# ACHIEVEMENT GOALS AND CAUSAL ATTRIBUTIONS OF STUDENTS WITH CHARACTERISTICS OF GRANDIOSE AND VULNERABLE NARCISSISM

MATTHEW JOHN CARDINALE

MSEd in Therapeutic Intervention Fordham University, 2013 BS in Psychology Fordham University, 2009

> Mentor Abigail M. Harris, PhD

Readers Anthony A. Cancelli, EdD Amelio D'Onofrio, PhD

### DISSERTATION

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### **DEDICATION**

I dedicate this work to my mother, Donna, and family, whose unwavering support, faith, and love has enabled me to overcome any obstacles of adversity and achieve any goal with humility, grace, dedication, and a sharp sense of humor.

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#### Abstract

### ACHIEVEMENT GOALS AND CAUSAL ATTRIBUTIONS OF STUDENTS WITH CHARACTERISTICS OF GRANDIOSE AND VULNERABLE NARCISSISM

Matthew John Cardinale, PhD

Fordham University, New York, 2014

Mentor: Abigail M. Harris, PhD

Recent evidence suggests a rise in incidence of narcissistic traits in younger populations including traits associated with both grandiose and vulnerable narcissism. Individuals exhibiting the traits associated with these two subtypes have been shown to react differently in specific situations and to specific outcomes. The current study compared the attributions for success and failure made by young individuals evidencing a range of traits associated with subclinical grandiose and vulnerable narcissism. Two hundred and two participants, ranging in age from 18 to 23, were provided with a randomly assigned mastery or performance task and experienced success or failure outcomes. Results indicated that traits associated with subclinical grandiose and vulnerable narcissism were not related statistically to causal attributions of locus of causality or stability following success or failure. Mastery and performance tasks were also not predictive of different causal attributions for vulnerable and grandiose narcissistically organized individuals experiencing success or failure. A limitation of the current study included inadequate internal consistency of the Narcissism Personality Inventory-16 and the Hypersensitive Narcissism Scale which may have contributed to the lack of significant findings. Further research is needed to determine the potential relationships between subtypes of narcissism, achievement goals, and causal attributions.

#### **CHAPTER I**

#### THE RISE OF NARCISSISM TRAITS IN YOUNGER POPULATIONS

Narcissism has been defined as a pervasive grandiosity of self-importance characterized by self-perceptions of unlimited success and power (*Diagnostic and Statistical Manual of Mental Disorders*, 5th ed.; *DSM-5;* American Psychiatric Association [APA], 2013). A recent National Institute of Health study (Stinson, et al., 2008) reported a lifetime prevalence rate of 6.2% for narcissistic personality disorder (NPD). Additionally, this epidemiological study found that younger people were more likely to experience NPD than older individuals. The newly released *DSM-5* (2013) 5th ed. retained the definition, diagnosis and symptoms of NPD from *DSM-IV-TR* (2000) 4th ed., text rev., signaling the continued clinical concern for NPD even though it was predicted that the diagnoses would be eliminated (Dingfelder, 2011a). Researchers have found that narcissistic personality traits in the general population of adolescents and young adults are on the rise. A cross-temporal meta-analysis conducted by Twenge, Konrath, Foster, Campbell, and Bushman (2008) revealed that over the course of 24 years, narcissism trait scores of college students rose steadily. Thus, current research points to a rise in both clinical and subclinical personality traits of narcissism.

Although, over the years, researchers have offered a myriad of explanations for the difference in numbers between the younger and older generations, Dingfelder (2011b) noted that the number of young individuals with elevated narcissistic traits in the general population is on the rise. This change was attributed to the advent of self-focused media (e.g., Facebook and Twitter) and changing parenting styles that focus on children's self-esteem rather than achievement among other factors (Dingfelder, 2011b). Similarly, Twenge & Campbell (2009) identified an increased focus on children's self-esteem in schools, changes in parenting styles

focusing on self-esteem, the availability of Facebook and Twitter, increases in materialism, and even reality television as contributing factors in the increased prevalence of subclinical narcissism in youth.

Traits associated with narcissism, including self-esteem, assertiveness, and extraversion, have been investigated to determine if they have increased over time as well. Since the 1970s, American culture has focused on the self, where self-worth and self-esteem were promoted by adults (Frum, 2000). Cushman (1990) characterized the self in modern American culture as the empty self, due to self-contained individualism, or a hyper focus on the self, an internal locus of control, and a desire to manipulate the surrounding environment. This cultural shift in values focusing on self-esteem was later extended to children in the 1980s and 1990s, whereby strategies to boost children's self-esteem were incorporated into educational programs (Gentile, Twenge, & Campbell, 2010). Although the focus on the self was encouraged to promote individual health and wellness, self-esteem has been shown to be highly correlated with narcissism (Bosson et al. 2008). Moreover, recent meta-analytic research by Gentile et al. (2010) demonstrated the rise in self-esteem across these generations, while two similar meta-analyses by Twenge (2001a; 2001b) showed an increase in assertiveness and extraversion during this time. Such traits are not necessarily considered to be pathological, however, Bergman, Westerman, and Daly (2010) argued that "self-esteem actively promoted for its own sake is not based on any objective reality, and may lead to the inflated and vulnerable self-esteem of narcissists" (p.121). They argued that self-esteem should follow from performing well on a task in school or life, rather than having self-esteem imposed on a child without the need for some type of achievement. Millon (1969) and Kernberg (1970) also purported that children who are considered "special" without true achievement of developmental milestones develop an inflated

sense of self and portray entitlement to recapture their feeling of being special. According to Twenge & Campbell (2009), such gratuitous inflation of the individual's self-esteem may lead to narcissistic personality traits.

The characteristics of subclinical narcissism can also be associated with more commonly considered maladaptive personality traits, such as entitlement, grandiosity, and materialism. Entitlement constitutes a key aspect of a narcissistic individual, as it is one of the diagnostic criteria used to diagnose NPD (APA, 2013) and included in the leading measure of subclinical narcissism, the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). Entitlement may lead to increased aggression, when an individual with elevated narcissistic traits is challenged (Reidy, Zeichner, Foster, & Martinez, 2008), as well as an unjustified expectation of success or reward (Twenge & Campbell, 2009). Furthermore, grandiosity is an underlying trait of narcissism, which is thought to fuel the unrealistic entitlement that many subclinical narcissists experience. Again, grandiosity is measured on the NPI (Raskin & Terry, 1988) while also being a key component to diagnosing NPD in the DSM-5 (2013) 5th ed. Similarly, materialism has shown a steady rise in the same population as subclinical narcissism over a comparable time period (Rose, 2007). A Pew Research Center survey (2007) indicated that 18- to 25-year-olds endorsed "getting rich" as one of their important goals 81% of the time with 64% stating it as their most important goal. Moreover, Astin, Oseguera, Sax, and Korn (2004) found that 74% of college freshmen chose "being very well-off financially" as an important life goal as compared to only 45% in 1967.

With the increase of narcissistic personality traits such as entitlement, grandiosity, and materialism in younger populations leading to increased expectations of success, how might these traits affect these individuals in an academic setting? Bergman et al. (2010) surmised that

students displaying elevated narcissistic traits will lack empathy, promote competition, have poor interpersonal skills and show arrogant behaviors that will corrode the focus on cooperative and team-focused learning techniques that are typically used in classrooms. Additionally, these individuals will externalize their problems and have poor skills to deal with constructive criticism, further hindering cooperation and rapport with classmates and teachers. Most notably, Bergman et al. (2010) suggested that individuals possessing elevated subclinical narcissistic traits may have trouble engaging in the learning process due to their need to maintain an image of superiority; having difficulty acknowledging that others may know more than themselves. Twenge (2009) also noted that many high school and college students were overconfident and overestimated their abilities to succeed, attitudes that can lead to increased anxiety and greater failure. Furthermore, Twenge (2009) explained that the increase of entitlement in classrooms would lead to frustration from the student and teacher as students would expect higher grades for effort, rather than strong performance, or because they "deserve the best." Overall, the research suggests that the education of an increasingly narcissistic population will pose greater difficulties to educators. Thus, the importance of understanding the personality of elevated subclinical narcissistic traits in students and their reactions to success and failure is integral to developing educational plans to manage these students and help them to succeed.

#### **Subtypes of Subclinical Narcissism**

Further compounding the issue of educating the increasing general population endorsing narcissistic traits is the inadequacy of the *DSM* definition of narcissism as it focuses on the grandiosity of narcissism (Akhtar & Thomson, 1982). Most clinical definitions of narcissism consist of grandiosity, entitlement, and exploitation of others, yet these traits are more closely related to the grandiose form of narcissism (Fossati, et. al., 2005). Instead, there is empirical

support for a dichotomy of clinical and subclinical narcissism with distinct traits (Wink, 1991). The basis for the two forms of narcissism, labeled grandiose (overt) and vulnerable (covert) narcissism, stems from the psychoanalytic writings of Kohut (1971) and Kernberg (1975). Millon (2011) also characterized the duality of narcissism, suggesting that individuals with elevated subclinical narcissistic traits typically display traits of grandiosity, self-assuredness, arrogance and a belief in an unfounded inflated sense of self, while also experiencing underlying depression, low self-esteem and poor tolerance of failure or criticism due to their unfounded inflated self-esteem. Furthermore, empirical research by Wink (1991) has demonstrated support through factor analysis for related but distinct forms of narcissism, each with specific traits that mirror the dual characterization of narcissism Millon and other early theorists suggested. Grandiose narcissism is characterized by self-assurance, exhibitionism, extraversion, and aggression, whereas vulnerable narcissism is marked by defensiveness, anxiety, introversion, and vulnerability in adverse situations (Wink, 1991). Yet, both forms share conceit, disregard for others, and self-indulgence (Wink, 1991). Hendin and Cheek (1997) corroborated Wink's dichotomy of subclinical narcissism by redeveloping Murray's (1938) Narcism [sic] Scale to determine the empirical basis for subclinical vulnerable narcissism. This study characterized individuals with elevated vulnerable narcissistic traits in the general population as hypersensitive to criticism and adversity as well as individuals expressing feelings of anxiety, however, they still demonstrated self-aggrandizing behavior and an excessive need for attention (Hendin & Cheek, 1997).

Interestingly, there have been some empirical studies investigating both forms of subclinical narcissism that demonstrate a difference in academic performance among subtypes. A study conducted by Weikel, Avara, Hanson, and Kater (2010) demonstrated the issues

undergraduate students with traits of both vulnerable and grandiose narcissism had with adjustment to college life and academics. The study found that those high in vulnerable narcissistic traits experienced academic, interpersonal and emotional distress due to underlying anxiety. Furthermore, it was reported that undergraduates high in grandiose narcissistic traits experienced emotional and interpersonal difficulties due to the experience of criticism and failure challenging their inflated self-esteem (Weikel et al., 2010). Since there is a dearth of empirical studies investigating the academic issues related to the subclinical vulnerable and grandiose forms of narcissism, further evidence is needed to understand the unique challenges this growing population may provide to educators and themselves when they are faced with success and failure.

#### **Causal Attributions to Achievement Outcomes**

To further understand how the growing population of youth with elevated subclinical narcissistic traits react in academic settings, the investigation of their causal attributions toward success and failure is important. Causal attributions are most often defined as the way in which an individual perceives the cause of an achievement outcome (McAuley, Duncan, & Russell, 1992). Weiner (1985) posited the existence of three causal attribution dimensions that individuals use when making attributions for performance outcomes: locus of causality, stability, and control. Locus of causality can best be described as the individual attributing the outcome to either internal traits or external circumstances, while the stability dimension encompasses the individual attributing the cause of the outcome as fixed or changeable. Furthermore, the control dimension determines if an individual believes the cause is due to controllable or uncontrollable aspects of the situation (McAuley et al., 1992). This model of causal attributions has often been utilized to research academic achievement and success and

failure (Covington, 1992). Thus, it can be assumed that individuals who experience success or failure in the classroom attribute their performance outcomes to a specific combination of causal attribution dimensions.

More specifically, when considering research regarding the tendencies of individuals with elevated subclinical narcissism, it may be posited that the causal attribution dimensions of locus of causality and stability will be most valuable in measuring perception of academic success and failure. As Bergman et al. (2010) proposed, students endorsing elevated subclinical narcissistic traits who experience failure and criticism are likely to attribute their performance to external factors, such as task difficulty. Twenge (2009) assumed that students with elevated subclinical narcissistic traits would expect success and attribute their success to internal attributions, such as ability. It has further been found in research investigating subclinical narcissistic attributions toward success and failure that these individuals will internalize success and externalize failure (Stucke, 2003). However, there is little empirical support investigating these hypotheses regarding attributions of success and failure of individuals displaying elevated subclinical vulnerable and grandiose narcissistic traits.

#### **Achievement Goals and Achievement Outcomes**

Researchers of achievement goal theory have helped develop an understanding of individuals' achievement outcomes through the investigation of the achievement goals used to obtain these outcomes (Elliot & Dweck, 2005). Achievement goals are typically divided among four orientations; mastery approach, mastery avoidant, performance approach, and performance avoidant (Elliot & Harackiewicz, 1996). Individuals who employ mastery approach goals aim to show competence through an understanding of the material, whereas individuals displaying mastery avoidance goals seek to avoid losing competence or the opportunity to improve their

skills (Elliot & McGregor, 2001). In contrast, individuals who endorse performance approach goals focus more on displaying their competence through competition with others for better grades or scores when compared to their classmates (Elliot & Dweck, 1988). Furthermore, individuals who employ performance avoidance goals rely on self-regulatory strategies to avoid negative outcomes (Elliot & Harackiewicz, 1996).

Past research has linked achievement goals to personal dispositions and behavior patterns related to personality as well as specific achievement goal task structures or contexts (Ames & Archer, 1988; Dweck & Leggett, 1988). Such linkages may further the understanding of achievement motivations of students exhibiting elevated subclinical narcissistic traits. Yet, upon review of the literature, there are no current studies that investigate how individuals with elevated subclinical vulnerable and grandiose narcissistic traits may react when asked to perform a specific achievement task under competitive or mastery goal conditions. Besser and Priel (2010) investigated participants with elevated subclinical vulnerable and grandiose narcissistic traits' reaction to achievement and interpersonal failure. They found that when compared to vulnerable trait elevated individuals, grandiose trait elevated individuals who experience failure displayed higher levels of negative outcomes, such as increased anger toward external factors. However, personality traits displayed by each subtype of narcissism in the general population may cause these individuals to behave differently when placed in specific mastery or performance goal tasks, while also experiencing success or failure. For instance, Fossati et al. (2005) found that individuals possessing elevated grandiose narcissistic traits are concerned with high performance and competing with others to display their superiority, while Weikel et al. (2010) indicated that individuals with elevated vulnerable narcissistic traits have difficulty in academics due to increased anxiety and hypersensitivity. Therefore, when individuals with

elevated traits of each type of subclinical narcissism are presented with a specific mastery or performance task, it may be posited that each will employ different achievement goals within these contexts to motivate their task performance.

#### The Link between Achievement Goals and Causal Attributions

Previous research has demonstrated a strong link between achievement goals and attributions for successful or unsuccessful academic outcomes (Covington & Omelich, 1979). Weiner (1985) suggested that high achievers typically attributed their success to internal ability and effort due to their internal motivation to demonstrate high competence or master the material, whereas they attributed failure to external circumstances or poor effort due to their confidence in their high abilities. Moreover, it was explained that low achievers attributed success to luck and other external factors not under their control, but their failure was attributed to insufficient ability and internal factors (Weiner, 1985). In essence, these individuals become avoidant when faced with subsequent academic tasks due to pessimism about the likely outcome, a concurrent lack of motivation and a fear of the implications of failure (Covington, 1992). In fact, Weiner (1985) posited that attribution theory could not be explained without the inclusion of achievement goals. Further, research by Covington and Omelich (1979) suggested that achievement goals activate specific attributional biases in the individual in response to success or failure. Thus, when individuals are presented with a specific achievement task, specifically mastery or performance tasks, they will attribute their success and failure to specific causal attributions.

#### **Purpose of Investigation**

As societal mores and values change, it seems that subclinical grandiose and vulnerable narcissistic personality traits have become ingrained in the fabric of everyday life, causing a rise

in narcissism and an overall acceptance of such traits. Twenge and Campbell (2009) suggested that American culture has begun to shift toward the acceptance of narcissistic traits as a means to succeed in the ultra-competitive and global world. Although *DSM-5* (2013) 5th ed. retained the diagnostic criteria from *DSM-IV-TR* (2000) 4th ed., text rev., researchers predicted that NPD would be excluded from or significantly altered in the new release. Millon (2011) stated that NPD had been deemed unworthy of continued characterization of a personality type. Nevertheless, the proposal of dropping narcissism as a psychopathology may signal the attitude shift in American culture that Twenge and Campbell (2009) described. Also, this may suggest that inflated self-esteem, grandiosity, entitlement, and other traits associated with the subtypes of subclinical narcissism have become more acceptable. If these shifts in beliefs and attitudes are accurate, what are the implications of managing adolescents and young adults in this changing culture? More specifically, what are the implications of educating individuals who possess these narcissistic traits?

The purpose of the current research was to investigate the relationships among subclinical narcissism, achievement goals and causal attributions for academic success and failure. Specifically, the investigation explored the dichotomy of grandiose and vulnerable narcissism subtypes to determine if individuals exhibiting the traits associated with the subtypes have a specific pattern of causal attributions related to locus of causality and stability when faced with success or failure in specific achievement goal contexts. Mastery and performance goal tasks were utilized to induce participants to adopt specific achievement goals and to activate causal attributions for a more comprehensive understanding of participant's achievement motivation. Success or failure outcomes were experimentally manipulated. It should be noted that the measures of narcissism used in the current study are continuous measures of vulnerable and

grandiose narcissism intended to measure subclinical narcissistic traits. Although the measures have been used with both the general population and clinically diagnosed narcissists, the current study makes no attempt to "classify" participants. Due to the lack of extensive research related to the dichotomy of elevated subclinical narcissistic trait individuals, this investigation focused on gaining an understanding of the potential unique behavioral patterns and manifestations of each type of individual's personality traits in regard to academic achievement and motivation. Accordingly, the study investigated how these traits relate to locus of causality and stability attributions toward academic success and failure within an achievement goal task.

#### **Research Questions**

To investigate the potential relationships among the aforementioned variables, the following research questions were posed:

- 1. Following success feedback, are locus of causality attributions predicted by grandiose and vulnerable narcissism and a mastery or performance task?
- 2. Following failure feedback, are locus of causality attributions predicted by grandiose and vulnerable narcissism and a mastery or performance task?
- 3. Following success feedback, are stability attributions predicted by grandiose and vulnerable narcissism and a mastery or performance task?
- 4. Following failure feedback, are stability attributions predicted by grandiose and vulnerable narcissism and a mastery or performance task?

The preceding research questions are exploratory in nature, with consideration that the variables of grandiose and vulnerable narcissism, mastery and performance tasks, and causal attributions, within the context of success and failure outcomes, have not been investigated together. Thus, the research questions and statistical analyses of the current study were guided

largely by past theoretical formulations. The following chapters outline and detail each of the variables contained in these research questions to determine the unique links between narcissistic personality traits and causal attributions under specific task conditions (i.e., mastery versus performance) and outcomes (i.e., success versus failure). Locus of causality and stability attributions will be discussed within the context of success outcomes, and then failure outcomes, to potentially develop an understanding of the academic and behavioral profiles of individuals possessing elevated subclinical grandiose and vulnerable narcissistic traits. Overall, the current investigation into narcissistic personality traits, achievement goals, and causal attributions aimed to contribute to our understanding of the academic motivation of students in the 21st century.

#### **CHAPTER II**

#### **OVERVIEW OF THE LITERATURE**

The following chapter is a brief review of the literature of the three contributing variables contained in this study; narcissism, achievement goals, and causal attributions. Each variable is outlined from historical to current conceptualizations and developments in their respective psychological theories. Furthermore, the links between each variable are detailed to further understand the empirical and theoretical concepts that underlie the current study.

#### **Narcissism Theory**

#### **Historical Narcissism Theory**

The study of narcissism first arose in 1898 when Havelock Ellis introduced the term Narcissus-like to describe excessive self-admiration. Historically, narcissism has been studied and defined in psychodynamic literature, even influencing Freud's structural model of the id, ego and superego (Raskin & Terry, 1988). He developed a dichotomy of narcissism that included a metapsychological and a clinical conceptualization of narcissism. The metapsychological narcissism, as described by Freud, was the energy to develop the ego, relations to the environment that lack interpersonal contact, and as the primary for the development and maintenance of self-esteem. Contrastingly, Freud's clinical narcissism encompassed attitudes and behaviors, such as self-love, self-aggrandizement and self-admiration, fears and vulnerabilities toward one's self-esteem, idealization, denial, splitting, and motivation for the need to be loved and perfect.

Freud's clinical description of narcissism inspired other psychodynamic theorists to expand on the narcissistic phenotype. Kohut (1971) explained the etiology of narcissism with regard to difficulties with the separation-individuation phase of development that lead to issues with dependency versus autonomy. Kohut (1971) described individuals with elevated narcissistic traits as vulnerable, empty, and somewhat depressed, while lacking resiliency and empathy for others. Interestingly, Kernberg (1975) explained that aggression plays a significant role in narcissism. Aggression serves to devalue others in defense of the ego when faced with loss of love and the depression that likely follows (Kernberg, 1975). Kernberg (1975) believed that elevated narcissistic trait individuals presented as grandiose, conceited, intensely envious, emotionally shallow, as well as lacking in empathy. Kernberg (1975) also suggested that the defense mechanism of splitting was central to a narcissist's disturbance. Moreover, both theorists posited that these individuals lack internal mechanisms to regulate self-esteem forcing an unconscious reliance on external sources of gratification and love, potentially leading to anger and vulnerability (Kernberg, 1975; Kohut, 1971). Thus, the external source of gratification develops into a vulnerability to be defended against by narcissistic traits that uphold the illusion of self-sufficiency. Kernberg (1975) explained that this disturbance in self-esteem regulation created an imbalance between the individual's self-representations and ideal self-representations.

Kernberg's (1975) and Kohut's (1977) theories also helped develop the contemporary view of a dichotomy of narcissism; overt and covert forms. Broucek (1991) proposed that both theories appeared to reflect the difference in narcissistic phenotypes. Both theorists proposed that overt narcissists displayed a specific pattern of behavior that included self-assuredness, aggressiveness, exhibitionism, self-indulgence, and a lack of empathy. By contrast, covert narcissists were characterized by defensiveness toward failure, hypersensitivity, anxiety, and a lack of social relationships. However, these individuals still displayed self-indulgence, conceit, and a grandiosity of fantasy. Although narcissism became a popular topic for psychoanalytic research, the field still lacked strong clinical measures and empirical support.

#### **Theories of Multiple Subtypes of Narcissism**

As noted previously, outside of the DSM conceptualization of narcissism, theorists researching narcissism have demonstrated that it is comprised of a dynamic set of characteristics and subtypes (e.g. Millon, 2011; Wink, 1991). Akhtar and Thomson (1982) explained that narcissistic individuals display as overly haughty and grandiose, with an inflated self-esteem and a sense of entitlement, but also possess a vulnerability marked by hypersensitivity and feelings of inferiority and worthlessness. Bursten (1973) proposed that narcissism was comprised of four distinct variations; manipulative, paranoid, craving, and phallic. Each subtype centered on how individuals with elevated traits of each narcissistic variation maintained and restored their selfesteem and the manner in which the individuals differentiated the self and object. Bursten described individuals with elevated manipulative narcissistic traits as individuals who perceived others' goals as contradictory to their goals. They also deceived and lied to others with no guilt. Those individuals with elevated paranoid narcissistic traits displayed anger, rigidity, and jealousy, became argumentative, and often placed blame on others (Bursten, 1973). Bursten proposed that the individuals who possessed elevated craving narcissistic traits were demanding, clingy, and held the expectation of disappointment. Lastly, individuals with elevated phallic narcissistic traits demonstrated aggressiveness, exhibitionism, conceitedness, and a need for power.

Furthermore, Miller (1979) proposed two forms of emotional disturbances stemming from narcissism, including grandiosity and depression. It was believed that both disturbances were a loss of expression of the self, where grandiosity was a denial of the loss of specific parts of the self (Miller, 1979). The similarity between each disturbance revolved around a fragile self-esteem, perfectionism, denial, and narcissistic object relations, while also stemming from envy, a fear of loss of love, aggression, hypersensitivity, shame, and guilt. Broucek (1991) also suggested that there were two forms of narcissism, including an egotistical and a dissociative type. The egotistical narcissistic traits were characterized by grandiosity and self-aggrandizing behavior, while the dissociative type "split off" from the grandiose self as these individuals viewed the self as idealized, causing them to experience low self-esteem (Broucek, 1991).

The most inclusive and comprehensive of these multiple narcissism theories can be attributed to Theodore Millon, the preeminent and pioneering theorist in current biosocial constructs of narcissism. He proposed a similar complex structure to narcissistic personality that included traits subsumed in the grandiose and vulnerable forms of narcissism. First, Millon (2011) synthesized the distinctive narcissistic traits into eight broad trait domains. These personality trait domains include expressively haughty, interpersonally exploitive, cognitively expansive, admirable self-image, contrived objects, rationalization mechanism, spurious organization, and insouciant mood. Millon synthesized many of these traits from previous narcissistic theory. Millon borrowed from Otto Kernberg's (1970) characterization of narcissistic traits, such as the excessive self-reference and a need to be admired by others while also possessing an inflated self-worth. Additionally, Kernberg (1970) detailed narcissistic haughtiness and grandiosity, which Millon incorporated into his conceptualization. Furthermore, Kohut's (1971) developmental theory of narcissism was incorporated into Millon's understanding of narcissism, such as the dichotomy of narcissism. Kohut (1971) explained that individuals with elevated narcissism traits develop either a grandiose self or the idealized *parental imago*, where the grandiose self seeks constant recognition while the parental imago experiences depression and emptiness. This separation of narcissistic traits into distinct forms of narcissism can also be seen in the works of Bursten (1973), conceptualizing craving, paranoid, manipulative and phallic narcissism, and Akhtar (1992), formulating overt and covert narcissism.

At the behavioral level of personality, individuals with elevated narcissistic traits display a haughty, or calm and self-assured, social behavior. Some may view narcissistically organized individuals as emotionally stable and composed in social situations, especially in times of adversity, while others may find individuals with elevated narcissistic traits as arrogant, supercilious, and pompous. Moreover, narcissistically organized individuals tend to believe conventional social limits as beneath them, where their actions often rebuff social reciprocation and the rights of others through a lack of personal integrity (Millon, 2011). Kernberg (1970) described this trait of narcissism by proposing that when children experience indifference from their parents while also being characterized as "special," children revert to the idea of their uniqueness as a refuge from unloving parents. Most notably, these individuals lack humility and appear conceited without merit. Further behavioral presentations of individuals with elevated narcissistic traits include an entitled and exploitative interpersonal style. Individuals with elevated narcissistic traits typically take others for granted and are nonempathic in their quest to enhance personal desires. Additionally, these individuals will seek others who will gratify them without the need to reciprocate the action, typically selecting dependent individuals who will praise them without great deservedness. By selecting to surround themselves with dependent individuals, individuals with elevated narcissistic traits perpetuate a loop of entitlement and exploitation.

Millon (2011) further explained narcissistic traits through phenomenological domains. As noted previously, narcissistically organized individuals are cognitively expansive, as they typically become preoccupied with immature self-enhancing fantasies of power and success. Narcissistically organized individuals often extend facts, or even lie, in order to substantiate their own illusions of their inflated self-image. Additionally, they aggrandize their powers, status, and even transform their failures into successes. Kohut (1971) explained individuals displaying elevated narcissistic traits need to constantly seek recognition in order to experience a sense of fulfillment due to their underlying lack of self-confidence. Further phenomenological traits include their admirable self-image. As previously explained, individuals with elevated narcissistic traits believe they are special and demand admiration from others without commensurate achievements or merit. Most notably, individuals with elevated narcissistic traits present as self-assured and egotistical, often expecting special treatment, without any valid attainments. Those who do not respect and praise the narcissist will be met with scorn and disdain. Bursten (1973) hypothesized that individuals possessing elevated narcissistic traits maintain intense self-interest in order to compensate for their poor sense of self and as to not decompensate. Lastly, these individuals' contrived object-representations allow for the alteration of past experiences in order to align with their internalized inflated self-worth. Negative feedback or evaluations of the narcissistic-self are transformed to present the situation in a favorable light. Kernberg (1975) and Kohut (1971) believed this transformation stemmed from parents and adults who presented the belief to individuals with elevated narcissism that no matter how these individuals performed or what they thought, they were still perfect.

The intrapsychic domain of narcissistic personality traits proposed by Millon (2011) included the rationalization mechanism and the spurious organization of these individuals. When individuals with elevated narcissistic traits encountered failure or humiliation, they commonly employed rationalization to develop plausible explanations to present the situation in a favorable way. This strategy protects the inflated self-worth in light of evident weaknesses and failures, at the threat of becoming dejected and empty if their rationalizations fail. These individuals experience underlying depression and low self-esteem and risk uncovering their inflated sense of self if displayed (Kohut, 1968). If the narcissistic rationalizations to preserve their grandiose self-worth fail, these individuals will continue to contrive fantasies that reassure them of their status and pride. Those aspects of the adverse situation that are unable to be made positive are simply repressed, or persons with elevated narcissistic traits will begin to project their feelings onto others. Furthermore, these individuals present a spurious persona, believing that everything will end well for them without much personal intervention during adverse situations. Ronningstam (1998) explains that narcissistically organized individuals have poorly developed skills to solve conflicts, overcome failures, quell impulses, and rebound from adversity. Due to these individuals' inability to regulate their inflated self-esteem during difficult situations, they will externalize their own inadequacies and blame others for their shortcomings, which Millon (2011) identifies as the time when the true fragility of narcissism is exposed.

Finally, persons with elevated narcissism demonstrate an insouciant temperament on a regular basis, allowing others to believe they have a pervasive sense of well-being (Millon 2011). However, if these individuals' sense of superiority is challenged, they may either become overly irritable and annoyed or shamed and depressed. In such an instance, the individual may vacillate between both extreme emotions of rage and emptiness (Millon, 2011).

Earlier theorists, such as Kohut (1968) and Bursten (1973), and contemporary theorists, such as Akhtar (1992) and Wink (1991), had proposed varying types of narcissism based on particular narcissistic traits that are presented. Most notably, Millon (2011) expands upon Kohut's (1968) developmental theory of narcissism, which posited that narcissism is on a

spectrum from a healthy to pathological expression of personality traits. In a similar fashion, Millon characterized narcissism into distinct levels based on specific traits and the presentation of those traits. Millon (2011) began by characterizing individuals with mild (normal) narcissistic traits as those who are typically focused on achievement, personal gratification, and selfenhancement through competition and portray self-confidence and assertiveness. He explained the two styles of mild narcissism as resourcefully confident personality style and masterly confident personality style. A resourcefully confident individual is optimistic and able to deal with life's ups and downs with patience and composure. These individuals tend to be creative and take risks in order to mold their environment to fit their needs. Moreover, resourcefully confident individuals are independent, self-actualizing and are steadfast in their beliefs and view of the world. Similar to the resourceful confident individual is the masterly confident individual, in that both are independent, self-actualizing and confident in their views of the self and the world. However, the masterly confident individual is more pragmatic and organized. These individuals tend to take on leadership roles by asserting themselves over others, which often leads to feelings of superiority. Additionally, masterly confident individuals are task-oriented, leading to a demanding and sometimes overbearing style that may lose sight of the needs of others.

Millon (2011) describes the more moderate (abnormal) persons with narcissistic traits as exceedingly haughty, arrogant and entitled with an inability to adapt to the surrounding circumstances, which may provoke others. The two egotistic types include the elitist and the exploitive individuals. Elitist egotist individuals typically display self-assuredness, arrogance, and a preoccupation with their inflated sense of self. Moreover, these individuals strongly believe in their superiority, although it is unfounded in many regards, and put forth greater effort in persuading others of their superiority. Elitists want to be seen in higher social situations and often promote themselves through bragging about supposed achievements in order to increase their self-esteem, but when confronted about their short-comings they may become irritable and insulate themselves from negative criticism. The exploitive egotist is marked more by the individual's grandiosity and exploitation of others, often of a sexual nature. These individuals portray a nonchalant approach to social responsibilities, yet possess strong cunning and self-confidence. Exploitive egotists rarely desire strong interpersonal relationships, instead valuing public attractiveness and feigned prowess. The egotistic type stemmed from Millon's (1969) earlier work on narcissism where he believed these individuals developed through *overvaluation* from parents that could not be sustained, leading to an inflated sense of self in order to maintain this characterization.

Lastly, Millon's (2011) description of individuals with severe (clinical) narcissistic traits presents them as highly conceited, extremely exploitative, overly rationalized, aggrandizing achievements, and with nonchalant affect all leading to abrasive social relationships. Millon divides clinical narcissists into two types, including the unprincipled narcissist and the compensatory narcissist. The unprincipled narcissistic trait individuals are characterized by an arrogant sense of self-worth, exceedingly low empathy with a tendency to exploit others, and a social façade marked by intimidation. These individuals typically have malicious intent with little regard for social responsibilities and mores, while often covering their social and personal deficits with grandiose fantasies. Unprincipled individuals are cunning and utilitarian, likely dismissing a relationship once they have acquired what they desired from it. In contrast, compensatory narcissism is derived from deep seeded insecurity and poor self-esteem stemming from early life deprivation, and compensates with a façade of inflated self-worth and superiority.

These individuals inflate their self-worth by boasting about minor accomplishments and by seeking great public recognition with a disingenuous demeanor. Furthermore, compensatory individuals become hypervigilant, in that they become sensitive to the reactions of others, hyperanxious, and prone to humiliation. Most notably, these individuals are vulnerable to negative judgments, as they are aware that their inflated self-worth is false. The severe narcissism dichotomy mirrors the historical perspective of narcissism explained by Kernberg (1970, 1975) and Kohut (1968, 1971), which described these individuals as overtly grandiose, but covertly experiencing anxiety and low self-esteem. Moreover, similar narcissistic dichotomies were theorized by Akhtar (1992) and researched by Wink (1991).

#### **Evidence for the Dichotomy of Narcissism**

To further investigate narcissism as a dichotomous personality disorder first proposed by historical psychoanalytical personality theorists (Kernberg, 1975, Kohut, 1971) and modern theorists (Millon, 2011), empirical research was conducted to provide further evidence of the specific traits encompassed within the subtypes of narcissistic personality. Wink (1991) investigated the grandiose (overt) conceptualization of narcissism through a comparison of measures purported to assess narcissistic traits. He found that the measures that had been developed based on the *DSM-III* (1980) 3rd ed. criteria supported the grandiose traits, but those developed through clinical conceptualizations of narcissism prior to the *DSM-III* (1980) 3rd ed. criteria did not. The pre-*DSM* measures were created using clinical representations of individuals thought to be narcissistic as defined by psychodynamic theory. Overall, Wink found that the measures of narcissism were uncorrelated, but shared the traits of entitlement and grandiose self-relevant fantasies. Wink labeled these two components of narcissism Grandiose-Exhibitionism (overt) and Vulnerability-Sensitivity (covert), paralleling Gabbard's (1989)

oblivious and hypervigilant subtypes and Masterson's (1993) exhibitionistic and closet subtypes. Individuals who scored high on the Grandiose-Exhibitionism measures of narcissism displayed "self-assuredness, aggressiveness, exhibitionism, self-indulgence, and disrespect for the needs of others," (Wink, 1991, p. 596). Conversely, Wink found that those who scored high on the measures of Vulnerability-Sensitivity narcissism were characterized with "defensiveness" and as "hypersensitive, anxious, and socially reticent individuals" (Wink, 1991, p. 596), but still displayed personal relationships filled with self-indulgence, conceit, arrogance, and selfishness.

Wink's (1991) research also focused on the distinct pathologies experienced by the Grandiosity-Exhibitionism and Vulnerability-Sensitivity forms of narcissism. Both types of narcissism were associated with psychological concerns and difficulties in effective functioning. Yet, Vulnerability-Sensitivity organized individuals developed anxiety and pessimism, fulfillment issues, and vulnerability to traumas in their lives, whereas Grandiosity-Exhibitionism organized individuals showed difficulties with overconfidence, aggressiveness, and extreme admiration needs. Subsequent research supported Wink's dichotomy of narcissism (Hendin & Cheek, 1997; Pincus et al., 2009), and provided empirical support for the inclusion of vulnerable narcissistic traits in the *DSM* representation of narcissism.

Additional research by Rathvon and Holmstrom (1996) investigated the overt and covert narcissistic subtype's relation to five MMPI-2 narcissistic scales and the NPI in subclinical narcissistic individuals. A principal components factor analysis was conducted, producing two distinct orthogonal factors labeled Narcissistic Grandiosity and Narcissistic Depletion. The researchers determined that the Depletion factor was related to measures of distress, chronic anxiety, social withdrawal, and maladjustment (Rathvon & Holmstrom, 1996). Furthermore, Hibbard (1992) posited the relationship among narcissism, masochism, shame, and object relations, which demonstrated a dichotomy of overt and covert narcissistic traits. By using the NPI, MMPI Narcissistic Personality Disorder Scale, and the O'Brien Multiphasic Narcissism Inventory in a factor analysis, Hibbard (1992) found consistent factor loadings along the overt and covert subtypes. It was determined that the overt narcissist displayed grandiosity, low feelings of shame, and poor distinctions between the real and ideal self, while the covert narcissist demonstrated vulnerability, submissiveness, shame, dependency, and idealization (Hibbard, 1992).

#### **Current Developments in Narcissism Theory**

Regardless of historical and contemporary dichotomous or multi-type theories of narcissism, as noted previously, the majority of current clinical definitions and empirical research related to narcissism focuses on the overt, grandiose aspects of the individual's personality. According to current clinical definitions, pathological narcissism is defined by pervasive grandiosity of self-importance characterized by unlimited success and power (APA, 2013). Moreover, individuals with elevated narcissistic traits are thought to lack empathy to the extent of exploiting others for personal gain, have an exaggerated sense of entitlement leading to arrogance, and tend to become envious of others. Research has reported that narcissism is employed by individuals to reinforce their fragile self-esteem, as they react with rage, humiliation, and shame when their self-esteem is challenged (Stucke, 2003). Current narcissism theory also proposes that these individuals rely on themselves to maximize pleasure and preserve self-esteem as well as passively pursue their perceived elevated status (Britton, 2004; Millon 2011). Millon (2011) explains that persons with elevated narcissistic traits inflate their personal standing, power, and achievement in order to exude a status of superiority and a sense of selfimportance. In essence, these individuals are more concerned with and satisfied by their own

self-perceptions, thus developing a somewhat grandiose, yet infallible, confidence in their selfworth that is passively pursued by being themselves (Millon, 2011).

Furthermore, Miller, Campbell, and Pilkonis (2007) analyzed the research on narcissism and determined that narcissism was comorbid with Axis I disorders, psychopathy, interpersonal relational issues, substance abuse, aggression, and impulsivity. Narcissism has also been studied in non-clinical populations through a social-personality psychology perspective. Unlike the *DSM* definition, but in accordance with historical and contemporary definitions of narcissism, Miller and Campbell (2008) explain that this approach views narcissism as a continuous personality trait found to various degrees in normal populations. Moderate levels of narcissism are not considered pathological and have been associated with positive well-being and high selfesteem. Yet, these individuals still portray some of the clinical behaviors associated with pathological narcissism such as grandiosity, entitlement, and a need for admiration.

It should be noted that narcissism is overwhelmingly considered to be a Western phenomenon due to societal ideals toward self-enhancement and self-worth (Lasch, 1978; Millon, 2011). This may be evidenced by the fact that the *International Statistical Classification of Diseases and Related Health Problems, 10th edition* (ICD-10; World Health Organization, 1999) does not include criteria for a diagnosis of NPD (Millon, 2011). Thus, clinicians diagnosing NPD must differentiate between pathologically inflated and empty self-worth and healthy self-confidence and self-esteem, along with the many other narcissistic traits that occur in a range from pathological to normal. Millon (2011) states that narcissism is encountered when there is a lack of empathy, exploitive relationships, and poor social reciprocity. Social learning theory's presentation of childhood narcissism posits that family environments that are overly permissive and doting create a foundation of inflated self-esteem and over confidence in social relationships (Millon, 2011). Thus, Millon (2011) argues that over indulgence as a child may cause children to display impaired social relationships, a fixation on self-image, and the ability to enhance self-esteem through control of social situations. As noted previously, American culture has recently begun to shift toward these parenting styles and social norms, possibly leading to an increase in narcissistic traits in younger American generations.

Using empirical support for observer-based measures of narcissism, Raskin and Terry (1988) provided construct validity of narcissistic traits when they found the NPI to be correlated with traits such as dominance, assertiveness, extraversion, exhibitionism, nonconformity, low interpersonal tolerance, hostility, need for power, impulsivity, need for achievement, and ego inflation among others. Additional research has shown social-personality trait narcissism to be related to high self-esteem and self-concept (Raskin & Terry, 1988; Rhodewalt & Morf, 1995). It is important to further understand the complexities of narcissism in order to characterize how these traits affect personal and interpersonal functioning. As Rhodewalt and Morf (1995) explained, persons with elevated narcissistic traits may experience a dilemma as they are dependent on external forces to support their self-esteem, yet show disdain and may be threatened by these same external forces. Thus, further investigation is needed to understand the adaptive aspects of narcissism.

#### **Measurement of Narcissism**

The construct of narcissism became a stronger area of interest due to the publication of the *DSM-III* (1980) 3rd ed., which included criteria for the Narcissistic Personality Disorder (Raskin & Hall, 1981). The proposed criteria included in the *DSM-III* (1980) 3rd ed. were developed by Theodore Millon in 1975, and revised in 1977, using a biosocial learning theory of personality pathology (Millon, 2011). Unlike contemporary psychoanalytic developmental
theories of narcissism of the period, Millon (1969) explained the development of narcissism stemmed from the overvaluation of a child's worth from adults in the child's environment, which could not be sustained in the outside world. Millon (1969) proposed five broad personality traits displayed by NPD individuals, which included: 1) inflated self-image (i.e., displays exaggerated self-assurance and inflated achievements); 2) interpersonal exploitiveness (i.e., takes others for granted and uses them to enhance self); 3) cognitive expansiveness (i.e., exhibits immature fantasies and takes liberties with facts to redeem self-illusion); 4) insouciant temperament (i.e., displays a nonchalant and imperturbable attitude unless narcissistic confidence is challenged); 5) deficient social conscience (i.e., shows a careless disregard for personal integrity and indifference to the rights of others). Further revisions were adapted to the cognitive expansiveness and insouciant temperament criteria, and were renamed to be expansive imagination (i.e., exhibits immature and undisciplined fantasies; prevaricates to further selfimpression) and supercilious imperturbability (i.e., appears nonchalant and coolly unimpressionable unless narcissistic confidence is confronted) respectively (Millon, 2011).

Subsequently, Raskin and Hall (1981) developed the NPI to measure the finalized criteria set forth by the *DSM-III* (1980) 3rd ed., which included, (a) grandiose sense of self-importance, (b) fantasies of success and power, (c) exhibitionism, (d) cool indifference or marked rage, inferiority, humiliation toward criticism, indifference from others, or defeat, (e) and entitlement, exploitiveness, or a lack of empathy. The *DSM-III* (1980) 3rd ed. criteria encompassed the grandiose aspects of narcissism and have been revised to support grandiosity as the foundation for narcissism and NPD (Pincus et al., 2009). The availability of the NPI allowed for an increase in research evaluating the construct of narcissism in clinical, and more importantly, subclinical settings (Wink, 1991). An additional measure developed and used to evaluate personality traits,

especially pathological personalities, was created by Millon (1977) named the Millon Clinical Multiaxial Inventory (MCMI). The current formulation of the MCMI is in its third edition (MCMI-III; Millon, Millon, Davis, & Grossman, 2009) and has allowed for further understanding of NPD, as it has a strong diagnostic foundation in the *DSM-5* (2013) 5th ed. criteria. The MCMI's use of base rate scores to determine the prevalence of particular personality traits has allowed for a richer understanding of the gradation of narcissism among clinical and subclinical populations through its specific narcissism scale (Millon, 2011). Beyond the understanding of the prevalence of narcissistic traits an individual possesses, the MCMI allows for richer and more complete knowledge of the individual's personality in order to guide diagnoses and treatment (Millon, 2011).

Additionally, the stimulated interest surrounding NPD was associated with the rise in the study of narcissistic traits in non-clinical populations. Lasch (1978) argued that narcissistic personality traits were prevalent in the general population. Furthermore, Emmons (1987) considered narcissistic personality traits found in the general population to be subclinical. The advent of the NPI allowed for the measurement of narcissistic traits in the non-clinical population, which became the standard instrument for measuring narcissistic tendencies in the general population (e.g., Twenge, 2009; Wallace & Baumeister, 2002). Thus, researchers were able to study narcissism as a continuous personality variable in the general population rather than only as a clinical pathological personality disorder (e.g., Rhodewalt & Morf, 1995; Stucke, 2003). Meta-analytic research conducted by Twenge et al. (2008) analyzed nearly three decades worth of NPI scores, which included 85 subclinical undergraduate populations from multiple college campuses. Results of the meta-analysis indicated that two-thirds of the recent undergraduate population scored higher than the mean of the undergraduate samples from 1979-

1985; a 30% rise in subclinical narcissistic trait endorsement (Twenge et al., 2008). The prevalence of the NPI to measure non-clinical populations' narcissistic characteristics in countless research studies since its inception in 1979 indicates the pervasiveness of narcissistic traits in the general population. Further research validated the construct of narcissism put forth by the *DSM-III* (1980) 3rd ed. and its subsequent revisions (e.g., Emmons, 1984, 1987; Pincus et al., 2009; Raskin & Terry, 1988), however, the singular focus on the grandiosity of narcissism did not seem to fully capture the clinical and subclinical representations of narcissism.

#### Summary of Literature on Narcissism

There is a current belief that narcissism in on the rise in the general population of younger generations in the United States (Twenge and Campbell, 2009). Millon (2011) supports this characterization of the younger generations in America being narcissistic, stating that NPD and its subsequent subclinical traits are considered a Western phenomenon and that current parenting styles foster narcissistic development. In accordance with the historical perspective of narcissism research by Kohut (1968, 1971, 1977), Millon (1969), and Kernberg (1970, 1975), Millon (2011) described that individuals who are over-valued by their parents develop an inflated sense of self that cannot be sustained naturally, thus leading to the development of narcissistic personality traits to maintain the idea of superiority and grandiosity. Overall, clinical narcissists can best be described as individuals who lack empathy, exploit others for personal gain, have an exaggerated sense of entitlement and self, and tend to become envious of others (APA, 2013). However, such a characterization tends to focus on the overt personality traits of these individuals, while neglecting the internal conflicts as well as the subclinical narcissistic personality traits of individuals. Historically, Kohut (1971) and Kernberg (1975) explained that individuals with elevated narcissistic traits experience low self-esteem, anxiety, and an emotional vulnerability stemming from a poor sense of self when specific narcissistic developmental needs were not met. The theory that narcissism had developmental stages allowed narcissistic personality traits to be viewed on a spectrum from healthy to pathological (Kohut, 1971). More recent theorists have posited a distinct dichotomy of these clinical and subclinical overt/grandiose traits and the covert/vulnerable traits of narcissism, with each type of narcissist presenting their personalities in a similar yet unique way (Millon, 2011; Wink 1991). In order to measure clinical narcissism, Raskin and Hall (1981) developed the NPI based on the *DSM-III* (1980) 3rd ed. criteria for NPD, however, subsequent researchers applied the NPI to subclinical populations with narcissistic traits as they took notice of the rise in narcissism among the general population (Emmons, 1984, 1987; Raskin & Terry, 1988).

## **Achievement Goal Theory**

Achievement goal theory was first developed through the study of students experiencing unique and distinct motivations, cognitions, and affects based upon the particular achievement goals they employed (Elliot, Murayama, & Pekrun, 2011). Achievement goal theory has been generally defined as the motivation individuals possess for achievement in an academic setting, as well as other settings (Elliot & Dweck, 2005). Dweck (1999) explained that achievement goal theory sought to determine why some individuals are motivated to persevere when faced with adversity, while others are unmotivated in such situations. Dweck and Leggett's (1988) early conceptualization of achievement goal theory focused on patterns of behavior and their association to personality. This research explained goals as either helpless- or mastery-oriented. Helpless goals were summarized as being ones that avoided challenging tasks and lead to poor performance when obstacles were encountered (Dweck & Leggett, 1988). Conversely, masteryoriented goals involved seeking challenging tasks and remained persistent when failure was encountered (Dweck & Leggett, 1988). Moreover, Dweck and Elliot (1983) conceptualized goals as the disposition individuals use to interpret and react to situations. They developed a dichotomy between performance and learning goals, where performance goals were attributed to the individual's need to gain positive judgments of competence while learning goals centered on the individual increasing competence in the subject (Dweck & Elliot, 1983). Ames and Archer (1988) further explained achievement goals as individual dispositions or orientations, which provided a schema of beliefs and feelings toward achievement situations as well as classroom specific structures or contexts which affected student's perceptions, learning strategies, and attributions. Therefore, achievement goals could be viewed as individual dispositions or task contextual measures of achievement motivation (Ames & Archer, 1988). Overall, the present study employs a contextual approach to induce achievement goals through mastery or performance tasks.

Currently, researchers have recognized that achievement goal theory is divided into two conceptually distinct achievement goal constructs, which include the goal orientation model and the standards model (Elliot et al., 2011). The goal orientation model described achievement goals as the reasoning or purpose for an individual's specific achievement motivation (Maehr, 1989), whereas the standards model outlined achievement goals as related to task-specific goals or aims (Elliot et al., 2011). Moreover, the goal orientation construct focused on how individuals ordinarily view competence, typically through mastery, or developmental goals and performance, or demonstration goals (Elliot et al., 2011). In contrast, the standards model focused on how the evaluative standards of an individual shape their desire to seek or avoid competency in a specific setting (Elliot et al., 2011). To further differentiate these achievement goal constructs, the goal orientation model defined mastery goals as an individual's motivation

towards success by increasing skill and knowledge towards mastery of the material (Midgley, Kaplan, Middleton, & Maehr, 1998). Additionally, ability or performance goals were characterized by the individual's perception of success in comparison to others' performance, with these goals being further divided into performance approach and avoidance goals (Midgley et al. 1998). In comparison, the standards model divided mastery goals into mastery approach and mastery avoidance to match the positive and negative direction of performance goals (Elliot & McGregor, 2001). Moreover, the standards model proposed further bifurcation of mastery goals into the absolute and interpersonal standards of evaluation divided among self-, task-, and other-goals, which can be affected by the specific situation (Elliot et al., 2011).

## **Overview of Specific Achievement Goals**

Theory defining specific achievement goals and their impact on academic motivation has evolved from a dichotomous model to more recent 2 × 2 and 3 × 2 models. As previously noted, achievement goals were first separated into performance goals and mastery goals (Ames & Archer, 1987). However, research by Elliot and Harackiewicz (1996) posited that performance goals can be divided further into performance approach and performance avoidance goals. Performance approach goals are considered by the individual to provide positive outcomes, such as appearing competent when compared to peers (Elliot & Harackiewicz, 1996). In essence, performance approach goals are employed to demonstrate ability to the assessor, self, and peers. Conversely, performance avoidance goals are self-regulatory strategies employed to avoid potential negative outcomes (Elliot & Harackiewicz, 1996). Thus, an individual may avoid engaging in a specific task due to a fear of failure (Elliot et al., 2011). This trichotomy of mastery, performance approach, and performance avoidance goals was investigated through confirmatory factor analysis and found to be the best fit for achievement goal theory (Elliot & Church, 1997).

The trichotomy of achievement goals is evident in academic settings, where students typically employ these goals as an achievement motivation strategy. Using achievement goals to understand a student's functioning is well supported in research (Pintrich, 1999; Urdan, 1997). Moreover, understanding a student's achievement goals in the classroom provides a greater understanding of the individual's motivation to engage, ability to think and willingness to perform which leads to achievement (Wolters, 2004). A study conducted by Miller, Greene, Montalvo, Ravindran, and Nichols (1996) found that undergraduate students with mastery goals tended to display greater effort and persistence on academic tasks. Students who employ mastery goals also view effort as a significant component to success, which may signal higher levels of engagement, reduced anxiety, and increased positive affect (Covington, 2000; Dweck & Leggett, 1988). Additionally, students endorsing mastery goals typically displayed less procrastination and a greater willingness to partake in additional courses (Wolters, 2004). Covington (2000) noted that students employing mastery goals develop deep-level strategic processing and effective problem solving skills, which lead to increased academic achievement. However, some research has found that students employing mastery goals did not necessarily earn high overall classroom performance and grades (Pintrich, 2000).

Similar to students employing mastery goals, those students who endorse performance approach goals display specific motivations and behavior patterns in order to achieve. Researchers have demonstrated that performance approach goals are indicative of increased achievement motivation and academic performance (Barkoukis, Ntoumanis, & Nikitaras, 2007). Specifically, students endorsing performance approach goals are motivated to perform well in order to demonstrate their ability and competence (Elliot & Dweck, 1988). For example, undergraduate students who endorsed performance approach goals were found to exert additional effort and persistence, yet they utilized surface processing skills demonstrating little use of study strategies (Elliot & McGregor, 2001). Additionally, students employing performance approach goals performed well on classroom exams, as research has determined that these individuals aim to outperform and appear more competent than others (Hulleman, Schrager, Bodmann, & Harackiewicz, 2010).

By contrast to individuals utilizing mastery and performance approach goals, research indicated that students endorsing performance avoidance goals focused on wanting to avoid seeming incompetent on challenging tasks, which led to disengagement and a lack of motivational willingness (Wolters, 2004). Research also suggested that performance avoidant students displayed an increased fear of failure and lacked intrinsic motivation leading to poor academic performance (Barkoukis et al., 2007; Midgley et al., 1998). Further, these students tended to procrastinate or gave up when tasks became too difficult and showed little interest in taking additional courses in the subject matter (Urdan, 1997). Elliot and McGregor (2001) also found that students endorsing performance avoidance goals typically employed disorganized study strategies and performed poorly on exams.

More recently, the achievement goals were further altered to include mastery approach and mastery avoidance goals, creating a  $2 \times 2$  structure of achievement goals (Elliot & McGregor, 2001; Hulleman et al., 2010). The approach and avoidance goals demonstrated a positive and negative direction, or valence, within the goal structure (Elliot & McGregor, 2001). Individuals endorsing mastery approach goals aimed to understand the task or ability, utilizing self-regulatory techniques to develop stronger academic competence (Elliot & McGregor, 2001). In contrast, individuals who employed a mastery avoidance goal sought to avoid a more complete understanding of the task or ability (Elliot & McGregor, 2001). Moreover, these individuals focused on their incompetence within a given task or self-regulatory processes, while wanting to avoid providing the wrong answers and losing their abilities instead of focusing on providing the correct response and improving upon their abilities (Elliot & McGregor, 2001).

These mastery approach and avoidance goals also encompassed the concepts of absolute and interpersonal standards (Elliot & Murayama, 2008). The absolute standards represented the specific task demands associated with the classroom or academic setting, while the interpersonal standards focused on the individual's comparison of their present performance to the previous performance (Elliot et al., 2011). Thus, the  $2 \times 2$  model of achievement goals aimed to understand the specific task evaluative demands and the individual's interaction with those demands to develop an understanding of achievement motivation (Elliot & Murayama, 2008). Additionally, the  $2 \times 2$  model of achievement goals had strong empirical support within the literature of achievement goal theory, demonstrating a better fit and unique predictors when compared to the trichotomous and dichotomous structures (Elliot & McGregor, 2001; Elliot & Murayama, 2008).

However, a newer model of achievement goal structure has been proposed by researchers, positing that mastery approach and avoidance goals can be further divided by the absolute and interpersonal standards of evaluation creating a  $3 \times 2$  goal structure (Elliot et al., 2011). Elliot et al. (2011) argued that each goal construct should include the evaluative standards in conjunction with the positive or negative valence proposed in the  $2 \times 2$  model. The three proposed evaluative standards included absolute, or task-based, intrapersonal, or self-based, and interpersonal, or other-based, standards across both mastery approach and avoidance

achievement goals (Elliot et al., 2011). Moreover, Elliot et al. (2011) believed that task- and self-based goals could be different based upon the specific situation in which an individual is placed. This  $3 \times 2$  structure was empirically supported through confirmatory factor analysis, with results demonstrating the new model as a better fit than the  $2 \times 2$  structure (Elliot et al., 2011).

Generally, task-based goals reflected the individual's metacognitive abilities to determine performance within a given task (Elliot et al., 2011). More specifically, individuals who employed task-based approach goals were able to determine their performance within a given task more objectively and sought to perform better than others, while those with task-avoidance goals aimed to not perform worse than others (Elliot et al., 2011). Furthermore, Elliot et al. (2011) explained that students possessing self-based goals evaluated their academic behavior by comparing their past performance and perceived potential with their current level of performance. These individuals typically developed their own personal evaluative standards to assess their performance, requiring a high level or mental processing (Elliot et al., 2011). Individuals with self-approach goals want to improve upon the past performances, whereas individuals endorsing self-avoidance goals aim to not perform worse than in previous experiences (Elliot et al., 2011). In contrast to the task- and self-base goals, individual's endorsing other-based goals typically compared themselves to classmates or through their performance on standardized assessments, relying on concrete comparisons to evaluate their performance. Specifically, students employing other-approach goals aim to outperform others and students endorsing other-avoidance goals desire to not perform worse than their peers (Elliot et al., 2011). Although this model has been empirically supported through confirmatory factor

analysis (Elliot et al., 2011), there is still debate within the literature regarding the six-goal structure and its effectiveness with measuring achievement goals (Wynne, 2014).

## Achievement Goal Theory and its Link to Narcissism

The relationship of narcissism to achievement goals is not well established, but early work related to achievement goals provides preliminary support for a link between these constructs. As explained previously, Dweck and Leggett's (1988) early conceptualization of achievement goal theory linked achievement goal dispositions to personality. Both students employing helpless and mastery goals exhibited specific dispositions that lead to their interpretation of and reactions to certain situations, which predicted motivation, behavior and achievement in academic settings (Dweck & Elliot, 1983; Dweck & Leggett, 1988). Additionally, when students were placed in classrooms utilizing mastery or performance goals, the specific goal context significantly predicted students' perceptions, motivations, and outcomes (Ames & Archer, 1988). It may be argued that these dispositions and contexts can be extended to the current conceptualization of mastery and performance goals being viewed as predictors of achievement motivation.

Similarities exist between specific traits associated with elevated levels of narcissism and motivations associated with specific achievement goals. For instance, individuals endorsing performance goals tend to be most concerned with competition among peers and demonstrating their competence to others (Dweck & Elliot, 1988), while persons with elevated narcissistic traits display traits of vanity and a sense of superiority due to their grandiose self-image (Kubaryck, Deary, & Austin, 2004). Fittingly, performance goals have been referred to as ego-involved goals (Nicholls, 1989) and self-enhancing goals (Skaalvik, 1997), which are descriptive terms

that could be used to explain an individual with elevated narcissistic traits and an inflated sense of self.

In accordance with the idea that goal orientations may signify underlying personality traits, individuals possessing elevated grandiose narcissistic traits typically are concerned with performance and desire a need for excessive admiration (Fossati et al., 2005), which parallels the motivation of students who employ performance approach goals. Furthermore, persons with elevated grandiose narcissistic traits require excessive admiration and they have a need to show superiority (Wink, 1991). These traits are similar to those of individuals employing performance approach goals, as research has shown these individuals require positive affirmation of their abilities and must demonstrate their competence to others in order to deflect negative self-assessments (Nicholls & Dweck, 1979). Additionally, Barkoukis et al. (2007) explained that individuals endorsing performance goals tend to try and outperform their peers, which parallels the grandiose narcissistic traits may externalize their failure on a performance task and blame others for their failures.

Moreover, individuals with traits associated with grandiose narcissism may not find a mastery task engaging, due to the lack of ability to show superiority in comparison to their peers. This may cause individuals displaying elevated grandiose narcissistic traits to be indifferent to the task. Similarly, individuals with elevated vulnerable narcissistic traits display specific patterns of behavior that correspond with individuals who endorse performance goals. Specifically, traits associated with vulnerable narcissism, such as elevated anxiety, hypersensitivity, and low self-esteem (Wink, 1991), mirror the disengagement and poor motivation in the face of challenging situations of performance avoidant individuals (Wolters,

2004). This may indicate that individuals possessing elevated vulnerable narcissistic traits may internalize their failures on a performance task. Similar to individuals employing performance avoidant goals, research found that persons with elevated vulnerable narcissistic traits tended to exhibit difficulties with academics (Weikel et al., 2010). Moreover, research explained that individuals utilizing performance avoidant goals were vulnerable to failure due to placing emphasis on outward measures of competence, making these individuals choose easier tasks or engage in handicapping behaviors to protect their self-esteem (Dweck & Leggett, 1988; Elliot & Dweck, 1988). This fear of failure displayed by students employing performance avoidant goals is comparable to the vulnerable narcissistic traits of defensiveness toward failure (Kernberg, 1975; Kohut, 1977) and pessimism (Wink, 1991). Similar to individuals with elevated grandiose narcissistic traits, individuals with elevated vulnerable narcissistic traits may find mastery tasks disengaging, as they still require competition, but these individuals may internalize their performance on mastery tasks more so than grandiose elevated individuals. Thus, it is posited that individuals with elevated subclinical grandiose and vulnerable narcissistic traits may employ different motivation strategies when placed in the same mastery or performance task.

While the  $2 \times 2$  model of achievement goal theory (i.e., mastery approach, mastery avoidance, performance approach and performance avoidance) has been found to have merit in measuring how an individual responds in an achievement context, the approach/avoidance aspect of it does not lend itself to experimental manipulation (i.e., creating specific approach and avoidance tasks in which individuals can be placed). Therefore, the dichotomy of mastery and performance goals was used in the current study to develop tasks that induced a mastery or performance goal without attempting to manipulate the participants' choice of approach or avoidance behaviors.

#### **Attribution Theory**

Researchers have developed a broad theory of cognitive and motivational attributions to understand and explain why individuals exhibit certain behaviors. Heider (1958) explained how individuals typically interpret situations in the environment, while finding that they attribute responsibility for their performances in these situations to themselves or to another person or situation. The theory generally describes attributions as the assignment of causes to an individual's actions and to the actions of others (Covington, 1992). Weiner et al. (1971) conceptualization of attribution theory further explains that individuals make attributions to ability, effort, task difficulty, and luck as the perceived cause of an outcome. Furthermore, Weiner (1985) posited that these causal elements are categorized across three dimensions; including locus of causality, stability, and controllability. Locus of causality refers to the location of the cause being either internal or external to the individual, while stability refers to the perception of the cause being constant and stable or temporary and unstable (Weiner, 2000). Elements considered to be internal processes include ability and effort, whereas task difficulty and luck are attributed to external forces (Weiner, 1985). Additionally, the causal elements of ability and task difficulty are considered stable due to their perceived consistency, while effort and luck are unstable causal elements because of their volatility (Covington, 1992). The final dimension of controllability is the individual's ascription of causality to a controllable aspect of life, such as effort, or to an uncontrollable aspect, such as illness (Covington, 1992). In essence, this theory combines two strands of attribution research, which include Heider's (1958) research on environmental factors that contribute to attributions and Rotter's (1966) work that focused on individual differences (internal vs. external) as perceived causation of behavior (Weiner, 1985). However, Weiner (1985) expanded upon this research to include a variety of emotional

experiences (i.e., anger, gratitude, guilt, pride) linked to attributions following success and failure. He argued that expectancy and affect guide subsequent motivational behavior.

# **Attributions for Success and Failure**

Causal attributions have been used to study behaviors related to health, education, law and business among other fields (Whitley & Frieze, 1986). More specifically, this model of attribution theory has been utilized to understand motivation and attributions of success and failure in academic settings (Weiner 1985; Weiner, Nierenberg, & Goldstein, 1976). Weiner et al. (1971) posited that success and failure outcomes in achievement-oriented situations lead the individual to seek an explanation for these outcomes with causal attributions. The use of this model of attribution theory to research achievement outcomes in educational settings has furthered the understanding of the causes identified by students for their successes and failures and the implications of these causes of students' affective reactions and subsequent behavior (Covington, 1992). Causal attributional theory has demonstrated that an individual's locus of causality can elicit incremental feelings of pride and self-esteem when a goal is attained (Weiner, 2000). Moreover, locus and controllability, in conjunction, influence strong emotions of guilt or shame after nonattainment of a goal (Weiner, 2000). Weiner (1985) also argued that, in general, causal attributions are best understood through the behavioral and emotional reactions they elicit when placed in achievement oriented situations. Covington (1992) explained that students who are motivated to succeed attribute their success to internal factors, such as high ability and high effort, with their failures ascribed to low effort. The unstable factor of effort is viewed as the causal factor of success, leading to pride, and failure, leading to feelings of guilt, in successoriented students, which allows for the individuals to continue their striving for success even after failure (Covington, 1992).

Conversely, Covington (1992) explained that failure-prone individuals attribute their poor performance to lack of ability, which is an internal and stable factor, and effort leading to feelings of shame and pessimism for each task. When these individuals succeed, they attribute success to external and unstable factors, such as luck, leading to small amounts of pride and continued pessimism (Covington, 1992). The controllability dimension is accounted for by the successful individual being able to determine the magnitude of effort applied to the task, whereas the failing individual deems that factors related to luck cannot be controlled (Weiner, 2000). Thus, Weiner's causal attribution theory further enumerates achievement motivation and emotions of students as it pertains to academics (Covington & Omelich, 1979; Weiner, 1985).

## **Achievement Goals and Causal Attributions**

Research within the fields of attribution and achievement goal theories has demonstrated a strong link between them (Covington & Omelich, 1979). In fact, research has demonstrated that attribution theory and achievement goal theory are complementary theories that combine to provide a well-rounded understanding of achievement motivation (Ames & Archer, 1988; Weiner, 1985). Notably, Weiner's (1985) theory of causal attributions of achievement motivation posited that within an achievement task or context, specific causal attributions are perceived by an individual that cause success or failure. Ames and Archer (1988) found that individuals who perceived an academic task as emphasizing mastery goals attributed their success to their ability and effort within the class. Furthermore, a review of the research by Covington (2000) stated that individuals who endorse mastery goals place a greater focus on effort to determine performance outcomes as well as to provide them adaptive skills to deal with their occasional failures. Students utilizing mastery achievement goals connect internal attributions of high effort with success and view failure as the use of ineffective learning strategies (Covington, 2000). Mastery goals created protective factors towards failure because the perceived cause of a student's failure was due to poor effort, which constitutes an internal and generally controllable attribution, but unstable in the immediate performance (Covington, 1992).

Conversely, individuals perceiving an academic task as emphasizing performance goals attributed their failure to external factors (Ames & Archer, 1988). Covington (2000) explained that students who employed performance goals typically viewed their ability (internal attribution) as the cause of their successes, but often attributed their failure to external factors by blaming others and making excuses for their failures (external attributions). Covington (1992) suggested that continued failure for students with performance goals would lead to avoidance and a lack of motivation to engage in future academic tasks. This was due to their fear of failure attributed to their perceived lack of control over the outcomes, such as task difficulty and luck (Covington, 1992). Thus, a student's causal attributions for success and failure depend upon the perceived structure of the achievement task or the individual's achievement goals (Ames & Archer, 1988; Weiner, 1985).

## Narcissism and Attributions for Success and Failure

Research studying narcissistically organized individuals has utilized attribution theory to understand their affect intensity with regard to success and failure (Emmons, 1987; Rhodewalt & Morf, 1998). Such research has suggested that persons with elevated narcissistic traits had an exaggerated tendency to internalize their successes, while externalizing failure in order to protect or enhance their self-esteem (Emmons, 1987). The internalized success of these individuals was commonly attributed to high ability, whereas externalized failure was attributed to task difficulty (Stucke, 2003). Additionally, Kernis and Sun (1994) reported that individuals displaying high levels of narcissistic traits attributed positive feedback to a more competent reviewer and a valid assessment tool, while they attributed negative feedback to a poor evaluator and a less valid assessment tool. Furthermore, increased self-aggrandizing attributions were reported when persons possessing elevated narcissistic traits experienced success (Rhodewalt and Morf, 1995). In contrast, when narcissistically organized individuals experienced failure, researchers explained that these individuals reported high levels of anger and anxiety (Rhodewalt & Morf, 1998). Of note, Rhodewalt and Morf (1998) found that individuals with elevated narcissistic traits endorsing the highest level of reported ability and expectancy exhibited the greatest amount of anger and anxiety when failure was experienced. Emmons (1987) explained that these egotistical attributions may be expected from individuals with elevated narcissistic traits due to their vulnerable self-esteem, motivating them to inflate their sense of self.

Further person-specific causal attribution research has been conducted with narcissistic trait individuals and attributional styles demonstrating similar results as those previously referenced. Hartouni (1992) evaluated the causal attributions of individuals with elevated narcissistic traits, finding that they held internal and stable casual attributions for positive events and supporting a narcissistic attributional style. Yet, the research found no significant difference in causal attributions between narcissistically organized participants and the control group for positive events (Hartouni, 1992). A replication of Hartouni's study was conducted by Ladd, Welsh, Vitulli, Labbe, and Law (1997) using a non-clinical population of narcissistically organized individuals. The researchers explained that all participants scoring high on the NPI reported more internal attributions to positive events, while also finding that men who scored higher on the NPI demonstrated external attributions to negative events (Ladd et al., 1997). It has often been proposed that non-clinical individuals with elevated narcissistic traits will

establish an external, unstable attributional style (Hartouni, 1992; Ladd et al., 1997; Rhodewalt & Morf, 1995). However, each of these studies fails to establish a casual attributional style for individuals with elevated narcissistic traits when they experience a negative event or receive negative feedback.

Studies have specifically focused on individuals with elevated narcissistic traits' attribution to academic success and failure as well (Farwell & Wohlwend-Lloyd, 1998; Stucke, 2003). Research conducted by Farwell and Wohlwend-Lloyd (1998) investigated undergraduate students with narcissistic traits, finding that students high on narcissism were more likely to predict high grade performance (ability attribution) but did not perform as well as they predicted on the final course grade. Additionally, they found these individuals over-estimated current course grades as well as performance of a cooperative task, demonstrating unrealistic selfenhancement attributions of ability and effort (Farwell & Wohlwend-Lloyd, 1998). Stucke's (2003) study of narcissism related to performance on an intelligence test supported prior narcissistic attribution research, and found that when persons with elevated narcissistic traits experienced failure they displayed anger and attributed the outcome to task difficulty. Yet, when non-narcissists experienced failure they became depressed and attributed the outcome to ability.

The sum of these findings reflect the characterization of individuals with elevated narcissistic traits developed by Kohut (1971) and Kernberg (1975), which states that these individuals display aggression in order to devalue others to protect their ego and self-esteem. Kernberg (1975) further argued that narcissistically organized individual's self and ideal-self representations are poorly differentiated, creating a grandiose self-concept to diminish the internalizing of typical failure feedback. Horowitz (1989) explained that this grandiose self-concept acts as a defense toward appearing as weak, damaged, or incomplete. Furthermore,

Raskin, Novacek, and Hogan (1991) described narcissistic grandiosity as a self-esteem management technique to protect the self from self-doubt, depression, and failure, while Raskin and Novacek (1989) posited that narcissistically organized individuals fantasize about success, power, and glory to manage stressful situations and protect their self-esteem. Moreover, Kernberg (1975) and Kohut (1977) explained that individuals with elevated grandiose (overt) narcissistic traits display self-assuredness and aggression, but individuals with elevated vulnerable (covert) narcissistic traits present as anxious and become defensive toward failure. Grandiose narcissistic representations have been recognized in most attribution research outlined above, though it may be assumed that vulnerable narcissistic traits are commonly ascribed to non-narcissists. Westen (1990) argued that research and theories of narcissism often rely on the static components of narcissism (i.e., grandiosity) and do not take into account the dynamic make-up of narcissism, leading to a misunderstanding of situational determinants and alterations in the functioning of different individuals. Thus, there is a dearth of research evaluating the unique causal attributions for success and failure of individuals possessing elevated grandiose and vulnerable narcissistic traits. Therefore, research to understand the specific causal attribution styles that may underlie academic success and failure among grandiose and vulnerable non-clinical narcissism must be conducted.

#### **CHAPTER III**

## METHODOLOGY

#### **Participants**

Participants of this study were a diverse population of male (n = 62) and female (n = 139) undergraduate students from multiple colleges and universities in the United States. In all, 202 participants submitted completed surveys. Responses gathered from the demographic questionnaire indicated that 75% of participants were White, 9% were Asian, 6% were Hispanic, 4.5% were multiracial, 4% were Black, 0.5% Pacific Islander, and 1% were Other. Of the students who participated in this study, 50 (24.8%) were freshmen, 39 (19.3%) were sophomores, 43 (21.3%) were juniors, and 67 (33.2%) were seniors, with 1.5% of participants not reporting a school year. There were 53 participants aged 18, 38 aged 19, 34 aged 20, 37 aged 21, 23 aged 22, and 17 aged 23 and above. Most participants (43.1%) had a GPA between a 4.0 and a 3.6 with 38.6% of students attaining a GPA between 3.1 and 3.5, 11.9% of participants achieving a GPA between 2.6 and 3.0, 2.0% of participants between a GPA of 2.1 and 2.5, and 1.5% of participants with a GPA between 1.6 and 2.0.

## **Instruments and Materials**

#### **Demographics Questionnaire**

Demographic information including participant age, gender, ethnicity, school year, GPA, and college major was collected from participants. The demographics questionnaire is included in Appendix A. Participants completed the surveys anonymously and were not asked to provide information that would individually identify them.

### **Narcissistic Personality Inventory-16**

The study used the shortened Narcissistic Personality Inventory, 16 item scale (NPI-16; Ames, Rose, & Anderson, 2006) to provide a measure of grandiose narcissism (Table 1). The NPI-16 is a 16-item measure that utilizes forced choice item responses between two statements taken from the NPI-40 (Raskin & Hall, 1981). Sample items include "I am an extraordinary person/I am much like everybody else." and "I like to be the center of attention/I prefer to blend in with the crowd." The NPI-40 encompassed subscale scores that could be calculated on four (Emmons, 1987) or seven dimensions (Raskin & Terry, 1988). Items that loaded highest on these subscales were selected for the NPI-16. However, this research aimed to calculate a mean score of grandiose narcissism since it focuses only on grandiose narcissistic traits established by Wink (1991). Thus, the use of the shortened NPI-16 is useful for measuring the grandiose narcissism mean score (Ames et al., 2006).

The 40-item NPI is the most commonly used and internally reliable measure of narcissism (Twenge et al., 2008). Raskin and Terry (1988) developed the 40-item NPI through a principal-components analysis, where items with negative loadings and those that did not contribute to the factor structure of the scale were eliminated. Ames et al. (2006) selected items for inclusion in the NPI-16 from the NPI-40, and conducted a factor analysis which resulted in similar loadings as the NPI-40. The revised 16-item scale had a correlation of .90 with the longer, 40-item NPI version. Additionally, the internal consistency of this measure was found to be acceptable (a = .72). The NPI-16 also demonstrated similar correlations with personality factors and self-esteem as well as similar, but insignificant, gender differences (Ames et al., 2006).

# Table 1

Items of the Narcissistic Personality Inventory, 16 Items

Measure	Item Code	Item Description
	NID11	
NPI-16	NPII	I know that I am good because everybody keeps telling me so
		When people compliment me I sometimes get embarrassed
	NP12	I like to be the center of attention.
		I prefer to blend in with the crowd.
	NPI3	I think I am a special person.
		I am no better or no worse than most people.
	NPI4	I like having authority over people.
		I don't mind following orders.
	NPI5	I find it easy to manipulate people.
		I don't like it when I find myself manipulating people.
	NPI6	I insist upon getting the respect that is due me.
		I usually get the respect that I deserve.
	NPI7	I am apt to show off if I get the chance.
		I try not to be a show off.
	NPI8	I always know what I am doing.
		Sometimes I am not sure of what I am doing.
	NPI9	Everybody likes to hear my stories.
		Sometimes I tell good stories.
	NPI10	I expect a great deal from other people.
		I like to do things for other people.
	NPI11	I really like to be the center of attention.
		It makes me uncomfortable to be the center of attention.
	NPI12	People always seem to recognize my authority.
		Being an authority doesn't mean that much to me.
	NPI13	I am going to be a great person.
		I hope I am going to be successful.
	NPI14	I can make anybody believe anything I want them to.
		People sometimes believe what I tell them.
	NPI15	I am more capable than other people.
		There is a lot that I can learn from other people.
	NPI16	I am an extraordinary person.
		I am much like everybody else.

# Hypersensitive Narcissism Scale

The study used the Hypersensitive Narcissism Scale (HSNS; Hedin & Cheek, 1997) to measure vulnerable narcissistic traits (Table 2). The HSNS is a 10-item measure with a Likert

style scale, where responses range from 1 (*very uncharacteristic or untrue, strongly disagree*) to 5 (*very characteristic or true, strongly agree*). The scale includes items such as "When I enter a room I often become self-conscious and feel that the eyes of others are upon me." and "I dislike sharing the credit of an achievement with others." A full scale score was calculated by adding each answer, with higher scores indicating greater presence of vulnerable narcissistic traits.

The HSNS was developed by correlating items from Murray's (1938) Narcism [*sic*] Scale with an MMPI-based composite measure of vulnerable narcissism. Hedin and Cheek (1997) found that ten items formed a reliable measure and were correlated with the Big Five Inventory of personality, while having a near zero correlation with the NPI (r = .02). This signifies that the HSNS and the NPI measure two distinct aspects of narcissism. Internal consistency for the HSNS was adequate (a = .69).

## Table 2

Measure	Item Code	Item Description
HSNS	HSNS1	I can become entirely absorbed in thinking about my personal
		affair, my health, my cares or my relations.
	HSNS2	My feelings are easily hurt by ridicule or the slighting
		remarks of others.
	HSNS3	When I enter a room I often become self-conscious and feel
		that the eyes of others are upon me.
	HSNS4	I dislike sharing the credit of an achievement with others.
	HSNS5	I feel that I have enough on my hands without worrying
		about other people's troubles.
	HSNS6	I feel that I am temperamentally different from most people.
	HSNS7	I often interpret the remarks of others in a personal way.
	HSNS8	I easily become wrapped up in my own interests and forget
		that existence of others.
	HSNS9	I dislike being with a group unless I know that I am
		appreciated by at least one of those present.
	HSNS10	I am secretly "put out" or annoyed when other people come
		to me with their troubles, asking for my time and sympathy.

## Items of the Hypersensitive Narcissism Scale

## The Revised Causal Dimension Scale

The study measured causal attributions of participants using the Revised Causal Dimension Scale (CDSII; McAuley et al., 1992) with modified directions (Table 3). The scale is composed of 12-items loaded onto four dimensions, which include Locus of Causality, Stability, Personal Control, and External Control. Each dimension includes three questions. Participants were instructed to "Think about the cause(s) or reason(s) for your performance on this task. The items below concern your impressions or opinions of the cause or causes of your performance. Select one number for each of the following questions." Then, participants were given this sentence stem; "Is the cause(s) for your performance something:" followed by two statements on a scale, such as "that reflects an aspect of you/reflects an aspect of the situation". They were then presented with a 9-point Likert scale with two opposing statements that complete the above sentence anchored on either end of the scale. For example, the statement anchored at 9 stated, that reflects an aspect of you and the statement anchored at 1 stated reflects an aspect of the situation. Other opposing statement pairs included, manageable by you (9) or not manageable by you (1), permanent (9) or temporary (1), and over which others have control (9) or over which others have no control (1). Dimension scores are calculated by summing each dimension item score, with the higher sum being indicative of greater endorsement of the causal attribution.

The CDSII was developed according to Weiner's (1985) attributional model of achievement motivation. The revised scale was derived through experiments with achievement related outcomes in order to provide data for a confirmatory factor analysis. A four-factor model was found to provide a strong fit to the data (GFI = .958). The locus of causality and stability dimensions were uncorrelated (r = .002), whereas personal control and external control had a significant negative correlation (r = -.558). Internal consistencies of each of the four dimension

scales were acceptable; locus of causality (a = .67), stability (a = .67), personal control (a = .79), and external control (a = .82).

Table 3

Subscale and Item Descriptors of the Causal Dimension Scale-Revised

Measure	Item Code	Item Description
CDSII		
Locus of causality	LOC1	Think about the cause(s) or reason(s) for your performance on this task. Is the cause(s) of your performance something that reflects an aspect of situationreflects an aspect of the yourself Think about the cause(s) or reason(s) for your
	LOC2	performance on this task. Is the cause(s) of your performance something inside of yououtside of you
	LOC3	Think about the cause(s) or reason(s) for your performance on this task. Is the cause(s) of your performance something about yousomething about others
Stability	STB1	Think about the cause(s) or reason(s) for your performance on this task. Is the cause(s) of your performance something permanenttemporary
	STB2	Think about the cause(s) or reason(s) for your performance on this task. Is the cause(s) of your performance something stable over timevariable over time
	STB3	Think about the cause(s) or reason(s) for your performance on this task. Is the cause(s) of your performance something unchangeablechangeable

# Mastery and Performance Word Jumble Puzzle Tasks for Success and Failure

The study used a novel task in order to place participants in a mastery or performance task, with each participant randomly provided with contrived success and failure feedback after the completion of the task (Appendix B). Participants in the mastery task were presented with two tasks. They received feedback after both tasks. Following the first task, participants received feedback stating that their outcome on the second task would be compared to their performance on the first task to set up a mastery task. After the second task, participants were provided with feedback that was based on their assigned outcome and not on their actual performance. Individuals in the performance task were also presented with two tasks. They received feedback after both tasks as well. Following the first task, participants were given feedback stating that their performance on the first task was practice and that their performance on the second task would be compared to others to set up a performance task. After the second competitive task, they were provided with contrived feedback unrelated to their actual performance regarding how they performed in comparison to others. All participants were presented with a series of jumble puzzles, where letters were presented that formed a word. They were informed that the task was a measure of their processing speed and that it was highly predictive of college performance and GPA. Sets of letters were presented in groups so that the participant must type the word into the survey and click the next button to receive the next group of jumbled letter sets. Participants were instructed to form the word using the letters presented and to work as fast as they could. A five minute time limit, broken into one minute intervals per each group of jumbled letter sets, was provided to participants on each task to complete each series of word jumbles. Sets of 10 word jumbles were provided on each task so that participants would find difficulty in accurately assessing their performance on the tasks. Once the participants completed the series of jumbles, they were randomly presented with a screen suggesting success or failure on the given task. The results presented to the participants were unrelated to their true performance on the task, so that success and failure were randomized and experimentally manipulated by the researcher.

## Procedure

Before data were collected and analyzed, the current study was approved by Fordham University's Institutional Review Board (Appendix C). The current study was categorized as expedited due to the lack of any anticipated harm to human participants, which classified as minimal risk. In order to provide confidentiality to the participants of this study, specific measures were taken. All data collected in the study were anonymous. Informed consent statements did not require a name, only that the volunteer participants electronically read and accepted the informed consent guidelines prior to beginning the study.

## **Data Collection**

Fordham University's online subject pool and snowball sampling were used to recruit participants for this study. Participation was restricted to undergraduate college students in the United States, aged 18–25. Efforts were made to target an equal number of male and female participants, who represented a diverse sample of ethnicities and socioeconomic status.

An online survey methodology was used to collect data. Participants were recruited using Fordham University's online research student pool as well as snowball sampling via Facebook. An email (Appendix D) was sent to all undergraduate students who had opted into the student pool, as well as individuals on Facebook via snowball sampling. Using snowball sampling, a Facebook message was posted and messaged to Facebook users, with undergraduate students being the only participants included in the study's results. The Facebook message and email to the online research student pool included a description of the proposed research, where participants were provided a link to the online survey consisting of the questionnaires and tasks provided above. For this study, participants from Fordham University's online student pool and snowball sampling interested in participating in the study clicked a link and viewed a consent form (Appendix E). Participants were informed that their participation was voluntary and that they had the right to withdraw their consent at any time. Upon clicking the link on the consent form, and therefore consenting to participate, participants began the online study. The online web survey was hosted by *Qualtrics*. First, participants were prompted with this statement: "I have not participated in the study already or heard about the information pertaining to this study from a person who has previously taken part in this study". Participants were then asked to click the true or false option. This was to ensure participants who took the survey had not been made aware of the experimental manipulation within the study. Those participants who responded with a false answer were not included in the study. Participants were then directed to the NPI and the HSNS, with the order counterbalanced. However, participants were instructed that both the NPI and HSNS were general personality questionnaires. Investigation of the counterbalancing of the narcissism scales found no order effect. Next, participants were presented with the novel word jumble task, where each participant was randomly selected to engage in a mastery or performance task. Participants were also randomly selected to experience success or failure on their task. Once participants completed the task, they were directed to complete the CDSII. Participants had the option to discontinue at any time by exiting the web browser. After the survey was complete, participants were debriefed about their participation in the study (Appendix F). Participants were informed of the experimentally manipulated outcomes and directed to contact the researcher if they required further assistance or if they wanted to receive the results of the study. The entire data collection procedure of the study (including the consent portion) was conducted on *Qualtrics*.

#### **CHAPTER IV**

## RESULTS

The present study examined the potential implications the subtypes of grandiose and vulnerable narcissism may have on locus of causality and stability attributions when placed in mastery or performance situations and experiencing success or failure outcomes. Four research questions were investigated to conduct the current study. All four research questions were analyzed through a simultaneous multiple regression analysis. Overall, these analyses aimed to explore the potential differences success and failure outcomes, experienced in a mastery or performance task, had on grandiose and vulnerable narcissistic trait individual's attributions of locus of causality and stability.

#### **Overview of Data Administration and Missing Data**

Inspection of the data revealed that of the 246 participants who began the questionnaire, 44 individuals failed to satisfactorily complete a large portion of the items administered. Incomplete responses ranged from providing only demographic information to providing sporadic responses to one or both of the narcissism scales. This resulted in 18% of the data being dropped, leaving 202 completed questionnaires for analysis. Inspection of the data for the 202 remaining participants revealed that only one missing value on the outcome measure of Locus of Causality was found. The missing value was replaced with the average of all of the responses from all participants for that item.

#### **Preliminary Analyses of Variables**

Descriptive statistics and Cronbach alpha reliability coefficients for all of the scales (i.e., NPI-16, HSNS, and the CDSII subscales of Locus of Causality and Stability) are provided in Table 4. Bivariate correlations between the NPI-16, HSNS, Locus of Causality and Stability

CDSII scales were also investigated (see Table 5). Table 6 provides a breakout of these measures by experimental condition (i.e., success or failure; mastery or performance). The NPI-16 internal reliability coefficient of .61 obtained in this investigation was below an acceptable level and inconsistent with prior studies that demonstrated adequate internal reliability for this scale. A follow up reliability analysis was conducted on the NPI-16 to determine if reliability of the measure was impacted by unreliable responses to any particular item of the instrument. The results indicated that eliminating an item did not result in a meaningful improvement in the reliability. Therefore, the scale was used in its entirety for all analyses with an understanding that the results of the current study could be adversely affected by the low reliability of the full scale. Moreover, the HSNS demonstrated low internal reliability (a = .68) somewhat below what has been reported in previous studies. The two CDSII subscales demonstrated adequate to good internal consistency reliability.

#### Table 4

Variable	М	SD	α	SE	Range
NPI-16	.39	0.18	.61	.01	.06–.88
HSNS	28.78	5.72	.68	.40	13–43
CDSII					
Locus of Causality	14.25	5.81	.77	.41	3–27
Stability	18.64	5.67	.81	.40	3-27

Psychometric Properties of NPI-16, HSNS, and CDSII Subscales

*Note.* There were 202 participants overall. The NPI-16 is coded as 0 for a non-narcissistic and 1 for a narcissistic response. The NPI-16 uses mean item scores. *M* reflects the mean of the mean item scores. The HSNS is coded on a 5-point Likert scale with a maximum score of 50. The HSNS uses the sum total scores. *M* reflects the mean of the total scores. The CDSII Locus of Causality and Stability subscales are coded on a 9-point Likert scale with a maximum score of 27. The CDSII subscales use the sum total score. *M* reflects the mean of the total scores.

As previously noted, the current sample consisted of 202 valid surveys consisting of 62 males and 139 females with one case missing a gender. Males (M = .44; SD = .18) and females

(M = .38; SD = .17) had comparable means on the NPI-16. The non-significant difference in means for each gender on the NPI-16 in the current study is consistent with the original norming study conducted by Ames et al. (2006). The original study (Ames et al., 2006) reported males having a mean of .37 (SD = .20) and females having a mean of .35 (SD = .20). Subsequent studies investigating the NPI-16 contained in the original Ames et al. (2006) paper had some variability in the mean male narcissism scores, with scores as high as .43 (SD = .21), and mean female narcissism scores, with scores as high as .36 (SD = .17), but no difference between mean gender scores were statistically significant. The current study's overall mean NPI-16 narcissism score (M = .39; SD = .18) was similar to the original study (M = .35; SD = .20).

Means for the current study on the HSNS (M = 28.78; SD = 5.72) were consistent with previous studies (M = 28.70; SD = 6.20) using the measure of hypersensitive narcissism (Hendin & Cheek, 1997). Male (M = 28.85; SD = 6.36) and female (M = 28.66; SD = 5.37) mean total scores on the HSNS for this study were not significantly different, which is consistent with previous research by Hendin and Cheek (1997) that indicated males (M = 29.30; SD = 4.70) and females (M = 28.70; SD = 6.20) had no difference in HSNS total scores.

Bivariate correlations between the NPI-16, HSNS, and the Locus of Causality and Stability subscales of the CDSII were mostly uncorrelated. Correlations between the NPI-16 and the HSNS were non-significant, as well as correlations between the NPI-16 and the Locus of Causality and Stability subscales (Table 5). Similarly, the HSNS was uncorrelated with both subscales of the CDSII (Table 5). Uncorrelated results often signify that each instrument is measuring a different psychological construct, however, due to the poor reliabilities of the NPI-16 and HSNS no such interpretation can be definitively stated. The CDSII subscales of Locus of Causality and Stability were statistically significant and moderately correlated (Table 5).

# Table 5

Measure	1	2	3	4
1. NPI-16				
2. HSNS	.06			
3. Locus of Causality	.03	07		
4. Stability	01	03	.51**	

Bivariate Correlations for NPI-16, HSNS, Locus of Causality and Stability Scales

*Note.* There are 202 participants for each row. \*\* p < .01.

\*\* *p* < .01.

Means for Locus of Causality attributions when experiencing success on a mastery or performance task were not statistically significantly different (Table 6). Similarly, means on the Stability subscale for participants who experienced success outcomes on a mastery task did not statistically significantly vary from scores attained when experiencing success on a performance task (Table 6). Moreover, there was no statistically significant difference of means for Locus of Causality or Stability attributions when participants experienced failure or success on a mastery task or a performance task (Table 6).

Table 6

Descriptive Statistics for Locus of Causality and Stability Attributions by Experimental Condition

		Locus of Causality			Stability			
Outcome/Task	n	М	SD	SE		М	SD	SE
Success	95	12.52	5.19	.53		17.03	5.82	.60
Mastery	46	12.98	4.99	.74		17.57	5.08	.75
Performance	49	12.08	5.38	.77		16.53	6.45	.92
Failure	107	15.81	5.92	.57		20.07	5.16	.50
Mastery	57	15.57	5.88	.79		19.82	5.29	.70
Performance	50	16.08	6.01	.85		20.36	5.04	.71

Additionally, bivariate correlations were computed between the various measures used in this study, including the NPI-16, HSNS, and Locus of Causality (see Table 7) and Stability (see Table 8) attributions given success or failure outcomes to investigate the relationships between the measures of narcissism and attributions. The results of the bivariate correlational analyses investigating the relationships between the NPI-16, HSNS and Locus of Causality attributions given a success outcome suggested that there was no statistically significant correlation between variables. Similarly, the bivariate correlations when a failure outcome was provided indicated that the relationships between the NPI-16, HSNS and Locus of Causality attributions were also not statistically significant.

Table 7

*Bivariate Correlations for NPI-16, HSNS and Locus of Causality Given a Success or Failure Outcome* 

Measure	1	2	3
1. NPI-16		03	.06
2. HSNS	.12	—	.04
3. Locus of Causality	03	16	—

*Note.* Correlations above the diagonal line are for success outcomes, whereas correlations below the diagonal line are for failure outcomes.

Bivariate correlations were again computed between the various measures of the current study, including the NPI-16, HSNS and Stability attributions (see Table 8) to investigate the relationships within each measure of narcissism and attributions. The correlational analyses between the narcissistic subtypes (grandiose and vulnerable) and Stability attributions given a success outcome lacked any significant correlations. When participants experienced failure, all variables were found uncorrelated, similar to bivariate correlations for the success outcomes for stability attributions. Moreover, none of the correlations were statistically significant.

# Table 8

Measure	1	2	3
1. NPI-16		03	02
2. HSNS	.14		.05
3. Stability	03	.13	

Bivariate Correlations for NPI-16, HSNS and Stability Given a Success or Failure Outcome

*Note.* Correlations above the diagonal line are for success outcomes, whereas correlations below the diagonal line are for failure outcomes.

## **Assumptions of Multiple Regressions**

Prior to conducting the regression analyses, the assumptions associated with multiple regression were evaluated. The first assumption when conducting a multiple regression was to determine if the sample size was adequate. According to guidelines outlined by Green (1991) for multiple regression samples, a minimal sample size for the study was calculated. Green (1991) recommended N > 50 + 8k when researching the overall model and N > 104 + k when researching individual predictors, with k representing the number of independent predictors. Therefore, according to these guidelines, a multiple regression analysis with 6 independent variables has a suggested minimal sample size of 110 participants. However, there is a suggested sample of 20 for each variable when conducting a simultaneous regression, making the optimal minimal sample size 160 participants. In the current investigation, the sample size exceeded the minimum. In this study, analyses were conducted separately for participants in the success or failure conditions. The Mastery or Performance task variable was dummy coded with 1 representing Mastery and 0 representing Performance. All other variables are continuous.

Another assumption of multiple regressions is that the relationship between the independent variables and dependent variables must be linear. This ensures an accurate estimate of relationship between the variables. Inspection of the residual plots determined that there was

linearity. Multicollinearity was investigated by analyzing the correlations between independent variables. By also examining the variance inflation factor (VIF), tolerance, and condition index, the researcher determined that multicollinearity was not present. Across all models, VIF was less than 10, the condition index was less than 30 and the Dubin-Watson statistic was around 2.00.

The next assumption addressed was whether the variables were normally distributed. The researcher visually inspected the data plots in order to evaluate this assumption, and Kolmogorov-Smirnov tests were performed to examine normality. Mahalanobis distances, which determined cases that exceeded the indicated chi square criteria, were examined to identify the presence of outliers. No univariate or multivariate outliers were found, as the Mahalanobis distances did not exceed the critical value. Furthermore, *z*-scores of the skewness statistic were calculated and analyzed to determine if univariate outliers existed. Upon inspection of these statistics and plots, all variables demonstrated normal distributions and homoscedasticity. It should be noted that the Locus of Causality subscale demonstrated a nonsignificant negative skewness.

#### **Research Question 1**

A simultaneous multiple regression analysis was conducted to investigate how individuals with elevated traits of grandiose (NPI-16) and vulnerable (HSNS) narcissism, being placed in a mastery or performance situation, attribute locus of causality when experiencing success (see Table 9). Overall, the specific narcissism traits and achievement task accounted for 1% of the variance in locus of causality attributions for individuals who experienced a success outcome, indicating a very weak effect size. No particular variable predicted locus of causality attributions when participants were provided with a success outcome.
### Table 9

#### Multiple Regression Analysis for Locus of Causality Given Success Outcomes

Outcome/Predictor	n	F	t	β	$R^2$	р
Locus of Causality	95	0.36			.01	.784
NPI-16			0.50	.05		.617
HSNS			0.37	.04		.712
Mastery or			0.75	.08		.456
performance task						

#### **Research Question 2**

To investigate how individuals possessing elevated traits of grandiose (NPI-16) and vulnerable (HSNS) narcissism, being placed in a mastery or performance task, experience locus of causality attributions when experiencing failure, a simultaneous multiple regression analysis was conducted. Again, each narcissism subtype and mastery or performance tasks were regressed on Locus of Causality for those participants who experienced a failure outcome. The results of these analyses are displayed in Table 10.

A small effect size was found, as grandiose and vulnerable narcissistic traits and achievement goal task accounted for 3% of the variance in locus of causality attributions for individuals who experienced failure. Therefore, neither the achievement goal tasks (performance or mastery) nor traits associated with grandiose and vulnerable narcissism predicted locus of causality attributions when participants were provided with a failure outcome.

#### Table 10

Multiple Regression Analysis for Locus of Causality Given Failure Outcomes

Outcome/Predictor	п	F	t	β	$R^2$	р
Locus of Causality	107	1.06			.03	.368
NPI-16			-0.05	01		.959
HSNS			-1.71	17		.091
Mastery or performance task			-0.66	07		.510

#### **Research Question 3**

A third simultaneous multiple regression was conducted by regressing the grandiose (NPI-16) and vulnerable (HSNS) narcissism subtype scores, and a dummy coded mastery or performance task variable for individuals who experienced success outcomes on the Stability subscale of the CDSII (see Table 11). The variables of this regression, including grandiose and vulnerable narcissism traits as well as task achievement goals, accounted for 1% of the variance in stability attributions for individuals who experienced a success outcome. This is consistent with the very small effect found in the previous regression. Therefore, when participants experienced success, there were no statistically significant predictors of stability attributions. Table 11

Multiple Regression Analysis for Stability and Success Outcomes

Outcome/Predictor	п	F	t	β	$R^2$	р
Stability	95	0.34			.01	.796
NPI-16			-0.24	03		.808
HSNS			0.47	.05		.638
Mastery or			0.86	.09		.394
performance task						

#### **Research Question 4**

This research question investigated how individuals endorsing elevated grandiose (NPI-16) and vulnerable (HSNS) subclinical narcissistic traits, being placed in a mastery or performance situation, perceived stability attributions when experiencing failure. A simultaneous multiple regression was conducted by regressing the NPI-16 and HSNS scores and mastery or performance task on the CDSII measure of Stability for participants experiencing failure feedback. The results of these analyses are displayed in Table 12.

The variables of this regression, including grandiose and vulnerable narcissism traits as well as task achievement goals, accounted for 2% of the variance in stability attributions for

individuals who experienced a failure outcome. However, due to the low reliability of the narcissism measures, the interpretation of these results is limited. As demonstrated in previous regression models, there were no statistically significantly variables that predicted stability attributions when participants were provided with failure feedback. Similar to previous regressions in this study, this model was not statistically significant and did not predict stability attributions, as the variables did not have overlapping variance.

### Table 12

Outcome/Predictor	п	F	t	β	$R^2$	р
Stability	107	0.75			.02	.527
NPI-16			-0.06	01		.951
HSNS			-1.37	14		.174
Mastery or performance task			-0.72	07		.472

Multiple Regression Analysis for Stability and Failure Outcomes

#### **Summary of Results**

Preliminary statistical analyses indicated that the NPI-16 and the HSNS had inadequate internal reliability, while the two correlated attribution subscales of Locus of Causality and Stability had adequate to good internal reliability. Bivariate correlations between the predictor variables indicated that there were no statistically significant relationships overall or when the data were disaggregated by success and failure. Each research question was analyzed using a simultaneous multiple regression. Analyses were conducted separately for success and failure conditions. Each model regressed the scores of the NPI-16, to represent grandiose narcissistic traits, and the HSNS, to represent vulnerable narcissistic traits, in addition to a dummy coded Mastery or Performance task on the CDSII subscales of Locus of Causality or Stability. All four regressions were non-significant, with each measure being uncorrelated with the others across all of the regressions. Furthermore, no model explained more than 3% of the variance (Research Question Two) in scores on the attribution measures. Overall, the lack of statistically significant findings may be due to poor reliability of the narcissism scales or lack of experimental treatment integrity. These results will be further discussed in the following chapter.

#### **Supplemental Analyses**

Additional analyses were conducted to attempt to gain insight into the lack of significant relationships between the study variables. Specifically, to test the original research questions, the data were disaggregated by success and failure. Further regression analyses using the complete data set were conducted to determine if exposure to success or failure predicted Locus of Causality and Stability attributions as has been found in past investigations (Covington, 1992; Weiner, 1985, 2000). Failure to replicate this past finding might suggest that the experimental manipulation of the current investigation was unsuccessful and flawed. To determine if success or failure outcomes were predictive of Locus of Causality and Stability attributions directly, the dummy coded success/failure variable (Success coded as 1 and Failure coded as 0) was moved from a selection variable to an independent variable within the regression model. Two new multiple regressions were performed, regressing the success/failure dummy coded variable along with the other independent variables of NPI-16, HSNS and the Mastery/Performance dummy coded variable on Locus of Causality in one model and Stability in the other model.

The regression analysis with Locus of Causality as the dependent variable revealed that the new model including success and failure as a predictor variable was statistically significant (Table 13). Further inspection of the results indicated that only success and failure outcomes were a statistically significant predictor of locus of causality attributions ( $\beta = -.29$ ; p < .001). Overall, this model accounted for 9% of the variance in locus of causality attributions. Results can be interpreted that experiencing failure was associated with greater internal Locus of

Causality attributions.

### Table 13

Multiple Regression Analysis for Locus of Causality

Outcome/Predictor	п	F	t	β	$R^2$	р
Locus of Causality	202	4.63			.09	.001**
NPI-16			0.18	.01		.856
HSNS			-1.09	08		.277
Mastery or performance task			0.12	.01		.906
Success/Failure			-4.16	29		.000**
** <i>p</i> < .01.						

Similarly, the regression analysis with Stability attributions as the dependent variable revealed that the regression model including success and failure outcomes as a predictor variable was statistically significant (Table 14). Similar to the previous analysis conducted, inspection of the data revealed success and failure outcomes as the only statistically significant predictor of stability attributions ( $\beta = -.27$ ; p < .001). This model accounted for 7% of the variance in stability attributions. Findings can be interpreted that participants who experienced success made lower Stability attributions.

Table 14

Outcome/Predictor	п	F	t	β	$R^2$	р
Stability	202	3.95			.07	.004**
NPI-16			-0.32	02		.749
HSNS			-0.54	04		.590
Mastery or performance Task			0.26	.02		.795
Success/Failure			-3.92	27		.000**

Multiple Regression Analysis for Stability

<sup>\*\*</sup> *p* < .01.

Overall, the results of these supplemental analyses suggest that participants responded differently to experiencing a success or failure outcome. It should be noted that, consistent with findings revealing negative regression statistics, the zero order correlations between the dummy coded Success/Failure variable (Success coded as 1) and Stability (r = -.27) and Locus of Causality (r = -.29) subscales were negative as well. However, the findings of the current study are inconsistent with past attribution research (Covington, 1992; Weiner, 2000), which has routinely reported that participants who experience success were more likely to make attributions suggesting greater control over the outcome and stability of the outcome when compared with participants who experienced a failure outcome. Nevertheless, the current study found an inverse relationship, where individuals who experienced failure attributed the outcome to more internal causality, while individuals who experienced success attributed it to less stable causes. Thus, these results may further indicate a flawed experimental manipulation.

#### **CHAPTER V**

#### **DISCUSSION OF FINDINGS**

The current study investigated the potential implications that subclinical subtypes of grandiose and vulnerable narcissism, and their unique traits, may have on locus of causality and stability attributions when presented with a mastery or performance task and provided with a success or failure outcome. The purpose of the current study was to understand how the rise in grandiose and vulnerable narcissistic traits in younger populations may impact reactions to feedback and the possible implications in the classrooms. Internal consistency of the NPI-16, HSNS, and the CDSII subscales of Locus of Causality and Stability attributions were investigated. Additionally, the inter-relationships between the variables were examined through bivariate correlations. Multiple regression analyses were utilized to determine the predictive utility of each type of subclinical narcissism and achievement tasks for locus of causality and stability attributions when receiving success or failure feedback. Overall, four research questions guided the current study to investigate the unique predictability of each causal attribution given success and failure outcomes.

Due to the reported rise in narcissistic traits in younger populations (Twenge et al., 2008), investigating how these personality traits may impact academic motivation and causal attributions for success and failure was warranted. Personality theorists and researchers have explained that narcissistic traits can be categorized into two related, but clinically and statistically distinct subtypes, labeled grandiose and vulnerable narcissism (Rathvon & Holmstrom, 1996; Wink, 1991). Additionally, researchers of achievement goals have identified a dichotomy of achievement goal contexts students are typically placed in by their teachers or schools; mastery tasks, in which students aim to increase their competence in and understanding of the subject, and performance tasks, where students aim to demonstrate competence through comparison and competition with their peers (Pintrich, 1999; Wolters, 2004). Mastery goal tasks typically elicit greater effort and persistence on academic tasks (Covington, 2000; Miller et al., 1996), whereas performance tasks tend to foster competition among peers and the demonstration of competency to others (Hulleman et al., 2010).

Furthermore, causal attributions in an academic setting aid in the understanding of emotional reactions toward academic outcomes (Weiner, 1985). Specifically, locus of causality attributions signify if individuals attribute their academic outcomes to internal factors, such as ability, or external factors, such as difficulty of the task (Weiner, 2000). Similarly, Weiner (2000) explained that stability attributions are the individual's perception of the cause of some outcome being constant (stable) or temporary (unstable). In conjunction, these causal attributions help to further describe individuals' perceived causes of academic outcomes (Weiner, 1985). For example, internal and external locus of causality attributions can be further explained with stability attributions since ability (internal) is considered stable due to its perceived consistency, while luck (external) is considered an unstable causal element due to its variability (Covington, 1992). Thus, in the current research, locus of causality and stability attributions were chosen as outcome variables to understand the unique patterns of causal perceptions that participants with elevated grandiose and vulnerable subclinical narcissistic traits experience when placed in a mastery or performance task in which they experience success or failure.

In conducting this study, it was proposed that understanding how each distinct cluster of traits may affect student attributional responses to success and failure outcomes on a mastery or performance task and provide useful insight into academic behavior. Two simultaneous multiple

regressions were conducted to investigate the attributional responses (Locus of Causality and Stability) to success outcomes, as well as two simultaneous multiple regressions for failure outcomes, for individuals endorsing elevated grandiose and vulnerable subclinical narcissistic traits when placed in a mastery or performance context.

#### **Attributional Responses to Success**

Overall, in success conditions, neither subtype of narcissism or achievement task were predictive of locus of causality or stability attributions. This may indicate that the predictor variables do not properly explain the participants' Locus of Causality and Stability scores, and can be assumed that other unmeasured variables are accounting for their causal attributions to success outcomes. Although, it should be noted that the internal consistency coefficient of the NPI-16 was less than adequate (a = .61), which is inconsistent with previous research and standardization samples (a = .72; Ames et al., 2006). Results of the current study may have been impacted by the poor internal consistency of the NPI-16. Further, the low reliability, when compared to previous studies, casts doubt on the online data collection procedures as participants may have randomly answered the questionnaire producing a poor measure of grandiose narcissism. Furthermore, the internal reliability of the HSNS, although somewhat consistent with previous research (Hedin & Cheek, 1997), was still only marginally adequate (a = .68), which may have contributed to the lack of predictive power of the narcissism measures.

In the current research, it was assumed that there would be a difference in the type of causal attributions for success between individuals displaying elevated grandiose and vulnerable narcissistic traits placed in mastery or performance tasks. The lack of significant findings relating achievement goal tasks and narcissism subtypes to attributions in success conditions is somewhat inconsistent with predictions based on past theoretical and empirical research.

Previous research has suggested that individuals endorsing elevated grandiose narcissistic traits thrive in competitive settings and will often attribute success to internal and stable factors (Rhodewalt & Morf, 1995), which is consistent with performance goals. In contrast, research has also indicated that vulnerable narcissistic traits include hypersensitivity, anxiety, and low self-esteem when faced with challenging situations (Ladd et al., 1997), which may have indicated individuals with elevated vulnerable narcissistic traits endorsing more external factors of locus of causality attributions (Westen, 1990).

Moreover, personality and attribution theories suggest that when individuals with elevated grandiose narcissistic traits experience success, they will attribute their success to high ability, a stable component, and personal effort, believed to be a stable component even though it is unstable, due to their grandiose sense of self (Farwell & Wohlwend-Lloyd, 1998). Additionally, the inability to understand the contributions and needs of others around them, as well as grandiose subclinical traits of self-indulgence, contribute to narcissistically organized individuals belief that their success is stable (Wink, 1991). Dweck and Elliot (1983) posited that performance goal students sought positive judgments, similar to the needs of persons with elevated grandiose narcissistic traits requiring admiration from others (Millon, 2001), which would suggest that individuals with elevated grandiose narcissistic traits attribute greater stable attributions on a performance task. Similarly, individuals endorsing elevated vulnerable narcissism share traits of self-indulgence and conceit with those endorsing elevated grandiose narcissism (Rathvon & Holmstrom, 1996; Wink, 1991). However, due to vulnerable traits of hypersensitivity to the reactions of others, anxiety and fear of humiliation in challenging settings (Stucke, 1993), it was posited that these individuals would endorse an unstable and external attribution for success on performance tasks. Furthermore, Rhodewalt and Morf (1995) reported

that individuals with elevated vulnerable narcissistic traits rely on unstable, external forces to determine their self-worth, which leads to further speculation that individuals with elevated vulnerable narcissistic traits would endorse external and unstable attribution factors to explain their success. Nevertheless, the current findings suggest that the predicted causal attribution patterns for vulnerable and grandiose narcissistically organized individuals who experience success on a mastery or performance task may not reflect the actual attributional response patterns of these individuals. The detection of the predicted causal attributional responses to success may have also been impacted by confounding variables related to inducing success outcomes and conducting an online survey (i.e., reduced integrity of participant responses, reduced participant motivation).

#### **Attributional Responses to Failure**

Similar to the previous examination of attributional responses to success outcomes, the relationships between grandiose and vulnerable narcissistic traits and attributions when students experienced failure in a mastery or performance task were posited to further the understanding of academic behavior. Again, two simultaneous multiple regression analyses were employed to determine the unique predictability failure and the predictor variables had, toward the causal attributions of locus of causality and stability. Overall, in failure conditions, neither subtype of narcissism or achievement goal tasks were predictive of locus of causality or stability attributions. As discussed earlier, the relatively low internal consistency reliability of the narcissism measures may have constrained their predictive power, limiting the likelihood of finding significant relationships due to low power.

Research detailing the emotional responses and attributions of both individuals possessing elevated vulnerable and grandiose subclinical narcissistic traits to failure guided the

development of this research. It was posited that both subtypes of individuals endorsing elevated narcissistic traits would react poorly, with anger and anxiety, toward failure (Rhodewalt & Morf, 1998), especially in a performance goal context due to the competitive nature and the need to exert superiority over their peers (Britton, 2004). Furthermore, it was believed that individuals endorsing elevated grandiose and vulnerable subclinical narcissistic traits would identify opposing locus of causality attributions for failure, with vulnerable trait participants endorsing internal locus of causality attributions and grandiose individual's endorsing external locus of causality attributions (Hartouni, 1992; Ladd et al., 1997; Rhodewalt & Morf, 1995). This hypothesis was guided by research demonstrating that persons endorsing elevated vulnerable narcissistic traits experience anxiety, depression and low self-esteem related to their feelings of inferiority when they experience failure (Hendin & Cheek, 1997), which corresponds with internal locus of causality factors such as low ability. Conversely, research by Raskin and Novacek (1989) as well as Horowitz (1989) explained that individuals with elevated grandiose narcissistic traits become angry and defensive to protect their inflated sense of self when they experienced failure, leading to the potential to attribute their failure to external factors like the difficulty of the task (Stucke, 2003). Thus, the expectation for participants endorsing elevated vulnerable narcissistic traits who experience failure outcomes on performance tasks to differ from participants endorsing elevated grandiose narcissistic traits in the same situation in order to predict opposing types of locus of causality attributions is firmly rooted in psychological theory.

Furthermore, previous research has concluded that subclinical grandiose narcissistic individuals attribute failure and negative events to an unstable cause that is external to them (Hartouni, 1992; Ladd et al., 1997; Rhodewalt & Morf, 1995), consistent with Kohut (1971) and Kernberg's (1975) beliefs that persons with elevated narcissism will attempt to preserve their

inflated sense of self-worth by blaming others for personal failure. Furthermore, Millon (2011) explained that individuals with elevated grandiose narcissistic traits feel entitled to inflate their self-standing and feel the need to exude a sense of superiority, leading to the perceived use of unstable attributions, such as poor effort and task difficulty, to explain their failure. Conversely, research has found that individuals with elevated vulnerable narcissistic traits react to challenges and failure with vulnerability, defensiveness, anxiety, and depression (Hendin & Cheek, 1997; Pincus et al., 2009; Wink, 1991). Thus, it was believed that individuals who endorsed elevated vulnerable narcissistic traits would attribute failure to internal and stable traits, similar to nonnarcissists who experience depression and attribute failure to their poor stable ability (Stucke, 2003). However, vulnerable narcissistically organized individuals may react in a defensive manner to preserve their sense of entitlement and protect their fragile self-worth (Rhodewalt & Morf, 1995). As previously noted, the results of the present study do not support the predicted causal attributional response patterns for individuals with elevated vulnerable and grandiose narcissistic traits who experience failure on a mastery or performance task. Although, limitations within the methodology, such as inducing failure, may have restricted the detection of specific causal attributional response patterns for these individuals.

#### Limitations of the Current Study

Several factors limit the interpretation of the findings of this investigation. As previously noted, the NPI-16, a measure of grandiose narcissism, demonstrated poor internal reliability, which was unlike other studies that used this measure. Similarly, the measure of vulnerable narcissism, the HSNS, also demonstrated weak internal reliability. The internal reliability of these measures may have decreased the sensitivity of the potential differences between each subtype of narcissism, contributing to the lack of statistically significant results. Future studies

should employ measures with extensive empirical foundations demonstrating strong reliability and validity. Such measures may include the complete NPI-40 (Raskin & Hall, 1981) and the MCMI-III (Millon et al., 2009).

Moreover, the lower obtained reliability may be symptomatic of a response pattern affecting other aspects of the study. As part of the online data collection process, the researcher was provided with information about how long each participant persisted on the tasks and how many attempts they made. Visual inspection of the data supported a hypothesis of inconsistent participant responses to the two tasks each participant was asked to perform. As each group of jumbled words was presented, participants provided fewer responses to the jumbles, while also taking less time to move on to the next set of jumbles. The number of times a participant clicked on the page or made changes to a word jumble also decreased as the mastery and performance tasks proceeded. There is the potential that this pattern of participant responding behavior was generalized to the entire questionnaire demonstrating a lack of engagement in the study leading to reliability issues as well as experimental treatment integrity concerns. The online administration of the surveys and the lack of supervision during the administration made it impossible to verify, but certainly it suggests limitations to this method of data collection. Furthermore, using internet-based data collection methods may have modified the participants' attributional responses to success and failure since participants' performance outcomes were kept private, reducing the necessity to employ socially protective attributions, such as making excuses for their failure. In future studies, face-to-face experimental treatment procedures and survey administration, as well as the use of pencil and paper surveys, may provide a more controlled environment with less chance of participant disengagement.

An additional limitation of the current study includes the inducing of mastery and performance achievement goals through a novel task. Although research has demonstrated that students will often adopt the achievement goals of the given task or context (Ames & Archer, 1987), participants may not have had a clear understanding of the achievement goal being imposed upon them. The methods used to induce mastery and performance goals shared the same word jumble task, differentiated only by a slight change in the wording of the directions to suggest an interpersonal competitive task as opposed to an intrapersonal mastery task. The instructions provided for each achievement goal task may not have been impactful or effective enough for participants to recognize the goal of the task. Particularly, the performance task may not have fostered a true competitive environment due to the lack of direct interaction or comparison with other participants. Furthermore, due to the language of the mastery task instructions and feedback, participants given this task may not have been properly motivated to master the material or may have thought the task was too difficult to master due to a lack of prior learning opportunities. Future studies may include a face-to-face or direct competition among participants to induce true performance goals in participants, while utilizing a test-retest type of task to accurately induce mastery goals within students.

Another possible limitation was that the use of novel mastery and performance tasks may not have activated the true attributional responses of participants. The use of a novel task may have reduced participants' expectations of performance, leading to an overall feeling of indifference to their performance on the task. Additionally, the use of randomly assigned success or failure outcomes not based on true performance may have further contributed to the indifference to the task outcomes. Participants may have realized that their performance on the task was not entirely related to the success or failure outcome they received. In turn, this may have affected participant responses to the outcome measure of the CDSII, since the novel task potentially did not elicit a true response to success and failure outcomes. It is suggested that in future studies individuals' true performance on an academic task be used to elicit attribution responses to their success and failure. True academic outcomes may enhance the findings of this study and lead to more valid and reliable responses to the locus of causality and stability attribution scales. Moreover, the inclusion of the personal and external control attribution subscales of the CDSII may lead to a fuller understanding of how individuals endorsing elevated grandiose and vulnerable subclinical narcissistic traits attribute success and failure. These subscales were excluded due to the controversy in the literature arguing that personal and external control subscales may measure a similar construct.

Supplemental analyses were conducted to gain insight into the credibility of these hypothesized limitations (i.e., participants were disengaged and may not have experienced the manipulated Success or Failure outcome). As part of the supplemental analyses, participants from both success and failure outcomes were included and this variable was entered as a predictor to determine if exposure to success or failure predicted Locus of Causality and Stability attributions as has been found in past investigations (Covington, 1992; Weiner, 1985, 2000). Failure to replicate this past finding might lend credence to the hypotheses that the experimental manipulation of the current investigation was unsuccessful and flawed. Statistically significant results suggested that causal attributions (both locus of causality and stability) were related to the success/failure outcome, yet the attributional pattern was inconsistent with past research. Locus of causality and stability attributions of participants who experienced an experimentally manipulated success were lower than the attributions made by participants who experienced an experimentally manipulated failure. Thus, this uncommon relationship found in the supplemental analyses, where failure predicted greater internal Locus of Causality and success predicted decreased Stability attributions, may further imply that the experimental manipulation of the variables was unsuccessful.

#### **Implications for Future Research**

Although the results of the current study are inconclusive in determining specific causal attributions for success and failure for individuals endorsing elevated subclinical grandiose and vulnerable narcissistic traits in mastery or performance achievement goal tasks, the concepts outlined in the current study may help guide future research in the fields of school psychology and education. The empirical evidence outlined by Twenge and Campbell (2009), among others, suggesting the rise in narcissistic traits in younger populations and the corresponding attitude shifts toward entitlement and individualism in American culture (Cushman, 1990; Dingfelder, 2011b) can have significant implications for educating students in the future. Similarly, the increase in prevalence of narcissistic traits in the general population, such as entitlement, inflated sense of self, and defensiveness (Akhtar and Thomson, 1982; Millon, 2011; Wink, 1991), should be examined to determine the possible specific academic behavior related to students possessing these traits. Research into the potential linkages between educational outcomes and personality traits is needed if we are to understand the student of the future, as culture and the individual continue to change into the 21st century.

Furthermore, with a clearer understanding of the dynamic dichotomous structure of narcissistic personality traits (e.g., Wink, 1991), the impact of students unique personality traits on achievement can be further understood. Due to the similar, yet divergent traits associated with each form of narcissism, it is important for researchers and experts to determine the specific behaviors, reactions and needs expected for each child in the classroom. As Bergman et al.

(2010) surmised, students possessing elevated subclinical narcissistic traits will have the ability to corrode the collaboration and effectiveness of the entire classroom, due to their need to compete and establish superiority over peers, externalization of problems related to criticism, and their poor ability to engage in the learning process due to their singular focus on themselves. This may be further compounded by vulnerable narcissistic traits of anxiety, low self-worth and defensiveness to failure (Kernberg, 1975), as these students will potentially demand more focus and attention from the teacher, detracting from the overall class. Research focusing on the unique effects vulnerable narcissistic traits have on achievement and academic motivation, such as causal attributions, is needed due to the lack of empirical studies in this area. Studies focusing on the attributional styles of individuals possessing elevated vulnerable narcissistic traits are needed to determine if these individuals pose distinctly different challenges for educators due to their tendency to internalize failure and to react defensively to such failure.

In addition to expanding the empirical understanding of an individual with elevated vulnerable narcissistic traits' specific pattern of causal attributions, investigating the achievement goal orientations of persons displaying elevated grandiose and vulnerable subclinical narcissistic traits can further the understanding of narcissistic academic behavior. As was discussed previously in this dissertation, general narcissistic traits of competition, seeking superiority and a desire for excessive admiration (Fossati et al., 2005) typically align with performance goals due to students seeking to determine their competency through peer competition (Dweck & Elliot, 1988). However, Elliot and Harackiewicz's (1996) theory of a  $2 \times 2$  model of achievement goals, specifically performance approach and avoidance goals, may better fit the dichotomy of grandiose and vulnerable narcissistic traits. Further analysis of these specific goals may be conducted to determine the potential correlation between each subtype of narcissism and each

performance goal. Research focusing on developing a conceptual link between grandiose and vulnerable narcissistic traits and performance approach and performance avoidance motivation, respectively, can utilize questionnaires, such as the Patterns of Adaptive Learning Scales (PALS; Midgley et al., 2000) or the Achievement Goal Questionnaire-Revised (AGQ-R; Elliot & Murayama, 2008), rather than achievement goal tasks only. By investigating these variables together, researchers may further understand the underlying academic motivation of students with specific narcissistic traits and how to best educate them.

Overall, the current study poses the question of how the changing American culture, focusing on individualism, entitlement, and self-indulgence, and specific personality traits associated with narcissism, enhanced by these cultural shifts, may impact the academic motivation and behavior of students in the 21st century. By understanding how these students react to success and failure in the classroom and their motivations to perform in school, educators may be able to better understand the needs of the changing student population. The continued examination of narcissistic traits, achievement goals, and causal attributions and their links will allow educators to understand their student's academic achievement and behavior, as well as guide future interventions aimed at alleviating the issues associated with individuals who possess these specific personality traits.

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# APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

## Appendix A

Demographic Questionnaire

Age: (1) 18; (2) 19; (3) 20; (4) 21; (5) 22; (6) 23+

Gender: (1) Male; (2) Female

Race/Ethnicity: (1) White/Caucasian (Non-Hispanic); (2) African-American/Black; (3) Latino/Hispanic; (4) Asian; (5) Pacific Islander; (6) American Indian; (7) Other

School year: (1) Freshman; (2) Sophomore; (3) Junior; (4) Senior; (5) Graduate Student

GPA: (1) 1.0-1.5; (2) 1.6-2.0; (3) 2.1-2.5; (4) 2.6-3.0; (5) 3.1-3.5; (6) 3.6-4.0

College major: \_\_\_\_\_

# **APPENDIX B**

# MASTERY AND PERFORMANCE WORD JUMBLE TASKS

## Appendix B

## Performance and Mastery Word Jumble Tasks

Following is a set of tasks that measures how well you process information. Previous research has shown that this task is an excellent measure of processing speed and is highly predictive of your performance in school and your GPA.

We will ask you to complete the task twice with different words of equal difficulty. The task consists of a series of jumbled letters, each creating words. You may recognize the task as a "Jumble" task. For each task, you are asked to form a word using all of the letters presented to you on the screen. You will be given 5 minutes to complete each task.

## Performance Task:

You are asked to complete two tasks. Please work as quickly as you can because your score will be determined by how many words you get correct in the time we give you. After you complete the first task, we will provide you with feedback on your performance and then you will be directed to a second task. After completion of the second task, we will provide you with information regarding your information processing score. You can begin this task by pressing the *next* button. Once you are finished typing your word, click the *next* button to continue to the next set of letters. Work as quickly as you can.

Task 1 Feedback:

Now that you have had an opportunity to familiarize yourself with the task, you will be completing a second task with a series of equally difficult jumbled letters. Please work as quickly as you can so we can get an accurate measure of your processing speed in comparison to others.

Performance Success Feedback:

Congratulations! You performed better than 80 percent of those individuals who have completed this task meaning that when compared to others, you are able to process information more quickly.

Performance Failure Feedback:

Unfortunately, you performed worse than 80 percent of those who completed this task meaning that when compared to others, your ability to quickly process information is not as strong.

Mastery Task:

You are asked to complete two tasks. Please work as quickly as you can because your score will be determined by how many words you get correct in the time we give you. We will be providing you feedback after both tasks. After you complete the first task, we will provide you
with feedback regarding your performance. Upon completion of the second task, we will provide you with information regarding your information processing score. You can begin this task by pressing the *next* button. Once you are finished typing your word, click the *next* button to continue to the next set of letters. Work as quickly as you can.

#### Task 1 Feedback:

Our previous data related to these tasks indicates that individuals like you typically improve their processing speed on the second task. The second task consists of an additional series of equally difficult jumbled letters, each creating words. The number of words you are able to complete in the given time limit of 5 minutes will be compared to your previously completed task to determine if your information processing skills have improved. Work as quickly as you can. Remember, you are trying to improve your score!

Mastery Success Feedback:

Congratulations! You improved your performance on the second task. Our research shows that students like you usually only improve by 10% on the second task, but your score improved 3 times as much as expected. This indicates that your processing speed has significantly improved!

Mastery Failure Feedback:

Unfortunately, you only slightly improved your performance on the second task. Our research shows that students like you usually improve by 30% on the second task, but you only improved by 10% or one-third as much as others. This indicates that your processing speed has not significantly improved.

Jumble	Word 1	Word 2	
GNRAE	ANGER	RANGE	
AEWTS	WASTE	SWEAT	
EGENR	GREEN	GENRE	
GNTHI	NIGHT	THING	
RTWEO	WROTE	TOWER	
DROMOBE	BEDROOM	BOREDOM	
TRNELAAP	PARENTAL	PATERNAL	
TCERAVEI	CREATIVE	REACTIVE	
GDEERNA	ENRAGED	ANGERED	
ISTLNE	LISTEN	SILENT	
GMNAO	MANGO	AMONG	
DDTIECUONS	DEDUCTIONS	DISCOUNTED	
TDEHA	HATED	DEATH	
BTREI	TRIBE	BITER	
LBWOE	ELBOW	BELOW	
LHSFE	SHELF	FLESH	
XTEIS	EXITS	EXIST	
OENTD	TONED	NOTED	

QPEIU	EQUIP	PIQUE	
ARHKS	SHARK	HARKS	
AMETD	MATED	TAMED	
ITTNA	TITAN	TAINT	
OGWNR	WRONG	GROWN	
DITNUE	UNITED	UNTIED	
UFNOD	FOUND	FONDU	
HBTRO	THROB	BROTH	
CTAIT	ATTIC	TACIT	
DGARE	RAGED	GRADE	
NHTSI	THINS	HINTS	
TSRTU	STRUT	TRUST	
TESAB	BEAST	BEATS	
EACM	ACME	CAME	
CRSEA	ACRES	CARES	
ROTACS	ACTORS	CASTOR	
ETSRACS	ACTRESS	RECASTS	
MNERIA	REMAIN	MARINE	
TELAR	ALERT	LATER	
TALEERD	RELATED	ALTERED	
ELDANIG	DEALING	LEADING	
LERAGLY	ALLERGY	GALLERY	
EMNA	MANE	NAME	
NELGA	ANGEL	ANGLE	
WNAE	ANEW	WANE	
TANREL	ANTLER	RENTAL	
CHAESR	ARCHES	SEARCH	
TRSERA	ARREST	STARER	
TASTIR	ARTIST	TRAITS	
SNCTEA	STANCE	ASCENT	
OTCAS	COATS	TACOS	
LESAPE	PLEASE	ASLEEP	
TICEDNUAO	AUCTIONED	EDUCATION	
KAERB	BREAK	BAKER	
ADREB	BARED	BREAD	
TANCRES	CANTERS	RECANTS	
AESCP	CAPES	SPACE	
DIALMEC	CLAIMED	MEDICAL	
BELTUS	SUBTLE	USTLE	
PSCAL	CLAPS	SCALP	
RETHAD	DEARTH	THREAD	
DRATSE	TRADES	STARED	
GESIND	DESIGN	SIGNED	
EEMITRD	DEMERIT	MERITED	
GANRED	DANGER	GARDEN	
PIAERD	DIAPERS	REPAID	

DURECTNIOS	INTRODUCES	REDUCTIONS
TEENRD	RENTED	TENDER
RANEED	EARNED	NEARED
RATHE	EARTH	HEART
LANGREE	ENLARGE	GENERAL
TILENS	ENLIST	LISTEN
SOFRET	FOREST	SOFTER
ALESID	IDEALS	SAILED
ELSNOM	LEMONS	SOLEMN
MEENLASS	NAMELESS	SALESMAN
TENMAL	LAMENT	MENTAL
EMSIL	LIMES	SMILE
EONST	NOTES	STONE
EAPSR	SPEAR	PARES
TOSNIP	PISTON	POINTS
CUSEER	RESCUE	SECURE

# **APPENDIX C**

# APPROVED REPORT OF ACTION FROM FORDHAM UNIVERSITY IRB

### Appendix C

### Approved Report of Action for New Study



Michele Kuchera IRB Manager <u>mkuchera@fordham.edu</u> 718-817-0876

#### Office of the Institutional Review Board for Research on Human Subjects Report of Action: Approval

<u>Review Date</u>: 06/27/2013 <u>Project Title</u>: Goal Orientations and Causal Attributions of Students with Characteristics of <u>Grandiose and Vulnerable Narcissism</u> <u>Investigator</u>: Matthew Cardinale <u>School/Department</u>: GSE/PES <u>Faculty Sponsor</u>: Dr. Abigail Harris

Review Type: New 🗹 Continuing 🗆 Date of Last Review\_\_\_\_ Expiration date: \_\_\_\_\_ Amendment, 🛄 Study closure 🗖

Category:	Exempt	Category
	Expedited 🔀	Category 7
	Full Board 🗖	Meeting Date:

IRB Action: Approved Date of Approval 06/27/2013

With receipt of your revisions dated June 26, 2013, your study has been approved for 12 months and **expires** on **06/26/14**.

- Multiple year projects require continuing review. It is the responsibility of the researcher(s) to submit an IRB continuation protocol <u>at least one month prior to the end of the approved period</u>.
- Investigators are responsible for submitting amendments to the IRB for any changes to the
  research protocol, including changes to the research design, documents, staffing, procedures or
  recruitment. These changes require IRB approval before being introduced.
- If there are any adverse events or unanticipated problems involving risks to subjects or others or any complaints about the research that occurs during the period of approval, please contact the Office of the IRB immediately at (212) 636-7946 or by email at <u>irb@fordham.edu</u>.
- The investigator(s) identified above are required to retain an IRB protocol file, including a record
  of IRB-related activity, data summaries and consent forms. This file is to be made available for
  review for internal procedural (audit) monitoring.

# **APPENDIX D**

PARTICIPATION EMAIL

## Appendix D

## Participation Email

Hello!

My name is Matt Cardinale and I am currently working toward my doctorate in School Psychology in the Graduate School of Education at Fordham University. I am interested in studying personality traits of undergraduates and how these traits relate to undergraduate performance on and reactions to a novel task. My hope is that this research will contribute to our understanding of how these different types of tasks are responded to by undergraduates with different types of personality traits. I ask that you would take a few minutes from your busy schedule to participate.

If you would like more information on the study you can contact me at mcardinale@fordham.edu. For further information about your rights as a research participant please contact Fordham University Institutional Review Board, at 718-817-0876, or IRB@fordham.edu.

Participation in this study is anonymous, and entirely voluntary. You may withdraw at any time during the survey. This study has been approved by the Institutional Review Board at Fordham University (6/27/13).

Below is a link to the online survey/questionnaire that can be completed at your convenience prior to DATE. The survey should take approximately 20-25 minutes to complete.

The link to the survey is: \_\_\_\_\_\_ (a letter of introduction and consent is included with the survey). Thank you for your consideration.

Sincerely, Matt Cardinale

# **APPENDIX E**

INFORMED CONSENT

# Appendix E

## Informed Consent

## Please read this consent document carefully before you decide to participate in this study.

**Purpose of the research study:** The purpose of the proposed study is to investigate how personality traits are related to the ways people perceive their performance under different types of instruction.

# Who is conducting study: Matthew J. Cardinale

**What you will be asked to do in the study:** Participants will be asked to fill out a series of questionnaires asking about aspects of their personality and how they typically judge their performance. Participants will also be asked to complete two word jumble tasks. All questionnaires will be administered through an internet survey service, Qualtrics.

## Time required: 20-25 minutes

**Risks and Benefits:** There is a potential for participants to experience disappointment related to the performance feedback provided on the task we ask you to do. To reduce this risk, a debriefing will be conducted immediately following the conclusion of the completion of the final questionnaire.

**Anonymity:** Your identity in this study will be anonymous. It will not be possible for anyone to know who chooses to participate in this study and who does not.

**Voluntary participation:** Your participation in this study is completely voluntary. You may refuse to answer any of the questions we ask you and you may stop or end your participation at any time. Since this is an online questionnaire, you can choose to stop completing the survey and not submit the part you already completed.

## Who to contact if you have questions about the study:

Any participant who had any questions about the study or is interested in the results of this study can contact the primary investigator for a summary of the results. Matthew J. Cardinale, Primary Investigator Phone: 631-858-0605 E-mail: mcardinale@fordham.edu

Who to contact about your rights as a research participant in the study: Fordham University Institutional Review Board Phone: 718-817-0876. E-mail: IRB@fordham.edu BY CLICKING NEXT, I UNDERSTAND THAT I AM AGREEING TO PARTICIPATE IN THIS STUDY. PLEASE PRINT THIS SCREEN FOR YOUR RECORDS.

# **APPENDIX F**

# DEBRIEFING STATEMENT

## Appendix F

### Debriefing Statement

Thank you for your participation in this study. Your participation was very valuable. I know you are very busy and very much appreciate the time you devoted to participating in this study.

There was some information about the study that I was not able to discuss with you prior to the study, because doing so probably would have impacted your actions and thus skewed the study results. I would like to explain these things to you now.

The study you have just participated in was a study regarding personality traits and reactions to relatively high or low performance on goal-oriented tasks. The study aimed to determine what individuals with specific personality traits attribute their performance outcomes to when placed in these goal-oriented situations. In order to ensure a variety of relatively high and low performances among participants, **participants were randomly assigned to receive either positive or negative feedback about their performance. The outcome of your word jumble task was experimentally manipulated and had no bearing on how well you actually did. It is also untrue that performance on this task is related to your academic achievement.** These steps were taken to promote genuine reactions and responses to the performance outcomes assigned to each participant.

If you would like more information about this study, you can contact me at the below contact information.

It is very important that you do not discuss this study with anyone else until the study is complete. My efforts will be greatly compromised if participants come into this study knowing what it entails and how the ideas are being tested. If you have any questions or concerns, you may contact Matthew Cardinale at (631) 858-0605 or via email at mcardinale@fordham.edu. Thank you again for your participation!