Educating the Disagreeable Extravert: Narcissism, the Big Five Personality Traits, and Achievement Goal Orientation

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Despite the fact that longitudinal data have been compiled over the past 30 years among undergraduate students in higher education settings regarding narcissism, the literature is devoid of empirical investigations that explore the relationships between narcissism and learning. Because the data suggest that narcissism scores are increasing each year among this population, an exploration of the relationship between narcissism and learning is timely and warranted. Sampling from university undergraduate students, this study uses the Narcissistic Personality Inventory, the Big Five Inventory, and the Achievement Goal Questionnaire to verify the known relationships between narcissism and the Big Five personality traits of extraversion and agreeableness; to verify the known relationships between the Big Five personality traits of extraversion and agreeableness and goal orientation; and to explore a previously undocumented empirical relationship between narcissism and performance goal orientation. Results of this exploratory study indicate that while narcissism does contribute to a performance goal orientation, it is not a substantial variable in determining achievement goal orientation in general. The study addresses the implications and limitations of this research in addition to areas for additional investigation.

When considering those variables that impact student learning, it is often easy to overlook or otherwise discount the significance of individual personality and its role in the learning process. While, as educators, we may deftly identify certain archetypes that contribute to our collective consciousness of “student,” we may fail to recognize that the individual personalities of our students factor significantly into their cognition. Of late there has been considerable interest in and a growing discussion of the personality construct of narcissism among undergraduate populations. Social psychologists, particularly those interested in generational phenomena, draw from convenience samples of university undergraduates in an exploration of the dynamic interactions between narcissistic personality and social contexts (e.g., Twenge, 2006; Twenge & Campbell, 2009; Twenge & Foster, 2008; Twenge, Konrath, Foster, Campbell, & Bushman, 2008).

Despite the fact that longitudinal data have been compiled over the past 30 years among undergraduate students in higher education settings regarding narcissism, the literature is devoid of empirical investigations that explore the relationships between narcissism and learning. Because the longitudinal data suggest that narcissism scores are increasing each year among this population (Twenge et al., 2008; Twenge & Foster, 2008), empirical attention must be given to the impact that this reportedly pervasive personality construct has on student learning.

Narcissism

An “unimaginably diverse and amorphous construct” (Bradlee & Emmons, 1992, p. 821), narcissism enjoys a rich and varied etiology that contributes to the ambiguity of its definition and its empirical illusiveness. Beginning with Ellis’ (1898/2010) description of “Narcissus-like” behavior to define aberrant, self-absorbed sexual behaviors, and later gaining acceptance as a normal part of ego and libidinal development in Freud’s (1914/1991) theory of psychosexual development, the early impressions of narcissism dealt explicitly with sexual behaviors and motivations. The “neo-Freudians” (i.e., Horney, Adler, Fromm, Klein, Erikson), without fully discounting the structure of Freud’s psychosexual theory, support a psychosocial theory of development and contend that narcissism either exists as, enables, or thwarts successive stages of development throughout childhood and into adolescence. Theorists such as Kernberg (1975) and Kohut (1977) suggest that certain interruptions or disconnections in human development contribute proportionally to the narcissistic tendencies in individuals, particularly parental overvaluation or undervaluation. Social learning theorists such as Millon (1981), draw from the works of Kernberg and Kohut to sketch a picture of the narcissist as someone whose enhanced self image “cannot be sustained in the outer world” (p. 165) and, thus, struggles to create an environment and make associations that provide continual validation.

Narcissism first appeared as a personality disorder in the third edition of the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980. Listed among the ranks of borderline personality disorders, Narcissistic Personality Disorder (NPD) is diagnosed clinically by use of a taxonomic menu. Individuals exhibiting at least five of the following nine categorical symptoms in extremity are considered candidates for clinical diagnosis of NPD:
1. a grandiose sense of self-importance (e.g., exaggerate achievements and talents, expect to be recognized as superior without commensurate achievements);
2. a preoccupation with fantasies of unlimited success, power, brilliance, beauty, or ideal love;
3. the belief that they are “special” and unique and can only be understood by, or should associate with, other special or high-status people (or institutions);
4. the demand for excessive admiration;
5. the belief in a sense of entitlement (i.e., unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations);
6. interpersonally exploitative thoughts and behaviors (i.e., take advantage of others to achieve their own ends);
7. a lack of empathy (i.e., are unwilling to recognize or identify with the feelings and needs of others);
8. envy toward others and/or the belief that others are envious of them; and
9. arrogant, haughty behaviors or attitudes.

(American Psychiatric Association, 2000)

According to the most recent publication of the *DSM*, edition IV (American Psychiatric Association, 2000), less than 1% of the general population is clinically diagnosed with narcissism, likely owing to the fact that narcissists, with a heightened sense of grandiosity, would not recognize their own flaws and shortcomings that might lead them to therapy (Campbell, Brunell, & Finkel, 2006; see also Corbitt, 2002; Millon, 1981).

While a categorical system of classification is useful as a clinical diagnostic tool, “only extreme manifestations of those [categorical] behaviors constitute pathological narcissism, and the assumption is that when exhibited in less extreme forms, these behaviors are reflective of narcissism as a personality trait” (Emmons, 1987, p. 12). Trait psychology maintains that “individual differences in most characteristics are continuously distributed”; that is, in a dimensional sense, “normal” and “abnormal” are opposite ends of the same continuum of an individual’s personality (Costa & Widiger, 2002, p. 4). While all individuals may have the propensity toward occasional and innocuous narcissistic behaviors, *dispositional narcissists* exhibit the following behaviors and expectations to such a degree as to “limit or weaken social, personal, and professional interactions or to compromise relationships” (Ryan, Sweeder, & Bednar, 2002, p. 26; see also Buss & Chiodo, 1991; Campbell, Bush, Brunell, & Shelton, 2005):

- actively engage in self-enhancement, seeing themselves in an unrealistically positive light
- often at the detriment and devaluation of others (Emmons, 1987; Paulhus & Williams, 2002; Raskin, Novacek, & Hogan, 1991; Robins & Beer, 2001);
- possess “elevated levels of exhibitionism” and enact attention-seeking behaviors (Campbell, Rudich, & Sedikides, 2002; Buss & Chiodo, 1991; Raskin & Terry, 1988);
- exhibit impulsivity (Raskin & Terry, 1988; Rose, 2007; Vazire & Funder, 2006);
- maintain self-entitled beliefs (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; Greenberger, Lessard, Chen, & Farruggia, 2008; Raskin & Terry, 1988; Trzesniewski, Donnellan, & Robins, 2008); and
- seek admiration but not acceptance in that they prefer to “get ahead” rather than “get along” (Paulhus & John, 1998; Raskin et al., 1991; Robins & Beer, 2001).

Developed in 1979 by Robert Raskin and Calvin Hall, the Narcissistic Personality Inventory (NPI) measures narcissistic traits as dimensions of normal personality. Those individuals who score high on the NPI reportedly possess the dispositional criteria of self-enhancement, impulsivity, entitlement, exhibitionism, and social climbing in greater proportion along the continuum of normal personality. While dispositional narcissists may be considered “interpersonal irritants” (Paulhus & Williams, 2002), they are not pathologically disordered in the categorical, clinical sense. This study is concerned with narcissism as a personality construct as measured by the NPI, reflective of dimensional personality traits and individual dispositions.

The Big Five Personality Traits

Considering a dimensional measure of personality suggests that all individuals possess varying degrees and combinations of facets that, when culled, constitute a set of traits, which in turn combine to define an individual’s personality. Narcissism can be seen as a distinct personality trait, the product of a combination of traits that comprise the Big Five. Broadly representing personality trait dimensions, the taxonomic Big Five details and defines five comprehensive personality traits: Openness (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), and Neuroticism (N). “Common dimensions of individual difference” are theoretically addressed in terms of “high” and “low” increments of each of the five traits (McCrae & John, 1992, p. 199); the Big Five traits, when viewed as multiple variables that comprise a personality construct, facilitate the definition of particular types or categories of personality (John & Srivastava, 1999). For example, Paulhus and Williams (2002) empirically determined...
construct differences among the “Dark Triad of personality,” constituted by Machiavellianism, psychopathy, and narcissism. Their findings indicate that individuals classified as “Machiavellian” score low in C and low in A; psychopaths score low in C, low in A, and low in N; narcissists score low in A and high in E. While each of these constructs shares a low A, it is the varying degrees and combinations of the traits that set each of the constructs apart.

Significant to the present study is the empirical and meta-analytic evidence that suggests a relationship between narcissism and the Big Five personality traits of agreeableness and extraversion (Buss & Chiodo, 1991; Paulhus & Williams, 2002; Saulsman & Page, 2004). Agreeableness is defined as an interpersonal trait dimension that “contrasts a prosocial and communal orientation toward others with antagonism” (John & Srivastava, 1999, p. 121). Those who score high in A are more likely to be altruistic, tender-hearted, trusting, empathetic, and modest (Costa & Widiger, 2002). Those who score low in A and who are subsequently termed as disagreeable are more likely to be hostile, indifferent, self-centered, spiteful, and jealous (Digman, 1990). Those who score high on the interpersonal trait dimension of extraversion (E) exhibit sociability, activity, and assertiveness (John & Srivastava, 1999) as well as dominance, competitiveness and frankness (see Digman, 1990; Eysenck, 1978). Those who score low in E are typically classified as Introverts and tend to be more aloof, reserved, and independent (Costa & Widiger, 2002).

Empirical data captured by Paulhus and Williams (2002) and Buss and Chiodo (1991) indicate significant relationships between the Big Five traits of agreeableness and extraversion and the personality construct of narcissism. In each study, narcissism—as measured by the NPI—correlates positively with extraversion and correlates negatively with agreeableness. Further, in their meta-analysis of studies that address the relationships between the DSM-IV personality disorders and the dimensions of personality represented by the Big Five, Saulsman and Page (2004) found similar significant correlations across both clinical and non-clinical populations. Parsimoniously stated, within the space of the Big Five, the NPI narcissist is a “disagreeable extravert” (Paulhus, 2001, p. 228). Contributing to this body of empirical evidence, the present study explores the relationships between narcissism, as measured by the NPI, and extraversion (E) and agreeableness (A).

Achievement Goal Orientation

According to Eysenck (1978), an individual’s personality, more than his or her IQ, is a significant variable in the learning process. Personality traits can “facilitate or inhibit the effective use of [learning] strategies” by exercising control over those “motivational impulses or the motivational blocks to use or not to use learning strategies and thus improve or turn down performance” (Blickle, 1996, p. 338). Not inconsistent with Eysenck, Dweck (1999, 2008a, 2008b) maintains that individual beliefs or “self-theories” about learning are critical pieces of an individual’s personality and intellectual constitution; such beliefs comprise mindsets that influence achievement patterns and trajectories. An individual who possesses a “fixed” mindset believes that her intelligence and other basic qualities are fixed traits; that is, effort and practice will not influence them, as the limits are predetermined. Those of a fixed mindset deem their abilities to be inherently manifested. By contrast, an individual who possesses a “malleable” mindset believes that her intelligence and other basic qualities can be grown and expanded upon through effort and education. She is less concerned with short-term evaluations of her abilities and more focused on their cultivation in the long-term (Dweck, 2004).

The perspective an individual takes when addressing a task in an achievement situation—her achievement goal orientation—is determined by her beliefs and self-theories, which constitute her mindset, which is determined by her personality (de Raad & Schouwenburg, 1996; Dweck, 1999, 2008a; Judge & Ilies, 2002; Klein & Lee, 2006; Wolters, Yu, & Pintrich, 1996). Based on their personalities and subsequent mindsets, individuals are disposed to pursue either a learning goal orientation (LGO) or a performance goal orientation (PGO), each of which is suggestive of different prerogatives when approaching a task (Dweck, 1999). Those with a LGO (used synonymously with mastery goal orientation) are focused on the process of mastering or learning material in achievement situations. Individuals with a malleable mindset are most likely to possess a LGO; they harbor an intrinsic motivation to engage in challenging tasks and are willing to “risk displays of ignorance in order to acquire skills and knowledge” (Dweck, 1986, p. 1042). They recognize that their efforts lead to success, and as a result, they find enjoyment in investing effort strictly for the outcome of an increased understanding (Ames, 1992; Dweck, 1986; Wolters, et al., 1996). According to Wolters et al. (1996), “a goal orientation that prioritizes effort and mastery of skill is more likely to include cognitive strategies such as elaboration and organizational strategies, which reflect deeper levels of cognitive processing” (p. 213). The LGO individual utilizes adaptive achievement patterns, “characterized by challenge seeking and high, effective persistence in the face of obstacles” (Dweck, 1986, p. 1040) either to improve her skills and competence (mastery-approach) or to avoid losing her skills and becoming incompetent
the LGO individual is unlikely to quit when challenged by new or difficult information.

While LGO embodies adaptive patterns of motivation, which lead to positive cognitive strategies that enable long-term retention of information, PGO is suggestive of more maladaptive patterns (Wolters, 2004), which tend toward cognitive biases, helplessness, or other obstructions that impede processing and support only short-term retention. “Characterized by challenge avoidance and low persistence in the face of difficulty” (Dweck, 1986, p. 1040), individuals with PGO are more concerned with outward demonstrations of their ability and with appearing better than others than with having a truly deep understanding of the material or mastery of a skill (Dweck, 1986; Wolters, et al., 1996). Possessing a fixed mindset, they are motivated by a desire to appear knowledgeable (performance-approach) or to avoid looking unknowledgeable (performance-avoidance); and it is their prerogative to seek extrinsic validation through performance, such as grades and favorable feedback delivered publicly, for their perceived fixed abilities (Dweck, Mangels, & Good, 2004; Wolters et al., 1996). Those with a fixed mindset become “excessively concerned with how smart they are, seeking tasks that will prove their intelligence and avoiding ones that might not” (Dweck, 2008b, p. 34). In their attempts to avoid unfavorable judgments, individuals with PGO are more likely to utilize defensive cognitive strategies that lead to negative performance outcomes. Among these strategies are Greenwald’s (1980) “benefectance,” the inclination to attribute positive outcomes to the self and negative outcomes to situational factors, and Millon’s (1981) “Illusion of Competence” wherein individuals assume that the presumption of superiority will suffice as its proof. Conditioned to think of themselves as able and admirable, they see little reason to waste the effort needed to acquire these virtues. . . . Rather than face genuine challenges, they may temporize and boast, but they never venture to test their adequacy. . . . they can maintain their illusion of superiority without fear of disproof. (p. 177-178)

Empirical studies have demonstrated correlations between achievement goal orientation and the Big Five personality traits (e.g., see Wang & Erdheim, 2007; Zweig & Webster, 2004), noting specific correlations between the personality traits of extraversion and agreeableness and both learning and performance goal orientations. Zweig and Webster (2004) present findings that demonstrate positive correlations between extraversion and both learning goal orientation and performance-approach orientation. These data suggest that those individuals high in E may be willing to “put themselves out there” and engage in intellectual risks and challenges but that they are extrinsically motivated to do so, desirous of the attention, perceived admiration, and validation they will receive for the attempt alone. Research conducted by Lucas, Diener, Grob, Suh, and Shao (2000) support the finding that extraverts are sensitive to the rewards inherent in most social situations and indicate that while their efforts may suggest a learning goal orientation, the motivation behind the efforts of those with high E are performance-oriented.

Additional data from the Zweig and Webster (2004) study indicate that agreeableness (A) is positively correlated with learning goal orientation and negatively correlated with performance-avoidance orientation. Those individuals who are low A correlate positively with a performance-avoidance orientation, which is consistent with the theoretical picture of the low A individual as competitive, skeptical, and cynical (Wang & Erdheim, 2007; Zweig & Webster, 2004). In sum, these empirical findings suggest that those individuals who are high E and low A, Paulhus’ “disagreeable extraverts,” are inclined toward performance orientation. The present study contributes to these data by exploring relationships between E, A, and achievement goal orientation.

While the literature suggests a theoretical relationship between dispositional narcissists (as “disagreeable extraverts”) and performance goal orientation based on the transitive empirical relationships among narcissism and the Big Five traits of extraversion and agreeableness and among the Big Five traits of extraversion and agreeableness and goal orientation, there are no empirical data to date that confirm this supposition. The current research explores possible relationships between narcissism and goal orientation among college students to address this theoretical relationship and to provide a foundation for further study into student beliefs, self-theories, and personality, which hold significant implications for an individual’s cognitive processing and subsequent learning. To this end, this study addresses the following research questions:

1. Is there a relationship between narcissism and the Big Five personality traits of Extraversion and Agreeableness?
2. Is there a relationship between the Big Five personality traits of Extraversion and Agreeableness and achievement goal orientation?
3. Is there a relationship between narcissism and achievement goal orientation?
Methodology

Participants

Participants in this study were 308 undergraduates taken from a convenience sample of 321 students enrolled in three sections of a one-credit college-level professional seminar course in a large university in the eastern United States. The academic level of the participants reflected students at their Sophomore (7%), Junior (50%), and Senior (43%) years; the average age of the participants was 21.7 years. Female students comprised 85% of the study respondents.

As part of their coursework, students were asked to complete an online, Likert-type survey that comprised three distinct measures: the Narcissistic Personality Inventory (NPI), the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), and the Achievement Goal Questionnaire (AGQ). Students were promised a report of their scores on the BFI component of the survey to assist them in researching career paths that are consistent with their assessed personality strengths (see Barrick & Mount, 1991; Judge, Heller, & Mount, 2002). The participants’ personal interest in the resulting data coupled with its perceived usefulness and the substantial course credit they received for the completion of the survey assignment in its entirety contributed to the response rate of 96%.

Measures

The survey instrument is a 96-question (exclusive of demographic questions) electronic survey, comprised of three distinct sections or “inventories,” each of which represents different known measures. Each of the three measures—the Narcissistic Personality Inventory, the Big Five Inventory, and the Achievement Goal Questionnaire—is described below.

Narcissistic Personality Inventory (NPI). Regarded as the preeminent self-report instrument for measuring non-clinical populations for dispositional narcissistic traits (Paulhus & Williams, 2002), the NPI demonstrates considerable internal consistency with Cronbach’s alphas ranging from .80 to .86 (Emmons, 1987; Raskin & Terry, 1988; Rhodewalt & Morf, 1995). For the present study, the NPI had an internal reliability of .82 ($n = 308$).

The NPI, constructed by Raskin and Hall (1979), contains 40 forced-choice questions, which ask respondents to choose between two statements by selecting the statement with which they most closely identify. Pairs of statements, such as “I am no better or worse than most people” vs. “I think I am a special person” and “I am more capable than other people” vs. “There is a lot that I can learn from other people” are scored according to a key, which awards the more narcissistic answer with a point. Scores on the NPI may range from 0 (respondent selected no narcissistic statements) to 40 (respondent selected all narcissistic statements); mean scores reported across the empirical literature range from 15.55 to 16.71 (Miller et al., 2009; Raskin & Terry, 1988; Trzesniewski et al., 2008). While the potential exists to do so, the overall scores on the NPI in these findings will be evaluated without factor analysis, as this study aims to establish a fundamental relationship between all measurable aspects of narcissism and the Big Five personality traits and goal orientation.

Big Five Personality Inventory (BFI). The BFI, constructed by John, Donahue, and Kentle (1991), is a 44-item inventory that asks respondents to indicate their level of agreement with self-descriptive statements along a 5-point Likert scale in which 1 = “Disagree Strongly” and 5 = “Agree Strongly.” With mean coefficient alphas above .80 (John & Srivastava, 1999), the BFI determines respondent strengths in the Big Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Internal consistency coefficients for each of the personality scales within the BFI are as follows (Cronbach’s alpha): Openness = .81; Conscientiousness = .82; Extraversion = .88; Agreeableness = .79; Neuroticism = .84 (John & Srivastava, 1999). Cronbach’s alpha reliabilities for each scale in the present study are indicated as follows: Openness, .81; Conscientiousness, .79; Extraversion, .87; Agreeableness, .74; and Neuroticism, .80. All alphas were determined at $n = 308$.

Sample statements for which the respondents must rate their agreement include, “I see myself as someone who is original, comes up with new ideas” (Openness); “I see myself as someone who does a thorough job” (Conscientiousness); “I see myself as someone who generates a lot of enthusiasm” (Extraversion); “I see myself as someone who is helpful and unselfish with others” (Agreeableness); and “I see myself as someone who worries a lot” (Neuroticism). After the reverse-scored items are standardized, scores for each personality scale are determined by calculating the mean of the numerical responses to each categorical question. Scores for each scale may range from an average of 1 (indicating low levels of the personality trait) to an average of 5 (indicating high levels of the personality trait).

Achievement Goal Questionnaire (AGQ). Designed by Elliot and McGregor (2001), the original AGQ measures performance (approach and avoidance) and mastery (approach and avoidance) orientation in a course specific context. Generalizing the AGQ to a more domain-specific context (i.e., general academic achievement as opposed to course-specific achievement), Finney, Pieper, and Barron (2004) calculated reliabilities for three of the four goal
orientation variables of over .70: Performance-Approach Orientation = .88; Mastery-Approach = .74; Mastery-Avoidance = .76. The fourth goal orientation, Performance-Avoidance, had a Cronbach’s coefficient alpha of .68, which was consistent with that of the Elliot and McGregor instrument, .64. For the present study, Cronbach’s alphas for each of the factored scales follow: Performance-Approach Orientation = .87; Mastery-Approach Orientation = .79; Mastery-Avoidance Orientation = .79; and Performance-Avoidance Orientation = .75. All alphas were calculated at \( n = 308 \).

Further calculations were undertaken to determine the internal reliability of the synthesis of the factored scales into more general categories of “Overall Performance Orientation” (\( \alpha = .85, n = 308 \)) and “Overall Mastery Orientation” (\( \alpha = .73, n = 308 \)), which will be of use for making conclusions regarding general goal orientation within this study.

The version of the AGQ employed in this study requires that respondents rate the validity of each of 12 statements as they apply to the respondents’ attitudes toward learning and performance in their college classes during the semester along a 7-point Likert scale in which 1 = “not at all true of me” and 7 = “very true of me.” Scores are calculated by taking the mean among the statement clusters for each of the four goal orientations. Mean scores can range from 1 (indicating no association with the goal orientation) to 7 (indicating a strong association with the goal orientation) for each goal orientation category. Sample statements for which respondents must provide a level of personal validity include: “My goal this semester is to get better grades than most of the other students” (Performance-Approach); “I just want to avoid doing poorly compared to other students this semester” (Performance-Avoidance); “Completely mastering the material in my classes is important to me this semester” (Mastery-Approach); and “I am definitely concerned that I may not learn all I can this semester” (Mastery-Avoidance).

**Procedures**

Students were introduced to the personality assessment activity first in the course syllabus at the beginning of the semester and again in class, when they were made aware of the availability of the online survey and provided instruction on how to access it. The online survey was available for students to access via the course website. The students were given 10 days to complete the survey. During this 10-day period, students received two reminders via email, which included the web link to the online survey, and one reminder in class, with the web link to the online survey projected on a large screen in the lecture hall. At the end of the data collection period, the survey was taken offline and was no longer accessible to participants. Data were downloaded from the survey instrument and imported into an Excel file. Individual reports were prepared for the students by calculating their average scores on each of the Big Five personality traits, as per the agreement in the course assignment. This information was returned to the students on an individual basis, and a whole-class lecture was provided that explained the data and how students might use it when choosing their careers. Once the data were sorted and the results were returned to the students, all identifying information (i.e., student names) was removed from the existing dataset. Use of the “clean” dataset was approved by the Institutional Review Board for this study. Statistical software was used to calculate the resulting descriptive data and correlation coefficients.

**Results**

Using the “clean” dataset, data gathered from the three instruments were calculated according to the protocol for each. An NPI score, mean scores for the BFI scales, mean scores for the AGQ scales (performance-approach, performance-avoidance, mastery-approach, and mastery-avoidance), and mean scores for the non-factorial, general Overall Performance Orientation and Overall Mastery Orientation scales were determined for each respondent. For the purpose of this study, the BFI scales for Openness, Conscientiousness, and Neuroticism will not be discussed, as the data are superfluous to the relationships sought herein. Descriptive statistical data relevant to the current study are summarized in Table 1.

**Research Question One**

The first research question seeks to determine whether a relationship exists between NPI scores for narcissism and BFI scores for the Big Five personality traits of extraversion (E) and agreeableness (A). To determine the existence of a relationship, a bivariate analysis using Pearson’s \( r \) was performed on the NPI scores and the mean scores for the BFI subscales for E and A. The findings are suggestive of a statistically significant relationship between narcissism and E and A; narcissism as measured by the NPI has a positive correlation with extraversion (\( r = .473, p < .01 \)) and a negative correlation with agreeableness (\( r = -.187, p < .01 \); see Table 2).

**Research Question Two**

The second research question seeks to determine whether a relationship exists between the BFI scores for extraversion (E) and agreeableness (A) and the AGQ scores for performance (approach and avoidance) and
mastery (approach and avoidance) goal orientations. A bivariate analysis using Pearson’s $r$ was performed on the mean scores for the BFI subscales for E and A and on the mean scores on the AGQ subscales for performance-approach, performance-avoidance, mastery-approach, and mastery avoidance. Additionally, correlation analyses were computed to determine the relationships between E, A, and overall mastery orientation and the relationships between E, A, and overall performance orientation. The findings suggest that there is a positive relationship between overall mastery orientation and agreeableness ($r = .200$, $p < .01$) as well as a positive relationship between mastery-approach orientation and agreeableness ($r = .273$, $p < .01$). Further, the data indicate a negative relationship between mastery-avoidance orientation and extraversion ($r = -.124$, $p < .05$). As indicated in Table 3, the data revealed no statistically significant relationships between extraversion, agreeableness, and the domains of performance orientation (avoidance, approach, or overall).

### Research Question Three

The third research question seeks to determine whether a relationship exists between NPI scores and the AGQ scores for performance (approach, avoidance, and overall) and mastery (approach, avoidance, and overall) goal orientation. A bivariate analysis using Pearson’s $r$ was performed on the NPI scores and the mean scores on the AGQ subscales for mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance, as well as for the overall mastery and performance scales. The data indicate a negative correlation between narcissism scores and mastery-avoidance goal orientation ($r = -.118$, $p < .01$) and a positive correlation between narcissism scores and performance-approach goal orientation ($r = .197$, $p < .01$), as well as a positive correlation between narcissism scores and overall performance goal orientation ($r = .143$, $p < .05$; see Table 4).

### Discussion

This exploratory study seeks to determine the relationship between narcissism and goal orientation among university undergraduates. Fundamentally, relationships were determined between the Big Five traits of extraversion and agreeableness and the construct of dispositional narcissism. Effect size estimates, calculated by squaring the correlations reported in Table 4 (see Wilkinson & the Task Force on Statistical Inference, 1999), indicate that extraversion accounts for 22.4% of the variance in narcissism, while agreeableness accounts for 3.5% among the population in this study. These findings are consistent in their practical significance with previous studies conducted by Buss and Chiodo (1991), Paulhus and Williams (2002), and Saulsman and Page (2004) and further confirm that the construct of dispositional narcissism is

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### Table 1

<table>
<thead>
<tr>
<th>Scale</th>
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<tbody>
<tr>
<td>Narcissism</td>
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<td>Extraversion</td>
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<td>Overall Performance Orientation</td>
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### Table 2

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<tr>
<td>2. Extraversion</td>
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<td>3. Agreeableness</td>
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**Note.** **p < .01, two-tailed.
Table 3

Correlations Among Extraversion, Agreeableness, and Mastery Orientation

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<td>.056</td>
<td>.273**</td>
<td>.200**</td>
</tr>
<tr>
<td>3. Mastery-Avoidance Orientation</td>
<td>-.124*</td>
<td>.056</td>
<td>---</td>
<td>.212**</td>
<td>.817**</td>
</tr>
<tr>
<td>4. Mastery-Approach Orientation</td>
<td>.103</td>
<td>.273**</td>
<td>.212**</td>
<td>---</td>
<td>.736**</td>
</tr>
<tr>
<td>5. Overall Mastery Orientation</td>
<td>-.025</td>
<td>.200**</td>
<td>.817**</td>
<td>.736**</td>
<td>---</td>
</tr>
</tbody>
</table>

Note. * p < .05, two-tailed. ** p < .01, two-tailed.

Table 4

Correlations between Narcissism and AGQ Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Narcissism</td>
<td>---</td>
<td>-.118*</td>
<td>.062</td>
<td>-.045</td>
<td>.056</td>
<td>.197**</td>
<td>.143*</td>
</tr>
<tr>
<td>2. Mastery-Avoidance Orientation</td>
<td>-.118*</td>
<td>---</td>
<td>.212**</td>
<td>.817**</td>
<td>.216**</td>
<td>.117*</td>
<td>.189**</td>
</tr>
<tr>
<td>3. Mastery-Approach Orientation</td>
<td>.062</td>
<td>.212**</td>
<td>---</td>
<td>.736**</td>
<td>.080</td>
<td>.261**</td>
<td>.193**</td>
</tr>
<tr>
<td>4. Overall Mastery Orientation</td>
<td>-.045</td>
<td>.817**</td>
<td>.736**</td>
<td>---</td>
<td>.197**</td>
<td>.235**</td>
<td>.244**</td>
</tr>
<tr>
<td>5. Performance-Avoidance Orientation</td>
<td>.056</td>
<td>.216**</td>
<td>.080</td>
<td>.197**</td>
<td>---</td>
<td>.562**</td>
<td>.885**</td>
</tr>
<tr>
<td>6. Performance-Approach Orientation</td>
<td>.197**</td>
<td>.117*</td>
<td>.261**</td>
<td>.235**</td>
<td>.562**</td>
<td>---</td>
<td>.882**</td>
</tr>
<tr>
<td>7. Overall Performance Orientation</td>
<td>.143*</td>
<td>.189**</td>
<td>.193**</td>
<td>.244**</td>
<td>.885**</td>
<td>.882**</td>
<td>---</td>
</tr>
</tbody>
</table>

Note. * p < .05, two-tailed. ** p < .01, two-tailed.

Positive correlations were found between the personality trait of agreeableness and overall mastery goal orientation, and, more granularly, between agreeableness and mastery-approach goal orientation. Theoretically speaking, those who score high in agreeableness are more inclined toward a mastery goal orientation. That is, those whose personality tendencies tend toward empathy, cooperation, trust, and modesty (Costa & Widiger, 2002) are found to be more intrinsically motivated and find enjoyment through efforts they exert in the completion of tasks or in problem-solving. Possessing a proclivity toward mastery-approach orientation, these individuals will not shy away from challenging situations, and their desire to tackle challenges is greater than their fear of appearing unknowledgeable in front of others. In other words, they approach challenges with the full intent of mastering them. Based on the empirical data and considering the practical significance of the findings, the estimated effect sizes for the correlations determined in this study suggest that agreeableness accounts for 7.5% of the variance in mastery-approach goal orientation and only 4% of the variance in overall mastery goal orientation. While the personality trait of agreeableness does indeed enjoy a relationship with an individual’s achievement goal orientation, it accounts for a small portion of that orientation.

While generally consistent with the findings from the Zweig and Webster (2004) study, data in the present study reveal an inconsistency: no significant relationship was found between agreeableness and performance-avoidance orientation. It is reasonable to conclude that the disparity among the findings is due in part to the differences in instruments and populations. Considering the trait features of individuals who score high in extraversion—those whose personalities lead them to be social, assertive, dominant, and competitive (Costa & Widiger, 2002; Digman, 1990)—it would seem appropriate to ascribe them to a performance orientation. Contrary to this theoretical assumption, however, the present study found no significant correlation between extraversion and performance goal orientation. While there does appear to be a negative correlation between extraversion and
mastery-avoidance orientation, effect size estimates in the present study suggest that extraversion accounts for only about 1.5% of the variance in mastery-avoidance orientation. As indicated by Finney et al. (2004), individuals who do have a mastery-avoidance orientation are likely to focus on “avoiding negative possibilities such as losing skills or becoming incompetent” and “strive to avoid misunderstanding the course material or to not forget what [they have] learned” (p. 367). Further, those with a mastery-avoidance goal orientation are inclined toward perfectionism and will take great pains “to avoid making mistakes or doing anything wrong” (Finney et al., 2004, p. 367). Given the negative correlation between extraversion and mastery-avoidance orientation, the data suggest that extraverts are, to a small degree, not so inclined to worry about becoming incompetent, forgetting what they’ve learned, or making mistakes. Additional research is needed to determine whether those who score low in extraversion (i.e., introverts) have a greater orientation toward mastery-avoidance.

Because of their propensity toward self-enhancement, their attention-seeking behaviors, their desire for admiration, and their impulsivity and self-entitledness, it would be natural to assume in an anecdotal sense that those predisposed to narcissism would favor a performance goal orientation. According to Dweck (2008b), those individuals with a performance goal orientation come from a fixed mindset wherein they “care first and foremost about how they’ll be judged: smart or not smart” (p. 35). This priority would suggest that there are significant potential impediments for dispositional narcissists in learning environments; the need for recognition and public validation drives their efforts in the classroom, and they are less inclined to take risks and make errors for fear of appearing less than stellar in the eyes of their peers and instructors.

Those individuals with performance-approach orientation “want to demonstrate their ability relative to others or want to prove their self-worth publicly” (Wolters, 2004, p. 236), and as a result will play it safe by taking the easier, well-worn path, intellectually speaking; they wish to exhibit only what they know for certain. They will resort to cheating if their ability is questioned, as the need to exert effort “makes them feel dumb” (Dweck, 2008b, p. 35). Because narcissists enjoy the attention of performance (Campbell et al., 2002) and because they fear failure and rejection (Elliot & Thrash, 2001), the theoretical assumption suggests that their performances are often representative of superficial artifacts as opposed to deep processes of engaged learning that come with a mastery or learning goal orientation. The findings in this study, while not entirely discounting the role of narcissism in achievement goal orientation, suggest that there is much more to determining the achievement goal orientation of a learner than his or her narcissistic disposition. While we may find the narcissistic student to be, in Paulhus and Williams’ (2002) estimation, an “interpersonal irritant,” the data in this study suggest that narcissism is not a significant factor in determining a student’s achievement goal orientation; however, regardless of the small percentages, narcissism does share more of a relationship with performance goal orientation than with mastery goal orientation, accounting for 3.9% of the variance in performance-approach orientation and 2% of the variance for overall performance orientation. Although negatively correlated with mastery-avoidance orientation, narcissism accounts for only 1.4% of the variance in that realm, while accounting for virtually none (0.2%) of the variance in overall mastery orientation.

Limitations

Like all research that uses self-report measures, the results of this study may have been affected by common methods bias including social desirability bias and consistency motif. Social desirability bias occurs when the respondents tend “to present themselves in a favorable light, regardless of their true feelings about an issue or topic” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 881). A social desirability bias coupled with a consistency motif, in which respondents “try to maintain consistency in their responses to similar questions or to organize information in consistent ways” (Podsakoff et al., 2003, p. 881), may offer some explanation as to why some of the findings in this study are inconsistent with those in previous research.

Because their identities were initially provided and linked to the results of the BFI measure for the classroom assignment, respondents may have been more susceptible to a social desirability bias. Wanting to appear more socially acceptable and attractive, respondents may have opted for the more favorable responses and maintained a consistent set of responses for similar questions throughout the survey. These biases together have the potential to act as “suppressor variables” that hide the actual relationships between variables or “moderator variables” that influence the relationships between variables (Podsakoff et al., 2003, p. 881), which may have impacted the strength of statistical significance among the variables in this study.

Future iterations of this study will take additional steps to account for common methods bias including the temporal separation of the various instruments, asking respondents to complete the NPI, the BFI, and the AGQ questionnaires as discrete entities at different
times. Psychological separation of the instruments is also a potential remedy for consistency motif biases, wherein each questionnaire has its own “cover story” to make it appear unique and unrelated to the other instruments (Podsakoff et al., 2003). In addition to these methodological considerations to account for common methods bias, treatments of the relationship between narcissism and achievement goal orientation should include a qualitative component that would allow researchers to augment the quantitative findings with explanatory narratives. Such a component might include observations, interviews with the participants, and interviews with those who know the participants and their personality traits and behavioral tendencies.

Conclusion

Because this study functions as an exploratory foundation to include the construct of narcissism as a potential variable in students’ learning, it serves to contribute to the ongoing investigation into the relationships between personality and cognition. Future studies should consider the contextual nature of achievement goal orientation and, perhaps, the contextual and/or developmental nature of the narcissistic disposition itself. Additional empirical investigations into narcissism and learning should further explore the relationship between Dweck’s self-theories, which capture mindset and achievement goal proclivities, and the disposition of narcissism within specific learning environments.

If the statistical trends identified by Jean Twenge and her colleagues (2008) indeed suggest an increase in narcissism (vis-à-vis NPI scores) among university undergraduates across the U.S., then exploring the implications of such a shift in personality in the realm of teaching and learning is certainly worthwhile. The appeal to label, categorize, and distinguish learners as “this type” or “that style” is indeed seductive in its simplicity; however, as reflective educators, we know that the enigmatic challenges of teaching are too easily remedied by such categorization. We recognize that pigeonholing a single individual—let alone an entire generation—is a dangerous enterprise, leading to unfortunate self-fulfilling prophecies and gross over- and under-estimations that can impede and/or damage the learning process. As narcissism continues to make headlines and to be featured prominently in discussions of “what’s wrong with kids these days” (e.g., see CBS News Staff, 2010; Clark, 2010; Twenge, 2012), it is wise to explore the true nature of this “epidemic” (Twenge & Campbell, 2009) to determine its catalytic power in our classrooms and in the learning process.

In light of Pintrich’s (1994) suggestion that the goal of educational research is not only to better understand the constructs of learning, thinking, and motivation, but also “actually to improve learning” (p. 141), this study seeks to contribute to these efforts by exploring possible connections between a student’s personality construct and his or her achievement goal orientation. In order to help students become better, deeper learners, educators must continue to investigate those myriad variables that constitute their cognitive behaviors—both those that are adaptive and those that are maladaptive—and develop teaching strategies that enhance learning strategies (Wolters, 2004). This is not to say that best instructional practices should cater to specific learning preferences. On the contrary, Pashler, MacDaniel, Rohrer, and Bjork (2009) admonished that “research needs to be the foundation for upgrading teaching and learning” and that “its primary focus should be on the experiences, activities, and challenges that enhance everybody’s learning [emphasis added]” (p. 117). While the findings of this study do suggest a slight indication toward a particular task orientation, they in no way definitively define narcissistic individuals as consistently performance oriented; therefore, it would be quite a mistake to design instruction that appeals to such an orientation, which is little more than a preference masquerading as a true cognitive necessity.

Empirical explorations of the relationships between student personality constructs and learning add to the growing body of “best practice” discourse by contributing to the creation of a heuristic through which educators may develop proactive, interventive instructional models and pedagogies. Central to these models and pedagogies is a prioritization for individual difference, which values the synthesis of personal experience with new information, and high standards for mastery achievement, which encourages all students to improve their learning by engaging in reflective strategies that lead to deeper cognitive processing and a greater metacognitive awareness (de Raad & Schouwenburg, 1996; Somuncuoglu & Yildirim, 1999).

References


Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (2008). Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory. *Journal of Personality*, 76(4), 875-901. doi:10.1111/j.1467-6494.2008.00507.x


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