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The Multifaceted Relationship Between Narcissism and Aggression: A Path Model

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Acknowledgments

Abstract

The present study examined the complex relationship between narcissism and perceptions of aggression by conceptualizing these constructs using a path analysis model. High levels of affect intensity and low levels of attributional complexity were identified as potential mediators for the relationship between narcissism and perceptions of aggression. Participants first completed four self-report measures and were primed by writing an essay about a time they felt insulted (v. control). They then answered questions regarding a hypothetical situation prompting aggression through action and/or insult. ANOVA revealed overt narcissists more likely to view their behavior as excessive in a hypothetical insult situation in the absence of insult compared to a situation where insults were exchanged. Attributional complexity was positively correlated with Hypersensitive Narcissism Personality Scale and Narcissistic Personality Inventory.

Keywords: narcissism, aggression, priming

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The relationship between narcissistic traits and aggression is complex and cannot currently be reduced to any one explanation. With current research showing this relationship positively interacting with reactance in men who rape (Bushman, Bonacci, van Dijk, & Baumeister, 2003), contributing to aggressive driving (Schreer, 2002) and possibly accounting for some of the violence seen in adolescents, including school shootings (Thomaes, Bushman, Stegge, Olthof, 2008), it has become imperative that this relationship be clearly defined and understood. In the present study we will examine the complex relations between narcissism and their perceptions of the justifiability and acceptability of various types of aggression by conceptualizing these constructs using a path analysis model. High levels of affect intensity and low levels of attributional complexity are expected to play a role in this relation.

Narcissistic Aggression

Psychodynamic theories on the clinical definition of narcissism involve a wide array of terminologies and perspectives; this diversity in the literature ultimately means that there is no one universally accepted definition of narcissism as a construct in psychodynamic literature (Miller & Campbell, 2008). When reviewing the relations between narcissism and aggression in clinical populations, two prominent theories emerge. The first explanation for the relation between aggression and narcissism involves the idea that narcissists aggress as a means to preserve their over-inflated egos. The theory of threatened egotism, proposed by Bushman and Baumeister (1998) posits that overly inflated and unjustified perceptions of self may lead to aggression, but only in

situations where the person's high evaluation of self is threatened. This threat often takes the form of negative evaluation, particularly in venues of intelligence and ability, where the narcissist perceives him or herself as being superior to others. A study conducted by Bushman and Baumeister (1998) found that those who scored high in narcissism and were insulted tended to be very hostile towards the source of the insult, though they did not engage in displacement of that aggression to an innocent bystander. Interestingly, narcissistic individuals did not show any difference in levels of aggression with their less narcissistic counterparts unless they were insulted. The same result was found by Bushman et al. (2009); out of 500 participants, the most aggressive were those who had high levels of self-esteem, high levels of narcissism, and who had experienced a threatening, negative evaluation. It has also been found that violent prisoners, despite being incarcerated and anticipated to have reduced scores on narcissistic measures as a result of their environment, scored much higher on scales of narcissism compared to general, non-incarcerated populations, particularly on measures of entitlement and superiority (Bushman, Baumeister, Philips, & Gilligan, 1999). Locke (2008) found that those who are highly narcissistic also score higher on self-report measures of aggression. In addition, those who are narcissistic tend to attribute human traits to themselves more readily than others. Viewing others in a more dehumanizing way than the self has been attributed to higher levels of aggression (Bandura, 1999).

This theory is aligned with Kernberg's analysis of the narcissist (1975, 1976). This conceptualization is based on the borderline personality organization, which involves the utilization of primitive defense mechanisms, as well as oral-sadistic behaviors. Utilizing object relations theory, Kernberg asserts that the narcissistic infant has trouble

differentiating between object and self, as well as positive and negative feelings toward

an object, due to overwhelming levels of aggression within themselves. Essentially, the

narcissist develops a pathologically grandiose self-representation as a result of defensive

withdrawal from parental rejection and lack of parental love. The narcissist defends

against these feelings of anger towards negative objects by creating a primitive, idealized

self. These individuals utilize excessive splitting and projection as a means of isolating

"good" and "bad" conceptualizations and projecting those conceptualizations that are

"bad" out of the self and onto others. Their grandiose self-representation is divorced from

any negative views of self, which can manifest in internal feelings of shame and external

hunger for praise and admiration. Their overwhelming aggression is also partially

externalized, as their ideal self protects the fragile ego from an unsatisfying and negative

external world.

        The second explanation concerning the relation between narcissism and

aggression in clinical populations suggests that aggression is a means for narcissists to

defend themselves against rejection in social situations. The interaction between

narcissism and social rejection has also been found to produce aggression across four

studies, in which narcissists felt more anger and less internalized negative emotion than

other individuals when reflecting on past social rejection, as well as showing more direct

and displaced aggression in response to social rejection (Twenge & Campbell, 2003).

        This theory aligns with Kohut's view of the narcissist (1971), which posits that the

grandiose self is actually healthy in infancy; the parent becomes a "self-object," which is

expected to regulate anxiety and self-esteem, since the infant is not yet capable of

performing such tasks on its own. In the normally developing child, the parental figure

mirrors the child's imagined perceptions of omnipotence and grandeur and empathically encourages the child's sense of grandiosity, which allows the child to maintain primitive fantasies regarding the parent, and the infant is able to define self as self object as a means of preventing feelings of helplessness. Given time, the child will eventually internalize the functions of the external self object and become capable of individuation. In the pathological narcissist, however, if the parental figure does not provide empathic encouragement or is too disillusioning to provide an adequate mirror, the infant's sense of efficacy is severely threatened. In regards to empathic failure, he child will never grow out of this narcissistic stage and therefore operate from an earlier developmental stage later in life, constantly looking for self-affirming feedback. In the case of disillusionment with the parent, replacement self-objects will be sought later in life in the form of what are perceived as parental figures. In either case, these individuals see others as an extension of the self, and essentially use the opinions of others as a replacement for self-regulation and perceptions of self. The self is poorly constructed, which results in narcissistic rage when the need for positive regard from others is not met.

In contrast to these two psychodynamic perspectives, the social/personality perspective on narcissism as a sub-clinical trait recognizes that narcissistic individuals are not necessarily pathological; instead, they seem to largely portray a mixture of positive and negative traits, with those defined as clinical narcissists representing an extremely strong manifestation of an otherwise normal trait. The social/personality perspective recognizes that narcissism is not a dichotomy, but rather a trait that exists on a spectrum, with "normal" levels of narcissism existing within the population (Morf & Rhodewalt, 2001; Raskin & Terry, 1988). Sub-clinical narcissism has been associated with higher

levels of self-esteem and good psychological health (Sedikides, Rudich, Gregg, Kumashiro, Rusbult, 2004).

Narcissists who are defined by a grandiose, exhibitionistic self are often referred to as "overt" narcissists. This type of narcissism is more closely associated with extroversion, self-assurance and aggression; they also display an outgoing, self-assured nature, though not always in a positive way (Wink, 1991). This form of narcissism is associated with higher self-esteem and happiness, despite the number of maladaptive traits that overt narcissists display; even though their self-esteem derives from illusions of self, it still serves to improve their health in sub-clinical populations (Rose, 2001). These narcissists are more likely to make positive self-attributions. Narcissists that are defined by this oversensitivity to criticism are often referred to as "covert" narcissists. These narcissists appear introverted, vulnerable, anxious and defensive, but are internally grandiose and, like overt narcissists, are exploitative and entitled. This type of narcissist experiences lower self-worth, more feelings of depression and anxiety, and poorer executive functioning (Wink, 1991). The thread that ties these types together is a grandiose sense of self, which masks an internal vulnerability. Both overt and covert narcissists disregard the needs of others, are self-indulgent and see themselves as superior (Wink, 1991). Both types of narcissists are prone to boredom (Wink & Donahue, 1997).

Whether normal or pathological, narcissistic traits may lead to aggression in certain situations, which is defined as hostility in behavior or intention towards another person or persons. Unfortunately, the current literature does not completely explain this relation, which means that potential mediators in the relation between narcissism and aggression need to be experimentally assessed. It is implied that the narcissist is unable to

tolerate insults from others, as they cannot deal with a hit to their over-inflated sense of self, and will feel socially rejected in situations where others are insulting them, which they cannot tolerate due to unstable boundaries between self and others. These narcissistic factors are likely to result in aggression. In addition, Impression Management Theory (Felson, 1982), which states that people in general are more likely to verbally express anger when insulted, may be particularly potent in narcissists due to their sensitivity to criticism and insult.

Affect Intensity

Affect intensity is the strength with which individuals respond affectively to emotional stimuli. The construct originates from research into operationalizing dynamic mood dimensions (Diener, Emmons, Larson, & Griffin, 1985). Through research on the dynamic nature of mood, affect frequency and affect intensity were identified as two aspects of mood that seemed to vary over time. Frequency and intensity operate on mood independently of one another, making them separate constructs. In contrast, despite having been initially measured separately, the positive and negative affect are measured as one variable instead of two due to strong correlations between the two (Diener et al., 1985). Affect intensity has been strongly associated with mean levels of affect in both positive and negative directions (Cooper & McConville, 1993).

This temperament construct can be applied to a wide spectrum of stimuli that can be encountered in everyday living; for example, affect intensity influences how strongly individuals respond to emotional appeals in advertisements, as well as how readily individuals seek emotional stimulation in their day-to-day life (Moore & Homer, 2000). In addition, those who score higher on affect intensity measures tend to report greater

affective reactions in response to daily life events when these events were rated from "very good" to "very bad" (Larsen, Diener & Emmons, 1986). Positive and negative emotions have been found to work independently in the lives of individuals, so each tends to operate separately, despite being measured together (Diener & Emmons, 1984). It is worth noting, however, that these differences in responses are only found in affect-laden stimuli; the emotional response to non-affective stimuli does not differ between individuals with lower and higher affect intensity scores (Moore, Harris & Chen, 1995). Women have been observed to have stronger affect intensity despite being equally as happy as men, likely due to the fact that their emotional intensity balances out (Fujita, Diener, & Stanvick, 1991). The exact relation between affect intensity and narcissism, however, has not well researched.

Exploitiveness and entitlement aspects of narcissism have been positively correlated with affect intensity and mood variability (Emmons, 1987). Cattell (1957) argued that mood swings were part of the narcissistic personality framework. In addition, Rhodewalt and Morf (1998) found that those who scored higher on the narcissistic personality inventory experienced greater changes in anxiety, anger and self-esteem when presented with a situation in which they met failure. Higher levels of affect intensity have been associated with maladaptive methods of coping with stress and depressive symptomatology (Flett, Blankstein & Obertynski, 1996). This finding may associate the affect intensity measure more strongly with covert narcissists, who share these difficulties. Linville (1982, 1985) has found that high self-complexity leads to more stable affect, while narcissists tend to have low self-complexity, leading to stronger mood swings. This relationship occurs because those with low self-complexity are not able to

conceptualize themselves as fully, and will often take insults or praise that involves one aspect of themselves as an insult to the entirety of their being. A journal study by Bogart, Benotsch, Pavlovic, 2004) found that narcissists chronicled stronger affective reactions to positive and negative social comparisons. In addition, Fridja, Ortony, Sonnemans, & Clore, 1992) suggests that the intensity of emotion is the aspect that will most strongly determine whether or not the emotion will lead to social consequences, whether positive or negative. These findings point to affect intensity in particular as contributing to maladaptive actions, as can be seen in narcissistic aggression. Because high levels of affect intensity has an implied relation with narcissism, it can be posited that these affect intensity levels may mediate responses to insulting situations, which are often very affect provoking.

Attributional Complexity

Attributional complexity is the level of complexity with which individuals attribute reasons and causes to human behavior. This construct arose from two competing theories regarding attributional process; one view depicted human beings as making simpler attributions than they were previously thought to make, while the other view suggested that the very opposite was true, and human beings were more complex in their attributions (Ross & Fletcher, 1985). While one possible solution to these opposing theories involved the idea of attributions varying in complexity based on situational factors (Kassin & Hochreich, 1977; Tetlock, 1983), Fletcher, and colleagues (1986) developed the attributional complexity measure in order to test the theory that the complexity of attributions varied between persons as an individual differences measure determining the degree of sophistication associated with the attributions individuals make

about the behavior of others, which is comprised of seven subscales. A number of individual difference characteristics are integral to the idea of attributional complexity. A highly attributionally complex person according to Fletcher, et al. (1986) should display interest and motivation in regards to understanding the behavior of others. These individuals should favor complex explanations to those that are simple; while the complexity of explanations often varies by situation, attributional complexity is seen to vary among individuals as well, all else being equal. The highly attributionally complex individual should display a strong talent for metacognitive thinking, particularly when considering explanations for the behavior of others. These individuals can utilize information obtained from observed behavioral interactions much more effectively than those who are attributionally simple, which results in a stronger awareness of the influence of behavioral interactions on the behavior of others. These individuals can make complex inferences regarding their own internal behavior. Their inferences, too, about contemporary and past causal events should display higher levels of complexity.

Those who score higher in this measure are likely to assign more complex reasons for behavior and more motives than those who score lower (Fletcher, et al., 1986). While those who score higher on this measure may not necessarily perform better academically, they are viewed by others as being socially skilled, wise, considerate, open and empathetic; it has been hypothesized that these traits in particular may contribute to the good social judgment that attributionally complex people characteristically display (Fast, Reimer & Funder, 2007). These individuals are more likely to consider past events, situational factors and the dispositions of those involved when making a judgment regarding the behavior of others (Fletcher, et al., 1986). This construct has also been

positively associated with mild to moderate forms of depression, forming an inverted u-shaped curve when looking at depression as a whole (Marsh & Weary, 1989). Mildly depressed individuals are considered to be more sensitive to social information than the general population, which accounts for this relation.

Narcissists have been found to generally have low attributional self-complexity and often tend to make self-serving attributions (Linville, 1982, 1985; Rhodewalt & Morf, 1995). In self-attribution, narcissists are more likely to attribute success to themselves and their own talent, which in turn creates very strong emotional reactions should they fail; these self-serving attributions manifest themselves in an attributional egoism, which involves taking credit for positive events and blaming others for negative events (Emmons, 1987). In addition, in a study done by McCullough, Emmons, Kilpatrick and Mooney (2003), it was found that narcissists report more interpersonal transgressions and consider themselves the victims of these transgressions more often than non-narcissists. Because the focus of the narcissist is traditionally on him or herself (APA, 2000), it stands to reason that their understanding of others' behavior is less complex than those who are not as focused on themselves. This attributional style speaks of a low level of attributional complexity, as it is a somewhat simplistic method of perceiving attributions of behavior. As such, it is believed that narcissists with low attributional complexity will be more likely to aggress, as they will be more likely to blame others and be more likely to take insults personally. In addition, narcissists may favor simple explanations for the behavior of others, especially if such behavior is insulting or frustrating to the narcissist, and may make it easier for the narcissist to justify aggressive responses.

Affective Priming

Priming refers to the effect of prior experiences on the increase or decrease of sensitivity towards certain stimuli. Affective priming, in particular, is usually defined as the phenomenon of emotionally polarized stimuli being processed faster when presented with similar polarized stimuli (such as "happiness" and "light" or "darkness" and "death") as opposed to conflicting polarized stimuli (such as "darkness" and "happiness") (Musch & Klauer, 2003). Affective priming is often used to access implicit attitudes in participants; the method has shown to be useful in accessing these attitudes, which are often difficult to put into words (Banse, 2001). The strength of the affective prime and the accessibility has generally been found to mediate this type of priming (Musch & Klauer, 2003). Fazio, Sanbonmatsu, Powell, and Kardes (1986) contend that affect can be called up from an individual's memory simply from observing affective stimuli. This phenomenon has been observed beyond the use of words as stimuli; for example, Banse (2001) utilized photographs of the individual, that individual's significant other, and the individual's worst enemy as a means of emotional priming. Positive and negatively associated odors have also been used as a means of priming (Hermans, Baeyans, Lamote, Spruyt, & Eelen, 2005). Emotional distress and disorder has been found to act as a primer in such observed phenomena as generalized anxiety disorder patients having a more difficult time with threat-related words in a Stroop-related task (Mathews & MacLeod, 1985) and individuals with post-traumatic stress disorder taking longer to identify the colors of trauma-related words than healthy controls (Cassiday, McNally, & Zeitlin, 1992). In addition, a study by McNally and colleagues (1994) found that exposure to reminders of traumatic events increased negative mood in all participants, but increased

overgenerality only in PTSD patients, though it is uncertain whether generality is an antecedent or a consequence of this disorder.

Though narcissistic aggression has not been primed specifically, narcissism itself was primed by Sakellaropoulo and Baldwin (2007) who asked narcissists to reflect upon their special qualities and consider their initials, based on the theory that those who like their own initials have more positive self-esteem. The narcissists after priming viewed their own initials as being unlikable, but attractive. Pathological narcissists have also been primed using dominant and submissive self-views before being asked to evaluate their own implicit self-importance (Fetterman & Robinson, 2010). Those who were more pathologically narcissistic were more susceptible to the priming due to the higher instability of their perceptions of self-importance. When thinking about priming a narcissist with a more negative association, such as a time in which they felt most insulted, it is important to consider that individuals who are narcissistic are likely to be more attributionally simplistic when viewing the behavior of others than their less narcissistic counterparts, and are especially sensitive to ego-threat. Insult seems to act as a primer for these individuals to act more sensitively towards anger, as evidenced by Bushman and Baumeister (1998). It would be logical to conclude, then, that narcissism acts as a predisposition to react more quickly and strongly to feelings resulting from reminders of previous insults than non-narcissists, much as PTSD patients react to reminders of trauma through overgeneralizability (McNally, et al., 1994).

Hypotheses

Aggression can come in many forms: verbal and nonverbal, as well as direct and indirect. By presenting four hypothetical situations in which the various types of

aggression are acted out, either in reaction to a frustrating situation or a frustrating situation compounded by insult, it is hoped that the relation between levels of narcissism and the justifiability and likelihood of acting out in such a manner can be better understood, especially in conditions where the individual is reacting to an insult. In addition, it is hoped that by priming individuals through the essay condition by encouraging them to remember a time in which they felt insulted, an even stronger connection between insult and aggression can be analyzed, particularly in individuals with highly narcissistic traits.

H_1. Affect Intensity will mediate the relation between narcissism, as measured by the Narcissistic Personality Inventory (NPI) and Hypersensitive Narcissism Scale (HSNS), and perceptions of excessiveness and justifiability when thinking about one's own actions. High affect intensity is expected to predict higher levels of narcissism on both scales.

H_2. Attributional complexity will mediate the relation between narcissism, as measured by the NPI and HSNS, and perceptions of excessiveness and justifiability of the actions of others. Lower attributional complexity is expected to predict higher levels of narcissism on both scales.

H_3. Priming will lead to higher justification and lower excessiveness ratings for those who rate more highly on narcissistic measures on perceptions of one's own hypothetical aggression, while the inverse is hypothesized to be true for justification and excessiveness ratings for the store manager's hypothetical aggression.

H_4. Conditions in which the participant was hypothetically insulted will have a stronger effect on those who rate as highly narcissistic versus those who do not; higher

justification and lower excessiveness ratings are expected for those who rate more highly

on narcissistic measures on perceptions of one's own hypothetical aggression, while the

inverse is hypothesized to be true for justification and excessiveness ratings for the store

manager's hypothetical aggression. Verbal forms of aggression, particularly direct verbal,

are anticipated to be most justifiable and least excessive.

Method

Participants

Participants consisted of 129 recruited and screened members of the

StudyResponse project, all of whom were required to be 18 years of age or older.

Participants were predominantly white (81%, $N = 104$), were divided relatively evenly

between genders (52.7% male, $n = 68$) and were normally distributed in terms of age and

level of education. See Table 1 for display of demographic characteristics of our sample.

The *StudyResponse* project is hosted by the School of Information Studies at Syracuse

University, and exists as a resource for student and faculty researchers in the social

sciences. *StudyResponse* has received Institutional Review Board approval (#07199)

(Stanton, 2007).

Design

The design of the study was twofold: In order to test mediation, a series of

multiple regression analyses were conducted. In order to test the effects of our

independent variables of priming and insult, a three-way MANOVA as well as a two-way

ANOVA were conducted on participants' perceptions of justification and excessiveness

for the store manger's hypothetical aggression.

Materials and Procedure

The participants were administered materials through the web-based provider of surveys known as SurveyMonkey. They were given an informed consent sheet if they wish to participate, as well as a short demographics sheet. The computer then presented four self-report measures in random order in order to control for any extraneous effects caused by measurement order. Two different measures of narcissism were used in order to ensure that a wide variety of narcissistic attributes are assessed. To measure overt narcissistic traits, the Narcissism Personality Inventory – Short Version (NPI-16) was used. This 16-item measure closely resembles the 40-item version, and compares well in terms of validity (Ames, Rose & Anderson, 2006). Covert narcissistic traits were measured using the Hypersensitive Narcissism Scale (HSRS), a 10-item measure that has been shown to be reliable in assessing covert narcissistic traits (Hendin & Cheek, 1997). The Attributional Complexity Scale (ACS), and the Affect Intensity Measure (AIM) were used to measure levels of attributional complexity and affect intensity, respectively. All scales were found to have good reliability, with Cronbach's alphas above .80. See Table 2 for all reliability data associated with our scales. After being administered these measures, half of the participants were asked to write an essay about the time in which they felt most insulted, as a means of priming them to feel insulted when reading the hypothetical situations; the other half received a neutral essay about shopping. The participants then received a hypothetical situation about an agitated store manager with four different responses. Half of the participants received a hypothetical situation in which they are insulted, while the other half of participants did not receive the insult condition. After reading each situation, they responded to five questions concerning the store manager and the participant's hypothetical reaction, which assesses the perception

of justifiability and excessiveness of aggression of both parties. Finally, they were asked about the believability and their ability to relate to the situation being presented, and they were asked to write an explanation of how they would really react in such a situation. Participation required roughly one hour. Participants were given a $10 incentive for their participation through *StudyResponse* as well as a debriefing sheet, and the primary researcher's e-mail address.

Results

In order to test each of our mediation hypothesis statements, a series of regressions and Sobel tests were conducted (MacKinnon & Dwyer, 1993). Mediation has four required steps: (1) The IV must be related to the DV, (2) the IV—GMQ/DAP—must be related to the mediator, (3) the mediator must be related to the DV—CQ, and (4) when controlling for the mediator, the IV must no longer be related to the DV. All four steps must be satisfied for mediation to occur. A Sobel test indicates whether the mediation is significant. These steps are taken for each mediator (Baron & Kenny, 1986).

H_1. Linear regressions found no statistically significant mediation of affect intensity, as measured by the Affect Intensity Measure, on the relationship between narcissism and perceptions of one's own aggressive acts. In addition, both types of narcissism were found not to predict affect intensity scores. These findings indicate that affect intensity had no effect on the relation between narcissism and perceptions of one's own aggression in the present study. See Figure 1 for a depiction of the path model with affect intensity as a mediator.

H_2. Full mediation was found (Sobel $Z = 3.83$, one-tailed $< .0001$, two tailed $< .0001$), such that covert narcissism, as measured by the Hypersensitive Narcissism scale,

predicted levels of attributional complexity ($\beta = 0.43$, $p < .01$), which was found to predict responses to "The store manager's treatment of me was justified," ($\beta = 0.45$, $p < .01$) Narcissism as measured by the Narcissistic Personality Inventory also displayed full mediation in regards to this perception of the store manager's justifiability (Sobel $Z = 2.04$, one-tailed = .019, two-tailed = .039), with overt narcissism also predicting levels of attributional complexity ($\beta = 0.19$, $p = .03$) Figure 2 displays significant paths for both overt as well as covert narcissists.

H_3. A linear regression found that priming as a dichotomous measure (insult vs. control conditions) did not significantly predict perceptions of aggressive situations on its own. In addition, a two-way analysis of variance revealed no significant interactions between priming and narcissism on perceptions of aggressive situations, as well as no significant main effects for either variable.

A 2 Priming (Insult v. Shopping Essay) x 2 HSNS (High v. Low) x 2 NPI (High v. Low) MANOVA was run on "The store manager's treatment of me was insulting" and "The store manager's treatment of me was justified." A significant Priming x HSNS x NPI interaction was found for the "insulting" item, $F(1, 110) = 13.606$, $p < .001$, partial eta squared = 11 (See Figures 3 and 4).

H_4. A two-way between-groups analysis was conducted to explore the impact of insult condition and overt narcissism on the perceived excessiveness of one's own hypothetical reaction. Insult condition was divided into five groups (direct verbal, indirect verbal, direct physical, indirect physical and control), while covert narcissism was divided into two groups (NPI score 16-23, and NPI score 24-30). There was a statistically significant interaction effect between narcissism and insult condition, $F(4,$

110) $= 3.98$, $p = < .01$. The effect size was medium to large (partial eta squared $= .13$). In addition, a main effect for insult condition was found, $F(4, 110) = 17.64$, $p < .01$. Post-hoc comparisons using the Scheffe test revealed that the control ($M = 5.48$, $SD = 1.73$), direct verbal ($M = 5.35$, $SD = 1.50$), and indirect verbal ($M = 4.88$, $SD = 1.69$) conditions significantly differed from the direct physical ($M = 2.19$, $SD = 1.63$), and indirect physical ($M = 1.08$, $SD = 0.28$) conditions (See Figure 5). The main effect for narcissism did not reach statistical significance.

A two-way between-groups analysis was also conducted to explore the impact of insult condition and overt narcissism on the perceived justifiability of the store manager's treatment of the individual. The interaction effect between the insult condition and overt narcissism was not statistically significant. There was also no main effect found for insult condition. A main effect was found for narcissism, $F(1, 111) = 4.58$, $p = .03$.

Discussion

Hypothesis 1

Affect intensity as measured by the Affect Intensity Measure was not significantly related to either form of narcissism in the present study. Though reviews of the literature imply a relation between the two variables, especially when considering the mood swings and affect ability observed in clinical narcissists (Cattell, 1957), these relations have yet to be founded by empirical data. As a result, it is difficult to determine whether the fault lies with the construct or the measure by which it was tested; alternate methods of measuring affect intensity, such as the PANAS, may help verify or refute this non-significant relation in future studies. In addition, similar, yet divergent constructs such as sensation seeking and affect frequency may potentially mediate between narcissism and

perceptions of aggression, especially since statements such as "mood swings" and "stronger mood" may refer to a number of different dynamic mood constructs. Though affect intensity in particular may not have been statistically significant, variables relating to dynamic mood still provide a wealth of possibility for exploring the relations between narcissism and perceptions of aggression.

Hypothesis 2

Attributional complexity was found to fully mediate the relation between narcissism and justifiability of aggression when perpetrated by others; however, the positive direction of the relation between narcissism and attributional complexity conflicts with the initial hypothesis. The literature on sub-clinical narcissism points to low empathy associated with higher scores (Watson, Grisham, Trotter, & Biderman, 1984); in addition, the higher their self-view, the more cynical and negative their views of others become (Rhodewalt & Morf, 1995). In contrast, empathy and openness have been positively correlated with high attributional complexity (Fast, Reimer & Funder, 2007). In addition, narcissism is negatively correlated with depression, while attributional complexity has been positively correlated (Wink, 1991). Though attributional complexity has not previously been applied directly to sub-clinical narcissism to the knowledge of the present study's researchers, a positive relation between attributional complexity and measures of narcissism does not seem to be generally supported by the literature.

Even so, though the research does indicate that narcissistic individuals are low in self-complexity and prefer simple explanations for their own behavior, narcissists are adept at determining why blame lies with others, not themselves. They may be more attributionally complex as a direct result of their need to shift blame on other people. By

developing a tendency to think critically about the behavior of others and to thoroughly

analyze the behavior of the people around them, narcissists may be able to use these

complex thoughts as a means to rationalize blame when considering others. Like

depressives, they may be more in tune with social information than the general

population. This high rating in attributional complexity may serve as a compensatory

function for their own self-perception, as implied by Kohut's assertion that narcissists

rely on others for their own self-assessment (1971). Because these are preliminary results,

replication of and further exploration into the relation between narcissism and

attributional complexity would be necessary in order to further develop and verify this

theory.

  In addition, while the literature in general supports the separation between overt

and covert narcissism, this finding may point to a potential link between the two

constructs; it has already been determined that common threads exist between overt and

covert narcissism, such as disregard for others and self-absorption (Wink, 1991). It may

be argued that these two constructs may also be linked by complex attributions when

considering the behaviors of others. Considering the literature in general, however, overt

and covert narcissists may be manifesting a similar trait for different reasons or in

different ways. Covert narcissists in particular may relate to attributional complexity in a

way similar to that of depressed individuals, while overt narcissists may manifest

attributional complexity in a healthier way.

  This finding brings new questions to light regarding the difference between sub-

clinical and clinical narcissism when considering attributional complexity. Due to the fact

that sub-clinical narcissists are more psychologically healthy than those individuals who

are identified as pathologically narcissistic and are both positive and negative traits, it

may be that the largely positive trait of high attributional complexity is limited to sub-

clinical narcissists. Future studies should examine the similarities and differences

between sub-clinical narcissists and clinical narcissists when scored using this measure. It

should be noted, however, that the use of self-report measures and hypothetical situations

may limit the external validity of these findings.

Hypothesis 3

Priming as a dichotomous measure (insult essays vs. shopping essays) was not

found to play a significant role in perceptions of aggression when viewing scales

separately, though a 2 x 2 x 2 interaction involving both scales and priming condition was

found. It was determined that those who score low on the HSNS scale are less prone to

priming as those who score more highly on the HSNS, while scores on the NPI do not

have a significant effect on priming, with both low and high scores displaying high scores

in perceiving the store manager's treatment as insulting, indicating that priming works on

both populations. Conversely, in the absence of priming, those who score lower on the

HSNS and higher on the NPI are more likely to perceive the store manager's treatment as

insulting. Additional research has been planned to address priming as a qualitative

variable, so that the insulting situations being described can be analyzed more

thoroughly; since priming as a construct often focuses on specific words and phrases, it

would be of utmost importance to look at the data qualitatively as well as dichotomously

before reaching any solid conclusions. It is likely that the relationship between priming in

the insult condition and perceptions of aggression will be better understood once the

qualitative aspects of the insult essays can be more effectively studied and examined in

relation to perceptions of aggression.

Hypothesis 4

Narcissists measured using the Narcissistic Personality Inventory (NPI) viewed direct verbal aggression as less excessive in response to an insult condition than more non-narcissistic individuals. These findings support previous research regarding Impression Management Theory, which states that individuals, particularly narcissists, are more likely to respond with verbal aggression when insulted (Felson, 1982). It is important to note that narcissists in this particular study did not seem to favor any other type of aggression over the normal population, which includes both forms of physical aggression and indirect verbal aggression. This finding correlates to Kernberg's (1975) observation of the narcissist as an oral-sadistic character, who is likely to use his or her words as a weapon against others. The fact that only overt narcissists appeared to display this relationship in the present study is also supported by the literature. This type of narcissist has already been identified as more aggressive than their covert counterparts (Wink, 1991). In addition, Felson (1982) utilized the NPI in his research study, but not the HSNS. An important distinction can be made between these two types of narcissists when looking at Impression Management Theory; namely, insult conditions seem to have a more profound effect on those who are measured as narcissistic by the NPI as opposed to the HSNS.

In addition, those who are more narcissistic are more likely to view their reaction as excessive in the absence of an insult condition. This finding implies that if narcissists do not feel that they are being personally insulted or humiliated, they are actually less likely to perceive an aggressive act as being appropriate and therefore may be less likely

to aggress than the general population in the absence of an insult condition. This finding

supports the narcissistic tendency towards hypersensitivity to criticism, as well as

suggesting that they may actually be less aggressive than the general population unless

certain conditions are met. The concept that narcissists may actually be less aggressive in

certain situations may provide some explanation for why conflicting findings appear in

the literature regarding a direct relation between narcissism and aggression;

overgeneralizing narcissistic aggression is not supported by the current findings, as they

seem to aggress in very specific situations. This knowledge has a number of clinical

applications, especially when dealing with someone who may have narcissistic

tendencies; it is important to understand when these individuals may be at risk for

aggressing, and identifying the narcissist's particular weakness for direct verbal

aggression against insult may aid clinicians in providing client-specific interventions for

problem behaviors.

The main effect between narcissism and the justifiability of the store manager's

reaction is surprising at first. Despite seeing their own reaction as less excessive when

they respond verbally and directly, they consider the store manager far more justified

when they respond with direct or indirect verbal aggression than non-narcissists do. They

are also considerably more likely to see the store manager's reaction as justified in the

control condition than those who score lower in narcissism scales. This finding may be

related to the higher levels of attributional complexity discovered in narcissists as a result

of Hypothesis 2; as a result of narcissists being able to ascribe more complex attributions

to the behavior of others, narcissists may actually be able to logically understand the store

manager's position and recognize the multitude of factors that may contribute to his

behavior more acutely than non-narcissists; however, this greater logical understanding

does not necessarily mean that the narcissist empathizes or "feels sorry for" the

individual. This finding further demonstrates that narcissists are more likely to be

attributionally complex, though their reasons for being this way may differ significantly

from individuals who score high on this measure, but lower on narcissistic measures.

Future studies should include a comparison of attitudes between the

attributionally complex that rate both low and high on the NPI to explore this concept. As

with Hypothesis 2, the use of self-report measures and hypothetical situations limits the

external validity of these findings.

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Research Protocol for Individual Research Project

Project Description

The relationship between narcissistic traits and aggression is complex and cannot currently be reduced to any one explanation. With current research showing this relationship positively interacting with reactance in men who rape (Bushman et al., 2003), contributing to aggressive driving (Schreer, 2002) and possibly accounting for some of the violence seen in adolescents, including school shootings (Thomaes et al., 2008), it has become imperative that this relationship be clearly defined and understood. The present study seeks to examine the complex relations between narcissism and their perceptions of the justifiability and acceptability of various types of aggression by conceptualizing these constructs using a path analysis model. High levels of affect intensity and low levels of attributional complexity are expected to play a role in this relation.

When reviewing the research on the relationship between narcissism and aggression in sub-clinical populations, two prominent theories emerge. The first explanation for the relation between aggression and narcissism involves the idea that narcissists aggress as a means to preserve their over-inflated egos. The theory of threatened egotism, proposed by Bushman and Baumeister (1998) posits that overly inflated and unjustified perceptions of self may lead to aggression, but only in situations where the person's high evaluation of self is threatened. The second explanation concerning the relation between narcissism and aggression suggests that aggression is a means for narcissists to defend themselves against rejection. The interaction between narcissism and social rejection has also been found to produce aggression across four studies (Twenge & Campbell, 2003). Neither of these theories serves to completely explain this relationship, however, which means that potential mediators in the relationship between narcissism and aggression need to be experimentally assessed. Both theories, however, imply that the narcissist is unable to tolerate insults from others, as they either cannot deal with a hit to their over-inflated sense of self, or will feel socially rejected in situations where others are insulting them.

Affect intensity is the strength with which individuals respond affectively to emotional stimuli. Exploitiveness and entitlement aspects of narcissism have been positively correlated with affect intensity (Emmons, 1987). In addition, Rhodewalt & Morf (1998) found that those who scored higher on the narcissistic personality inventory experienced greater changes in anxiety, anger and self-esteem when presented with a situation in which they met failure. Because high levels of affect intensity have already been observed in narcissists, it can be posited that these affect intensity levels may mediate their responses to insulting situations, which are often very affect provoking. Attributional complexity, on the other hand, is the level of complexity with which individuals attribute reasons and causes to human behavior. Those who score higher in this measure are likely to assign more complex reasons for behavior and more motives than those who score lower (Fletcher, Danilovics, Fernandez, Peterson & Reeder, 1986). In self-attribution, narcissists are more likely to attribute success to themselves and their own talent, which in turn creates very strong emotional reactions should they fail

(Emmons, 1987). In addition, in a study done by McCullough, Emmons, Kilpatrick and Mooney (2003), it was found that narcissists report more interpersonal transgressions and consider themselves the victims of these transgressions more often than non-narcissists. Because the focus of the narcissist is traditionally on him or herself (APA, 2000), it stands to reason that their understanding of others' behavior is less complex than those who are not as focused on them. This lack of attributional complexity may lead narcissists to favor simple explanations for the behavior of others, especially if such behavior is insulting or frustrating to the narcissist, and may make it easier for the narcissist to justify aggressive responses.

Aggression can come in many forms: both verbal and nonverbal, as well as direct and indirect. By presenting four hypothetical situations in which the various types of aggression are acted out, either in reaction to a frustrating situation or a frustrating situation compounded by insult, it is hoped that the relation between levels of narcissism and the justifiability and likelihood of acting out in such a manner can be better understood, especially in conditions where the individual is reacting to an insult.

It is anticipated that the path between high levels of narcissism and high levels of perceived acceptance of aggression (in all of its forms) will have significant path weight, as depicted by beta values. The same relationship is predicted between high levels of narcissism and perceiving aggression as being justified in all forms. Though some forms of aggression (e.g. telling friends about the situation) are expected to be more acceptable than others (e.g. punching the insulting individual in the eye), it is expected that these differences will be consistent across the four forms of aggression being studied (direct physical, indirect physical, direct verbal and indirect verbal). High affect intensity is expected to have a significant relationship with narcissism, as well as mediate its relation with perceptions of aggression. The path weight of the inverse relationship between attributional complexity and narcissism is expected to have a significant path weight, and is expected to mediate the relationship between narcissism and perceptions of aggression. Finally, priming for feelings of insult is expected to mediate the relationship between narcissism and perceptions of aggression.

Participants

Participants will consist of 150 recruited and screened members of the StudyResponse project, all of whom will be required to be 18 years of age or older. The StudyResponse project is hosted by the School of Information Studies at Syracuse University, and exists as a resource for student and faculty researchers in the social sciences. StudyResponse has received institutional review board approval (#07199; reviewed for 2008) (Stanton, 2007). Participants will be compensated $10 for their participation.

Research Procedures and Methodology

The participants will be administered materials through the web-based provider of surveys known as SurveyMonkey. They will be given an informed consent sheet if they wish to participate, as well as a short demographics sheet. They will then be

electronically administered the short form of the Narcissism Personality Inventory (NPI-16), the Hypersensitive Narcissism Scale (HSNS), the Attributional Complexities Scale (ACS), and the Affect Intensity Measure (AIM). Order of these measures will be randomized for each participant to minimize the effects of testing order on the results. After being administered these measures, half of the participants will be asked to write an essay about the time in which they felt most insulted, as a means of priming them to feel insulted when reading the hypothetical situations; the other half will receive a neutral essay about shopping. The participants will then receive a hypothetical situation about an agitated store manager with four different responses. Half of the participants will receive a hypothetical situation in which they are insulted, while the other half of participants will not receive the insult condition. After reading each situation, they will respond to five questions concerning their hypothetical reaction. Finally, they will be asked about the believability and their ability to relate to the situation being presented, and they will be asked to write an explanation of how they would really react in such a situation.

Participants will be given $10 as compensation for their participation, regardless of whether or not they answer every question, as well as a debriefing sheet, which provides details and references regarding the study, as well as the primary researcher's e-mail address.

Consent Procedures and Data Confidentiality and Anonymity

This study will follow the guidelines set by the American Psychological Association. Participants will be fully informed of the procedures and told that they may discontinue their participation at any time without prejudice or penalty. As stated previously, potential participants will be given an informed consent sheet, which outlines the procedures of the study and their requirements, should they decide to participate.

In order to insure anonymity, absolutely no names or code numbers will appear on survey instruments. Additionally, informed consent sheets will be collected separately from any survey instruments. In this way, participants will be insured of full anonymity. The data will be collected in such a way that no one, other than the researcher, will have access to the responses of the participants of the study. This method will insure full confidentiality.

Proposed Data Analyses

Path analysis will be used to test the validity of the causal model using simple OLS and maximum likelihood methods to predict the path of each relationship. A chi square goodness of fit test will be used to calculated goodness of fit for this model. All tests of mediating effects will be conducted using AMOS, a causal model test.

Risks/Discomfort and Benefits to the Participants

No significant risks have been associated with the procedures employed in this experiment. Participants will receive monetary compensation for their participation, as well as the opportunity to think critically about themselves through taking the surveys and thinking critically about their opinions toward hypothetical aggressive situations.

139 Community Members 68 Male 61 Female	Recruited through *StudyResponse* Project $10 incentive
18-24 2% 25-34 19% 35-44 13% 45-54 27% 55-64 30% Over 64 9%	Caucasian 81% African-American 10% Hispanic 2% Asian 5%
HS Graduate 13% Some College 35% Bachelor's Degree 42%	Master's Degree 12% Doctoral Degree 5% Other 2%

Table 1. Participant demographics for gender, age, race and level of education (*N* = 139).

Scale	# of Items	Cronbach's α
NPI-16 Narcissism Personality Inventory	16	.81
HSNS Hypersensitive Narcissism Scale	10	.86
ACS Attributional Complexity Scale	28	.87
AIM Affect Intensity Measure	40	.93

Table 2. Reliability coefficients for instruments used in the study.
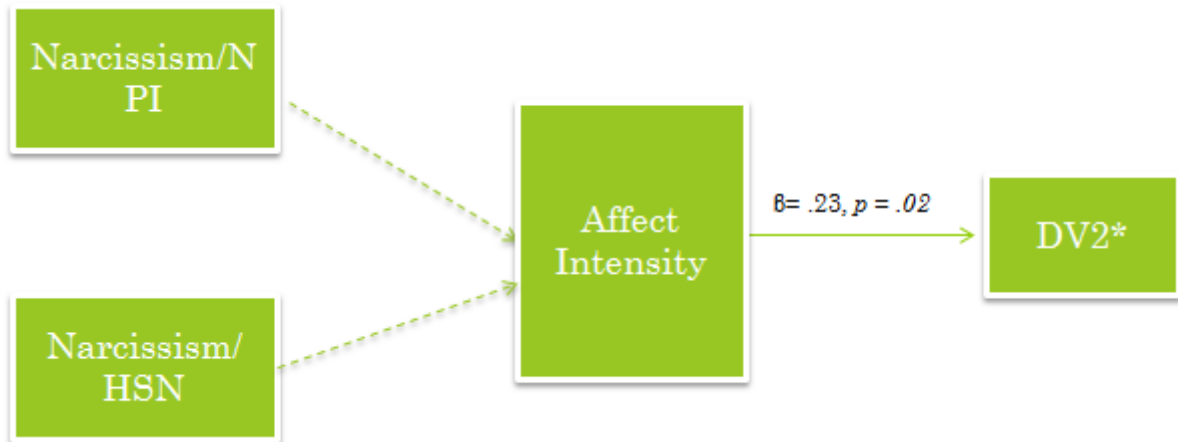
*The store manager's treatment of me was justified.
Scaled from 1 = Strongly disagree to 7 = Strongly agree

Figure 1. Illustration of the model identified in Hypothesis 1. A linear relationship between Affect Intensity and ratings of the store manager's justifiability, but no other path in the model was significant.
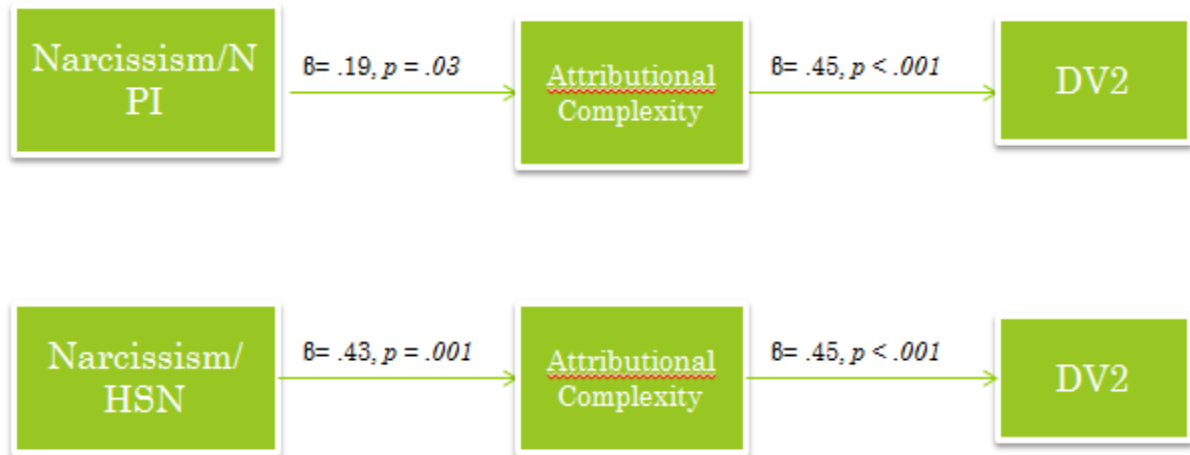
*The store manager's treatment of me was justified.
Scaled from 1 = Strongly disagree to 7 = Strongly agree

Figure 2. Illustration of the model identified in Hypothesis 2. Full mediation was found for attributional complexity between both types of narcissism and perceptions of the store manager's justifiability.
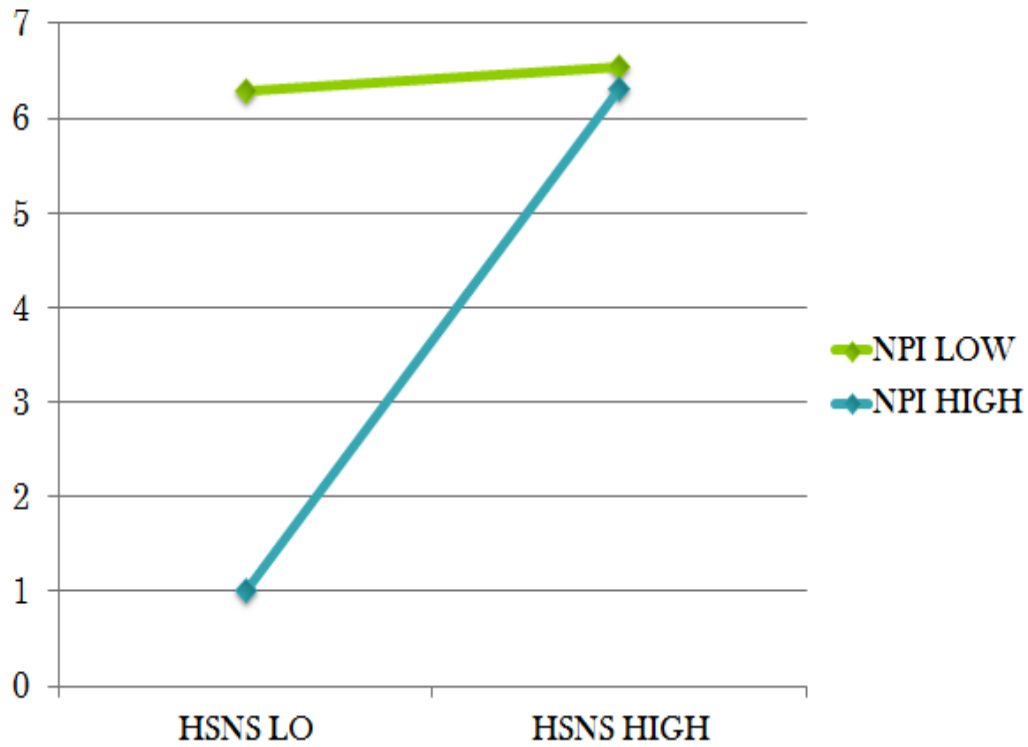
Figure 3. A depiction of the NPI x HSNS interaction when looking at the insult condition on perceptions of the store manager's treatment as insulting. Those who score low on the HSNS are the least affected by priming, while there appears to be no difference between low and high NPI scores; both are equally primed.
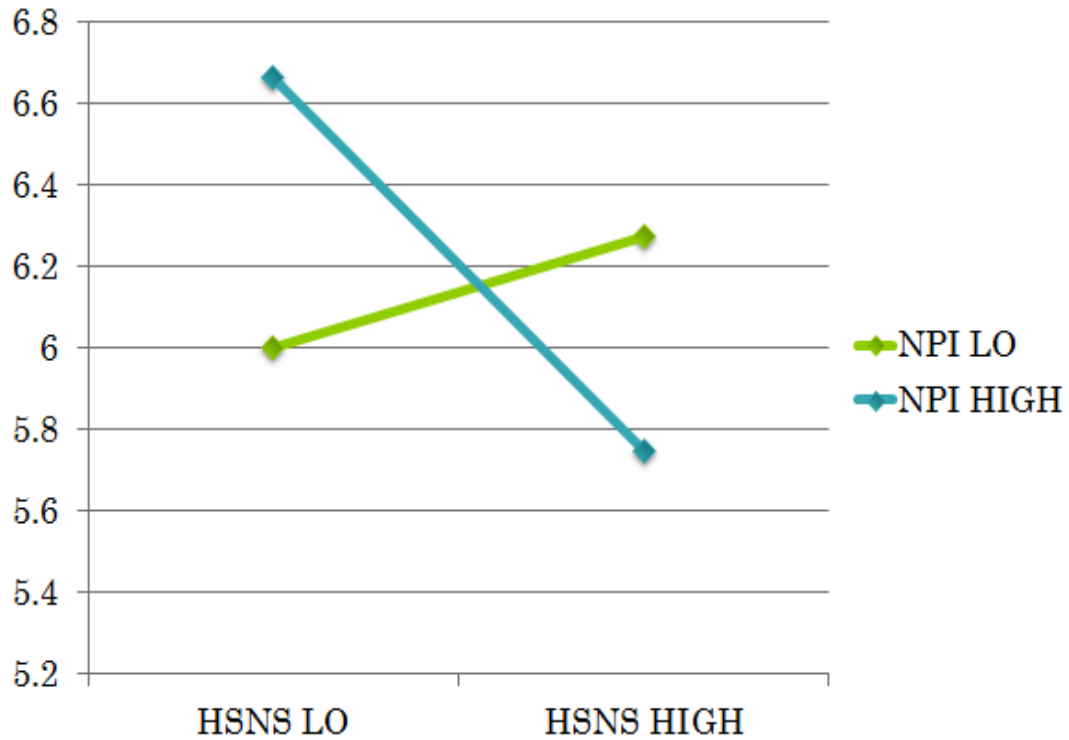
Figure 4. A depiction of the NPI x HSNS interaction when looking at the shopping (control) condition. Without priming, those who rate lower on the HSNS and rate higher on the NPI are more likely to feel insulted by the store manager's treatment.
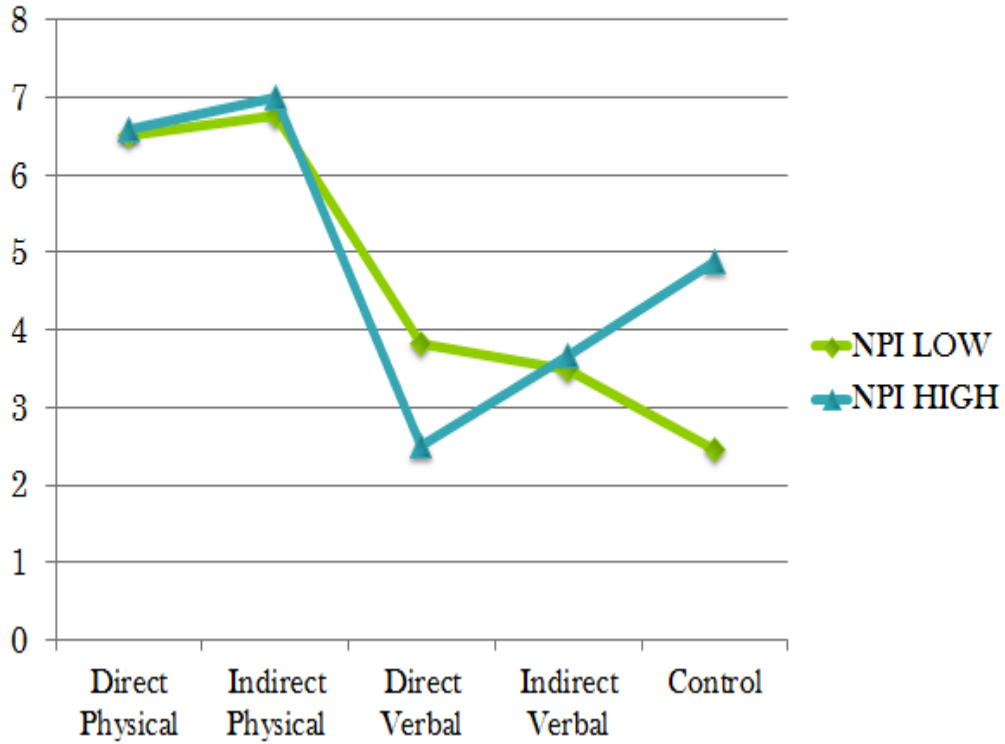
Figure 5. The interaction between NPI scores and type of aggression response on perceptions of one's own reaction. Those who are more narcissistic perceive direct verbal aggression as less excessive, and aggression in the control condition as more excessive.

Appendix A

Survey Packet

Instructions: Please answer the following questions as completely and accurately as possible.

Gender: _____Female   _____Male   _____Transgender

Age: _____

Race:

American Indian   Alaska Native

Asian   Black or African American

Native Hawaiian   Pacific Islander

White   Other_____

What is your level of college education?

Some High School   High School Graduate

Some College   Associate's Degree

Bachelor's Degree   Master's Degree

Doctoral Degree   Other: _____

Please indicate the **Socio-Economic Status of your family:**

_____ Lower class

_____ Lower middle class

_____ Middle class

_____ Upper middle class

_____ Upper class

(NPI-16) Read each pair of statements below and place an "X" by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. **Please complete all pairs**.

1.   __   I really like to be the center of attention

     __   It makes me uncomfortable to be the center of attention

2.   __   I am no better or no worse than most people

     __   I think I am a special person

3.   __   Everybody likes to hear my stories

     __   Sometimes I tell good stories

4.   __   I usually get the respect that I deserve

     __   I insist upon getting the respect that is due me

5.   __   I don't mind following orders

     __   I like having authority over people

6.   __   I am going to be a great person

     __   I hope I am going to be successful

7.   __   People sometimes believe what I tell them

     __   I can make anybody believe anything I want them to

8.   __   I expect a great deal from other people

     __   I like to do things for other people

9.   __   I like to be the center of attention

     __   I prefer to blend in with the crowd

10 __ I am much like everybody else

__ I am an extraordinary person

11 __ I always know what I am doing

__ Sometimes I am not sure of what I am doing

12 __ I don't like it when I find myself manipulating people

__ I find it easy to manipulate people

13 __ Being an authority doesn't mean that much to me

__ People always seem to recognize my authority

14 __ I know that I am good because everybody keeps telling

__ When people compliment me I sometimes get embarrassed

__ I try not to be a show off

15 __ I am apt to show off if I get the chance

__ I am more capable than other people

16 __ There is a lot that I can learn from other people

HSNS

Please answer the following questions by deciding to what extent each item is characteristic of your feelings and behavior. Fill in the blank next to each item by choosing a number from the scale printed below.

1 = very uncharacteristic or untrue, strongly disagree

2 = uncharacteristic

3 = neutral

4 = characteristic

5 = very characteristic or true, strongly agree

_____ 1. I can become entirely absorbed in thinking about my personal affairs, my

health, my cares or my relations to others.

_____   2. My feelings are easily hurt by ridicule or the slighting remarks of others.

_____   3. When I enter a room I often become self-conscious and feel that the eyes of others are upon me.

_____   4. I dislike sharing the credit of an achievement with others.

_____   5. I feel that I have enough on my hands without worrying about other people's troubles.

_____   6. I feel that I am temperamentally different from most people.

_____   7. I often interpret the remarks of others in a personal way.

_____   8. I easily become wrapped up in my own interests and forget the existence of others.

_____   9. I dislike being with a group unless I know that I am appreciated by at least one of those present.

_____   10. I am secretly "put out" or annoyed when other people come to me with their troubles, asking me for my time and sympathy.

Attributional Complexity Scale

Please answer each question as honestly and accurately as you can, but don't spend too much time thinking about each answer.

1. I don't usually bother to analyze and explain people's behavior.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

2. I Once I have figured out a single cause for a person's behavior I don't usually go any further.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

3. I believe it is important to analyze and understand our own thinking processes.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

4. I think a lot about the influence that I have on people's behavior.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

5. I have found that relationships between a person's attitudes, beliefs, and character traits are usually simple and straightforward.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

6. If I see people behaving in a really strange or unusual manner, I usually put it down to the fact that they are strange or unusual people and don't bother to explain it any further.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

7. I have thought a lot about the family background and personal history of people who are close to me, in order to understand why they are the sort of people they are.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

8. I don't enjoy getting into discussions where the causes for people's behavior are being talked about.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

9. I have found that the causes for people's behavior are usually complex rather than simple.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

10. I am very interested in understanding how my own thinking works when I make judgments about people or attach causes to their behavior.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

11. I think very little about the different ways that people influence each other.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

12. To understand a person's personality/behavior I have found it is important to know how that person's attitudes, beliefs, and character traits fit together.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

13. When I try to explain other people's behavior I concentrate on the other person and don't worry too much about all the existing external factors that might be affecting them.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

14. I have often found that the basic cause for a person's behavior is located far back in time.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

15. I really enjoy analyzing the reasons or causes for people's behavior.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

16. I usually find that complicated explanations for people's behavior are confusing rather than helpful.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

17. I give little thought to how my thinking works in the process of understanding or explaining people's behavior.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

18. I think very little about the influence that other people have on my behavior.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

19. I have thought a lot about the way that different parts of my personality influence other parts (e.g., beliefs affecting attitudes or attitudes affecting character traits).

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

20. I think a lot about the influence that society has on other people.

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

21. When I analyze a person's behavior I often find the causes form a chain that goes back in time, sometimes for years.

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

22. I am not really curious about human behavior.

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

23. I prefer simple rather than complex explanations for people's behavior.

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

24. When the reasons I give for my own behavior are different from someone else's, this often makes me think about the thinking processes that lead to my explanations.

	-3	-2	-1	0	1	2	3
	Strongly Disagree			Neither Agree or Disagree			Strongly Agree

25. I believe that to understand a person you need to understand the people whom that person has close contact with.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

26. I tend to take people's behavior at face value and not worry about the inner causes for their behavior (e.g., attitudes, beliefs, etc.).

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

27. I think a lot about the influence that society has on my behavior and personality.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

28. I have thought very little about my own family background and personal history in order to understand why I am the sort of person I am.

-3	-2	-1	0	1	2	3
Strongly			Neither			Strongly
Disagree			Agree or			Agree
			Disagree			

Affect Intensity Measure

Directions: The following questions refer to the emotional reactions to typical life-events. Please indicate how YOU react to these events by placing a number from the following scale in the blank space preceding each item. Please base your answers on how YOU react, not on how you think others react or how you think a person should react.

	Almost				Almost
Never	Never	Occasionally	Usually	Always	Always

1------------2------------3------------4------------5------------6

1. ____ When I accomplish something difficult I feel delighted or elated.

2. ____ When I feel happy it is a strong type of exuberance.

3. ____ I enjoy being with other people very much.

4. ____ I feel pretty bad when I tell a lie.

5. ____ When I solve a small personal problem, I feel euphoric.

6. ____ My emotions tend to be more intense than those of most people.

7. ____ My happy moods are so strong that I feel like I'm "in heaven."

8. ____ I get overly enthusiastic.

9. ____ If I complete a task I thought was impossible, I am ecstatic.

10. ____ My heart races at the anticipation of some exciting event.

11. ____ Sad movies deeply touch me.

12. ____ When I'm happy it's a feeling of being untroubled and content rather than being zestful and aroused. (r)

13. ____ When I talk in front of a group for the first time my voice gets shaky and my heart races.

14. ____ When something good happens, I am usually much more jubilant than others.

15. ____ My friends might say I'm emotional.

16. ____ The memories I like the most are of those times when I felt content and peaceful rather than zestful and enthusiastic. (r)

17. _____ The sight of someone who is hurt badly affects me strongly.

18. _____ When I'm feeling well it's easy for me to go from being in a good mood to being really joyful.

19. _____ "Calm and cool" could easily describe me. (r)

20. _____ When I'm happy I feel like I'm bursting with joy.

21. _____ Seeing a picture of some violent car accident in a newspaper makes me feel sick to my stomach.

22. _____ When I'm happy I feel very energetic.

23. _____ When I receive an aware I become overjoyed.

24. _____ When I succeed at something, my reaction is calm contentment. (r)

25. _____ When I do something wrong I have strong feelings of shame and guilt.

26. _____ I can remain calm even on the most trying days. (r)

27. _____ When things are going good I feel "on top of the world."

28. _____ When I get angry it's easy for me to still be rational and not overreact. (r)

29. _____ When I know I have done something very well, I feel relaxed and content rather than excited and elated. (r)

30. _____ When I do feel anxiety it is normally very strong.

31. _____ My negative moods are mild in intensity. (r)

32. _____ When I am excited over something I want to share my feelings with everyone.

33. ____ When I feel happiness, it is a quiet type of contentment. (r)

34. ____ My friends would probably say I'm a tense or "high-strung" person.

35. ____ When I'm happy I bubble over with energy.

36. ____ When I feel guilty, this emotion is quite strong.

37. ____ I would characterize my happy moods as closer to contentment than to

joy. (r)

38. ____ When someone compliments me, I get so happy I could "burst."

39. ____ When I am nervous I get shaky all over.

40. ____ When I am happy the feeling is more like contentment and inner calm

than one of exhilaration and excitement. (r)

ESSAY

Describe in detail the time in your life in which you felt the most insulted. Explain not only the event, but also any immediate and long-term reactions to the insulting individual and/or situation. If your reaction would have changed, describe how you would have reacted to the person or situation today, both short and long-term.

OR

Describe in detail the last time you went shopping. Explain not only the shopping experience itself, but the purchases you made and any immediate and long-term effects of these purchases. If you would have changed the items you purchased, describe how you would have done that shopping trip today.

SITUATION 1 – DIRECT PHYSICAL RESPONSE

One month ago, your favorite store opened in a nearby mall. Due to a busy schedule, you have not been able to visit the store during its regular hours, but you have had some time today to go to the mall and take a look around. As you're looking around, you find an item that you've been trying to find for a long time. You are about to bring the item up to the counter when the manager, looking agitated, tells you that it's closing time and you need to leave. When you point out that the time is actually ten minutes before closing time, the manager becomes cross and raises their voice, again telling you to leave. [INSULT CONDITION: The manager notices the item in your hand, and adds, in an insulting tone, "You probably can't afford that, anyway."] In response, you punch the manager and give them a black eye in retaliation for how you were treated.

SITUATION 2 – INDIRECT PHYSICAL RESPONSE

One month ago, your favorite store opened in a nearby mall. Due to a busy schedule, you have not been able to visit the store during its regular hours, but you have had some time today to go to the mall and take a look around. As you're looking around, you find an item that you've been trying to find for a long time. You are about to bring the item up to the counter when the manager, looking agitated, tells you that it's closing time and you need to leave. When you point out that the time is actually ten minutes before closing time, the manager becomes cross and raises their voice, again telling you to leave. [INSULT CONDITION: The manager notices the item in your hand, and adds, in an insulting tone, "You probably can't afford that, anyway."] In response, you leave the store in a fury. The next day, you decide to go back to the mall, and you see the manager

parking in the mall parking lot. Once the manager enters the mall, you key his car in retaliation for how you were treated.

SITUATION 3 – DIRECT VERBAL RESPONSE

One month ago, your favorite store opened in a nearby mall. Due to a busy schedule, you have not been able to visit the store during its regular hours, but you have had some time today to go to the mall and take a look around. As you're looking around, you find an item that you've been trying to find for a long time. You are about to bring the item up to the counter when the manager, looking agitated, tells you that it's closing time and you need to leave. When you point out that the time is actually ten minutes before closing time, the manager becomes cross and raises their voice, again telling you to leave. [INSULT CONDITION: The manager notices the item in your hand, and adds, in an insulting tone, "You probably can't afford that, anyway."] In response, you tell the manager they are the most awful store manager that you have ever seen, that their store is terribly organized, and that they deserve to lose business. You insult the manager and their business practices in retaliation for how you were treated.

SITUATION 4 – INDIRECT VERBAL RESPONSE

One month ago, your favorite store opened in a nearby mall. Due to a busy schedule, you have not been able to visit the store during its regular hours, but you have had some time today to go to the mall and take a look around. As you're looking around, you find an item that you've been trying to find for a long time. You are about to bring the item up to the counter when the manager, looking agitated, tells you that it's closing time and you

need to leave. When you point out that the time is actually ten minutes before closing

time, the manager becomes cross and raises their voice, again telling you to leave.

[INSULT CONDITION: The manager notices the item in your hand, and adds, in an

insulting tone, "You probably can't afford that, anyway."] In response, you leave the store

in a fury. The next day, you tell as many people as you can about how the manager was

the most awful store manager you have ever seen, that their store is terribly disorganized,

and that they deserve to lose business. You additionally post this on the store's website in

retaliation for how you were treated.

1. The store manager's treatment of me was insulting.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

2. The store manager's treatment of me was justified.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

3. My reaction was excessive.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

4. My reaction was justified.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

5. I would have reacted in a similar way if this situation were to happen to me.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

6. I found this situation to be believable.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

7. As I read the four situations presented, I could place myself emotionally in the situation being described.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree or Disagree			Strongly Agree

If this situation were to happen to me, I would have reacted by _____

_____

_____

_____