normal development progresses libidinal investment shifts to external love objects thereby reducing the ego’s narcissistic supply. The notion that as libidinal investment shifts from one psychic structure to another there is simultaneously an inevitable shift in energy is consistent with Freud’s theory of psychic energy, but is contended by psychoanalysts who do not agree with the constancy principle. Nonetheless, Freud considered primary narcissism a normal stage of development that is crucial to the development and regulation of a positively infused ego. According to
Freud, pathological narcissism involves the defensive withdrawal of psychic energy into a state of secondary narcissism. In secondary narcissism the libido is extracted from external love objects and reinvested in the ego, resulting in exaggerated self-focus and self-aggrandizement.

Even though Freud was one of the first to elaborate on the construct of narcissism, he did not fully develop his ideas on narcissism. Several early papers (Nemiah, 1961; Reich, 1960/1986; Waelder, 1925) expanded on the construct of narcissism. For example, Waelder (1925) described an individual with “narcissistic personality” that highly resembled the narcissistic personality proposed by contemporary writers. He suggested that these individuals presented with an air of superiority, lacked empathy for others, and approached sexual encounters solely for physical pleasure. Despite this early interest in narcissism, theories regarding the genesis and treatment of narcissistic personality disorder were not articulated until the seminal work of Kohut (1971, 1977) and Kernberg (1970, 1974/1986, 1975, 1984). Due to the centrality of these theories in further psychoanalytic contributions to narcissism, their theories will be described in some detail below.

Kohut’s (1971, 1977) theory on narcissism is consistent with Freud’s in placing narcissism as a crucial stage of development. He postulated that the development of a cohesive self requires the presence of a responsive-empathic environment. Kohut coined the term selfobjects to refer to “objects which we experience as part of our self; the expected control over them is, therefore, closer to the concept of the control which a grown-up expects to have over his own body and mind than to the concept of the control which he expects to have over others” (Kohut & Wolf, 1978/1986, p.177). Kohut
described two types of selfobjects that play a crucial role in the development of the self. The first is the mirroring selfobject whose role is to respond and confirm the child’s grandiosity by mirroring the child’s exhibiting of his/her self. The second selfobject is the idealized parent imago, whose role is to provide the child with the opportunity to connect to an all powerful other that soothes the child emotionally and sustains the child’s integrity and safety in the face of perceived threat.

In Kohut’s theory (1971, 1977), the self develops along two narcissistic poles, the grandiose pole and the idealizing pole. The grandiose pole develops through the mirroring of the child’s normal infantile grandiosity and eventually evolves into the child having mature, realistic ambitions. The idealizing pole develops through stages ranging from the idealization of mature and powerful others to a mature capacity to view others realistically and to self-soothe in the face of disappointment. Kohut proposed that in normal development the child’s mirroring and idealizing needs are sufficiently responded to while simultaneously the child experiences minor empathic failures by the mirroring and idealizing selfobjects. These empathic failures are necessary for the child to develop a realistic self-concept and realistic expectations of others. Through a process Kohut labeled transmuting internalization, the child’s self crystallizes and there is a gradual replacement of selfobjects and their functions by a self and its functions. Kohut suggested that in normal development people achieve healthy narcissism, which in adulthood is exhibited in ambition, creativity, empathy, and humor.

Kohut (1977) proposed that narcissistic pathology represents a developmental arrest caused by unempathic responding to the child’s mirroring and idealizing needs. Kohut and Wolf (1978/1986) described four self-states (i.e., undifferentiated self,
fragmenting self, overstimulated self, overburdened self) of narcissistic pathology. These self-states were not intended to be diagnostic in nature, and do not have to occur in isolation. The undifferentiated self results from frustration of the child’s mirroring needs and manifests itself in a pervasive sense of emptiness, deadness, and paralysis. The emptiness experienced by these individuals is avoided via compulsive self-stimulating activities (e.g., compulsive masturbation, sexual promiscuity, drug- and alcohol-induced excitement, or gambling). The fragmenting self arises as a consequence of parental failure to respond with empathic attunement to the child’s autonomous strivings resulting in a fragile self that cannot tolerate any negative feedback. There is only a narrow range of functioning within which the fragmenting self can maintain cohesion and, therefore, even with the slightest external negative feedback the fragile self will experience fragmentation.

According to Kohut and Wolf (1978/1986), the overstimulated self can arise as a consequence of fixation in either the grandiose pole or the idealizing pole. When fixation occurs in the development of the grandiose pole it is typically due to the parent’s excessive appraisal of the child’s strength as evidence of superhuman capacities that convey the message that only what is superhuman will suffice. These individuals experience a painful mixture of grandiose self-expectations and a nagging awareness that their grandiose fantasies are unattainable. When the fixation occurs in the development of the idealizing pole it is typically due to parent’s excessive need for admiration that interferes with their ability to empathically respond to the child’s idealizing needs. The self will crave merger, but the idealized selfobject is experienced as dangerous and must be avoided. Finally, the overburdened self results from not having the opportunity to
merge with the calmness of an omnipotent selfobject. In other words, parents fail to model appropriate soothing responses to the child’s emotionality and, therefore, the child does not internalize the capacity to soothe him/herself. Lacking internal control of their emotions, these individuals depend on their external environment to regulate themselves. The inevitable wounds produced by their environment leads them to experience the world as hostile and critical.

Kohut (1971, 1977) suggested that deficits in the self result in the emergence of a defensive grandiose structure. The grandiose self is overly reliant on the environment to sustain itself and demands mirroring experiences that are unrealistically entitled. Moreover, the grandiose self intensely defends from the experience of inadequacy, emptiness, and shame. Kohut described two forms of splitting that characterize the non-cohesive self. When the self is split horizontally, it successfully impedes unacceptable selfobject needs and feelings of unworthiness and shame from entering consciousness and, therefore, maintains only the grandiose self in consciousness. When the self is split vertically, it uses denial and disavowal of needs to ward-off feelings of unworthiness and shame, but is unable to successfully maintain only the grandiose self in consciousness. This results in alternating experiences of grandiosity and inadequacy.

Kernberg’s (1970, 1974/1986, 1975, 1984) theory of narcissism was developed within drive-oriented object-relations theory. He defined the self as a structure that consists of a compilation of all of the self-representations that have been integrated from one’s interactions throughout all stages of development (Kernberg, 1984). These self-representations are developed based on the cognitive-emotional experiences of the self in relation to important others. Consistent with object-relations theory, these self-other
representations will provide the framework for all future relationships. Kernberg postulated that the normal self develops through the integration of all the “good” and “bad” components of the various representations of self and others. As individuals mature and their cognitive and affective capabilities become more sophisticated, their self-other representations become more complex and realistic. If self-esteem needs are fulfilled in age-appropriate ways, the self will develop a realistic self-concept that takes into consideration the positive and negative aspects of the self and will seek age-appropriate channels to gratify self-esteem. Moreover, if relational needs are fulfilled, others will be viewed realistically as possessing positive and negative attributes and will be experienced as separate individuals with their own needs and feelings.

Unlike Kohut (1971, 1977), Kernberg (1984) does not conceptualize pathological narcissism as a developmental arrest, but rather he proposes that it involves the development of a pathological self-structure and unintegrated object relations. His theory postulates that pathological narcissism develops in reaction to parents who are chronically cold and unempathic, yet admiring of certain aspects of the child. These early experiences result in intolerable amounts of aggression that threaten the individual’s representations of self and other. Defensively, the child develops a pathological grandiose self that is comprised of the admired aspects of the self (real self), the fantasized aspects of the self that defend against rage and envy (ideal self), and the fantasized image of loving parents (ideal object). Kernberg suggests that the presence of the pathological grandiose self is central to narcissistic pathology. Also central to his theory is the notion that the unacceptable aspects of the self and parents are split-off from conscious experience through dissociation, repression, or projection and not integrated into
representations of the self and others. Even though these aspects of the self are split-off from conscious experience, they manifest themselves in chronic boredom, emptiness, and reliance on others for the maintenance of self-esteem.

In his clinical description of pathological narcissism, Kernberg (1984, 1998, 2004) suggested that these individuals have an inflated self-concept and therefore present as pervasively arrogant. In interpersonal situations, including therapy, these individuals’ grandiosity is exhibited in their boastful attempts to impress others and their devaluation of others. In therapy, they strive to demonstrate the incompetence of therapists by suggesting that interventions are not helpful. Their need to devalue others is grounded in underlying envy. For example, in therapy they cannot tolerate therapist’s interpretations that suggest that he/she knows something that the patient has not yet discovered because it engenders feelings of inferiority in the patient. These individuals are so envious that they need to defensively “spoil” what they receive in order to avoid feeling inferior.

Kernberg (1984, 1998, 2004) also described these individuals as excessively needing to be loved and admired by others. They expect to be lauded by others without commensurate achievements. Failure to receive external narcissistic supply leads to boredom, emptiness, and restlessness. Paradoxically, these individuals are dependent on others’ tribute and admiration to sustain their grandiose self, yet they cannot allow themselves to really depend on others due to underlying distrust and envy. These individuals denigrate interpersonal dependency and pride themselves on being self-sufficient. Their interpersonal relationships are shallow; they tend to idealize those from whom they expect narcissistic feed and devalue those from who they do not expect
anything. They are interpersonally exploitative, hold entitled expectations in relationships, and lack empathy for others.

Kernberg (1984; 1998) suggested that the grandiose presentation of pathological narcissism is intercepted by occasional feelings of extreme inferiority. These feelings are intensely defended against by outbreaks of rage that successfully make the narcissist feel powerful and in control. Therefore, when relying on external sources of praise and adulation fails or when faced with criticism or noncompliance with their entitled expectations, these individuals are able to use overt self-enhancement strategies to sustain the grandiose self.

Kohut’s (1971, 1977) and Kernberg’s (1970, 1974/1986, 1975, 1984) conceptualizations of narcissism have been very influential to our understanding of narcissistic pathology. However, their theories differ in several important ways. First, Kernberg disagreed with Kohut that narcissistic pathology represents a developmental arrest and argued that narcissistic grandiosity is different from normal infantile grandiosity. Kernberg argues that the difference is that pathological grandiosity involves libidinal investment in a pathological self-structure, while normal infantile grandiosity involves libidinal investment in an integrated self-structure. Second, Kernberg’s conceptualization of narcissism stresses that pathological narcissism involves abnormal development of both self- and other-representations, not a failure to develop mature object-relations as argued by Kohut. Third, Kernberg views aggression as a central component of pathological narcissism, while Kohut conceptualized narcissistic aggression as a natural reaction to the unempathic responses of others and does not consider aggression central to narcissism. Finally, and most importantly, Kernberg’s
conceptualization of narcissistic pathology posits that unacceptable aspects of the self are split-off and, therefore the grandiose self predominates the experience of the narcissist. While this is similar to Kohut’s description of a horizontal split, it is inconsistent with Kohut’s description of a vertical split where narcissistic pathology vacillates from grandiosity to extreme feelings of inferiority and inadequacy. These differences in their conceptualizations of pathological narcissism have led to depictions of two very distinct narcissistic presentations. While Kernberg describes a narcissist that is overtly grandiose and whose self-structure is almost impermeable to feelings of inferiority and inadequacy, Kohut’s vertical split depicts a narcissist who vacillates between feeling inferior and inadequate when faced with criticism or threat and feeling grandiose when in the presence of a mirroring or idealized other.

Two Phenotypic Expressions of Narcissistic Pathology

The seminal work of Kohut (1971, 1977) and Kernberg (1970, 1974/1986, 1975) stimulated significant interest in narcissistic pathology. Several clinical theoreticians (e.g., Akhtar, 2003; Akhtar & Thompson, 1982; Cooper, 1998; Cooper & Ronningstam, 1992; Gabbard, 1989, 1998; Gersten, 1991; Kohut, 1971; Masterson, 1993; Rosenfeld, 1987; Rovik, 2001) and personality researchers (e.g., Cain et al., 2007; Dickinson & Pincus, 2003; Hendin & Cheek, 1997; Hibbard & Bunce, 1995; Wink, 1991, 1996) proposed a broader conceptualization of narcissistic pathology that incorporates more than one phenotypic expression. Since the early writings of Kohut and Kernberg, there has been a proliferation of labels to describe variations in the expression of pathological narcissism. In a recent review of the literature, Cain and Pincus (2006) identified over 50 labels describing narcissistic pathology, but they found that most of these descriptions
could be classified as reflecting two broad themes of narcissistic dysfunction, grandiose and vulnerable. Grandiose narcissism is adequately represented by Kernberg’s theory and common clinical descriptions (i.e., DSM-IV-TR’s NPD, American Psychological Association, 2000), and therefore will not be further expanded on.

Vulnerable narcissistic dysfunction characterizes individuals who overtly present as shy, inhibited, and modest (Cooper, 1998; Gabbard, 1989, 1998; Masterson, 1993). However, underlying this overt presentation these individuals have a private core similar to that of the grandiose phenotypic expression. Vulnerable narcissists also harbor grandiose expectations and entitlements (Akhtar, 2003; Cooper, 1998; Dickinson & Pincus, 2003; Masterson, 1993). Moreover, they have grandiose fantasies of unlimited power, glory, and fame (Akhtar, 2003). Unlike grandiose narcissists who successfully repress unacceptable aspects of the self, the vulnerable expression stems from consciously experiencing both feelings of inadequacy and grandiosity. Consistent with Kohut’s (1971) description of a vertical split in the psyche, vulnerable narcissists are unable to maintain only the grandiose self in consciousness, and therefore alternate between states of inadequacy and grandiosity. This side-by-side conscious experience of these otherwise incompatible psychological states complicates the clinical picture of pathological narcissism.

McWilliams (1994) suggested that, “in every vain and grandiose narcissist hides a self-conscious, shame-faced child, and in every depressed and self-critical narcissist lurks a grandiose vision of what that person should or could be” (p. 171). While grandiosity dominates the experience of the grandiose phenotypic expression, feelings of inadequacy predominate that of the vulnerable phenotype. Vulnerable narcissists typically experience
their grandiosity as fraudulent and their grandiose fantasies as unattainable. They are painfully aware of the discrepancy between their fantasies and reality, and are unable to match their fantasies with a conviction of personal efficacy. Therefore, they experience shame related to their underlying grandiosity and concern that others will detect their grandiosity (Akhtar, 2003; Gabbard, 1989, 1998; Morrison, 1989). As a result, these individuals rarely express grandiosity in overt behavior, or demand that their entitled needs be met. Instead, they carry out most their narcissistic activity in fantasy (Cooper & Ronningstam, 1992).

Vulnerable narcissists experience tremendous difficulty modulating their self-esteem. Their awareness that their grandiose fantasies are beyond reach creates feelings of inadequacy and depletion. While these feelings of low self-worth predominate their self-experience, vulnerable narcissists are occasionally able to bask in feelings of grandiosity when their environment provides them with admiration or confirmation of their wish to be special and unique. These periods of grandiosity are short-lived. Nonetheless, they lead to oscillations in self-esteem. Vulnerable narcissists crave experiences that validate their grandiose self-views and therefore often strive for perfection in their endeavors (Fiscalini, 1993; McWilliams, 1994). However, since perfection is too high a standard to achieve, these individuals set themselves up for failure. In fact, Cooper (1998) suggested that these individuals are unable to provide self-reward for their accomplishments and, therefore, actual achievements do not successfully increase feelings of self-worth.

Unable to internally regulate their self-esteem, vulnerable narcissists rely excessively on others’ acknowledgement and praise. Gabbard (1989) referred to these
individuals as “hypervigilant narcissists” and suggested that they present with antenna-like sensitivity to evidence that disconfirms their grandiosity. When the environment fails to confirm their underlying grandiosity, these individuals experience tremendous shame associated with the realization that their grandiose fantasies are unattainable (Fiscalini, 1993; Gabbard, 1989; Kohut, 1971, 1977; Morrison, 1989). Morrison (1989) wrote extensively about shame as central to the experience of vulnerable narcissists. He suggested that shame is based on an intrapsychic evaluation of the self as being intrinsically flawed and as failing to accomplish the mandates of the ideal self. Their dependence on others for the maintenance of self-esteem evokes shame because it highlights their need for others and, in turn, confirms their own inadequacy and lack of self-sufficiency.

Although vulnerable narcissists do not express their entitled needs overtly, they experience tremendous disappointment when their entitled needs are not met. Vulnerable narcissists tend to respond to this disappointment in one of two ways. Their most typical response is to shamefully disavow their own entitled expectations. Chronic reliance on others for the maintenance of self-esteem and the experience of continual disappointment due to their entitled expectations can lead to anxiety about developing relationships, and in some cases, to avoidance of relationships all together (Dickinson & Pincus, 2003; Gabbard, 1989; Pimentel et al., 2004). The disavowal of their entitled expectations leads to brewing anger and occasional hostile outbursts. Morrison (1989) suggested that shame underlies narcissistic rage. In an effort to expunge their shame resulting from the recognition that they need others for the sustenance of the self, vulnerable narcissistic individuals can sometimes defensively react with rage. Vulnerable narcissists have been
described as emotionally labile because they oscillate between shame/avoidance and rage in response to disappointments or self-esteem threats (Masterson, 1993).

Another characteristic of vulnerable narcissists is their tendency to be self-sacrificing and to use masochistic behaviors in an effort to modulate their self-esteem (Cooper, 1988; Pharis, 2004). Even though their self-sacrificing behaviors can be easily misperceived as empathy and real concern for others, they are intended to elevate the self above others. For example, vulnerable narcissists often choose to socialize with others who are inferior to them in terms of talents or resources, while secretly harboring fantasies that they are engaged in a heroic rescue of someone with lesser capacities (Cooper, 1998). Their masochistic behaviors represent similar attempts to increase self-esteem by demonstrating that the self is in control. Cooper (1988) suggested that vulnerable narcissists simultaneously attempt to maintain a grandiose fantasy while acknowledging that they are weak and helpless. Through masochistic behaviors, they extract satisfaction from themselves, thereby removing the possibility for others to disappoint them and ultimately remaining in control.

**Narcissistic Personality Disorder**

Narcissistic Personality Disorder (NPD) was introduced in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, American Psychiatric Association, 1980). The most current edition, DSM-IV-TR (American Psychiatric Association, 2000), characterizes NPD as “a pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy that begins by early adulthood and is present in a variety of contexts” (p. 714). An NPD diagnosis is indicated when an individual meets five or more of nine criteria reflecting a grandiose sense of self, a
representation of the self as special and unique, a preoccupation with fantasies of
grandeur, a need for excessive admiration, arrogant behaviors, a sense of entitlement,
exploitative interpersonal behaviors, lack of empathy, and envy.

Since its inception, the DSM characterization of NPD has received significant
criticism for defining narcissistic pathology too narrowly (Akhtar & Thompson, 1982;
Cain & Pincus, 2006; Cain et al., 2007; Cooper, 1981, 1998; Cooper & Ronningstam,
1992; Gabbard, 1989, 1998). DSM NPD criteria were devised conceptually not
empirically and were drawn mostly from the theoretical work of Kernberg (1970,
1974/1986, 1975), who emphasizes overt grandiosity as a central component of
narcissistic pathology. Therefore, the defining feature of the DSM description of NPD is
overt grandiosity; overt grandiosity is explicit or implied in the majority of the nine
criteria mentioned above (Ronningstam, 1988). Using the current diagnostic system,
failure to present with overt grandiosity precludes the possibility of an NPD diagnosis.
This is problematic considering that the clinical presentation of the vulnerable phenotypic
expression of narcissism does not present with overt grandiosity, and their underlying
grandiosity is not initially unveiled. Moreover, DSM criteria do not encompass the
hypersensitivity, social avoidance, and shameful disavowal of needs characteristic of the
vulnerable phenotype (Dickinson & Pincus, 2003). To address this problem, Cain and
Pincus (2006) recently proposed that DSM NPD criteria be revised to encompass
characteristics of both phenotypic expressions of narcissism and provided
recommendations for how this can be achieved. (See also Cain et al., 2007)
Assessment of Narcissism

The diagnostic nomenclature’s omission of criteria capturing the vulnerable form of phenotypic expression of narcissistic pathology has significantly impacted the assessment of narcissistic pathology. Contemporary assessment of narcissism also relies heavily on characteristics associated with the grandiose form of phenotypic expression and often fails to assess vulnerable aspects of narcissism. There is a dearth of measures that accurately assess the construct of vulnerable narcissism and therefore researchers interested in this form of phenotypic expression have had to rely on cumbersome procedures or less valid clinical measures. As a consequence, empirical research on vulnerable narcissism is scarce, with most of the research on narcissism focusing exclusively on the grandiose form of phenotypic expression.

The most widely used measure of narcissism is the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), which is a self-report measure of trait narcissism. Emmons (1984) suggested that the NPI has a complex four-factor structure consisting of Leadership/Authority (L/A), Superiority/Arrogance (S/A), Self-Absorption/Self-Admiration (S/S), and Exploitativeness/Entitlement (E/E). The first three of these factors have been associated with adaptive or “healthy” narcissism, while E/E has been consistently related to maladaptive or “unhealthy” narcissism (Emmons, 1984, 1987; Watson & Biderman, 1993). While the NPI has been largely used to assess the grandiose form of phenotypic expression, Hibbard and Bunce (1995) developed a procedure for identifying both grandiose and vulnerable forms of phenotypic expression using the NPI. They asserted that both phenotypes score high on E/E. However, grandiose narcissists also endorse the “healthier” aspects of narcissism due to their tendency to deny weakness.
and to approach the assessment as an opportunity to self-enhance. On the contrary, vulnerable narcissists do not endorse the “healthier” aspects of narcissism because of their relative inability to self-enhance. As a result, Hibbard and Bunce’s procedure suggests that high scores on all factors of the NPI denote grandiose narcissism and low scores on the more adaptive factors combined with high scores on E/E is indicative of vulnerable narcissism. While this method has been used successfully (Dickinson & Pincus, 2003), it is cumbersome and not ideal.

In addition to the procedure developed by Hibbard and Bunce (1995), there are several other measures that purportedly measure vulnerable narcissism [e.g., Narcissistic Personality Disorder Scale (NPDS; Ashby, Lee, & Duke, 1979), Hypersensitive Narcissism Scale (HNS; Hendin & Cheek, 1997); Murray’s Narcissism Scale (MNS; Murray, 1938); Ego-Sensitivity Scale (NHS; Serkowek, 1975)]. Several of these measures (i.e., ESS and NHS) were derived from the MMPI Masculinity-Femininity (MF) scale and a review of the items suggests that they have questionable content validity.

Moreover, several studies have found that the scales listed above are orthogonal to measures of grandiose narcissism (Hendin & Cheek, 1997; Wink, 1991). Wink performed a principal components analysis of six measures of narcissism and found two orthogonal components. He labeled one component grandiosity-exhibitionism since the measures that loaded on it were measures of grandiose narcissism, such as the MMPI-version of the NPI (Raskin & Novacek, 1989). On the other hand, NPDS, ESS, and NHS loaded on the other component, which he labeled vulnerability sensitivity. Hendin and Cheek developed the HNS by extracting 10 items from MNS that positively correlated
with the NPDS and NHS. Similar to Wink, these authors found that the HNS did not correlate with NPI total score. These findings create a measurement paradox because grandiose and vulnerable narcissism share a common narcissistic core and, therefore, scales that assess these forms of phenotypic expressions should exhibit moderately positive correlations as opposed to being orthogonal.

**Vulnerable Narcissism Scale**

To address the current difficulties in the assessment of vulnerable narcissism, my colleagues and I developed the Vulnerable Narcissism Scale (VNS; Pimentel et al., 2004, Pimentel et al., 2007), a 50-item self-report instrument that is intended to aid in the assessment of the behaviors and psychological features reflective of vulnerable narcissistic dysfunction. The initial validation study used a sample of 815 undergraduate students (597 females, 202 males, 16 unknown; mean age 19.23 with SD = 3.45; 82.7% Caucasian) at a large rural university. We conducted a principle components analysis using an Oblimin rotation, which provided support for a seven-component structure. The seven components were labeled: Contingent Self-Esteem, Exploitativeness, Self-Sacrificing Self-Enhancement, Hiding the Self, Grandiose Fantasy, Devaluing Others and Needs for Others, and Entitlement Rage. The 7 components are listed on Table 1 along with the numbers of items in each component, the explained variance, component loadings, the mean inter-item correlation, and the coefficient alphas of each component. Each of the VNS components displayed acceptable internal consistency, with coefficient alphas ranging from .70-.93.

The initial validation study examined the construct validity of the VNS in several ways. First, VNS components were correlated with two other measures of vulnerable
narcissism [i.e., Murray’s Narcissism Scale (Murray, 1938) and Narcissism-Hypersensitivity Scale (Serkowek, 1975)] in order to explore its convergent validity. Second, the correlations between the VNS and well-established measures of self-esteem (i.e., Rosenberg Self-Esteem Inventory; Rosenberg, 1965), empathy (i.e., Visions of Morality Scale; Shelton & McAdams, 1990), dependency (3 Vector Dependency Inventory; Pincus & Wilson, 2001), shame (Experience of Shame Scale; Andrews, Qian, & Valentine, 2002), and personality organization (i.e., Inventory of Personality Organization; Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001) were examined to determine if these correlations reflected clinical theory on vulnerable narcissism. Finally, this study compared the correlations of the NPI (Raskin & Hall, 1979) (i.e., a measure of grandiose narcissism) and the external variables mentioned above with the correlations between the VNS and these variables. According to clinical theory, a measure that taps into grandiose narcissism and one that taps into vulnerable narcissism should correlate very differently with variables that are only associated with one form of phenotypic expression and similarly with variables that represent core aspects of both. Moreover, as mentioned above, we expected a moderate correlation between the VNS and NPI since vulnerable narcissism and grandiose narcissism share a similar grandiose core.

The pattern of correlations provided support for the construct validity of the VNS (see Table 2). There was a significant positive correlation between the VNS and two other measures of vulnerable narcissism. The VNS correlated with the external variables mentioned above according to clinical theory and the pattern of correlations between the NPI and these external variables diverged from the VNS pattern of correlations as predicted. The VNS correlated negatively with self-esteem and correlated positively with
dependency and shame. On the other hand, the NPI correlated positively with self-esteem and correlated negatively with dependency and shame. As expected, both measures correlated negatively with empathy and positively with aggression. The VNS correlated more strongly with the Inventory of Personality Organization suggesting a higher level of pathology associated with the vulnerable form of phenotypic expression and/or a denial of pathology in association with the grandiose form of phenotypic expression. Finally, the VNS and NPI were significantly and positively correlated.

The VNS is currently the only multifactor measure assessing clinically identified characteristics of vulnerable narcissism (Cain et al., 2007). While the initial validation study found support for the psychometric properties and the construct validity of the VNS, additional validation studies must be carried out to examine the effectiveness of the VNS in identifying individuals with characteristics of the vulnerable form of phenotypic expression of narcissistic pathology. As previously mentioned, one of the goals of the current study is to provide further empirical data in support of the construct validity of the VNS by using this measure to identify vulnerable narcissistic personalities for this study and examining if they perform according to clinical expectations.

Diagnostic Dilemmas

The fact that the clinical presentation of vulnerable narcissism is not adequately represented in the DSM’s (APA, 2000) criteria for NPD and that there is such a scarcity of empirical research on this form of phenotypic expression has led to considerable confusion among clinicians regarding the diagnosis of NPD (Gunderson et al., 1991). Clinicians treating individuals with vulnerable narcissistic pathology are faced with a diagnostic dilemma in which two types of diagnostic errors can occur. First, clinicians
may not recognize narcissistic pathology because the clinical presentation does not resemble the grandiose, exhibitionistic, and arrogant presentation depicted in the DSM and studied in empirical research (i.e., false negative diagnosis). Second, clinicians may misdiagnose narcissistic pathology as another disorder whose DSM description is more consistent with the presentation of vulnerable narcissism (i.e., false positive diagnosis).

Of particular interest in this paper is the misdiagnosis of vulnerable narcissistic pathology with avoidant personality disorder (AVPD). The overt presentation of the vulnerable narcissist is strikingly similar to that of avoidant personalities and, therefore, misdiagnosis is likely. Dickinson and Pincus (2003) found that on a structured interview for DSM-IV criteria, vulnerable narcissistic personalities were rated as significantly higher on AVPD criteria than were grandiose narcissistic personalities and control personalities.

**Vulnerable Narcissism and Avoidant Personality**

Several theoreticians have written extensively about AVPD (Alden, Laposa, Taylor, & Ryder, 2002; Beck & Freeman, 1990; Millon, 1996; Millon & Davis, 1996; Taylor, Laposa, & Alden, 2004). Their writings suggest that the developmental history of AVPD individuals is characterized by repeated exposures to rejection and humiliation. Their early developmental history fosters the development of low self-esteem and the integration of self-critical attitudes (Beck & Freeman, 1990; Meyer, 2002; Millon, 1996). As adults, these individuals present with low self-worth and a self-concept of being socially inept, unappealing, and inferior to others. Their interpersonal style is shy and detached. Moreover, they distrust others and expect others to be critical, betraying, and humiliating. It is the anticipation and fear of criticism, humiliation, disapproval, and
rejection that propels AVPD individuals to avoid interpersonal relationships and activities. Even though they have a strong desire to be accepted, they are too afraid to experience rejection. Therefore, unless they are certain that others will accept them, they are unwilling to get close to others. The DSM-IV-TR characterizes AVPD as “a pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation that begins by early adulthood and is present in a variety of contexts” (APA, 2000, p. 721).

Due to their lack of social experience, AVPD individuals tend to be somewhat interpersonally awkward and often continue to elicit ridicule and rejection as adults. This humiliation and rejection confirms their beliefs about others, and tends to alienate them even further. AVPD individuals feel sadness, resentment, and anger regarding incidents of rejection and the continual frustration of their need for acceptance (Benjamin, 1993). They have a low tolerance for negative emotions and do not express their emotions overtly due to fears that doing so will lead to greater rejection (Beck & Freeman, 1990; Millon, 1996). Millon and Davis (1996) proposed that these individuals are deficient in the ability to experience pleasure. Interestingly, a recent study found that AVPD individuals are not only concerned about expressing their negative emotions publicly, but also avoid experiencing and expressing positive emotions (Taylor et al., 2004). Millon (1996) suggested that the main defense mechanism utilized by AVPD individuals is fantasy; they depend on fantasy to deal with their frustrated needs, to discharge feelings, to increase their self-worth, and to gratify their wish for acceptance.

Several similarities in the presentation of vulnerable narcissists and avoidant personalities can contribute to misdiagnosis. First, both personality types present with
shyness and timidity. Second, low self-esteem and feelings of inferiority characterize individuals with both vulnerable narcissism and AVPD. Third, both personality types are hypersensitive to rejection and criticism, and are acutely attuned to their environments for signs of rejection or disapproval. Fourth, they both defensively engage in socially avoidant behaviors. Finally, they both use fantasy as a defense mechanism to regulate their self-esteem and cope with their disappointments.

Despite these similarities in their clinical presentation, vulnerable narcissism and AVPD are two very different types of personality pathologies and a closer examination of their similarities reveals their differences. The shyness and timidity in the presentation of vulnerable narcissists may overtly resemble that of avoidant personalities, but represents a preoccupation with occulting their grandiose core as opposed to a concern with not being accepted. In fact, Cheek and Melchoir (1985) found that narcissistically based shyness was hostile, entitled, and exploitative as opposed to anxiety-driven, as is the shyness that is characteristic of individuals with AVPD. Furthermore, the low self-esteem characteristic of both vulnerable narcissism and AVPD are based on different criteria. Vulnerable narcissists tend to experience low self-esteem because they are unable to measure up to their grandiose self-expectations and to experience themselves as unique and special. In contrast, AVPD individuals have more realistic standards for determining their self-worth and their low-self esteem is based on their assessment of themselves as socially awkward and inept. Moreover, vulnerable narcissists experience oscillations in their self-esteem depending on whether their environment is providing them with narcissistic feed, while the self-esteem of AVPD individuals is chronically low.
Both vulnerable narcissism and AVPD have been described as being hypersensitive and having antenna-like sensitivity to any sign of rejection in their environment. While vulnerable narcissists’ attunement to the environment is guided by a need for uncritical and continuous admiration, AVPD individuals are guided by a need for uncritical and continuous acceptance. Both individuals attend to their environments for cues about how to behave, but vulnerable narcissists try to discern what will lead to adulation and AVPD individuals what will prevent rejection. Similarly, the social avoidance of AVPD individuals is motivated by fear of rejection and humiliation, which frustrates their need for acceptance. In contrast, vulnerable narcissists are not concerned with acceptance for the sake of the affectionate needs that it fulfills; instead, they are concerned with being admired, having their uniqueness validated, and getting their entitled needs met. Avoidance of relationships is a defensive mechanism by which vulnerable narcissists avoid having to be disappointed by others’ failures to meet their entitled expectations and mirror their grandiosity and avoid exposure of a less than ideal self. While social avoidance represents the consistent interpersonal style of AVPD, vulnerable narcissists vacillate between social avoidant behaviors and dominant, cold, vindictive, and overly-friendly interpersonal behaviors (Cain et al., 2007; Dickinson and Pincus, 2003; Pimentel et al., 2007).

While both vulnerable narcissists and AVPD individuals depend on fantasy to regulate their self-esteem and cope with their disappointments, the quality of these fantasies is quite different. The fantasies of vulnerable narcissists are of a grandiose nature and involve unlimited power, success, brilliance, fame, and glory (Akhtar, 2003). Their fantasies are also retaliatory and involve getting vengeance for interpersonal slights.
(Pimentel et al., 2004). In contrast, AVPD individuals fantasize about being accepted, having successful interpersonal interactions, and resolving interpersonal conflicts with others (Millon, 1996).

The similarities between the presentations of vulnerable narcissism and AVPD coupled with a lack of criteria capturing vulnerable narcissistic pathology in the DSM (APA, 2000) create a realistic concern regarding false negative and false positive diagnoses. Misdiagnosing narcissistic pathology can be detrimental to the efficacy of therapy. Interventions will be misguided by a misinterpretation of the client’s experience that do not take into consideration the client’s primary difficulties with self-esteem regulation. For example, if a client is misdiagnosed with AVPD, interventions addressing their social avoidance will likely focus on the client’s social anxiety (e.g., Renneberg, Goldstein, Phillips, & Chambless, 1990) as opposed to the client’s deflated self-esteem and disappointment rooted in grandiose entitled expectations. Capturing the client’s experience is particularly important in working with narcissistic clients who will otherwise experience the therapist as unempathic. More empirical research needs to be dedicated to broadening our understanding of how vulnerable narcissism differs from other personality pathology (e.g., grandiose narcissistic dysfunction and AVPD). One of the purposes of this study is to provide further validation of the construct of vulnerable narcissism by distinguishing it from the grandiose phenotypic expression of narcissistic pathology and from avoidant personalities.

Present Study

The goals of the present study are: (1) to find additional evidence of the validity of the VNS and (2) to further elucidate the differences between grandiose and vulnerable
narcissistic dysfunction and between vulnerable narcissistic dysfunction and avoidant personalities. Since this study will use the VNS to identify individuals with vulnerable narcissistic personalities, then evidence for the construct validity of the VNS can be gauged based on whether the presentation of these individuals conforms to theoretical and clinical expectations. The second goal will be accomplished by comparing these personality types to one another and to a control group of individuals who are low on narcissistic and avoidant personality characteristics.

To summarize, there are three main features that distinguish the vulnerable and grandiose narcissistic dysfunction. The first is differences in their overt presentation. While the grandiose form initially presents as arrogant, grandiose, and boastful, the vulnerable form presents as shy, insecure, inhibited, and modest. The second is each phenotype’s ability to maintain only the grandiose self in consciousness. The grandiose form of phenotypic expression is remarkably adept at maintaining only the grandiose self in consciousness. On the other hand, the vulnerable form of phenotypic expression oscillates between experiencing the self as grandiose and experiencing the self as inadequate and inferior. Finally, the third distinguishing feature is their ability to successfully self-enhance when faced with a self-esteem threat. Grandiose narcissists are notorious for their ability to successfully protect the self by responding to self-esteem threats with self-promotion, overt hostility, and devaluation of others. On the contrary, vulnerable narcissists appear to be much less successful at maintaining the self impervious to threats. They respond to self-esteem threats with either shame, avoidance, disavowal of needs, and self-criticism or, similar to their grandiose counterpart, with overt anger and devaluation of others.
While many of the differences between the vulnerable and grandiose forms of narcissistic pathology lie in their overt presentation, the overt presentation of vulnerable narcissists and avoidant personalities can appear almost identical at first sight. Both personality types present with overt shyness, low self-esteem, hypersensitivity to negative evaluation and rejection, and avoidant behaviors. However, as previously mentioned, a closer look at the motivation underlying these behaviors illuminates the differences between them. Vulnerable narcissists are motivated by underlying grandiosity and entitlement and a desire to avoid having their grandiosity invalidated or their entitled needs obliterated. On the other hand, avoidant personalities are motivated by fear of rejection based on their evaluation of themselves as inadequate. Another apparent similarity is that both personality types sometimes experience anger when faced with rejection. However, avoidant personalities experience anger internally and are unlikely to display their anger in overt behaviors due to their discomfort with the expression of intense emotions, both positive and negative (Taylor et al., 2004). Vulnerable narcissists do not always respond to self-esteem threats with anger, but when they do they are likely to express their anger overtly.

The theoretical writings and empirical research presented thus far suggest that vulnerable narcissistic personalities and grandiose narcissistic personalities should present with very different overt presentations, but the similarities among them should become evident when the vulnerable form unveils its narcissistic core. On the other hand, vulnerable narcissistic personalities and avoidant personalities should appear very similar in their overt presentation and differences among these personality types should only be evident if the underlying grandiosity and entitlement characteristic of narcissism is
exposed. Therefore, to accomplish the goal of identifying the overlapping and distinguishing features between the vulnerable and grandiose phenotypic expressions of narcissism and between vulnerable narcissistic personalities and avoidant personalities, I will compare these personality types’ overt presentations, conscious and non-conscious views of themselves, and ability to modulate self-esteem and affect following a self-esteem threat.

As previously mentioned, four groups of individuals will be selected to participate in this study: vulnerable narcissistic personalities, grandiose narcissistic personalities, avoidant personalities, and a control group. When participants arrive to the study, they will be informed that they will be participating in a series of group activities, each of which will culminate with a participant being kicked out of the group based on the votes of other participants. Prior to participating in the group activity, participants will complete measures examining their expectations of success in the upcoming activity, rejection sensitivity, attachment style, global explicit self-esteem, and implicit self-esteem in an effort to examine both their overt presentation and conscious and non-conscious self-views. Participants will then participate in a group activity after which they will all be informed that they were chosen by other participants as the first person to be kicked out of the group. Finally, participants will complete measures of state self-esteem and affect. Several studies (Bourgeois & Leary, 2001; Craighead, Kimball, & Rehak, 1979; Sommer & Baumeister, 2002; Twenge, Baumeister, Tice, & Stucke, 2001) have shown that rejection is a significant self-esteem threat. Exposing these individuals to rejection should reveal the narcissistic core of vulnerable narcissistic personalities and allow us to examine the differences in self-esteem and affect modulation between the
personality groups. Below I will expand on each of the variables mentioned above and provide hypotheses for how I expect the personality types to present in relation to each other on these variables. Moreover, I will elaborate on the research that has examined the impact of rejection and delineate how I expect each personality group to manage this self-esteem threat.

**Overt Presentation and Conscious and Unconscious Self-Views**

*Expectations when entering a threatening interpersonal situation.* An important aspect of one’s overt presentation and conscious self-view is the expectation that one has regarding interpersonal relationships (e.g., does one expect to be rejected or adored?). Since participants in this study will have been informed of the group activity that they will participate in, I am interested in examining how they differ from each other in their expectations to succeed in such a threatening interpersonal situation. High expectations (i.e., not being rejected by the other group members) are indicative of overt grandiosity while low expectations (i.e., being rejected by the other group members) signal a more negative view of the self’s social appeal. Due to their overt grandiosity and entitlement, I expect grandiose narcissistic personalities to report the most optimistic expectations of not being rejected by the other group members. On the contrary, I predict that vulnerable narcissistic personalities and avoidant personalities will report equally pessimistic expectations of rejection that will be lower than the expectations of a control group. While vulnerable narcissistic personalities may secretly wish that others would validate their grandiosity, the theoretical writings reviewed above suggest that they do not overtly express their grandiosity and thus I expect them to present similarly to avoidant personalities. Research has demonstrated that avoidant personalities have a pessimistic
outlook and expect to be rejected in social situations (Meyer, 2002; Meyer & Carver, 2000; Millon, 1996).

Rejection Sensitivity. Rejection sensitivity has been defined as a tendency to anxiously expect, readily perceive, and disproportionately respond to rejection. Rejection sensitivity has been found to correlate negatively with self-esteem and secure attachment, and positively with social avoidance, resistant attachment, and avoidant attachment (Downey & Feldman, 1996). This variable was included because the literature describes both vulnerable narcissistic personalities and avoidant personalities as being hypersensitive to rejection. As it has been highlighted earlier, the underlying causes of these individual’s sensitivity to rejection is quite different but these would not be evident in their overt presentation. Therefore, I expect that both personality types would obtain equally high scores on a measure of rejection sensitivity that does not examine the underlying causes of their sensitivity to rejection, and that their scores would be significantly higher than that of a control group. On the other hand, grandiose narcissistic personalities are more capable of sustaining their grandiose self without external feedback and tend to deny weakness. Therefore, I predict that grandiose narcissistic personalities will score the lowest on a measure of rejection sensitivity.

Attachment. Since attachment has been found to be an important variable in the understanding of psychopathology, I am interested in examining how the personality groups in this study differ with regards to attachment style.

Several theoreticians have described the attachment style of narcissistic personalities (Fiscalini, 1993; Kernberg, 1975; Kohut, 1971, 1977), but empirical research in this area has been sparse. Dickinson and Pincus (2003) assessed the
attachment styles of grandiose and vulnerable narcissistic personalities using Bartholomew and Horowitz’s (1991) Adult Attachment Questionnaire. Bartholomew and Horowitz’s model of attachment describes four attachment patterns that are based on combinations of positive and negative views of the self and others [i.e., Secure (positive view of self, positive view of others); Dismissive (positive view of self, negative view of others); Fearful (negative view of self, negative view of others); and Preoccupied (negative view of self, positive view of others)]. Dickinson and Pincus found that grandiose narcissistic personalities scored the highest on secure attachment (i.e., 60% of grandiose narcissistic personalities), followed by dismissive attachment (i.e., 16%) and then fearful (i.e., 13%) and preoccupied attachments (i.e., 10%). Essentially, grandiose narcissistic personalities scored the highest on attachment styles that denoted positive views of the self and the lowest on attachment styles that denoted negative views of the self. This is not surprising considering their grandiose and inflated self-views and their tendency to use self-report measures as an opportunity to self-aggrandize. In contrast, vulnerable narcissistic personalities in Dickinson and Pincus’ study scored highest on fearful attachment (i.e., 50%), followed by secure (i.e., 27%), and then preoccupied (i.e., 13%) and dismissive (i.e., 10%) attachments. The attachment style of the vulnerable phenotypic expression revealed a more complex picture that included both positive and negative views of the self, even though the highest percentage of vulnerable narcissistic individuals identified as having a fearful attachment style (i.e., negative self, negative other).

In a review of the literature on attachment styles and personality disorders, Meyer and Pilkonis (2005) reported research suggesting that narcissistic individuals did not
report a predominant attachment style, but rather that similar percentages of narcissistic individuals identified with all four of Bartholomew and Horowitz’s (1991) attachment styles. This may have been due to a lack of differentiation between the two forms of phenotypic expressions of narcissistic pathology.

Similar to research on narcissism and attachment, the research on avoidant personalities and attachment is scant. Meyer and Pilkonis (2005) reported that avoidant personality disorder (AVPD) is highly associated with Bartholomew and Horowitz’s (1991) fearful attachment style. Similarly, West, Rose, and Sheldon-Keller (1994) found that AVPD individuals preferred to maintain distance in relationships, prioritized self-sufficiency, and viewed attachment relationships as a threat to security. It is important to note that the group of individuals studied by these researchers consisted of a composite between AVPD and Schizoid Personality Disorder and therefore may not accurately describe the attachment style of AVPD individuals. Strodl and Noller (2003) examined the relationship between agoraphobia and adult attachment using the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994). The ASQ describes five attachment styles: one secure attachment style (i.e., confidence), and four styles of insecure attachment (i.e., discomfort with closeness, relationships as secondary, need for approval, and preoccupation with relationships). Strodl and Noller found that agoraphobic behaviors were highly correlated with all four insecure attachment scales on the ASQ and negatively correlated with the confidence scale. Their findings are relevant to the hypotheses developed in this study due to the similarities between AVPD and agoraphobia (American Psychiatric Association, 2000).
The present study will also use the ASQ to examine attachment. Based on the research reviewed, I expect grandiose narcissistic personalities to have the highest mean on the confidence scale and the lowest mean on all of the insecure attachment scales, with the exception of relationships as secondary. Relationships as secondary describes individuals that value achievements more than relationships and, therefore, may not be seen as representing a weakness by grandiose narcissistic personalities since it does not denote a negative view of the self or express anxiety about relationships. In contrast, I expect both vulnerable narcissistic personalities and avoidant personalities to have the highest scores on all scales of insecure attachment, with the exception of relationships as secondary in which they are expected to score similarly to grandiose narcissistic personalities but higher than a control group. Finally, based on Dickinson and Pincus’ (2003) study, I expect vulnerable narcissistic personalities to score lower than grandiose narcissistic personalities and a control group on the confidence scale, but higher than avoidant personalities who are expected to have the lowest scores on this scale.

Self-Esteem. Self-esteem regulation is a central component of narcissistic pathology and of avoidant personality disorder. In fact, some theoreticians have described difficulties with self-esteem regulation as the core feature of narcissism (Cooper, 1998; McWilliams, 1994). However, these self-esteem difficulties manifest very differently in the vulnerable and grandiose phenotypic expressions of narcissistic pathology. As previously mentioned, grandiose narcissists present as arrogant and superior, while vulnerable narcissists present as weak and inadequate. This difference in their overt presentation may parallel their conscious experience of self-worth and self-esteem.
Dickinson and Pincus (2003) examined the self-esteem of grandiose narcissistic personalities and vulnerable narcissistic personalities using two different measures of self-esteem, Rosenberg Self-Esteem Inventory (RSI; Rosenberg, 1965) and Janis-Field Feelings of Inferiority Scale (JFS; Janis & Field, 1959). They found that on both of these measures, grandiose narcissistic personalities reported having higher self-esteem than a control group and vulnerable narcissistic personalities reported lower self-esteem than a control group. These findings are not surprising considering that grandiose narcissistic personalities are notorious for using self-report measures as an opportunity to self-aggrandize. Moreover, these findings are consistent with Kohut’s (1971, 1977) description of a horizontal versus a vertical split in narcissistic pathology. Grandiose narcissistic personalities (i.e., horizontal split) have a greater ability to maintain their grandiose self in consciousness while repressing a more insecure self-image, whereas vulnerable narcissistic personalities (i.e., vertical split) oscillate between experiencing the self as grandiose and inadequate, with a more degrading self-image pervading their conscious experience.

Some theoreticians writing about grandiose narcissistic pathology suggest that these individuals’ overt grandiosity is a veneer that overlays a more insecure and inferior self-experience. In contrast, others have posited that vulnerable narcissists have a hidden narcissistic core of grandiose fantasies and entitlements. Considering that both phenotypic expressions of narcissistic pathology exhibit only the manifest aspect of their intricate self-experience, it may be necessary to tap into their non-conscious self-views in order to capture their complex organization.
Implicit self-esteem refers to non-conscious evaluations of the self that are over-learned, occur unintentionally, and are elicited with self-relevant stimuli (e.g., how much does someone like/dislike their initials in relation to other letters of the alphabet?) (Bosson, Brown, Zeigler-Hill, & Swann, 2003; Greenwald & Banaji, 1995; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003). The spontaneous reactions to these self-relevant stimuli are automatic and closely associated with the non-conscious value that an individual has attached to their self. Jordan et al. (2003) suggest that implicit self-evaluations are preconscious and enter awareness when an individual is not motivated to or is unable to retrieve their explicit attitudes. In support of this view, research has shown that individuals are more likely to report self-views that are consistent with their implicit self-evaluations when their cognitive capacities are taxed by busyness or time pressure constraints (Koole, Dijksterhuis, & van Knippenberg, 2001).

Zeigler-Hill (2006) proposes that humans have two modes of information processing: (1) a cognitive mode that is rational, deliberate, and conscious; and (2) an experiential mode that is affective, automatic, and non-conscious. He suggests that explicit self-esteem is processed cognitively, while implicit self-esteem is processed experientially. Explicit self-esteem is assessed via self-report measures that ask an individual to report their conscious evaluations of themselves. Measures of implicit self-esteem allow researchers to assess self-evaluations at a level of awareness that is typically untapped by self-report measures. Unlike measures of explicit self-esteem, which are influenced by self-enhancing strategies intended to experience and present the self in a better light, measures of implicit self-esteem assess self-esteem without the
individual’s conscious awareness, markedly reducing or eliminating the impact of self-enhancing strategies.

Several researchers have posited that implicit self-esteem is more primitive and develops earlier than explicit self-esteem (Bosson et al., 2003; Koole et al., 2001). Consistent with this notion, DeHart (2002, as cited in Bosson et al., 2003) found that mother’s parenting style (based on both participants’ ratings and their mothers’ ratings) was associated with participants’ initial preferences; having a mother who was high in nurturance and low in over-protectiveness was associated with stronger initial preferences. Moreover, college students from divorced families reported weaker initial preferences than college students from intact families. Zeigler-Hill, Bosson, & Brown, (2002, as cited in Bosson et al., 2003) found evidence that initial preference was positively associated with childhood attachment security.

Researchers have identified two distinct types of high self-esteem: secure high self-esteem and fragile high self-esteem (Zeigler-Hill, 2006). Individuals with secure high self-esteem report high explicit and high implicit self-esteem. These individuals are not easily threatened, their self-worth is not contingent on external approval, and they have an integrated self-view that incorporates both their positive and negative characteristics. Individuals with fragile high self-esteem [i.e., also referred to as defensive high self-esteem (Jordan et al., 2003)] report high explicit self-esteem and low implicit self-esteem. In contrast to individuals with secure high self-esteem, individuals with fragile high self-esteem hold fragile self-views that are vulnerable to threat. Fragile high self-esteem has consistently been related to narcissism as measured by the NPI (Jordan et al., 2003;
Zeigler-Hill, 2006), to higher self-enhancement and defensiveness (Jordan et al., 2003), and to unstable self-esteem (Zeigler-Hill, 2006).

By tapping into both conscious and non-conscious self-esteem in this study, I hope to elucidate some of the similarities and differences between the vulnerable and grandiose phenotypic expressions of narcissism. Based on the theoretical descriptions of the grandiose phenotypic expressions, I expect that these individuals will report high self-esteem on a measure of explicit self-esteem (i.e., conscious self-evaluation) and low self-esteem on a measure of implicit self-esteem (i.e., non-conscious self-evaluation). I expect the opposite pattern to be true for vulnerable narcissistic personalities. Since these individuals overtly present as inadequate and are more in touch with this aspect of their self-experience, I expect that they will report low explicit self-esteem. Whereas, a measure of implicit self-esteem may tap their grandiose core, leading to high implicit self-esteem scores.

There is also an abundance of theory and research that suggests that low self-esteem is a core feature of avoidant personality pathology (Alden et al., 2002; Beck & Freeman, 1990; Meyer, 2002; Millon, 1996). Similarly, the DSM diagnosis of Avoidant Personality Disorder includes “feelings of inadequacy” as a criteria for meeting this diagnosis (APA, 2000, p.721). As with many of the variables that have been discussed earlier, avoidant personalities and vulnerable narcissistic personalities are expected to present with similarly overt low self-esteem. However, a more thorough examination may highlight some of the differences in their experience of self-worth. The description of avoidant personality pathology in the literature suggests that these individuals’ low self-esteem is pervasive and I expect that, unlike vulnerable narcissistic personalities,
their implicit self-esteem will match their low explicit self-esteem. Therefore, using measures of both explicit and implicit self-esteem will also likely help elucidate the similarities and differences between vulnerable narcissism and avoidant personalities.

Based on the literature and research reviewed above, I will forward the following hypotheses. On a measure of global explicit self-esteem (i.e., conscious evaluation of the self), I expect grandiose narcissistic personalities to have the highest mean and control personalities to have higher mean scores than vulnerable narcissistic personalities and avoidant personalities. I do not expect the mean scores of vulnerable narcissistic personalities and avoidant personalities to be significantly different from one another. On a measure of implicit self-esteem (i.e., non-conscious evaluation of the self), I expect vulnerable narcissistic personalities to have the highest mean, followed by control personalities, and grandiose narcissistic personalities and avoidant personalities to have similarly low mean scores.

Managing a Self-Esteem Threat

According to Baumeister and Leary (1995) the desire to be accepted by others is a fundamental human drive that motivates people to seek out positive social interactions and avoid negative ones. Perhaps due to this “need to belong,” rejection is one of the most undesirable interpersonal experiences that can happen to a human being and is considered a significant self-esteem threat. Research has shown that even imagining rejection can cause emotional distress and physiological arousal (Craighead, Kimball, & Rehak, 1979). Similarly, Sommer and Baumeister (2002) found that priming participants with the idea of rejection by subliminally presenting them with words connoting interpersonal rejection was enough to evoke negative reactions in individuals with low
self-esteem. Moreover, people tend to use self-enhancement strategies to buffer from the implications of rejection. In a study examining how people cope with rejection, Bourgeois and Leary (2001) found that participants who were allegedly chosen last by a team captain rated captains as being unpleasant, less likeable, incompetent leaders, and less desirable as friends. These negative impressions were based on virtually no personal information about the captains and therefore appear to be buffers against rejection.

Aggression is often used as a self-enhancement strategy to cope with rejection. Twenge, Baumeister, Tice, and Stucke (2001) found that participants who were told either that they would have a lonely future or that other participants in the laboratory had rejected them responded more aggressively than accepted participants. One of the important findings of this study is that participants did not respond aggressively when told that they would suffer accidents or injuries later in life, highlighting the unique impact of rejection on aggression.

Despite the apparent universality in peoples’ tendency to respond negatively to rejection, research on self-verification theory suggests that individuals with negative self-views prefer negative feedback that confirms their self-views over positive feedback, and actively engage in efforts to acquire this feedback (Swann & Read, 1981). According to self-verification theory, people with negative self-views have learned that their relationships proceed more smoothly when others see them as they see themselves and have come to associate self-verifying feedback with feelings of authenticity (De La Ronde & Swann, 1993). Therefore, individuals with low self-esteem may respond differently to rejection in that this type of interpersonal feedback may provide some validation of their self-views and thus be experienced as comforting.
Several studies have examined grandiose narcissists’ reactions to negative feedback and rejection, and found that these individuals react with more aggression than non-narcissists. While these studies did not specify that they studied grandiose narcissism, they all used high scores on the Narcissistic Personality Inventory, which is the traditional method of identifying the grandiose phenotypic expression of narcissism. Rhodewalt and Morf (1998) provided participants with success/failure feedback for their performance on two tests, with the order of success and failure feedback counterbalanced in two conditions. Participants made attributions about their performance and reported their moods following each feedback. They found that grandiose narcissists’ angry reactions were amplified when they were given failure feedback on Test 2 after having received success feedback on Test 1. Rhodewalt and Morf proposed that grandiose narcissists attributed their success on Test 1 to their superior ability, which validated their grandiose self-views, and therefore exhibited more anger following failure feedback on Test 2 when their grandiose self-views were challenged. Similarly, Bushman and Baumeister (1998) gave participants bogus negative feedback on an essay and asked participants to rate how threatening they experienced the feedback to be (i.e., ego threat). Not surprisingly, they found that grandiose narcissism combined with high ego threat yielded the highest levels of aggression. Twenge and Campbell (2003) found that grandiose narcissists reacted to rejection with more anger and fewer internalized negative emotions than non-narcissists, and were more likely to aggress against their rejecters and against an innocent third party by blasting loud white noise. This finding generalized across several types of rejection manipulations, such as narrating a past episode of rejection and being rejected to belong in a group in the laboratory.
This propensity to react more aggressively has in part been attributed to the grandiosity and inflated self-views inherent in the grandiose subtype (Baumeister, Smart, & Boden, 1996; Raskin, Novacek, & Hogan, 1991; Rhodewalt & Morf, 1998). In an excellent review of the influence of self-esteem on aggression, Baumeister et al. (1996) proposed that the major cause of aggression is unrealistically inflated self-views combined with any evaluation that is less favorable than the recipient’s self-appraisal. These authors highlighted that the more inflated the self-appraisal, the greater the range of feedback that will be experienced as threatening. When faced with threatening feedback, people must either revise their self-appraisals downwardly or reject the feedback as invalid and these authors suggest that aggression is one of the ways in which feedback is rejected. By aggressing towards those who provide threatening feedback, people can protect against having to accept the feedback, revise their self-appraisals, and experience feelings of dejection about the self. Because grandiose narcissists have inflated self-views that are not based on reality, they are likely to experience a large range of feedback as threatening. The research above suggests that they successfully use aggressive behaviors to buffer against threats to their self-esteem. These findings are consistent with the theoretical descriptions of Kernberg (1984) that describe grandiose narcissists as responding to self-esteem threats with narcissistic rage.

No empirical studies to date have examined the reactions of vulnerable narcissistic personalities or avoidant personalities to rejection. As mentioned above, Benjamin (1993) suggests that avoidant personalities feel sadness, resentment, and anger regarding incidents of rejection. However, these individuals are also consistently described as having low self-esteem. According to self-verification theory, these negative
self-views should predispose them to seek out negative feedback and feel comforted by negative evaluations. Considering this literature, avoidant personalities are expected to respond to rejection with a combination of sadness, resentment, and anger coupled with relief and serenity. Since they are uncomfortable with the expression of intense emotion, they would not be expected to communicate these feelings overtly if given an opportunity to retaliate after being rejected.

Vulnerable narcissistic personalities have also been described as presenting with low explicit self-esteem. However, they hold grandiose expectations of themselves similar to grandiose narcissists and are expected to report high implicit self-esteem. I expect that vulnerable narcissistic personalities would be disappointed and deflated by rejection due to the discrepancy between this feedback and their underlying grandiosity, and that they would retaliate with overt expressions of anger in an attempt to modulate their self-esteem. While grandiose narcissistic personalities are able to successfully shield the self from experiencing insecurity or internalized negative emotions, vulnerable narcissists have been described as being less successful at buffering the self from the impact of self-esteem threats. Therefore, I would expect these individuals to experience a significant drop in self-esteem after being rejected and to report a combination of externalized (e.g., anger and hostility) and internalized emotions (e.g., shame and sadness).

In order to compare these personality groups’ reactions to a self-esteem threat, they will be asked to complete a measure of state self-esteem and affect both before and after being rejected. Moreover, they will be given an opportunity to retaliate against those who allegedly rejected them by writing them a letter. This letter will be coded to examine
the amount of overt affiliation versus hostility and submissiveness versus dominance expressed by each personality group. Hypotheses for each of these variables will be delineated below.

State self-esteem. Three types of hypotheses are relevant; first, will there be a significant difference in mean self-esteem between Time 1 (pre-rejection) and Time 2 (post-rejection) (within-group hypothesis; main effect for time); second, will the groups’ mean self-esteem scores differ significantly from each other (between-group hypothesis; main effect for group membership); and third, will the groups significantly differ from each other when the effect of time interacts with the effect of group membership (interaction hypothesis).

Since the personality groups’ mean state self-esteem scores are expected to change in different directions and at different rates, I do not expect a significant main effect for time. In terms of the between-group differences, I expect grandiose narcissistic personalities to have the highest mean state self-esteem because they will report high self-esteem prior to the rejection manipulation and even higher scores following the rejection to buffer against the self-esteem threat. Control personalities typically report healthy, high self-esteem and would be expected to protect the self against the impact of rejection. Therefore, control personalities would be expected to have higher mean scores than avoidant personalities and vulnerable narcissistic personalities. Avoidant personalities are expected to have similarly low self-esteem scores at Time 1 and Time 2 since they expect to be rejected and therefore do not have to adjust their self-evaluation. Finally, vulnerable narcissistic personalities are expected to have the lowest mean state self-esteem score, collapsed across Time 1 and Time 2, since they will report low self-
esteem prior to the rejection manipulation and even lower self-esteem scores following the rejection due to their difficulties modulating their self-esteem.

I expect to find a significant group membership by time interaction effect. I predict grandiose narcissistic personalities will report the most significant increase in mean state self-esteem scores between Time 1 and Time 2. I predict that vulnerable narcissistic personalities will report significant decreases in mean state self-esteem between Time 1 and Time 2. I do not expect control personalities or avoidant personalities to show significant changes in self-esteem between Time 1 and Time 2.

Affect. The Positive and Negative Affect Schedule-Expanded Form (PANAS-X; Watson & Clark, 1991) will be used to assess state affect. This measure consists of two higher-order scales (i.e., Negative Affect and Positive Affect) and eleven lower-order scales that assess specific affective states. No hypotheses will be forwarded regarding the two higher order scales because these scales are too general and will not provide useful information to discriminate the groups from one another. Hypotheses will be delineated for the six lower-order scales that are relevant to this study (i.e., Hostility, Guilt, Sadness, Joviality, Self-Assurance, and Serenity).

Three types of hypotheses are relevant; first, will there be a significant difference in mean affect between Time 1 (pre-rejection) and Time 2 (post-rejection) (within-group hypothesis; main effect for time); second, will the groups’ mean affect scores differ significantly from each other (between-group hypothesis; main effect for group membership); and third, will the groups significantly differ from each other when the effect of time interacts with the effect of group membership (interaction hypothesis). While I expect there to be between-group differences, I am most interested in how the
group means differ from each other taking into consideration the effect of time and thus no hypotheses will be forwarded regarding the main effect of group membership.

The Hostility scale is composed of six words (i.e., angry, hostile, irritable, scornful, disgusted, loathing). Based on the research reviewed above and my theoretical understanding of the personality types included in this study, I predict a significant main effect for time, with mean Hostility scores increasing between Time 1 and Time 2 for all groups. I also predict a significant interaction effect. More specifically, I predict grandiose narcissistic personalities will have the greatest increase in mean scores on the Hostility scale between Time 1 and Time 2. I expect vulnerable narcissistic personalities to have a greater increase in mean hostility scores between Time 1 and Time 2 than avoidant personalities and control personalities.

The Guilt and Sadness scales of the PANAS-X can both be considered internalized negative emotions. The Guilt scale consists of six words (i.e., guilty, ashamed, blameworthy, angry at self, disgusted with self, dissatisfied with self) and the Sadness scale is comprised of five words (i.e., sad, blue, downhearted, alone, lonely). Morrison (1989) suggests that “shame follows narcissistic defeat,” (Morrison, 1989, p.49) such as failures to be seen as unique and special. Being rejected by a group should represent an enormous narcissistic defeat since it suggests that an entire group does not consider you unique and special. As was described above, grandiose narcissistic personalities are typically able to successfully defend against feelings of shame and other internalized negative emotions by activating their grandiosity. Vulnerable narcissistic personalities are less equipped to use these defense mechanisms and, therefore, feel shameful, inadequate, and disappointed when faced with narcissistic threat.
Based on my theoretical understanding of the personality types included in this study, I will forward the following hypothesis for both the Guilt and Sadness scales of the PANAS-X. I do not expect to find a significant main effect for time because I expect the group means to change in different directions and at different rates. I expect to find a significant interaction effect. I predict that vulnerable narcissistic personalities and avoidant personalities will both report significant increases in mean Guilt and Sadness between Time 1 and Time 2, but I expect the mean changes in Guilt scale scores to be greater for vulnerable narcissistic personalities. I predict that grandiose narcissistic personalities will demonstrate significant decreases in their Guilt and Sadness mean scores because they will successfully defend against these negative internalized emotions. I do not expect control personalities to demonstrate significant mean differences in scores between Time 1 and Time 2 on either the Guilt or Sadness scales since research suggests that people generally use self-enhancement strategies to buffer from the implications of rejection (Bourgeois & Leary, 2001; Twenge et al., 2001).

The Joviality scale of the PANAS-X consists of eight words (i.e., happy, joyful, delighted, cheerful, excited, enthusiastic, lively, energetic). The Self-Assurance scale of the PANAS-X consists of six words (i.e., proud, strong, confident, bold, daring, fearless). For both Joviality and Self-Assurance, I do not expect to find a significant main effect for time because I expect the group means to change in different directions and at different rates. However, I predict a significant interaction effect. Since one of the ways that grandiose narcissistic personalities defend against feelings of inadequacy is by self-enhancing, I expect that they will report significant increases in mean Joviality and Self-Assurance scores between Time 1 and Time 2. I predict that vulnerable narcissistic
personalities and control personalities will both report significant decreases in mean Joviality and Self-Assurance scale scores between Time 1 and Time 2, but I expect the mean changes to be greater for vulnerable narcissistic personalities due to their relative inability to successfully self-enhance. I do not expect avoidant personalities to demonstrate significant mean differences between Time 1 and Time 2 on the Joviality or Self-Assurance scale because I expect these individuals to score low on these scales pre-manipulation due to their concerns about being socially inept and being in a threatening interpersonal situation and to score equally low after the rejection when their self-views are confirmed.

Finally, the Serenity scale of the PANAS-X consists of three words (i.e., calm, relaxed, at ease). I do not expect to find a significant main effect for time because I expect the group means to change in different directions and at different rates. I expect to find a significant interaction effect. Based on research on self-verification theory, I expect avoidant personalities to report the most significant increases in Serenity scale scores between Time 1 and Time 2. I predict that grandiose narcissistic personalities and vulnerable narcissistic personalities will both demonstrate significant decreases in their Serenity scale score since both subtypes tend to become quite dysregulated when their grandiose expectations are not fulfilled. I do not expect control personalities to report significant changes in their mean Serenity scores between Time 1 and Time 2 due to their ability to self-regulate when faced with negative feedback.

*Letter.* The purpose of allowing participants to write a letter is to be able to evaluate how much hostility versus affiliation and dominance versus submissiveness the personality groups express when they believe that these letters will be read to the
participants that allegedly rejected them. For affiliation, I expect control personalities to have the highest means, and avoidant personalities, vulnerable narcissistic personalities, and grandiose personalities to have equally low mean scores. For hostility, I expect grandiose narcissistic personalities to have the highest mean, vulnerable narcissistic personalities to have higher mean scores than control personalities, and avoidant personalities to have the lowest mean scores.

Summary

I expect grandiose narcissistic personalities to present with a grandiose conscious self-image as evidenced by expectations to win the relationship survivor game, low scores on a measure of rejection sensitivity, high explicit self-esteem, and high scores on secure attachment. Moreover, I expect them to present with a negative non-conscious self-image as reflected in low scores on a measure of implicit self-esteem. I expect this personality subtype to respond to rejection with an increase in defensiveness as reflected by increases in state self-esteem and positive affects and a decrease in negative affects, except for hostility. In addition, I expect grandiose narcissists to employ overt self-enhancement strategies to buffer against the impact of rejection by aggressing towards other group members through the expression of hostility and dominance in their letters.

I expect vulnerable narcissistic personalities to present with a negative conscious self-image as evidenced by expectations to loose the relationship survivor game, high scores on a measure of rejection sensitivity, low explicit self-esteem, and high scores on insecure attachment. However, I expect them to present with a positive non-conscious self-image as reflected in high scores on a measure of implicit self-esteem. Even though I expect vulnerable narcissists to report that they do not expect to win the game of
relationship survivor, I expect them to experience tremendous disappointment when they do not win due to their underlying grandiosity and entitled expectations. As previously mentioned, vulnerable narcissists are less successful at consistently employing overt self-enhancement strategies to buffer against the impact of rejection, and therefore I expect that they will respond to rejection with a decrease in self-esteem and an increase in both externalized (i.e., hostility) and internalized (i.e., shame/guilt and sadness) negative emotions. I expect their letters to reflect hostility and dominance towards other group members.

Finally, I expect avoidant personalities to also present with a negative conscious self-image as evidenced by expectations to loose the relationship survivor game, high scores on a measure of rejection sensitivity, low explicit self-esteem, and high scores on insecure attachment, and with a negative non-conscious self-image (i.e., low scores on implicit self-esteem). Unlike vulnerable narcissists, being rejected from the relationship survivor game will provide some relief to avoidant personalities because it will confirm their negative self-views and remove them from an uncomfortable situation. Therefore, I expect that they will report an increase in mean Serenity scores between Time 1 and Time 2. Since they expect to be rejected, avoidant personalities are not expected to have significant changes in self-esteem or in any of the positive mood states as a result of the rejection. I expect them to experience an increase in negative mood states that is endorsed in a self-report measure but not in their letters. I expect their letters to be less hostile and more submissive than all other groups.
Chapter 2: Methods

Group Selection and Recruitment Methods and Procedures

Group Selection Method

Participants were selected using The Pennsylvania State University Psychology department’s mass screening sessions for the Fall and Spring semesters of the 2004-2005 academic year and the Fall semester of the 2005-2006 academic year. Mass screening offers students taking selective psychology courses the opportunity to complete a large battery of questionnaires for the attainment of research credits. Students who are not interested in participating in psychological research are given alternate methods of earning extra credit. The following scales were included in mass screening during the semesters mentioned above and were used for selection purposes: Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), Social Phobia Diagnostic Questionnaire (SPDQ; Newman, Kachin, Zuellig, Constantino, & Cashman-McGrath, 2003), and Vulnerable Narcissism Scale (VNS; Pimentel et al., 2004). These scales are described in more detail below. The order of the scales were counterbalanced throughout each of the semesters in order to account for any error that might be due to placement of these scales within the battery of other measures.

Four groups of participants were identified based on their responses to the three screening questionnaires mentioned above: grandiose narcissistic personalities, vulnerable narcissistic personalities, avoidant personalities, and control personalities. It is important to note that our selection procedures were aimed at selecting individuals with narcissistic and avoidant personality styles, in contrast to personality pathology (i.e., personality disorders). The inclusion criteria for each group were based on cut-off scores.
for each of the screening questionnaires. The cut-off scores for the NPI (Raskin & Hall, 1979) and the VNS (Pimentel et al., 2004) were determined every semester based on the means and standard deviations of the mass screening sample. For the SPDQ (Newman et al., 2003), Receiver Operating Characteristics (ROCs) of this measure were analyzed comparing the SPDQ to the Structured Clinical Interview for Axis-II Disorders (SCID-II) diagnosis for Avoidant Personality Disorder. According to this analysis, the optimal balance between sensitivity and specificity for avoidant personality is achieved with a cut-off score of 8.63 on the avoidance scale of the SPDQ.

The inclusion criteria for each group were as follows: grandiose narcissistic personalities had NPI scores that were at least .70 standard deviation above the mean, SPDQ scores below 8.63, and VNS scores at least .70 standard deviation below the mean; vulnerable narcissistic personalities had VNS scores that were at least .70 standard deviation above the mean, SPDQ scores below 9.63, and NPI scores at least .40 standard deviation below the mean; avoidant personalities had SPDQ scores that were greater or equal to 8.63, VNS scores that were at least .40 standard deviation below the mean, and NPI scores that were at least .70 standard deviation below the mean; control personalities had NPI scores that were at least .70 standard deviation below the mean, SPDQ scores below 8.63, and VNS scores at least .70 standard deviation below the mean.

It is important to highlight that the selection criteria for the vulnerable narcissistic personalities and the avoidant personalities were less stringent than those of the grandiose narcissistic personalities and the control personalities. For vulnerable narcissistic personalities, the cut-off score on the NPI was lowered to .40 standard deviation below the mean because vulnerable narcissistic personalities typically score high on the
Entitlement/Exploitativeness scale of this measure since it assesses a characteristic that is core to both phenotypic expressions of narcissism (Dickinson & Pincus, 2003; Hibbard & Bunce, 1995). Moreover, vulnerable narcissistic personalities and avoidant personalities had less stringent cut-off scores on the SPDQ and the VNS, respectively. These criteria were selected because there is significant overlap between the presentations of these two personality types, which could lead vulnerable narcissistic personalities to score high on the SPDQ (i.e., SPDQ assesses avoidant behaviors without assessing the cause of the avoidant behaviors) and avoidant personalities to score high on certain scales of the VNS (e.g., individuals with low self-esteem may score high on Contingent Self-Esteem; individuals who exhibit avoidant behaviors may score high on Devaluing Others and Needs for Others). As a result, for vulnerable narcissistic personalities the cut-off score on the SPDQ was adjusted so that the presence of avoidant behaviors did not rule out vulnerable narcissistic personalities. Similarly, avoidant personalities’ cut-off score on the VNS was adjusted so that individuals with low self-esteem and avoidant behaviors would not be ruled out of the avoidant group if they presented with sufficiently high scores on the SPDQ.

*Group Selection Measures*

*Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979)*. This questionnaire is a 40-item measure of trait narcissism based on DSM-III Narcissistic Personality Disorder criteria. Response format consists of a forced choice between two self-descriptive phrases, one with a narcissistic theme and the other without. Reports of internal consistency have produced coefficient alphas ranging from .80 to .87 across several studies (Auerbach, 1984; Emmons, 1984; Pimentel et al., 2004; Raskin & Terry,
Emmons (1984; 1987) uncovered four dimensions accounting for 72% of the variance and labeled these dimensions Exploitativeness/Entitlement (E/E), Leadership/Authority (L/A), Superiority/Arrogance (S/A), and Self-Absorption/Self-Admiration (S/S). Internal consistencies for each of the scales ranged from .68 to .74 for E/E, .69 to .79 for L/A, .69 to .70 for S/A, and .69 to .81 for S/S (Emmons, 1984, 1987). The NPI has been largely used to assess grandiose narcissism. Additionally, the NPI has been shown to have good convergent and discriminant validity (Auerbach, 1984; Emmons, 1984; Pimentel et al., 2004; Raskin & Terry, 1988). A recent study investigated the test-retest reliability of the NPI and found that the full scale score produced an adequate test-retest correlation (alpha coefficient = .81) across a 13 week period (de Rosario & White, 2005). This is important considering the lability associated with narcissistic personality characteristics.

Social Phobia Diagnostic Questionnaire (SPDQ: Newman et al., 2003). The SPDQ was designed to assess social phobia using DSM-IV criteria. The measure includes several yes/no questions that assess excessive fearfulness in social situations and a tendency to avoid these situations. It also includes a list of 16 social situations and the participant is instructed to rate their fear and avoidance of each situation. In this study, only the avoidance scale of the SPDQ was used. Using a 4-point Likert scale ranging from “No Avoidance” to “Consistent Avoidance,” participants were asked to rate the severity of their avoidance for the 16 social situations. This questionnaire was chosen to measure avoidant personality because of the high co-morbidity between social phobia and avoidant personality (Reich, 2001) and because the avoidance scale assesses avoidant behaviors. Newman et al. reported that the SPDQ has good internal consistency (alpha
coefficient = .95) and good split-half reliability (r = .90). The SPDQ also demonstrated
good convergent and divergent validity (Newman et al., 2003).

Vulnerable Narcissism Scale (VNS; Pimentel et al., 2004). The VNS is a 50 item
multidimensional measure that assesses the construct of vulnerable narcissism. Items
consist of a series of self-descriptive statements that participants are asked to rate on a 6-
point Likert scale ranging from “Not At All Like Me” to “Very Much Like Me.” A
preliminary factor analysis of the VNS revealed a 7-component structure. These
components are labeled Contingent Self-Esteem, Exploitativeness, Self-Sacrificing Self-
Enhancement, Hiding the Self, Grandiose Fantasy, Devaluing Others and Needs for
Others, and Entitlement Rage. In preliminary analyses, Cronbach’s alpha ranged from .70
to .93 for the seven subscales, indicating that the measure has good internal consistency
within each of its subscales. Moreover, the VNS demonstrated good convergent and
divergent validity when related to a variety of personality and clinical measures (Pimentel
et al, 2004; Pimentel et al., 2007). To date, no studies have examined the test-retest
reliability of the VNS.

Recruitment Procedures

Individuals who met criteria for group selection were contacted via telephone by
trained undergraduate research assistants and invited to participate in the study. All
eligible individuals were recruited during the semester in which they participated in mass
screening. However, in order to increase the pool of eligible participants, individuals who
did not choose to participate in the study during the semester in which they took part in
mass screening were also invited to participate in the study during the Fall semester of
2006. Research assistants notified eligible participants that the study would take
approximately two hours and that they could choose between receiving two research credits or $15 in cash as compensation. Participants were reminded that their participation in this study was voluntary and that they could ask their professor for alternate forms of extra credit if they did not wish to participate.

Research assistants provided eligible participants with a brief description of the alleged purpose of the study. They told them that due to the increasing popularity of reality television shows involving the formation of relationships in group settings, we were interested in studying the development of these types of relationships in the laboratory. Eligible participants were informed that participation in the study would involve completing several questionnaires about their opinions, emotions, and interpersonal behaviors and participating in a “relationship survivor game.” No information regarding the “relationship survivor game” was provided at this time other than to say that it involved several group activities. They were also informed that the winners of the “relationship survivor game” would be entered into a drawing and that two individuals would be awarded $25 at the end of the semester. This drawing was included in the experiment to increase participants’ investment in winning the relationship survivor game by having a monetary incentive in addition to the psychological motivations for winning. After the first semester of running the study, it became apparent that participants were more motivated to win based on psychological as opposed to monetary reasons and therefore the $25 drawing was removed from the design. As will be evident in the methods section, we examined whether the removal of this monetary compensation had an impact on the results of the study by including semester as an independent variable.
Participants who chose to participate in the study were scheduled. Four to five participants were scheduled per session and the sessions were matched with respect to gender in order to avoid any gender effects that resulted based on the composition of the groups.

**Participant Characteristics**

Four groups were selected and recruited: grandiose narcissistic personalities (17 males, 24 females, 1 unknown), vulnerable narcissistic personalities (8 males, 25 females, 1 unknown), avoidant personalities (9 males, 21 females), and control personalities (20 males, 31 females). The mean age of participants was 18.83 (SD = 1.94). The ethnic composition of participants was 88.5% Caucasian, 7% Asian/Pacific Islander, 2.5% African-American, and 0.6% Latino/Hispanic with 1.3% unknown.

**Core Study Methods and Procedures**

**Experimental Design and Manipulation**

Two research assistants proctored every session. It is important to note that undergraduate research assistants involved in the study were trained extensively through weekly meetings that took place throughout the year-and-a-half-long data collection. These meetings focused on providing the theoretical background for the study and evaluating the progress of the study. Prior to beginning data collection, research assistants participated in practice runs of the experiment and received feedback from the principal investigator. Moreover, during the first semester of data collection the principal investigator observed research assistants conducting the experiment and provided feedback.
The set up of the study included one main group room and five individual rooms. The main group room was used to greet participants, provide group instructions, and conduct the group activity, which is described in detail below. Each participant had an individual room, where they completed questionnaires and were rejected in private. The individual rooms were equipped with a desk and a noisemaker to prevent participants from hearing others being rejected.

When participants arrived to their scheduled session, a proctor greeted them, checked them in, and provided them with a nametag that had their first name written on it. Participants completed consent forms and received a pre-manipulation questionnaire packet. It is important to note that proctors were blind to participants’ experimental group membership.

The following instructions were read to the group:

*As we mentioned briefly on the phone, we are interested in studying how personality affects people’s success in forming relationships in groups. This is a big topic in psychology nowadays due to the increased popularity of reality TV shows that put a bunch of strangers together, give them a short opportunity to get to know each other, and then ask group members to make selections about who they would like to vote out of the group. Today we are going to do something similar in the laboratory by asking you all to play a game of “relationship survivor.” We are going to first separate everyone into individual rooms so that you can fill out several confidential questionnaires about yourself. Afterwards, you will all come back to this room and we will begin playing relationship survivor! Every round of relationship survivor will involve a different activity. After each round, you will each go to the voting table and write down on a*
confidential piece of paper who you are interested in voting out. After each round we will tally the votes. We don’t want to embarrass anyone, so we will escort everyone back to their individual rooms and inform you of your survivor status privately. If you are voted out, we will ask you to write a letter to the group and fill out some additional questionnaires. Your letter will be read to the remaining group members at the end of the next round before group members vote. If you are not voted out, you will come down to this room again for another round of relationship survivor. As I said earlier, each round of relationship survivor will involve a different activity and someone will be voted out each time. We are going to play for three rounds (two rounds if only four participants) until there are only two people left. These two people will be considered the winners. Even though you will end earlier than other participants if you are voted out of the game at any time, we will need you to sit patiently in your room until the study is over in order to give you credit equivalent to everybody else. Does anyone have any questions?

During the first semester the following instructions were also included:

The winners of the relationship survivor game will be entered into a drawing. At the end of the semester we will draw two names from this drawing and compensate these participants with $25 each.

At this time, participants were escorted to their individual rooms to fill out the pre-manipulation questionnaires. Once all participants completed these questionnaires, they were escorted back to the main group room. Five chairs were arranged in a circle and participants were invited to sit.

The following instructions were read to the participants:
Let’s begin playing relationship survivor. We are going to start by asking you all to introduce yourself to the group by saying your name, major, year, where you are from and then tell the group something about yourself. Just to provide an example, I will go ahead and introduce myself (The proctor introduced him/herself). The first round of relationship survivor is going to consist of letting other group members get to know you by answering some personal questions. You want to pay attention to others’ responses because the next round consists of a group activity so you may want to vote out the person you least want in your group based on what you have learned about them. In order to give you all an opportunity to get to know each other better in this short period of time, we have put together a number of personal questions. [Note: Twenty-two questions from the Relationship Closeness Induction Task (Sedikides, Campbell, Reeder, & Elliot, 1999) were used. These questions are described in more detail below.] We would like you to pick out a question from this box and read it out loud to the other group members. It is completely acceptable for you to return the question if you are not comfortable answering it and would like to choose another one. We will go for as many rounds as we can in a 15-minute period. You will each answer the same number of questions and may not take more than 4 minutes to answer each question. Does anyone have any questions?

After approximately 15 minutes elapsed and all participants answered the same number of questions, the proctor read the following instructions:

Before we ask you all to write down the name of the person you would like to vote out, we would like each of you to state your case to the group. In other words, tell the group the reasons why you believe you should not be voted out. Just as a reminder, your
votes are confidential. We are going to be tallying your votes and to avoid embarrassment we will let you know individually in your separate rooms about your survivor status. Those of you who are not voted out will be returning to this room for the second round of relationship survivor! Does anyone have any questions?

Participants informed the other group members why they believed they should not be voted out. Afterwards, participants were asked to walk over to the voting table one by one to write down the name of the person they wanted to vote out. The voting table was set up in an angle that allowed participants some privacy. The voting table had blank papers, a pen, and a small box for participants to insert their voting slips. Once all participants cast their vote, they were escorted back to their individual rooms. After two minutes elapsed, proctors went to each room individually to inform participants that they had been voted out by the other group members. Of course, all participants were voted out. The following script was read to each participant:

(Names of Participant), I’m sorry to inform you that you have been voted out. This means you will not be going on to the second round of relationship survivor. Like I said earlier, one of the things that I would like you to do is to write a letter to the group and we will read it to them at the end of the next round before they vote. This letter is an opportunity for you to tell the group how you feel about this experience and to share anything else that you would like them to know. There are no rules for how the letter should be written, so you are welcome to write anything that you like. Also, I need you to fill out two questionnaires using this scantron. On the questionnaire packet, you will be instructed to write your initials on the top right corner of your scantron. [Note: Instructions regarding participants’ initials were included because they are necessary to
score the Initials Preference Task (Bosson, Swann, & Pennebaker, 2000) described below. Please don’t forget to do this before you hand these in. I will be back to collect your materials shortly, so if you finish earlier please wait patiently because I’ll be in the group room monitoring the next group activity. As I mentioned earlier, I’ll need you to wait patiently until the study is over to be able to compensate you for your participation equivalent to everybody else. Do you have any questions?

Proctors were instructed to answer questions regarding the letter very generally in order to avoid priming participants to respond in any particular way. Therefore, they simply reiterated that the purpose of the letter was to provide them with an opportunity to express their feelings or share anything else they would like the group to know and that there were no rules for how the letter should be written. The protocol stressed that if any participant was deemed to be too distressed to continue with the experiment, then they should be debriefed immediately and their data should not be included in the study. It is important to note that this was never necessary and all participants who began the experiment were able to complete it.

Proctors proceeded by giving participants a post-manipulation questionnaire packet that included a blank page to be used for the letter. After approximately 15 minutes, proctors collected all the measures. Participants were debriefed individually at this time and also received a written debriefing form. Participants were informed that the rejection was manipulated and that all participants in the study were rejected. They were told that as a result it was impossible for anyone to win the relationship survivor game. They were also be informed that the votes were never tallied and that the letters were not read to other group members. Proctors explained to participants that we deceived them in
order to study personality differences in reactions to rejection. During the first semester
participants were also informed that since no one could actually win the relationship
survivor game, the names of all participants would be entered in the drawing for a chance
to win $25. Participants were asked to keep the study confidential in order to avoid
compromising our results. The protocol instructed proctors to refer participants to
Counseling and Psychological Services (CAPS) if participants continued to be distressed
after being debriefed. This was never actually necessary.

Dependent Measures Administered Only Pre-Manipulation

Expectations questions. To assess participants’ expectations for how they would
perform on the relationship survivor game, they were asked, “Do you expect to be voted
out during: (A) The first round; (B) The second round; (C) The third round; (D) Never: I
will win relationship survivor game.” This question was included at the end of the
questionnaire packet completed by participants prior to the rejection manipulation.

Rejection Sensitivity Scale (RSQ; Downey & Feldman, 1996). The RSQ
conceptualizes rejection sensitivity as generalized expectations and anxiety about
whether significant others will meet one’s needs or will be rejecting. The RSQ consists of
18 hypothetical situations in which participants express a need/request to a significant
other. Answers to these hypothetical situations (e.g., You ask someone you don’t know
well out on a date) vary along two dimensions: first, participants are asked to indicate
their degree of anxiety and concern about the outcome of each situation (e.g., How
concerned or anxious would you be over whether or not the person would want to go out
with you) using a 6-point Likert scale ranging from “Very Unconcerned” to “Very
Concerned;” second, participants indicate their expectations of whether their request will
be honored or rejected (e.g., I would expect that the person would want to go out on a date with me) using a 6-point Likert scale ranging from “Very Unlikely” to “Very Likely.” High likelihood represents expectations of acceptance and low likelihood represents expectations of rejection. The RSQ has been shown to have high internal reliability (coefficient alpha = .83), high item to item-total correlations (all items $r > .30$), and high test-retest reliability ($r = .83$ for a 2 to 3 week period and $r = .78$ for a 4-month period) (Downey & Feldman, 1996). In this sample, the coefficient alpha for the RSQ total score was .77.

**Attachment Style Questionnaire (ASQ; Feeney et al., 1994).** The ASQ consists of five attachment scales: (1) Confidence (in self and others) (high scorers on this factor tend to experience secure attachment); (2) Discomfort with closeness (high scorers on this scale have difficulty trusting and depending on others and allowing others to depend on them); (3) Relationships as secondary (high scorers on this scale value achievements more than relationships and do not assign much importance to getting along with others); (4) Need for approval (high scorers on this scale are concerned with other’s approval of them and worried that they will not meet other people’s standards); and (5) Preoccupation with relationships (high scorers on this scale worry about whether other’s feelings of love and commitment are real and about being abandoned or rejected by others due to fears that they cannot survive alone). Participants were instructed to rate the degree to which they agree with 40 statements concerning their perceptions of themselves and their relationships using a 6-point Likert scale ranging from “Totally Disagree” to “Totally Agree.” Feeney et al. demonstrated that the ASQ has a high level of internal consistency; the following Cronbach’s alphas were reported for each of the five scales [i.e.,
Confidence (.80), Discomfort with closeness (.84), Relationships as secondary (.76), Need for approval (.79), Preoccupation with relationships (.76)]. They also reported test-retest reliability over a 10-week period [i.e., Confidence (.74), Discomfort with closeness (.74), Relationships as secondary (.67), Need for approval (.78), Preoccupation with relationships (.72)]. In this sample, the coefficient alphas were: Confidence scale (\(\alpha = .84\)), Discomfort with closeness scale (\(\alpha = .87\)), Relationships as secondary scale (\(\alpha = .66\)), Need for approval scale (\(\alpha = .80\)), Preoccupation with relationships scale (\(\alpha = .76\)).

Self-Liking/Self-Competence Scale (SLCS; Tafarodi & Swann, 1995). The SLCS measures two dimensions of global self-esteem: (1) self-liking (high scores on the self-liking scale indicate positive affect, self-acceptance, and comfort in social settings; low scores indicate negative affect, self-derogation, and discomfort in social settings); and (2) self-competence (high scores on the self-competence scale indicate a sense of personal efficacy, and a view of oneself as being in control; low scores indicate a view of oneself as incapable, ineffective, and not in control). The SLCS consists of two 10-item subscales that measure the two dimensions of self-esteem described above. Participants were asked to rate all items using a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree.” Bosson, Swann, & Pennebaker (2000) reported Cronbach’s alphas of .87 and .89 for the self-liking and self-competent subscales, respectively. In this sample, the coefficient alphas for each scale were high (Self-liking \(\alpha = .93\), Self-competence \(\alpha = .91\)).

Initials-Preference Task (Bosson et al., 2000). Implicit self-esteem has been defined as, “an automatic, over-learned, non-conscious evaluation of the self that guides spontaneous reactions to self-relevant stimuli” (Bosson et al., 2000, p. 631). The initials-
preference task measures implicit self-esteem by assessing the extent to which people like the letter of their initials relative to other letters. The assumption underlying this task is that people automatically attach value to stimuli that are closely associated with the self and that this value is based on people’s implicit self-esteem. Therefore, people who strongly prefer their initials to other letters are thought to possess high implicit self-esteem. Participants were instructed to rate how much they like each letter of the alphabet using a 7-point Likert scale ranging from “Very Much” to “Not at All.” To calculate initials-preference scores, each participant’s mean rating of all letters was subtracted from their mean rating of their first and last initials. Therefore, this score reflects the extent to which participants prefer/dislike their initials over other letters. Participants were asked to write their initials on the post-manipulation questionnaire packet in order to minimize suspicion about the relevance of the initials-preference task. Bosson et al. have shown that this task has satisfactory test-retest reliability over a 4-week period (r = .90). Moreover, Zeigler-Hill (2006) provided evidence of the internal consistency of this measure by correlating participants’ ratings of their first and last initials (r = .42, p < .001).

**Dependent Measures Administered Both Pre- and Post-Manipulation**

*State Self-Esteem Scale (SSES; Heatherton & Polivy, 1991).* This scale was designed to measure state self-esteem and has been found to be sensitive to temporary changes in self-esteem caused by experimental manipulations (Heatherton & Polivy, 1991). The SSES has three scales that assess three aspects of self-esteem: performance, social, and appearance. This study only used items from the performance and social self-esteem scales. The performance self-esteem scale measures the extent to which
participants feel their performance is worthy. A sample item from this scale is, “I feel confident about my abilities.” The social self-esteem scale measures the extent to which participants feel self-conscious, foolish, or embarrassed about their social image. A sample item from this scale is, “I am worried about whether I am regarded as a success or failure.” In this study the SSES was administered twice, once before the rejection manipulation and once afterwards. Participants were asked to rate 14 statements using a 5-point Likert scale ranging from “Not at All” to “Extremely.” The instructions asked them to focus on how they feel “right now.” Some of the items in this measure have to be reverse-scored. Heatherton & Polivy have shown that the SSES has high internal consistency (Cronbach’s alpha for total score = .92). In this sample, the coefficient alphas for each scale were high (Performance scale Time 1 $\alpha = .88$, Time 2 $\alpha = .81$, Social scale Time 1 $\alpha = .89$, Time 2 $\alpha = .93$).

Positive and Negative Affect Schedule-Expanded Form (PANAS-X; Watson & Clark, 1991). The PANAS is a widely used measure of affect. This measure consists of two higher-order scales labeled Negative Affect (NA) and Positive Affect (PA) and eleven lower-order scales that assess specific affective states (i.e., Fear, Hostility, Guilt, Sadness, Joviality, Self-Assurance, Attentiveness, Shyness, Fatigue, Serenity, and Surprise). Participants were instructed to rate the extent to which 60 feelings/emotions describe their affective state using a 5-point Likert scale ranging from “Very Slightly or Not at All” to “Extremely.” The PANAS-X can be administered with different temporal instructions. The instructions provided in this study asked participants to rate how they feel “right now (that is, at the present moment).” Watson and Clark (1991) assert that the PANAS-X can be used as a measure of state affect and is sensitive to changing
endogenous and exogenous conditions. Participants in this study completed the PANAS-X twice, before and after the experimental manipulation. Watson and Clark reported the following coefficient alphas using a college population across several data sets: NA (.85), PA (.88-.89), Fear (.81-.88), Hostility (.81-.84), Guilt (.84-.86), Sadness (.79-.89), Joviality (.91-.93), Self-Assurance (.77-.83), Attentiveness (.72-.81), Shyness (.82-.83), Fatigue (.80-.90), Serenity (.71-.75), and Surprise (.74-.80). In this sample, the coefficient alphas were: Hostility (Time 1 $\alpha = .79$, Time 2 $\alpha = .87$), Guilt (Time 1 $\alpha = .87$, Time 2 $\alpha = .90$), Sadness (Time 1 $\alpha = .81$, Time 2 $\alpha = .87$), Joviality (Time 1 $\alpha = .92$, Time 2 $\alpha = .92$), Self-Assurance (Time 1 $\alpha = .85$, Time 2 $\alpha = .87$), Serenity (Time 1 $\alpha = .82$, Time 2 $\alpha = .86$), Surprise (Time 1 $\alpha = .68$, Time 2 $\alpha = .79$), and Fatigue (Time 1 $\alpha = .92$, Time 2 $\alpha = .88$).

**Dependent Measure Administered Only Post-Manipulation**

**Letter.** After participants were informed that they had been voted out of the relationship survivor game, they were asked to write a letter to the other group members. Participants were instructed to write the letter prior to answering the additional questionnaires in the post-manipulation packet. The instructions for the letter were as follows: On the blank sheet attached to your scantron, please write a letter to the group participants who voted you out. This letter is an opportunity for you to tell the group how you feel about this experience and to share anything else that you would like them to know. There are no rules or guidelines for what you should write, so please feel free to write anything you like. This letter will be read to the other group members by the experimenter at the end of the next round before group members vote. This letter was coded using Structural Analysis of Social Behavior (SASB, Benjamin, 1974, 1984;
Benjamin & Cushing, 2000). Refer to the section on additional instruments below for a detailed description of SASB.

Additional Instruments

Relationship Closeness Induction Task (RCIT; Sedikides et al., 1999). The RCIT is a structured self-disclosure procedure for the induction of closeness in the laboratory. The RCIT consists of three lists of questions, which become progressively more personal. This study only used the two most personal lists, which totaled 22 questions. Sedikides et al. (1999) cite five studies that have successfully used the RCIT to induce closeness in the laboratory. The RCIT is typically used in dyads that are instructed to answer all questions while conversing with each other for 9 minutes. In this study, the questions from the RCIT were used to structure the conversation of participants during the group activity and to create an opportunity for participants to reveal personal aspects of themselves, which should increase closeness with other participants and increase their psychological investment to move on to the next round of the relationship survivor game. Each question was typed on an individual slip of paper. Participants were instructed to randomly select from the slips of questions folded in a box and to answer questions for a 15-minute period.

Structural Analysis of Social Behavior (SASB; Benjamin & Cushing, 2000). SASB is a circumplex model with three surfaces that are organized around the orthogonal dimensions of affiliation (i.e., love/friendliness-hate/hostility) on the horizontal axis and interdependence (i.e., control-autonomy) on the vertical axis. The first surface of this model, Focus on the Other, describes transitive actions that are directed toward another individual. The behaviors characterized on this surface are concerned with what is going
to be done for the other person. The horizontal axes on this surface ranges from “Active-Love” to “Attack.” The vertical axes ranges from autonomy-granting behaviors (i.e., “Emancipate”) at the top to extremes of control (i.e., “Control”) at the bottom. The second surface of the SASB model, Focus on the Self, describes intransitive behaviors that are reactions to transitive behaviors by another person. The horizontal axes on this surface ranges from “Reactive-Love” to “Recoil.” The vertical axes on this surface ranges from autonomy-taking behaviors (i.e., “Separate”) at the top to submission (i.e., “Submit”) at the bottom. The first two surfaces are complimentary in that the complement of any surface one behavior is located at the identical circumplex point on the second surface. The third surface, the Introject, describes actions directed towards the self. According to interpersonal theory (Sullivan, 1953), these self-directed behaviors develop through the introjection of significant interpersonal relationships. The horizontal axes on this surface ranges from “Active Self-Love” to “Self-Attack;” the vertical axes from “Self-Emancipate” to “Self-Control.” SASB has been widely used to code dyadic interactions and narratives. In this study, SASB was used to code participants’ letters. Two coders were involved in coding the letters. In order to establish reliability, the coders first coded a third of all the letters together. Once reliability was established, the coders coded the remaining letters separately and resolved discrepancies in codes through consensus.
Chapter 3: Results

The core hypotheses in this study center upon a comparison of four personality groups: grandiose narcissistic personalities, vulnerable narcissistic personalities, avoidant personalities, and control personalities with low narcissistic and avoidant traits. More specifically, I examined between-group differences on variables reflecting the overt presentations of these personality groups and their conscious and unconscious views of themselves. In addition, I examined differences in how these groups modulate their self-esteem and affect following a self-esteem threat. Even though hypotheses were only forwarded regarding group membership, gender was also included as an independent variable in all of the statistical analyses. When gender did not produce significant effects, it was removed from the analyses to preserve power. It is important to note that semester was also entered as an independent variable in all of the statistical analyses since the study ran for three semesters and a few changes occurred across semesters (i.e., the monetary compensation changes mentioned above and changes in the undergraduate research assistants involved in the data collection). Since semester and all interactions including semester were not significant, semester was removed from all statistical analyses and those results are not reported below.

Group Selection Parameters

Table 3 displays the means and standard deviations for the three selection measures used in this study (i.e., NPI, SPDQ, VNS) across the four personality groups. Univariate ANOVAs followed by Student-Newman-Keuls post-hoc analyses were run to ascertain that the groups differed from each other in the expected ways on each of these selection measures (See Table 3). For the NPI, the main effect for Group Membership
was significant \[F (3, 154) = 180.36, p < .001\] and post-hoc analyses revealed that grandiose narcissistic personalities had the highest mean (Mn = 21.81), vulnerable narcissistic personalities (Mn = 8.47) had a higher mean than avoidant personalities (Mn = 5.23) and control personalities (Mn = 6.25). The means of avoidant personalities and control personalities on the NPI were not significantly different from one another. For the SPDQ, the main effect for Group Membership was also significant \[F (3, 154) = 129.30, p < .001\] and post-hoc analyses revealed that avoidant personalities had the highest mean (Mn = 11.54), vulnerable narcissistic personalities (Mn = 6.87) had a higher mean than grandiose narcissistic personalities (Mn = 2.30) and control personalities (Mn = 4.74). The mean of control personalities was significantly higher than the mean of grandiose narcissistic personalities. Finally, for the VNS, the main effect for Group Membership was significant \[F (3, 154) = 236.24, p < .001\] and post-hoc analyses revealed that vulnerable narcissistic personalities had the highest mean (Mn = 147.25), avoidant personalities (Mn = 78.12) had a higher mean than grandiose narcissistic personalities (Mn = 63.32) and control personalities (Mn = 60.50). The means of grandiose narcissistic personalities and control personalities on the VNS were not significantly different from one another. In sum, the group means differed from one another in the expected ways.

**Overt Presentation and Conscious and Unconscious Self-Views**

**Expectations When Entering a Threatening Interpersonal Situation**

In order to assess participants’ expectations to succeed or fail when entering a threatening interpersonal situation, participants were asked to indicate in which round of the relationship survivor game they expected to be voted out. Low scores on this question reflect the expectation to be voted out early in the game, while high scores reflect the
expectation that one will be voted out later in the game or will win the relationship survivor game. I predicted that grandiose narcissistic personalities would score the highest, and that vulnerable narcissistic personalities and avoidant personalities would score the lowest. A univariate ANOVA was carried out with Group Membership, Gender, and the Group Membership X Gender interaction as the independent variables. Since the main effect for Gender and the Group Membership X Gender interaction were not significant, Gender was removed from the analysis. The main effect for Group Membership was significant \( F (3, 146) = 10.60, p < .001 \). The above predictions were only partially supported. Post-hoc Student-Newman-Keuls tests revealed that, as expected, grandiose narcissistic personalities had a significantly higher mean (Mn = 2.00) than all other groups. However, there were no significant differences between the mean scores of control personalities (Mn = 1.57), vulnerable narcissistic personalities (Mn = 1.56), and avoidant personalities (Mn = 1.00). (See Table 4)

Chi-square statistics were computed for Expectations X Group Membership. A significant chi-square was found, \( \chi^2 (9) = 39.11, p < .001 \). Figure 1 displays a bar graph indicating the percentage of individuals in each group that selected each round as their expectation of when they would be voted out. As represented in the figure, 37% of the grandiose group selected, “Never: I will win relationship survivor.” This is compared to 10% of control personalities, 7% of avoidant personalities, and 6% of vulnerable personalities. Thirty percent of grandiose personalities responded that they expected to be voted out during the third round, while only 23% of controls personalities, 19% of vulnerable personalities, and 3% of avoidant personalities chose this response as their expectation. In terms of the second round, 73% of avoidant personalities expected to be
voted out, 59% of vulnerable personalities, 39% of control personalities, and 27% of
grandiose personalities. Finally, only 5% of grandiose expected to be voted out in the first
round. This is in contrast to 16% of vulnerable personalities, 17% of avoidant
personalities, and 27% of control personalities.

**Rejection Sensitivity**

I predicted that avoidant personalities and vulnerable narcissistic personalities
would score the highest on the RSQ, and that grandiose personalities would score the
lowest. A univariate ANOVA was carried out with scores on the RSQ as the dependent
variable and Group Membership, Gender, and the Group Membership X Gender
interaction as the independent variables. Since the main effect for Gender and the Group
Membership X Gender interaction were not significant, Gender was removed from the
analysis. There was a significant main effect for Group Membership \[F (3, 146) = 14.34,
p < .001\]. Consistent with predictions, post-hoc Student-Newman-Keuls tests revealed
that avoidant personalities (Mn = 10.71) and vulnerable narcissistic personalities (Mn =
9.79) had significantly higher means than control personalities (Mn = 7.99) and grandiose
narcissistic personalities (Mn = 6.48). As predicted, there were no significant differences
between the means of avoidant personalities and vulnerable narcissistic personalities.
Control personalities had a significantly higher mean than grandiose personalities, who
reported significantly lower scores than all other groups. (See Table 5)

**Attachment**

I predicted that the personality groups in this study would not have the same mean
scores on the scales of the ASQ. This hypothesis was tested using a MANOVA with
Group Membership, Gender, and the Group Membership X Gender interaction as the
independent variables and their mean score on each scale of the ASQ as the dependent variables. As predicted, the multivariate main effect for Group Membership was significant \([F (15, 395) = 4.93, p < .001]\), as was the multivariate main effect for Gender \([F (5, 143) = 3.50, p < .01]\). The Group Membership X Gender interaction effect was not significant \([F (15, 395) = 0.84, p = .63]\). Follow-up univariate analyses revealed a main between-group effect for all scales of the ASQ, with the exception of Relationships as Secondary. These results are discussed in more detail below (See Table 6). Follow-up univariate analyses for Gender revealed that none of the scales of the ASQ produced a significant main effect suggesting that there were no significant univariate gender differences on any of the five scales of the ASQ.

Student-Newman-Keuls post-hoc analyses were performed on each scale of the ASQ that produced a significant univariate effect in order to examine how the groups differ from one another on each scale. In terms of the Confidence scale, there was a significant main effect for Group Membership \([F (3, 147) = 13.50, p < .001]\). I expected grandiose narcissistic personalities to have the highest mean, control personalities to have higher mean scores than vulnerable narcissistic personalities, and avoidant personalities to have the lowest mean scores. As predicted, post-hoc Student-Newman-Keuls tests revealed that grandiose narcissistic personalities had significantly higher mean scores \((Mn = 37.66)\) than all other groups, and that avoidant personalities had significantly lower mean scores \((Mn = 30.43)\) than all other groups. Not consistent with predictions, the means of vulnerable narcissistic personalities \((Mn = 33.24)\) and control personalities \((Mn = 35.16)\) were not significantly different from one another. However, the means
were in the expected direction and may have been borne out in a larger sample or a clinical sample.

The Discomfort with Closeness scale also revealed a significant univariate effect for Group Membership \([F (3, 147) = 3.72, p = .01]\). I expected vulnerable narcissistic personalities and avoidant personalities to have the highest mean scores, followed by control personalities, and grandiose narcissistic personalities to have the lowest mean scores. Post-hoc Student-Newman-Keuls tests were conducted to examine these predictions. These predictions were only partially supported. As expected, the mean scores of avoidant personalities (\(M_n = 36.50\)) and vulnerable narcissistic personalities (\(M_n = 33.42\)) were not significantly different from one another, and the mean score of avoidant personalities was significantly higher than the mean scores of control personalities (\(M_n = 30.65\)) and grandiose narcissistic personalities (\(M_n = 30.63\)). However, the mean scores of the vulnerable narcissistic, grandiose narcissistic, and control personalities were not significantly different from one another.

In terms of the Need for Approval scale, there was also a significant univariate effect for Group Membership \([F (3, 147) = 15.16, p < .001]\). I expected vulnerable narcissistic personalities and avoidant personalities to have the highest mean scores, followed by control personalities, and grandiose narcissistic personalities to have the lowest mean scores. Post-hoc Student-Newman-Keuls supported these predictions. The mean scores of the avoidant personalities (\(M_n = 24.83\)) and vulnerable narcissistic personalities (\(M_n = 24.21\)) were not significantly different from one another, but were significantly higher than control personalities (\(M_n = 19.78\)) and grandiose narcissistic
personalities (Mn = 17.17), who reported a significantly lower mean than all other groups.

Finally, the Preoccupation with Relationships scale also revealed a significant univariate effect for Group Membership [F (3, 147) = 13.83, p < .001]. I expected vulnerable narcissistic personalities and avoidant personalities to have the highest mean scores, followed by control personalities, and grandiose narcissistic personalities to have the lowest mean scores. These predictions were only partially supported. Post-hoc Student-Newman-Keuls revealed that vulnerable narcissistic personalities (Mn = 31.42) reported higher mean scores than all other groups, and avoidant personalities (Mn = 28.70) had higher mean scores than control personalities (Mn = 24.55) and grandiose narcissistic personalities (Mn = 23.59). The mean scores of control personalities and grandiose narcissistic personalities were not significantly different from one another, but the differences were in the expected direction and may have been borne out in a larger sample or a clinical sample.

**Self-Esteem**

As previously mentioned, the SLCS was used to measure explicit global self-esteem (i.e., conscious evaluation of trait self-esteem) and the Initials Preference Task was used to examine implicit global self-esteem (i.e., non-conscious trait self-esteem).

The SLCS consists of two scales that examine two dimensions of global self-esteem, self-liking and self-competence. On both dimensions, I expected grandiose narcissistic personalities to have the highest mean scores, followed by control personalities, and vulnerable narcissistic personalities and avoidant personalities to have the lowest mean scores. This hypothesis was tested using a MANOVA with Group
Membership, Gender, and the Group Membership X Gender interaction as the independent variables and scores on the two scales of the SLCS as the dependent variables. Since the main multivariate effect for Gender and the Group Membership X Gender interaction were not significant, Gender was removed from the analysis. As predicted, there was a significant multivariate main effect for Group Membership [F (6, 304) = 11.51, p < .001]. Follow-up univariate analyses for Group Membership revealed a main effect for both the Self-Competence Scale [F (3, 153) = 17.70, p < .001] and the Self-Liking Scale [F (3, 153) = 21.49, p < .001]. Post-hoc Student-Newman-Keuls tests supported the hypotheses mentioned above. On both scales of the SLSC, grandiose narcissistic personalities had significantly higher mean scores (Self-Competence Scale Mn = 45.45; Self-Liking Scale Mn = 43.31) than all other groups. Control personalities had significantly higher scores (Self-Competence Scale Mn = 41.16; Self-Liking Scale Mn = 39.18) than vulnerable narcissistic personalities (Self-Competence Scale Mn = 38.76; Self-Liking Scale Mn = 33.03) and avoidant personalities (Self-Competence Scale Mn = 37.73; Self-Liking Scale Mn = 32.87). Also consistent with predictions, the mean scores of vulnerable narcissistic and avoidant personalities were not significantly different from one another on either scale of the SLSC. (See Table 7)

Since the Initials Preference Task measures automatic, non-conscious evaluations of the self, I predicted that vulnerable narcissistic personalities would score the highest, followed by control personalities, and that avoidant personalities and grandiose narcissistic personalities would score the lowest. This hypothesis was tested using a between-subjects ANOVA with the Group Membership, Gender, and the Group Membership X Gender interaction as the independent variables and scores on the Initials
Preference Task as the dependent variable. The main effects for Group Membership \( [F (3, 141) = 1.14, p = .34] \) and Gender \( [F (1, 141) = 0.01, p = .91] \) were not significant. However, there was a significant Group Membership X Gender interaction \( [F (3, 141) = 4.54, p < .01] \). In both the grandiose narcissistic personality group and the control personality group, females scored higher than males (Grandiose Narcissistic Personality Group Females Mn = 1.91 and Males Mn = 0.96) (Control Group Females Mn = 1.34 and Males Mn = 1.08). The opposite pattern was evident in the vulnerable narcissistic personality group and the avoidant personality group, in which males scored higher than females (Vulnerable Narcissistic Personality Group Females Mn = 0.94 and Males Mn = 1.72) (Avoidant Personality Group Females Mn = 1.42 and Males Mn = 1.93). Figure 2 displays the Group Membership X Gender interaction. (See Table 8)

In order to examine whether the mean differences between the genders of each personality group were significantly different from one another and from the control group, the 2 X 4 factorial design (i.e., Gender X Group Membership) was reconceptualized as a one-way ANOVA with a variable denoting Gender and Group Membership as the independent variable and total scores on implicit self-esteem as the dependent variable. While the main effect was significant \( [F (7, 141) = 2.65, p = .01] \), Student-Newman-Keuls post-hoc analysis did not reveal any significant differences between the means of the groups. It is important to note that failure to detect significant differences between the means may have been due to a lack of power. For example, the vulnerable narcissistic male group only included 8 participants. This will be discussed further in the discussion section and the limitations of the study. An evident trend is that there is a discrepancy between the mean scores of grandiose narcissistic males and
females and vulnerable narcissistic males and females that is less pronounced between the genders of the avoidant personality group and the control group.

**Managing a Self-Esteem Threat**

**State Self-Esteem**

I did not expect to find a significant main effect for Time since the group means were expected to change at different rates and in different directions. In terms of between group differences collapsed across Time, I expected grandiose narcissistic personalities to have the highest mean score on the SSES, control personalities to have higher mean scores than avoidant personalities, and vulnerable narcissistic personalities to have the lowest mean score. I also expected to find a significant Time X Group Membership interaction effect. I predicted that grandiose narcissistic personalities would report a significant increase in mean SSES scores between Time 1 and Time 2. I predicted that vulnerable narcissistic personalities would report a significant decrease in mean SSES scores between Time 1 and Time 2. I did not expect avoidant personalities or control personalities to show significant changes in self-esteem between Time 1 and Time 2.

A mixed within- and between-group ANOVA was used to examine these hypotheses. Time was entered as the within-group independent variable. Group Membership, Gender, and the Group Membership X Gender interaction were entered as the between-group independent variables. Finally, all possible Time, Group Membership, and Gender interactions were also entered. Analyses were run separately for each scale of the SSES (i.e., Social and Performance scales), with scores on each scale as the dependent variable. The hypotheses delineated above pertain to both scales.
Contrary to predictions, the within-group main effect for Time was significant \[ F(1, 129) = 18.14, p < .001 \] for the Social scale of the SSES. Collapsed across Group Membership and Gender, the mean score for the Social State Self-Esteem scale increased from a mean of 26.81 at Time 1 to a mean of 28.92 at Time 2. There was also a significant between-group main effect for Group Membership \[ F(3, 129) = 8.55, p < .001 \] for the Social scale of the SSES. Post-hoc Student-Newman-Keuls tests revealed that, collapsed across Time and Gender, grandiose narcissistic personalities (Mn = 30.07) and control personalities (Mn = 29.86) had higher mean scores than avoidant personalities (Mn = 24.92) and vulnerable narcissistic personalities (Mn = 24.66). Not consistent with predictions, the mean scores of grandiose narcissistic personalities and control personalities and the mean scores of avoidant personalities and vulnerable narcissistic personalities were not significantly different from one another. However, the differences were in the expected direction and may have been borne out in a larger sample or a clinical sample. There was also a significant between-group main effect for Gender \[ F(1, 129) = 7.41, p < .01 \], with males (Mn = 29.01) reporting higher mean scores than females (Mn = 26.71) when collapsed across Time and Group Membership. There was also a significant Gender X Group Membership interaction \[ F(3, 129) = 2.60, p = .05 \]. Collapsed across Time, the mean of vulnerable narcissistic males (Mn = 28.88) was higher than the mean of vulnerable narcissistic females (Mn = 23.05). No other group demonstrated such a large discrepancy between genders [grandiose narcissistic males (Mn = 30.90) and females (Mn = 29.50); avoidant males (Mn = 26.71) and females (Mn = 24.22); control males (Mn = 29.56) and females (Mn = 30.05)] (See Table 9 and Figure 3).
There was a significant Time X Gender interaction \[ F (1, 129) = 4.99, p = .03 \], with males’ mean social self-esteem (Time 1 Mn = 27.40; Time 2 Mn = 30.62) increasing at a higher rate than females’ mean social self-esteem (Time 1 Mn = 26.20; Time 2 Mn = 27.21). Contrary to predictions, the Group Membership X Time interaction was not significant \[ F (3, 129) = 0.45, p = .72 \]. The Group Membership X Gender X Time interaction effect was also not significant \[ F (3, 129) = 0.95, p = .42 \]. Even though this interaction effect was not statistically significant, this three-way interaction is displayed in Figures 6 and 7 because it will be discussed further in the discussion section. (See Table 9)

In terms of the Performance scale of the SSES, there was no significant main effect for Gender or for any of the interactions including Gender. As a result, Gender was removed from the analyses. There was a significant within-group main effect for Time \[ F (1, 134) = 9.45, p < .01 \]. Collapsed across Group Membership, the mean score for the Performance scale of the SSES increased from a mean of 26.85 at Time 1 to a mean of 27.77 at Time 2. There was also a significant between-group main effect for Group Membership \[ F (3, 134) = 11.17, p < .001 \]. Post-hoc Student-Newman-Keuls tests revealed that, collapsed across Time, grandiose narcissistic personalities (Mn = 30.08) and control personalities (Mn = 28.58) had higher mean scores than avoidant personalities (Mn = 25.62) and vulnerable narcissistic personalities (Mn = 24.95). Not consistent with predictions, the mean scores of grandiose narcissistic personalities and control personalities and the mean scores of avoidant personalities and vulnerable narcissistic personalities were not significantly different from one another. However, the differences were in the expected direction and may have been borne out in a larger
sample or a clinical sample. Contrary to predictions, the Group Membership X Time interaction was not significant \(F(3, 134) = 1.62, p = .19\). (See Table 10)

**PANAS-X**

A mixed within- and between-group ANOVA was used to examine hypotheses related to affect. Analyses were run separately for each scale of the PANAS-X that was included in this study. Time was entered as the within-group independent variable. Group Membership, Gender, and the Group Membership X Gender interaction were entered as the between-group independent variables. Finally, all possible Time, Group Membership, and Gender interactions were also entered. With the exception of the Serenity and Self-Assurance scales, Gender and interactions including Gender were not significant and, therefore, Gender was removed from the analyses of all the other affect scales. All PANAS-X results are tabulated in Table 11.

In terms of the PANAS-X Hostility scale, there was no significant between-group main effect for Group Membership and, as a result, Group Membership was removed from the analyses. Consistent with predictions, there was a significant within-group main effect for Time \(F(1, 156) = 6.98, p < .01\). Collapsed across Group Membership, there was a significant increase in mean Hostility scores between Time 1 (Mn = 7.73) and Time 2 (Mn = 8.34). I had predicted a significant Group Membership X Time interaction that was not supported by the results.

In terms of the PANAS-X Guilt scale, there was a significant within-group main effect for Time \(F(1, 153) = 4.75, p = .03\). Contrary to predictions, there was a significant increase in mean Guilt scores between Time 1 (Mn = 7.93) and Time 2 (Mn = 8.47) when collapsed across Group Membership. There was also a significant between-
group main effect for Group Membership \[ F (3, 153) = 3.30, p = .02 \]. Student-Newman-Keuls post-hoc tests revealed that vulnerable narcissistic personalities had a significantly higher mean \( (M_n = 9.10) \) than control personalities \( (M_n = 7.17) \). None of the other group means were significantly different from one another \[ avoidant personalities \( (M_n = 8.83) \); grandiose narcissistic personalities \( (M_n = 7.68) \) \]. I had predicted a significant Group Membership X Time interaction effect, but the results did not support my predictions \[ F (3, 153) = 1.73, p = .16 \].

In terms of the PANAS-X Sadness scale, there was a significant between-group main effect for Group Membership \[ F (3, 153) = 6.24, p < .01 \]. Student-Newman-Keuls post-hoc tests revealed that avoidant personalities \( (M_n = 9.57) \) and vulnerable narcissistic personalities \( (M_n = 9.20) \) reported significantly higher mean scores on the sadness scale than both the control personalities \( (M_n = 7.34) \) and the grandiose narcissistic personalities \( (M_n = 7.30) \). The mean scores of the avoidant personalities and the vulnerable narcissistic personalities and the mean scores of the control personalities and the grandiose narcissistic personalities did not significantly differ from one another. Consistent with predictions, there was no significant within-group main effect for Time \[ F (1, 153) = 0.61, p = .44 \]. I had predicted a significant Group Membership X Time interaction effect, but the results did not support my predictions \[ F (3, 153) = 0.55, p = .65 \].

In terms of the PANAS-X Joviality scale, there was no significant between-group main effect for Group Membership or for any of the interactions including Group Membership. As a result, Group Membership was removed from the analyses. Not consistent with predictions, there was a significant within-group main effect for Time \[ F
(1, 156) = 35.67, p < .001]. Collapsed across Group Membership, mean Joviality scores
decreased from Time 1 (Mn = 20.95) to Time 2 (Mn = 18.19). I had predicted a
significant Group Membership X Time interaction that was not supported by the results.

In terms of the Self-Assurance scale of the PANAS-X, there was a significant
within-group main effect for Time [F (1, 147) = 19.18, p < .001]. Collapsed across Group
Membership and Gender, there was a significant decrease in mean Self-Assurance scores
between Time 1 (Mn = 15.38) and Time 2 (Mn = 13.94). There was also a significant
between-group main effect for Group Membership [F (3, 147) = 5.29, p < .01]. Student-
Newman-Keuls post-hoc analysis revealed that the grandiose narcissistic personality
group (Mn = 16.87) had significantly higher mean scores on the Self-Assurance scale
than all other groups when collapsed across Time and Gender. The mean scores of
control personalities (Mn = 13.94), vulnerable narcissistic personalities (Mn = 13.68),
and avoidant personalities (Mn = 12.97) were not significantly different from one
another. There was also a significant between-group main effect for Gender [F (1, 147) =
4.22, p = .04]. Collapsed across Time and Group Membership, males reported
significantly higher mean scores (Mn = 15.47) than females (Mn = 13.85). I predicted a
significant interaction effect between Group membership and Time, but this prediction
was not supported by the results [F (3, 147) = 0.35 p = .79].

In terms of the PANAS-X Serenity Scale, several different analyses will be
reported. When the analyses were run with Group Membership, Gender, and Time as
independent variables, there was a significant within-group main effect for Time [F (1,
147) = 7.30, p < .01] and a significant between-group main effect for Gender [F (1, 147)
= 12.42, p < .01], with no significant main effects for Group Membership. However,
when the analyses were run without Gender as a variable, there was a significant Group Membership X Time interaction \[ F (3, 153) = 2.96, p = .03 \]. Since Gender produced a significant effect when included in the analyses but the Group Membership X Time interaction was lost when the analyses were run with both genders collapsed, the analyses for the Serenity scale were re-run separately for males and females.

When run with only female participants, there was a significant within group main effect for Time \[ F (1, 97) = 9.21, p < .01 \]. Collapsed across the Group Membership, there was a significant decrease in mean Serenity scores between Time 1 (Mn = 9.46) and Time 2 (Mn = 8.57). There was no significant between-group main effect for Group Membership \[ F (3, 97) = 1.28, p = .29 \]. Consistent with results, there was a significant interaction effect of Group Membership X Time \[ F (3, 97) = 2.62, p = .05 \]. While the females of all other groups reported a decrease in mean Serenity scores between Time 1 and Time 2 [vulnerable narcissistic personalities Time 1 Serenity score (Mn = 9.60), Time 2 Serenity score (Mn = 7.72); grandiose narcissistic personalities Time 1 Serenity score (Mn = 10.29), Time 2 Serenity score (Mn = 8.79); control personalities Time 1 Serenity score (Mn = 9.68), Time 2 Serenity score (Mn = 9.13)], avoidant females reported a slight increase in mean Serenity scores [Time 1 Serenity score (Mn = 8.29), Time 2 Serenity score (Mn = 8.62)]. Also consistent with predictions, vulnerable narcissistic and grandiose narcissistic females reported the greatest decrease in mean Serenity scores between Time 1 and Time 2. The Group Membership X Time interaction for female participants is illustrated in Figure 4. When analyses were run only with male participants, there were no significant results for the PANAS-X Serenity scale.
Even though no hypotheses were forwarded for the Surprise and Fatigue scales of the PANAS-X, the results of these scales are being reported because they provide evidence of the effectiveness of the rejection manipulation. This will be further elaborated on in the discussion section. The Surprise scale of the PANAS-X consists of three words (i.e., amazed, surprised, astonished). On this scale, there were no significant between-group main effects for Group Membership or Gender or for any of the interactions including Group Membership and Gender. As a result, Group Membership and Gender were removed from the analyses. There was a significant within-group main effect for Time \([F (1, 155) = 32.49, p < .001]\). Mean Surprise scores increased from Time 1 (Mn = 4.60) to Time 2 (Mn = 5.88). The Fatigue scale of the PANAS-X consists of four words (i.e., sleepy, tired, sluggish, drowsy). Since there were no significant between-group main effects for Group Membership or Gender or for any of the interactions including Group Membership and Gender, Group Membership and Gender were removed from the analyses. There was also no significant within-group main effect for Time \([F (1, 151) = 0.24, p = .62]\).

**SASB**

A univariate ANOVA was carried out for each SASB cluster with the mean percentage for each cluster as the dependent variable and Group Membership, Gender, and the Group Membership X Gender interaction as the independent variables. Only SASB clusters that revealed significant results will be reported here.

**SASB 1-5 (i.e., Watching and Controlling):** There was a significant between-group main effect for Group Membership \([F (3, 143) = 2.93, p = .04]\). However, Student-Newman-Keuls post-hoc tests revealed no significant differences between the group
means. There was also a significant main effect for Gender \([F (1, 143) = 4.98, p = .03]\), with males \((M_n = 0.01)\) writing significantly more dominating letters than females \((M_n < 0.01)\). There was a significant Group Membership \(\times\) Gender interaction \([F (3, 143) = 3.99, p < .01]\). In both the grandiose narcissistic personality group and the avoidant personality group, males wrote more dominating letters than females (Grandiose Narcissistic Personality Group Males \(M_n = 0.01\) and Females \(M_n < 0.01\)) (Avoidant Personality Group Males \(M_n = 0.04\) and Females \(M_n < 0.01\)). The opposite pattern was evident in the vulnerable narcissistic personality group and the control personality group, in which females wrote more dominating letters than males (Vulnerable Narcissistic Personality Group Females \(M_n = 0.01\) and Males \(M_n < 0.01\)) (Control Personality Group Females \(M_n < 0.01\) and Males \(< 0.001\)).

SASB 1-7 (i.e., Attacking and Rejecting): There was a significant between-group main effect for Group Membership \([F (3, 143) = 3.28, p = .02]\). However, Student-Newman-Keuls post-hoc tests did not reveal any significant differences between the group means. There was also a significant main effect for Gender \([F (1, 143) = 6.03, p = .02]\), with males \((M_n = 0.04)\) writing significantly more hostile letters than females \((M_n < 0.01)\). There was a significant Group Membership \(\times\) Gender interaction \([F (3, 143) = 3.59, p = .02]\), with vulnerable narcissistic personality males \((M_n = 0.13)\) writing more hostile letters than vulnerable narcissistic females \((M_n < 0.01)\). Similarly, grandiose narcissistic males \((M_n = 0.02)\) wrote more hostile letters than grandiose narcissistic females \((M_n < 0.01)\). The means of avoidant personality males \((M_n < 0.01)\) and females \((M_n < 0.01)\) and control personality males \((M_n < 0.01)\) and females \((M_n < 0.01)\) did not
significantly differ from one another. Figure 5 displays the Group Membership X Gender interaction.

SASB 2-3 (i.e., Joyfully Connecting): There was no significant between-group main effect for Group Membership or any of the interactions including Group Membership. As a result, Group Membership was removed from the analyses. There was a significant main effect for Gender \( [F (1, 149) = 10.02, p < .01] \), with females (Mn = .13) writing significantly more affiliative letters than males (Mn = .06).
Chapter 4: Discussion

The goals of this study were two-fold: (1) to find further evidence supporting the construct validity of the VNS by using this measure to select vulnerable narcissistic personalities; and (2) to elucidate the similarities and differences between vulnerable and grandiose narcissistic dysfunction and between vulnerable narcissistic dysfunction and avoidant personality. In summary, results regarding vulnerable narcissistic personalities in this study were consistent with clinical descriptions and past research and provide evidence in support of the validity of the VNS. Moreover, the results corroborate with most clinical theory and past research describing the similarities and differences between the personality groups under study. Below, I will review the results in detail. The following discussion will begin with evidence that supports the effectiveness of the rejection manipulation. This will be followed by a description of the results pertaining to vulnerable narcissistic personalities and how the results provide support for the construct validity of the VNS. Results that highlight the similarities and differences between vulnerable and grandiose narcissistic dysfunction and between vulnerable narcissistic dysfunction and avoidant personality will be discussed. Finally, this section will conclude with a discussion of the limitations of this study and questions for future research.

Before proceeding to a discussion of the results, it is important to highlight that our selection procedures were aimed at selecting individuals with narcissistic and avoidant personality traits, as opposed to personality pathology. Therefore, in the following discussion, the personality groups should not be considered to be representations of personality disorders, but rather individuals with a prominent character
style reflective of the grandiose and vulnerable phenotypic expressions of narcissistic personality and avoidant personality.

**Manipulation**

Several of the results of this study rest on the assumption that the rejection manipulation was successful. While there was no formal manipulation check, participants were routinely asked at the end of the study whether they suspected that the rejection was manipulated and participants consistently denied knowledge of this. More importantly, several of the results of the study add credence to the success of the rejection manipulation. No hypotheses were forwarded for the main effect of Time for almost any of the PANAS-X scales. However, there was a significant Time main effect for the Hostility, Guilt, Serenity, Joviality, Self-Assurance, and Surprise scales. Collapsed across Group Membership and Gender, participants reported feeling more hostile, guilty, and surprised, and less serene, jovial, and self-assured at Time 2 than at Time 1. Moreover, the Fatigue scale of the PANAS-X did not produce a significant Time main effect, which suggests that the results of the study cannot be attributed to fatigue. This clear pattern of results supports the assertion that the rejection manipulation was successful.

**Vulnerable Narcissism Scale**

One of the goals of this study was to provide further empirical data in support of the construct validity of the Vulnerable Narcissism Scale (VNS) by using this measure to identify vulnerable narcissistic personalities for this study. The adequacy of the VNS in discriminating and selecting vulnerable narcissistic personalities was gauged based on whether or not the individuals selected with this measure presented according to clinical
expectations and past research. Almost all of the findings concerning the vulnerable narcissistic personalities in this study were consistent with both theory (Cooper, 1998; Gabbard, 1989, 1998; Kohut, 1971, 1977) and research (Dickinson & Pincus, 2003; Wink, 1991). In summary, vulnerable narcissistic personalities presented with an overt presentation marked by feelings of inadequacy and insecurity, moderate covert self-esteem (i.e., trend suggesting high implicit self-esteem for males and low implicit self-esteem for females), and a relative inability to employ self-enhancement strategies to manage their self-esteem and affect following a self-esteem threat. I will review the findings for vulnerable narcissistic personalities in more detail below.

Vulnerable narcissistic personalities in this study reported moderate expectations (i.e., not significantly different from the control group) to win the relationship survivor game. An important finding is that their expectations were significantly more pessimistic than grandiose narcissistic personalities, who reported the highest expectations to win. While I had predicted that vulnerable narcissistic personalities would report lower expectations than a control group, the pattern of results is still consistent with clinical descriptions of these individuals as modest and as not presenting with overt grandiosity and entitlement. Vulnerable narcissistic personalities also reported high scores on a measure of rejection sensitivity, which assesses the tendency to expect, readily perceive, and disproportionately respond to rejection. As previously mentioned, vulnerable narcissists have been referred to as “hypervigilant narcissists” (Gabbard, 1989) due to their exquisite sensitivity to evidence that disconfirms their grandiosity. Their high scores on rejection sensitivity are consistent with this clinical description.
Regarding adult attachment style, vulnerable narcissistic individuals in this study scored higher than all other groups on the Preoccupation with Relationships scale and as high as avoidant personalities on the Need for Approval scale. They reported moderate scores on the Confidence scale (i.e., secure attachment) and on the Discomfort with Closeness scale of the ASQ. While vulnerable narcissistic personalities were expected to score significantly lower than the control group on the Confidence scale and significantly higher than the control group on the Discomfort with Closeness scale, these hypotheses were not supported by the results. However, the means were in the expected directions and may have been borne out with a larger sample or a clinical sample.

If the scales of the ASQ are examined based on whether they denote a positive/negative view of the self and positive/negative view of the other as the Bartholomew and Horowitz (1991) scales are conceptualized, then the results of this study can be seen as corroborating past research (Dickinson & Pincus, 2003). As previously stated, Dickinson and Pincus found that 50% of their vulnerable narcissistic personalities endorsed Bartholomew and Horowitz’s Fearful attachment, which portrays a negative view of self and other. The attachment style described by the Preoccupation with Relationships scale of the ASQ is also indicative of a negative view of self and others since it describes anxieties about the veracity of other’s affection and the possibility of rejection and doubts about the self’s ability to survive alone. Similarly, the Need for Approval scale of the ASQ indicates a negative view of self since it portrays concerns regarding other’s approval of the self. Unlike the Preoccupation with Relationships scale, the Need for Approval scale involves a positive view of others and resembles Bartholomew and Horowitz’s Preoccupied scale, which was identified by 13% of their
vulnerable narcissistic personalities as characteristic of their attachment style. Both the Confidence and Discomfort with Closeness scales of the ASQ comprise a positive view of the self and resemble Bartholomew and Horowitz’s Secure and Dismissive attachment styles, respectively. Even though I had hypothesized that vulnerable narcissistic individuals would report insecure attachment on both of these scales, the findings are consistent with Dickinson and Pincus’ findings, where 27% of their vulnerable narcissistic personalities identified as having Secure attachment and 10% as having Dismissive attachment. In sum, the findings of the current study are consistent with Dickinson and Pincus’ findings and provide additional support for the validity of the VNS.

Based upon theoretical descriptions of vulnerable narcissism, I had predicted that vulnerable narcissistic personalities would score low on a measure of explicit global self-esteem due to their vulnerability and experience of the self as inadequate, and high on a measure of implicit self-esteem that would tap into their covert grandiosity. Consistent with predictions, vulnerable narcissistic personalities reported low global explicit self-esteem. On the implicit self-esteem scale, there was a significant interaction effect for Group Membership X Gender, but a post-hoc analysis did not detect any significant differences between the means of the groups. However, it is likely that differences were not detected due to the small sample size of the study (e.g., the study only included 8 vulnerable narcissistic males). Considering that the sample size likely influenced the power of the statistical analysis in detecting significant mean differences, the results can be seen as prominent trends that merit further investigation. An important trend was that vulnerable narcissistic males reported higher implicit self-esteem than control
personalities, while vulnerable narcissistic females reported lower implicit self-esteem than control personalities. This is an interesting and surprising finding that will be discussed at more length in the following section that describes the similarities and differences between the two phenotypic expressions of narcissistic personality.

Another characteristic feature of the vulnerable phenotypic expression of narcissism is their difficulty self-enhancing when faced with a self-esteem threat. In order to examine this, participants completed measures of state self-esteem and affect following the rejection manipulation and were given the opportunity to retaliate against those who rejected them by writing them a letter. The pattern of results for vulnerable narcissistic personalities in this study corroborate with theoretical descriptions of these individuals as being relatively unsuccessful in protecting the self from a narcissistic injury. Interestingly, the gender pattern described above was also present in several of the post-rejection measures.

Vulnerable narcissistic males were more successful than vulnerable narcissistic females in protecting their self-esteem following the rejection manipulation by reporting an increase in Social state self-esteem between Time 1 and Time 2. This gender pattern in vulnerable narcissistic personalities is not evident in the results because the Group Membership X Gender X Time interaction effect was not significant. However, there was a significant Group Membership X Gender interaction, with vulnerable narcissistic males reporting significantly higher Social state self-esteem than vulnerable narcissistic females when the means are collapsed across Time (See Figure 3). Moreover, there was a significant Gender X Time interaction; when collapsed across Group Membership, males’ Social state self-esteem increased at a higher rate than females from Time 1 to
Time 2. The sample of this study may not have been large enough to bear out the Group Membership X Gender X Time interaction. Even though the interaction effect was not statistically significant, this three-way interaction is displayed in Figures 6 and 7 in order to illustrate the gender differences among vulnerable narcissistic personalities. While this gender pattern was surprising and not consistent with predictions, it parallels the pattern of results described earlier for implicit self-esteem. Vulnerable narcissistic males (i.e., trend suggests high implicit self-esteem) may have more access than vulnerable narcissistic females (i.e., trend suggests low implicit self-esteem) to a grandiose core that allows them to use some self-enhancement strategies to protect their self-esteem.

This gender pattern was also evident in the results of the PANAS-X Serenity scale. Statistical analyses for the Serenity scale were run separately for each gender because an important Group Membership X Time interaction was lost when both genders were combined. Consistent with findings that suggest that vulnerable narcissistic males are more adept than vulnerable narcissistic females in tempering the impact of a narcissistic injury, vulnerable narcissistic males did not show a significant change in mean Serenity scores between Time 1 and Time 2 (i.e., the main effect for Time was not significant for Serenity when the analyses were run with only male participants). However, vulnerable narcissistic females reported the steepest decrease in mean Serenity scores between Time 1 and Time 2 when compared to the other personality groups (See Figure 4). This finding suggests that vulnerable narcissistic females were more dysregulated than vulnerable narcissistic males by the rejection manipulation.

Finally, contrary to predictions, vulnerable narcissistic personalities wrote letters that were not significantly different from control personalities on dominance [i.e., their
mean scores on SASB 1-5 (Watching and Controlling) were not significantly different from one another]. However, predictions regarding the level of hostility expressed by vulnerable narcissistic personalities’ letters were partially confirmed. Once again, there was a gender pattern with vulnerable narcissistic males writing more hostile letters than any other personality group and vulnerable narcissistic females writing letters that did not differ from the control group in terms of hostility. Considering that aggression is a common way of protecting the self from self-esteem threats (Twenge et al., 2001), this pattern of results once again suggests that vulnerable narcissistic males are more facile than vulnerable narcissistic females at self-enhancing.

This study suggests that there are important gender differences between vulnerable narcissistic personalities that are worthy of further investigation. The pattern of results for vulnerable narcissistic males initially gives the impression that these individuals are successfully self-enhancing in ways that we expect only the grandiose phenotypic expression of narcissism to be capable of. However, closer inspection reveals that vulnerable narcissistic males are only partially successful at self-enhancing due to the high levels of internalized negative emotions that they report. Vulnerable narcissistic personalities reported higher scores than control personalities on the Guilt and Sadness scales of the PANAS-X when collapsed across Time. Even though these between-group main effects for Group Membership do not indicate changes in affect following the rejection manipulation, they point to the general affective state of vulnerable narcissistic personalities. The results of this study suggest that vulnerable narcissistic males are experiencing both high levels of externalized negative emotions (e.g., hostility in their letters) and high levels of internalized emotions (e.g., guilt and sadness). This pattern of
results is consistent with clinical descriptions that suggest that when faced with self-esteem threats, vulnerable narcissistic personalities vacillate between responding with shame and anger.

In conclusion, the VNS successfully discriminated groups of individuals with vulnerable narcissistic personalities among a non-clinical sample of young adults. All the findings presented above, with the exception of the gender effects, corroborate clinical descriptions of vulnerable narcissism. Therefore, the results of this study provide further evidence in support of the validity of the VNS.

*Distinguishing Vulnerable and Grandiose Expressions of Narcissism*

Another important goal of this study was to further elucidate the differences between vulnerable and grandiose narcissistic dysfunction. I had forwarded the hypothesis that the two phenotypic expressions would differ from each other in three important ways: (1) their overt presentation and each phenotype’s ability to maintain only the grandiose self in consciousness; (2) their scores on a measure of implicit global self-esteem; and (3) their ability to successfully self-enhance when faced with a self-esteem threat. The findings of this study provide evidence for the validity of each of these phenotypic expressions of narcissism, and corroborate clinical descriptions of the similarities and differences between vulnerable and grandiose narcissistic personalities.

*Overt Presentation and Conscious Self-Views*

Clinical observations suggest that grandiose narcissistic personalities overtly present as arrogant, grandiose, and boastful, while vulnerable narcissistic personalities present as insecure, inhibited, and modest. Moreover, clinical theory suggests that grandiose narcissistic personalities are remarkably adept at maintaining only the
grandiose self in consciousness, whereas the vulnerable form oscillates between experiencing the self as grandiose and experiencing the self as inadequate and inferior, with a more insecure self-experience predominating their experience.

The results concerning the grandiose narcissistic personalities in this study corroborated clinical descriptions of this phenotypic expression of narcissistic personality. These individuals reported the highest means on: expectations to win the relationship survivor game, secure attachment, and explicit global self-esteem. Conversely, they reported the lowest mean scores on a measure of rejection sensitivity and several scales of insecure attachment (i.e., Need for Approval and Preoccupation with Relationships). It is important to note that the mean score of grandiose narcissistic personalities on the Preoccupation with Relationships scale of the ASQ was not significantly different from the mean score of control personalities, but the means were in the expected direction and would have likely been borne out with a larger sample or a clinical sample. Similarly, the mean score of grandiose narcissistic personalities was not significantly different from control personalities and vulnerable narcissistic personalities on the Discomfort with Closeness scale, but these too were in the expected direction with grandiose narcissistic personalities scoring lower than control personalities, who scored lower than vulnerable narcissistic personalities. In addition, this scale describes an attachment style that denotes a positive view of self and a negative view of others so it may not represent such debility for grandiose narcissistic personalities.

Essentially, the pattern of results for grandiose narcissistic personalities in this study suggests that these individuals endorsed a grandiose self-presentation that denied any sign of weakness. This is not surprising given that grandiose narcissistic personalities
tend to dismiss personal difficulties and use self-reports as an opportunity to self-enhance (Hibbard & Bunce, 1995). The results of this study are consistent with clinical descriptions of grandiose narcissistic personalities as successfully splitting off unacceptable aspects of the self and maintaining the grandiose self in consciousness. In contrast, the pattern of results for vulnerable narcissistic personalities described above was almost the exact opposite and revealed a self-presentation that reflected feelings of inadequacy and insecurity in relationships.

**Unconscious Self-Views**

Another variable that I expected would differentiate the vulnerable and grandiose forms of phenotypic expressions was their mean scores on a measure of implicit self-esteem. I predicted that grandiose narcissistic personalities would obtain a low mean score on a measure of implicit self-esteem, whereas vulnerable narcissistic personalities would obtain a high mean score. An unexpected and interesting Group Membership by Gender interaction emerged for the implicit self-esteem measure used in this study (See Figure 2). As previously mentioned, post-hoc analysis did not detect significant differences between the mean implicit self-esteem scores of the groups, but several trends were evident. Grandiose narcissistic females and vulnerable narcissistic males obtained high scores on a measure of implicit self-esteem. On the contrary, vulnerable narcissistic females and grandiose narcissistic males obtained low scores on a measure of implicit self-esteem. This finding suggests that while males and females in each of these personality groups present similarly in terms of their conscious overt presentation, their non-conscious evaluation of the self is quite different.
One possible explanation for this pattern of results is that there may be different developmental pathways to each phenotypic expression of narcissistic personality and that gender is an important variable that affects the development of narcissism and its expression. As previously mentioned, implicit self-esteem is believed to develop earlier than explicit self-esteem (Bosson et al., 2003; Koole et al., 2001) and has been found to be associated with early familial environment and mother’s parenting style (DeHart, 2002, as cited in Bosson et al., 2003), and with childhood attachment security (Zeigler-Hill et al., 2002, as cited in Bosson et al., 2003). While implicit self-esteem is more experiential, explicit self-esteem is processed cognitively and can be influenced by attempts to enhance the self (Zeigler-Hill, 2006). Therefore, it is possible that implicit self-esteem is more determined by the early familial environment of the child, while explicit self-esteem is more malleable and can be influenced by cognitive processes that occur later in life.

Two developmental models of narcissism are Benjamin’s (1996) model (i.e., an excess model) and the deficit model described by both Kernberg (1975) and Kohut (1971). The psychodynamic literature has stressed the different developmental experiences that males and females go through in the process of gender development (Chodorow, 1978, 1999). The primary identification for both genders is with the mother, but males have to de-identify with the mother in order to proceed with gender development. It is possible that there is an interaction between parenting style (i.e., based on an excess or deficit model) and the gender of the child that affects how narcissistic pathology is expressed. Of course, the actual developmental history of these personality groups was not assessed in this study, so the discussion that ensues is strictly speculative.
and put forth solely for the purpose of developing important questions for future research. Moreover, it is important to remind the reader that the implicit self-esteem findings discussed below refer to trends in the results of this study since the post-hoc analysis of the Group Membership X Gender interaction for implicit self-esteem did not detect significant differences.

Benjamin’s (1996) interpersonal theory is based on a social-learning model that stresses the importance of early relationships in guiding an individual’s expectations within adult relationships. Her description of the developmental pathway that engenders narcissistic pathology can be seen as an excess model in that it underscores the parents’ failure to reign in their mirroring of their child’s grandiosity and to set limits on the child’s entitled needs. Benjamin asserts that rather than providing realistic mirroring responses, the parents provide unconditional affiliation/love and mirror their child’s grandiosity at a level that is not age-appropriate or commensurate with the child’s achievements. As a result, the child internalizes an unconditional positive affiliation for the self that is not anchored in a realistic evaluation of the self’s potential. In contrast to Kohut’s (1971, 1977) and Kernberg’s (1975) view of the grandiose self as defensive or compensatory, Benjamin posits that the grandiose self is an internalization of the idealized self reflected by the parents. The child never builds self-esteem that is based on their actual abilities/talents, learn to set appropriate goals, or appreciate the limits of their reality. Due to parents’ permissiveness and communication that the child’s needs are special, the child does not develop realistic expectations for adult relationships that include reciprocity, empathy, and the occasional frustration of needs. The child continues
to display entitled expectations that are no longer appropriate for their maturational level and expects, or even demands, absolute compliance from others.

It is possible that narcissistic individuals who present with high implicit self-esteem (i.e., non-conscious evaluation of the self) were raised within an excess model and that the gender of the child determines whether narcissistic tendencies are expressed in a more grandiose or vulnerable form. Grandiose narcissistic females in this study presented with high explicit self-esteem and a trend towards high implicit self-esteem. These individuals may have been raised in an environment such as the one proposed by Benjamin (1996), where they were overly praised and gratified and never had to learn to have realistic claims of self-esteem. Assuming that it was the mother (i.e., the traditional caretaker) who inappropriately and excessively adulated the child, the fact that the child is female and will thus identify with the mother and her ways of fostering self-esteem makes it more likely that she is able to retain an idealized self-view that is not conflicted and therefore emerges in both conscious and non-conscious evaluations of self-esteem. Females do not have to differentiate from their mothers in the same way that males do and, therefore, are less likely to come-up against evidence that invalidates their grandiose self-views because they can continue to use the same defenses that were employed and modeled by the mother. Gabbard (1989) referred to grandiose narcissists as “oblivious narcissists.” The female grandiose narcissistic personalities in this study truly embody this label since they appear to not be conflicted about their grandiosity and are oblivious to evidence that contradicts their self-view.

On the other hand, vulnerable narcissistic males in this study reported low explicit self-esteem and a trend towards high implicit self-esteem. I propose that it is possible that
vulnerable narcissistic males were also brought up within an excess model and their high implicit self-esteem is an internalization of their mother’s inappropriate idealization of them. Their implicit self-esteem may reflect a grandiose core, which holds a view of the self as superior and as deserving of special treatment from others. Similar to grandiose narcissistic females, they do not ever learn to set realistic goals for the self that would nurture their self-esteem, to self-soothe during times of distress, or to develop reciprocal adult relationships. However, unlike grandiose narcissistic females who do not have to de-identify from the mother in the process of gender development, vulnerable narcissistic males may realize during the process of de-identification that their idealized self-views are not consistent with reality. This may be one of the reasons why vulnerable narcissistic males develop low explicit self-esteem. Vulnerable narcissistic individuals have been described in the literature as having more awareness than grandiose narcissistic personalities that their grandiose self-views are fraudulent and that their grandiose fantasies are not attainable (Kohut, 1971, 1977). This clinical description is embodied by vulnerable narcissistic males in this study, who hold a grandiose covert self-evaluation and a discrepant, insecure overt self-evaluation.

In contrast to Benjamin’s (1996) excess model, both Kohut (1971, 1977) and Kernberg (1975) posit a deficit model as the developmental pathway to narcissistic pathology, wherein the child develops a defensive or compensatory grandiose self as a derivative to harsh and unresponsive parenting. As described earlier, Kohut proposes that in order for a child to develop healthy self-esteem and realistic expectations of others, the parent must simultaneously respond to the child’s mirroring and idealizing needs while allowing for minor empathic failures. Failure to do so results in the emergence of a
grandiose defensive self-structure and, in turn, a non-cohesive self. As previously stated, he described two ways that the non-cohesive self can be split: horizontally or vertically. When the self is split horizontally, it successfully maintains only the grandiose self in consciousness. When the self is split vertically, it has alternating experiences of grandiosity and inadequacy. Similarly, Kernberg argued that the pathological grandiose self develops in response to parents who are harsh and unempathic, yet admiring of certain aspects of the child. These admired aspects of the child coupled with idealized and internalized aspects of the parents coalesce to make up the grandiose self. Kernberg posits that this too creates a split in the self, with the pathological grandiose self predominating the individual’s conscious experience and the unacceptable aspects of the self being split-off from conscious experience.

I propose that narcissistic individuals who present with low implicit self-esteem may have been raised within a deficit model and their low implicit self-esteem is reflective of the self-view that was internalized from harsh, unresponsive parents. Grandiose narcissistic males in this study reported high explicit self-esteem and low implicit self-esteem. The presentation of these individuals resonates with Kohut’s description of a horizontal split and Kernberg’s description of pathological narcissism wherein their compensatory grandiose self-structure is reflected in high explicit self-esteem scores (i.e., based on a conscious evaluation of the self), while their implicit self-esteem (i.e., based on a non-conscious evaluation of the self) captures the unacceptable aspects of the self that are split-off from conscious experience. The fact that these individuals are male may make it possible for them to develop defense mechanisms that make this type of split in the self possible, since in the process of differentiating from the
mother they can develop new ways of protecting the self, as opposed to perpetuating a harsh evaluation of the self by remaining identified with the mother.

In contrast, vulnerable narcissistic females in this study reported low mean scores on measures of both explicit and implicit self-esteem. Their low implicit self-esteem may also reflect the internalization of the defective self that was reflected by unresponsive parents. However, unlike the grandiose narcissistic males who successfully maintain the grandiose compensatory defensive self-structure in their conscious experience, the vulnerable narcissistic females are much more consistent with Kohut’s description of a vertical split. These individuals’ explicit self-esteem may not reflect a defensive grandiose self-structure because their noncohesive self is organized vertically, making them relatively unsuccessful at maintaining the grandiose self in consciousness. It is possible that they continue to identify with a mother who was deficient in mirroring and who never developed defense mechanisms to enhance the self. Kohut suggests that when the self is split vertically, feelings of unworthiness and inadequacy predominate the person’s conscious experience, with the occasional fluctuation into a conscious grandiose self-state. It is possible that because this study only evaluates these individuals at one point in time (i.e., cross-sectional design), the vacillations that occur in the conscious self-evaluation of vulnerable narcissistic females was not captured.

Interestingly, Dickinson, Wilson, and Pincus (1999) examined the parental representations of grandiose and vulnerable narcissistic personalities. They found that grandiose narcissistic males in their study reported maternal representations that were higher in communion and affiliation than those reported by grandiose narcissistic females and vulnerable narcissistic males and females. While this finding may initially seem to
invalidate the hypothesis forwarded here in which grandiose narcissistic males are thought to have been raised within a deficit model, Dickinson et al. (1999) interpreted these results as reflective of grandiose narcissists’ tendency to self-enhance and present the self and those associated with the self in a positive light. Their findings are also consistent with Kernberg’s depiction of pathological narcissism since these individuals are described as having the ability to split-off negative aspects of the self and to experience the self, and those fused with the self, as idealized. If their findings are interpreted in this fashion, they corroborate the model presented here for grandiose narcissistic males.

Of interest, grandiose narcissistic females in Dickinson et al.’s (1999) study did not report such idealized maternal representations. Research on implicit self-esteem has suggested that having high implicit self-esteem can have a buffering effect that protects individuals from threats to the self and diminishes the need to use undesirable self-enhancement strategies to maintain self-esteem (e.g., aggression, out-group derogation, self-deception) following threatening events (e.g., social rejection and failure) (Zeigler-Hill, 2006). This notion can explain the lack of idealized maternal representations in Dickinson et al.’s study and is consistent with the results for grandiose narcissistic females in this study. As will become evident below, grandiose narcissistic females in this study did not self-enhance as much as grandiose narcissistic males (e.g., did not report significant increases in self-esteem following the rejection manipulation and expressed less hostility in their letters), but they were able to maintain their idealized self-view after the rejection manipulation (e.g., their state self-esteem remained the same).
One important question is why the relatively high implicit self-esteem of vulnerable narcissistic males does not have the same buffering effect? I propose that it is the discrepancy between their explicit and implicit self-esteem that leads them to feeling so wounded after threats to their self-esteem. Research has shown that individuals with fragile high self-esteem (i.e., high explicit self-esteem and low implicit self-esteem) are more vulnerable to threats, use more self-enhancement strategies, and are more defensive (Jordan et al., 2003; Zeigler-Hill, 2006). It is possible that the discrepancy between explicit self-esteem and implicit self-esteem is what makes the self vulnerable to threat and that fragile low self-esteem (i.e., low explicit self-esteem and high implicit self-esteem) is also more highly associated with attempts to protect the self.

Managing a Self-Esteem Threat

I had predicted that a key distinguishing feature would be differences in grandiose narcissistic personalities’ and vulnerable narcissistic personalities’ ability to self-enhance in the face of a self-esteem threat, with grandiose narcissistic personalities being more successful than vulnerable narcissistic personalities in protecting the self. More specifically, I predicted that grandiose narcissistic personalities would report an increase in state self-esteem and positive affects and a decrease in negative affects, except for hostility, and that they would express both hostility and dominance in their letters. On the other hand, I expected vulnerable narcissistic personalities to report a decrease in state self-esteem and positive affects and an increase in negative affects, including hostility, shame/guilt, and sadness. I expected their letters to be similar to grandiose narcissistic personalities in the level of hostility and dominance expressed. The results partially supported these predictions.
In terms of vacillations in self-esteem, the Group Membership by Time interaction was not significant for either the Social or Performance scales of the SSES. However, several results indirectly support predictions regarding differences in state self-esteem between grandiose narcissistic personalities and vulnerable narcissistic personalities. The results suggest that on both the Social and Performance state self-esteem scales there was an increase in mean state self-esteem scores between Time 1 and Time 2, when collapsed across Group Membership. As previously mentioned, the Group Membership by Gender interaction was significant for the Social scale of the SSES, with a discrepancy existing between the mean scores of vulnerable narcissistic males (Mn = 28.88) and vulnerable narcissistic females (Mn = 23.05) when collapsed across Time. This discrepancy did not exist between the mean scores of grandiose narcissistic males (Mn = 30.90) and females (Mn = 29.50) (See Figure 3). In discussing the findings of vulnerable narcissistic personalities, I pointed out the importance of the Group Membership by Gender by Time interaction in illustrating the difference between vulnerable narcissistic males and females, even though this three-way interaction did not achieve significance. Grandiose narcissistic females and vulnerable narcissistic females displayed the expected pattern of results on the Social scale of the SSES; vulnerable narcissistic females experienced a slight drop in their state self-esteem scores, while grandiose narcissistic females were able to maintain their already high self-esteem scores (see Figure 7). The pattern of results for males was not consistent with predictions. Vulnerable narcissistic males reported a significant increase in mean Social state self-esteem scores between Time 1 and Time 2, while grandiose narcissistic males simply maintained their already high self-esteem scores (See Figure 6).
The results for affect provided only partial support for predictions. The Group Membership by Time interaction effect for the Serenity scale suggests that both grandiose narcissistic females and vulnerable narcissistic females experienced significant declines in Serenity scores between Time 1 and Time 2. However, the decline was greater for vulnerable narcissistic females, suggesting that they became more dysregulated than grandiose narcissistic females. None of the other Group Membership by Time interactions predicted for the PANAS-X scales were significant. However, although there were no differences between grandiose narcissistic personalities and vulnerable narcissistic personalities in terms of how they manage their affect overtime, several between-group main effects for Group Membership suggest that there are important differences between the global affective states of these personality groups that concur with clinical descriptions. Specifically, grandiose narcissistic personalities reported higher mean scores on the Self-Assurance scale than all other groups when means scores were collapsed across Time. Vulnerable narcissistic personalities reported significantly higher mean scores than control personalities on both the Guilt and Sadness scales when collapsed across Time. Conversely, the mean scores of grandiose narcissistic personalities on these scales were not significantly different than control personalities when collapsed across Time. Even though these results do not allow us to gauge how the rejection manipulation affected these personality groups, they point to some important differences in the general affective states of these groups. Some of the Group Membership by Time interactions that were predicted may have been borne out with a larger sample or a clinical sample.
As predicted, vulnerable narcissistic males and grandiose narcissistic males both wrote letters that were hostile in comparison to control personalities, but the letters of vulnerable narcissistic males were more hostile than those of any other group. Contrary to predictions, neither grandiose nor vulnerable narcissistic females wrote hostile letters in comparison to control personalities. Also not consistent with predictions, the letters of grandiose narcissistic personalities and vulnerable narcissistic personalities were not significantly different from control personalities in the amount of dominance expressed.

In conclusion, the pattern of results suggests that grandiose narcissistic personalities and vulnerable narcissistic personalities present with very different overt presentations that are consistent with theoretical descriptions of each phenotypic expression of narcissism. There was an interesting and unexpected gender pattern for implicit self-esteem that merits further investigation. One possible implication for this finding is that there is a different developmental pathway that engenders narcissism and that gender may be an important variable. Moreover, there is a possibility that grandiose narcissistic personalities and vulnerable narcissistic personalities are affected differently by whether their implicit self-esteem is positive or negative; while in vulnerable narcissistic personalities high implicit self-esteem appears to correlate with an increased ability to use self-protective mechanisms when faced with a self-esteem threat, grandiose narcissistic personalities are able to successfully self-enhance regardless of the valence of their implicit self-esteem. These findings map well onto Kohut’s (1971, 1977) distinction between a horizontal versus a vertical split in the self, with grandiose narcissistic personalities (i.e., horizontal split) successfully splitting off undesirable aspects of the
self and vulnerable narcissistic personalities (i.e., vertical split) being less successful and vacillating in their self-experience.

*Distinguishing Vulnerable Narcissistic and Avoidant Personalities*

Another important goal of this study was to shed light on the similarities and differences between vulnerable narcissistic personalities and avoidant personalities. Past research (Dickinson & Pincus, 2003) has shown that vulnerable narcissistic personalities can be easily misdiagnosed as avoidant personalities due to similarities in their overt presentations. Based on this research, I forwarded the hypotheses that these two personality groups would report similar mean scores on variables that examined their conscious overt presentation, but that differences among them would become evident in their mean implicit self-esteem scores and in their reactions to a self-esteem threat. As previously stated, I predicted that vulnerable narcissistic personalities would respond to the rejection manipulation with a decrease in state self-esteem, an increase in guilt, sadness, and hostility, and letters expressing hostility and dominance. On the other hand, I expected avoidant personalities to anticipate rejection and to experience some relief after being removed from a threatening interpersonal situation. My prediction was that they would report an increase in mean Serenity scale scores, but no changes in mean state self-esteem scores or mean Self-Assurance and Joviality scale scores between Time 1 and Time 2. Since research suggests that avoidant personalities experience sadness, resentment, and anger regarding incidents of rejection (Benjamin, 1993), I expected that they would report an increase in mean Sadness, Guilt, and Hostility scale scores following the rejection manipulation. However, since research suggests that avoidant personalities experience anger internally and are unlikely to display their anger in overt
behaviors (Taylor et al., 2004), I did not expect that they would express hostility or dominance in their letters. The results of this study provided partial support for these hypotheses and will be elaborated on below.

*Overt Presentation and Conscious Self-Views*

The hypothesis that vulnerable narcissistic personalities and avoidant personalities would present with similar overt presentations was strongly supported by the results of this study. Both vulnerable narcissistic personalities and avoidant personalities reported only modest expectations to win the relationship survivor game, the highest scores on a measure of rejection sensitivity and on three of the insecure attachment scales (i.e., Discomfort with Closeness, Need for Approval, and Preoccupation with Relationships), and the lowest scores on a measure of explicit self-esteem. Avoidant personalities also obtained the lowest scores on the Confidence scale of the ASQ, while vulnerable narcissistic personalities obtained moderate scores. As previously mentioned the mean score of vulnerable narcissistic personalities on the Confidence and Discomfort with Closeness scales of the ASQ were not significantly different from that of control personalities, but the means were in the expected direction and a significant difference may have been borne out with a larger sample or a clinical sample. The findings of this study support past research (Dickinson & Pincus, 2003) that highlights the similarities between the overt presentations of vulnerable narcissistic personalities and avoidant personalities and point to the real danger of misdiagnosis based on initial clinical impressions.
Predictions for the implicit self-esteem scores of avoidant personalities were not supported by the results. As was previously stated, the post-hoc analysis for the Group Membership X Gender interaction for implicit self-esteem did not reveal significant differences between the groups. However, a trend was evident with avoidant personalities in this study reporting higher mean implicit self-esteem scores than control personalities. In fact, avoidant males reported higher mean implicit self-esteem scores than any other personality group. This finding is surprising and not consistent with our predictions that this variable would help distinguish vulnerable narcissistic personalities and avoidant personalities. Moreover, it is inconsistent with theoretical writings on avoidant personality pathology, which highlights the chronic low self-esteem characteristic of this disorder.

Predictions for how avoidant personalities would respond to the rejection manipulation were only partially supported. Not consistent with predictions, avoidant personalities in this study reported an increase in mean Social state self-esteem between Time 1 and Time 2, with no significant differences in the rate of change reported by male and female avoidant personalities. While this finding is initially surprising, research shows that most individuals are able to buffer from the impact of rejection (Bourgeois & Leary, 2001) and avoidant personalities are not theoretically understood as having difficulties with self-esteem regulation.

As previously mentioned, the majority of Group Membership by Time interactions predicted for the PANAS-X scales were not significant. However, there was
a significant Group Membership by Time interaction for the Serenity scale (i.e., when run with only female participants), which supported predictions for avoidant personalities. Avoidant personality females reported a slight increase in mean Serenity scale scores between Time 1 and Time 2. This finding is important because it suggests that avoidant females were relieved by the rejection. In stark contrast, vulnerable narcissistic females reported the most significant decrease in mean Serenity scale scores between Time 1 and Time 2 (See Figure 4).

Another distinguishing feature was the nature of the letters written by vulnerable narcissistic personalities and avoidant personalities. As predicted, the letters of avoidant personalities were less hostile than control personalities, but similar in level of hostility to the letters of vulnerable narcissistic females (See Figure 5). As expected, the letters of vulnerable narcissistic males were more hostile than those of the control group. This finding supports past research that suggests that avoidant personalities are uncomfortable with the expression of negative emotions (Taylor et al., 2004). Contrary to predictions, avoidant males wrote more dominant letters than any other group.

Two surprising findings regarding avoidant personalities in this study were their high scores on the implicit self-esteem measure and the high level of dominance expressed by avoidant males in their letters. It is possible that these results are due to the fact that the individuals in this study did not represent a clinical population. It is also possible that the avoidant individuals in this study were not representative of most individuals with avoidant personality traits since they agreed to participate in a study that involved a threatening social situation. In other words, there may have been a selection bias in which only avoidant individuals who could tolerate being in a challenging
interpersonal situation would choose to participate while those who could not would
decline participation in this study and seek other ways of obtaining research credit.
Another possibility is that the measure used to select avoidant personalities (i.e., Social
Phobia Diagnostic Questionnaire) did not adequately identify individuals with this
personality style since this measure was originally developed to assess social phobia.
Nonetheless, this pattern of results was in the opposite direction of predictions and merits
further investigation.

In sum, the results of this study corroborate with previous research that highlights
the similarities in the overt presentation of vulnerable narcissistic personalities and
avoidant personalities. However, this study provided only limited information on what
distinguishes the two personality groups. The results suggest that avoidant personalities
are less affected by the impact of rejection, especially when compared to vulnerable
narcissistic females, and that they are less likely to retaliate with overt hostility against
those who reject them. Future research should attempt to identify characteristics that
distinguish these personality groups in order to assist clinicians with a differential
diagnosis.

Gender Effects: An Alternate Explanation

An important gender pattern in this study is that females in general were more
affected than males by the rejection manipulation. Females reported a greater decrease in
Serenity scores and their social state self-esteem increased at a slower rate than that of
males. Moreover, females retaliated less than males following the rejection manipulation;
their letters were significantly less hostile and significantly friendlier than the letters
written by males. This pattern of results may be due to the differences in the interactions that took place among the participants in the study.

As previously mentioned, the experiment was run with groups of four to five same-sex participants and participants were asked to respond to a set of personal questions that were intended to promote closeness in the laboratory. However, the interactions that took place in the all female versus the all male groups were qualitatively very different. In the female groups, participants shared a lot of personal information and answered questions for a significantly longer period of time. In contrast, there was very little intimacy in the all male groups with participants sharing almost nothing about themselves, answering questions in a few seconds, and engaging in impression management techniques, such as using jokes and presenting themselves in a masculine manner. After the group interaction, female participants often lamented that someone would have to leave the group while the males demonstrated few signs of having experienced bonding.

These remarkably different interactions may have impacted the gender results in this study since female participants most likely felt that they were rejected by a close other, while males most likely felt that they were rejected by an acquaintance or even a stranger. Moreover, the differences in the level of intimacy in these interactions likely affected the attributions that participants used to explain the subsequent rejection. While males could easily make an external attribution (e.g., there is something wrong with them) since the other participants did not get to know them, the females would be more likely to make an internal attribution (e.g., there is something wrong with me) since they had disclosed personal aspects of themselves and demonstrated investment in the
interaction. It is important to consider the results presented above with an appreciation of the differences in the interactions between males and females and how this may have affected the impact of the rejection manipulation.

**Limitations**

There are several important limitations in this study. The first is the use of a non-clinical population. While non-clinical, participants in this study were selected from a large sample based on extreme responses to our selection measures. Therefore, it is possible that this sample approximated more pathological levels of these personality groups. However, as previously mentioned, some of the results of this study revealed means that were in the predicted directions, but the differences between the groups were not large enough to produce statistically significant effects. These results may have been borne out with the use of a clinical sample.

Similarly, the sample of this study was relatively small, which may have affected the robustness of some of the results. This was particularly evident in some of the interactions that included the variable of gender (e.g., implicit self-esteem Group Membership by Gender interaction) since some of the groups (e.g., vulnerable narcissistic males) did not have enough participants in order for the analyses to reach significance when clear trends were evident in the result. Future studies examining vulnerable narcissistic dysfunction would benefit from having more equilibrium between the number of males and females in their sample.

A third limitation of this study was that it relied solely on self-report measures. Future research should include ratings by individuals who have interacted with participants over a period of time. This is particularly important in the study of narcissism.
since clinical theory suggests that these individuals split off parts of themselves and may not be able to accurately evaluate themselves.

A fourth limitation is that the design of this study was cross-sectional. This limitation is important for several reasons. First, narcissistic personalities, particularly vulnerable narcissistic personalities, have been described as oscillating from a grandiose self-state to a depleted self-state, and a cross-sectional design would not be able to detect these vacillations. Second, the results of this study raise important questions regarding the developmental experiences of these individuals and whether there is an interaction between gender and the parenting style within which they were raised (e.g., excess model versus a deficit model) that affects how narcissistic pathology is expressed. A longitudinal design would be necessary to examine these important questions.

Some of the most interesting findings in this study pertain to the unexpected gender interaction on the implicit self-esteem measure. A limitation of this study is that implicit self-esteem was only measured with one instrument. This is important because the development of measures of implicit self-esteem is still in its infancy and research has shown that the available measures often do not correlate with each other (Bosson et al., 2000). One of the explanations that have been put forth for this lack of correlation is that implicit self-esteem may not be a single unitary construct and different measures may be tapping different facets of this construct. Therefore, the lack of correlation between measures may be reflective of the complexity of this construct. The results of this study may pertain to only one aspect of implicit self-esteem and are worthy of further investigation. Future studies should include several measures of implicit self-esteem in order to provide further validity of these findings.
Due to the lack of correlation among measures of implicit self-esteem, the validity of implicit self-esteem as a construct has been questioned. However, several studies have found support for the construct validity of implicit self-esteem. Implicit self-esteem has been found to be associated with self-reported and informant-reported negative affect (Robinson & Meller, 2005), and has been found to predict emotional response to negative feedback (Meagher & Aldman, 2004). Moreover, a study examining the effect of threats on self-esteem found that high group identifiers experienced a greater decrease in implicit self-esteem than low group identifiers when reading a fictitious statement indicating whether their university had received a positive or negative evaluation relative to a rival university (Smurda, Wittig, & Gokalp, 2006). These studies provide support for the validity of implicit self-esteem and suggest that this construct merits further study. The results of the current study point to the importance of conducting future research that elucidates the relationship between narcissism and implicit self-esteem.

Finally, I mentioned that avoidant personalities in this study did not perform according to predictions both on the implicit self-esteem measure and on the level of dominance expressed in their letters. It is possible that there was a selection bias or that selection measure used did not adequately identify avoidant personalities. It is also plausible that this study has shed light on an aspect of avoidant pathology that has not been theoretically proposed. Future studies are needed both to increase our understanding of avoidant pathology and to better identify the difference between avoidant and vulnerable narcissistic pathology. This study provides evidence of the similarities between the overt presentation of avoidant personalities and vulnerable narcissistic
personalities, but clearly more research is needed to identify the important criteria to discriminate these personalities.

Conclusions and Future Directions

The results of this study provide additional evidence for the validity of VNS and support the use of this measure in future studies examining vulnerable narcissistic dysfunction. Research in social/personality research has been dominated by the use of the NPI and future studies on narcissistic pathology should expand their scope by using measures that also assess vulnerable narcissistic traits (Cain et al., 2007).

The results of this study also provide additional support for the validity of the vulnerable phenotypic expression of narcissism and corroborate clinical theory on the similarities and differences between vulnerable and grandiose phenotypic expressions of narcissistic dysfunction. Cain and Pincus (2006) point to the proliferation of research that emerged from the inclusion of NPD in the DSM-III and argue that there needs to be a similar increase in research investigating the description, assessment, etiology, and treatment of vulnerable narcissistic dysfunction. I believe that this study makes an important contribution towards this goal. However, further work in examining the vulnerable narcissistic dysfunction with a clinical sample would be a significant contribution. In light of the interaction of Group Membership by Gender for implicit self-esteem, future research should also explore the possible influence of parenting styles and gender as it relates to the development and expression of pathological narcissism.

Finally, the results of this study provide evidence of the similarities between the overt presentation of vulnerable narcissistic personalities and avoidant personalities. This presents a real problem in terms of possible misdiagnosis and merits future investigation.
that sheds light into some of the differences between these two personality dysfunctions. As previously mentioned, a significant contributor to misdiagnosis is the omission of vulnerable narcissistic traits from the DSM criteria of NPD. This omission may lead some clinicians to misdiagnose vulnerable narcissistic individuals as having avoidant personality dysfunction since the overt presentation of vulnerable narcissism is more similar to the criteria for Avoidant Personality Disorder (AVPD) in the DSM than to the criteria for NPD. I concur with Cain et al. (2007) that it is imperative for future revisions of the DSM to contain sufficient content to permit diagnosis of NPD when either narcissistic grandiosity or vulnerability is predominant. Moreover, it is also crucial that future research on the differences between vulnerable narcissistic dysfunction and avoidant personality dysfunction be incorporated into revisions of the DSM in order to enhance the discriminant validity of both NPD and AVPD diagnoses and to assist clinicians in making a differential diagnosis.
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Appendix: Tables and Figures
Table 1.
Results of Principal Components Analysis for the Vulnerable Narcissism Scale

<table>
<thead>
<tr>
<th>Factor</th>
<th>Scale</th>
<th>No. of Items</th>
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<th>Range of Factor Loading</th>
<th>Mean Inter-Item Correlation</th>
<th>Cronbach’s Alphas</th>
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<td>.92</td>
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<td>6.57</td>
<td>.45-.78</td>
<td>.37</td>
<td>.75</td>
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<td>Self-Sacrificing Self-Enhancement</td>
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<td>5.18</td>
<td>.43-.79</td>
<td>.32</td>
<td>.70</td>
</tr>
<tr>
<td>4</td>
<td>Hiding the Self</td>
<td>5</td>
<td>3.94</td>
<td>.39-.71</td>
<td>.34</td>
<td>.72</td>
</tr>
<tr>
<td>5</td>
<td>Grandiose Fantasy</td>
<td>7</td>
<td>3.39</td>
<td>.60-.79</td>
<td>.49</td>
<td>.87</td>
</tr>
<tr>
<td>6</td>
<td>Devaluing Others and Needs for Others</td>
<td>7</td>
<td>3.04</td>
<td>.53-.82</td>
<td>.41</td>
<td>.93</td>
</tr>
<tr>
<td>7</td>
<td>Entitlement Rage</td>
<td>9</td>
<td>2.83</td>
<td>.34-.74</td>
<td>.38</td>
<td>.90</td>
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Table 2. Vulnerable Narcissism Scale and Narcissistic Personality Inventory Correlates

<table>
<thead>
<tr>
<th></th>
<th>NPI</th>
<th>VNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3VDI Total Dependency</td>
<td>-.42***</td>
<td>.43***</td>
</tr>
<tr>
<td>Rosenberg Self-Esteem</td>
<td>.38***</td>
<td>-.37***</td>
</tr>
<tr>
<td>ESS Total Shame</td>
<td>-.15***</td>
<td>.55***</td>
</tr>
<tr>
<td>VMS Total Empathy</td>
<td>-.14***</td>
<td>-.14***</td>
</tr>
<tr>
<td>IPO Primitive Defenses</td>
<td>.08*</td>
<td>.60***</td>
</tr>
<tr>
<td>IPO Identity Diffusion</td>
<td>.02</td>
<td>.62***</td>
</tr>
<tr>
<td>IPO Reality Testing</td>
<td>.09*</td>
<td>.48***</td>
</tr>
<tr>
<td>IPO Aggression</td>
<td>.20***</td>
<td>.36***</td>
</tr>
<tr>
<td>IPO Moral Values</td>
<td>.17***</td>
<td>.45***</td>
</tr>
<tr>
<td>Murray’s Narcism Scale</td>
<td>.21***</td>
<td>.62***</td>
</tr>
<tr>
<td>Narcissistic Hypersensitivity</td>
<td>-.01</td>
<td>.52***</td>
</tr>
<tr>
<td>NPI Total</td>
<td>1.00</td>
<td>.13***</td>
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</table>
Table 3. Means, Standard Deviations, and ANOVAs for the Selection Measures Across the Four Personality Groups

<table>
<thead>
<tr>
<th>Group Membership</th>
<th>Grandiose</th>
<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPI</td>
<td>21.81 (4.01)</td>
<td>8.47 (3.74)</td>
<td>5.23 (2.53)</td>
<td>6.25 (3.86)</td>
<td>180.36*</td>
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<tr>
<td>SPDQ</td>
<td>2.30 (2.04)</td>
<td>6.87 (1.63)</td>
<td>11.54 (1.90)</td>
<td>4.74 (2.31)</td>
<td>129.30*</td>
</tr>
<tr>
<td>VNS</td>
<td>63.32 (14.73)</td>
<td>147.25 (12.51)</td>
<td>78.12 (16.84)</td>
<td>60.50 (18.57)</td>
<td>236.24*</td>
</tr>
</tbody>
</table>

Note. * p < .001

a greater than grandiose narcissistic personalities
b greater than vulnerable narcissistic personalities
c greater than avoidant personalities
d greater than control personalities
Table 4.
Univariate Results for Participants’ Expectations When Entering a Threatening Interpersonal Situation

<table>
<thead>
<tr>
<th>Group Membership</th>
<th>Grandiose</th>
<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectations</td>
<td>2.00(^a)</td>
<td>1.56</td>
<td>1.00</td>
<td>1.57</td>
<td>10.60(^*)</td>
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</tbody>
</table>

Note. *p < .001
\(^a\) greater than vulnerable narcissistic, avoidant, and control personalities
Table 5.
Univariate Results for Participants’ Rejection Sensitivity

<table>
<thead>
<tr>
<th>Rejection Sensitivity</th>
<th>Group Membership</th>
<th>( \text{ANOVA F} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grandiose</td>
<td>Vulnerable</td>
</tr>
<tr>
<td></td>
<td>6.48</td>
<td>9.79(^a)(^b)</td>
</tr>
</tbody>
</table>

Note. *\( p < .001 \)
\(^a\) greater than control personalities
\(^b\) greater than grandiose narcissistic personalities
Table 6. Multivariate and Univariate Results for Participants’ Attachment Styles

<table>
<thead>
<tr>
<th>Attachment Scale</th>
<th>Grandiose</th>
<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>37.66</td>
<td>33.24</td>
<td>30.43</td>
<td>35.16</td>
<td>13.50**</td>
</tr>
<tr>
<td>Discomfort w/ Closeness</td>
<td>30.63</td>
<td>33.42</td>
<td>36.50 a d</td>
<td>30.65</td>
<td>3.72*</td>
</tr>
<tr>
<td>Need for Approval</td>
<td>17.17</td>
<td>24.21</td>
<td>24.83 a d</td>
<td>19.78 a</td>
<td>15.16**</td>
</tr>
<tr>
<td>Preoccupation w/ Relationships</td>
<td>23.59</td>
<td>31.42 a c d</td>
<td>28.70 a d</td>
<td>24.55</td>
<td>13.83**</td>
</tr>
<tr>
<td>Relationships as Secondary</td>
<td>16.22</td>
<td>16.51</td>
<td>16.63</td>
<td>15.69</td>
<td>0.40 n.s.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachment Scale</th>
<th>Males</th>
<th>Females</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>32.91</td>
<td>34.64</td>
<td>3.54 n.s.</td>
</tr>
<tr>
<td>Discomfort w/ Closeness</td>
<td>32.22</td>
<td>33.13</td>
<td>0.42 n.s.</td>
</tr>
<tr>
<td>Need for Approval</td>
<td>20.63</td>
<td>21.85</td>
<td>1.81 n.s.</td>
</tr>
<tr>
<td>Preoccupation w/ Relationships</td>
<td>26.11</td>
<td>27.53</td>
<td>2.38 n.s.</td>
</tr>
<tr>
<td>Relationships as Secondary</td>
<td>16.98</td>
<td>15.89</td>
<td>2.02 n.s.</td>
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</tbody>
</table>

Note. *p < .01 **p < .001

a greater than grandiose narcissistic personalities
b greater than vulnerable narcissistic personalities
c greater than avoidant personalities
d greater than control personalities
Table 7.
Multivariate and Univariate Results for Participants’ Explicit Global Self-Esteem

<table>
<thead>
<tr>
<th>SLSC Scale</th>
<th>Grandiose</th>
<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Competence</td>
<td>45.45 (\text{a} \text{b} \text{c})</td>
<td>38.76</td>
<td>37.73</td>
<td>41.16 (\text{a} \text{b})</td>
<td>17.70*</td>
</tr>
<tr>
<td>Self-Liking</td>
<td>43.31 (\text{a} \text{b} \text{c})</td>
<td>33.03</td>
<td>32.87</td>
<td>39.18 (\text{a} \text{b})</td>
<td>21.49*</td>
</tr>
</tbody>
</table>

Note. *p < .001
\(\text{a}\) greater than vulnerable narcissistic personalities
\(\text{b}\) greater than avoidant personalities
\(\text{c}\) greater than control personalities
Table 8.
Univariate Results for Implicit Self-Esteem.

<table>
<thead>
<tr>
<th>Group Membership</th>
<th>Grandiose</th>
<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.43</td>
<td>1.33</td>
<td>1.67</td>
<td>1.21</td>
<td>1.14</td>
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</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.42</td>
<td>1.40</td>
<td>0.01</td>
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</table>

<table>
<thead>
<tr>
<th>Group Membership X Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandiose</td>
</tr>
<tr>
<td>Male</td>
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<tr>
<td>0.96</td>
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Note. *p < .01
Table 9. Mixed Within and Between ANOVA for Social State Self-Esteem

<table>
<thead>
<tr>
<th>Time</th>
<th>T1</th>
<th>T2</th>
<th>ANOVA F</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>26.81</td>
<td>28.92</td>
<td>18.14***</td>
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</table>

<table>
<thead>
<tr>
<th>Group Membership</th>
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<tr>
<td>Grandiose</td>
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<tr>
<td>30.07 a</td>
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<table>
<thead>
<tr>
<th>Gender</th>
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<tr>
<td>Males</td>
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<td>29.01</td>
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<table>
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<tr>
<th>Group Membership X Gender</th>
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</thead>
<tbody>
<tr>
<td>Grandiose</td>
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<td>Male</td>
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<table>
<thead>
<tr>
<th>Gender X Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
</tr>
<tr>
<td>T1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group Membership X Gender x Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandiose</td>
</tr>
<tr>
<td>Males</td>
</tr>
</tbody>
</table>

| Avoidant | Avoidant | Control | Control | ANOVA F |
| Males | Females | Males | Females | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 | 25.29 | 28.14 | 22.94 | 25.50 | 27.89 | 31.22 | 29.36 | 30.75 |

Note. *p < .05  **p < .01  ***p < .001

a greater than vulnerable narcissistic personalities and avoidant personalities
Table 10.
Mixed Within and Between ANOVA for Performance State Self-Esteem

<table>
<thead>
<tr>
<th>Time</th>
<th>T1</th>
<th>T2</th>
<th>ANOVA F</th>
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<tr>
<td></td>
<td>26.85</td>
<td>27.77</td>
<td>9.45*</td>
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<table>
<thead>
<tr>
<th>Group Membership</th>
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<th>Vulnerable</th>
<th>Avoidant</th>
<th>Control</th>
<th>ANOVA F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.08 a</td>
<td>24.95</td>
<td>25.62</td>
<td>28.58 a</td>
<td>11.17**</td>
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</table>

Note. *p < .01  **p < .001  
a greater than vulnerable narcissistic personalities and avoidant personalities
Table 11.
Mixed Within and Between ANOVA for State Affect

<table>
<thead>
<tr>
<th>PANAS-X Scale</th>
<th>Time</th>
<th>ANOVA</th>
<th>F</th>
<th>Time</th>
<th>ANOVA</th>
<th>F</th>
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<tbody>
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<td>Hostility</td>
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<tr>
<td>T1</td>
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<td>T2</td>
<td>8.34</td>
<td>6.98**</td>
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<td>Guilt</td>
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<tr>
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<td>T2</td>
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<td>T2</td>
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<td></td>
<td>T2</td>
<td>5.88</td>
<td>32.49***</td>
</tr>
</tbody>
</table>

Note. *p < .05  **p < .01  ***p < .001

\( ^a \) greater than grandiose narcissistic personalities

\( ^b \) greater than vulnerable narcissistic personalities

\( ^c \) greater than avoidant personalities

\( ^d \) greater than control personalities
Expectations For Relationship Survivor

Round Expect To Be Voted Out

Percent

Group Membership
- Grandiose
- Vulnerable
- Avoidant
- Control

Round 1 | Round 2 | Round 3 | Never-Will Win
Implicit Self-Esteem

Group Membership X Gender Interaction

Mean Scores

Gender
- Males
- Females

Group Membership
State Social Self-Esteem

Group Membership X Gender

Mean Scores

Gender
- Males
- Females

Group Membership
- Grandiose
- Vulnerable
- Avoidants
- Control
PANAS-X Serenity Scale

Females Only

Group Membership X Time Interaction

TIME
Mean Scores

Group Membership
- Grandiose
- Vulnerable
- Avoidant
- Control

TIME
SASB1-7
Attacking and Rejecting

Group Membership X Gender Interaction
Social State Self-Esteem
Group Membership X Gender X Time

Males

Group Membership
- Grandiose
- Vulnerable
- Avoidant
- Control

Mean Scores

Time 1

Time 2

TIME
Social State Self-Esteem

Group Membership X Gender X Time

Females

Mean Scores

Group Membership
- Grandiose
- Vulnerable
- Avoidant
- Control

TIME

Time 1

Time 2

Mean Scores

22

24

26

28

30

32
Vita
Claudia A. Pimentel

Education
2000-2007 The Pennsylvania State University, University Park, PA
PhD. In Clinical Psychology
1999 The George Washington University, Washington, DC
B.A. in Psychology

Clinical Experience
2006-2007 New York Presbyterian Hospital, Columbia University Medical Center
2003-2006 Counseling and Psychological Services, The Pennsylvania State University
2001-2004 The Psychological Clinic, The Pennsylvania State University
1999-2000 University of Miami School of Medicine/Jackson Memorial Hospital

Supervision Experience
2004-2005 The Psychological Clinic, The Pennsylvania State University

Teaching Experience
2005-2006 The Pennsylvania State University, Introduction to Clinical Psychology

Published Manuscripts


Paper and Poster Presentations (abbreviated list)


