Narcissistic Rage Revisited

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Narcissists are thought to exhibit “narcissistic rage,” an explosive mix of anger and hostility arising from threats to narcissists’ fractured sense of self. Building on clinical views of narcissism, we present empirical evidence on the nature and sources of narcissistic rage. Findings from 4 studies reveal narcissistic vulnerability (but not grandiosity) as a powerful driver of rage, hostility, and aggressive behavior, fueled by suspiciousness, dejection, and angry rumination. Consistent with theorizing about narcissistic rage, Study 1 showed that vulnerable (but not grandiose) narcissism predicted more anger internalization and externalization, as well as poorer anger control. Study 2 revealed vulnerable narcissism as a stronger indicator of shame and aggressiveness, especially hostility and anger. Study 3 identified distrust of others and angry rumination as key factors accounting for vulnerable narcissists’ reactive and displaced aggression. Study 4 provided behavioral evidence that vulnerable (but not grandiose) narcissism amplifies reactive and displaced aggression in the face of provocation. Taken together, the findings not only establish narcissistic vulnerability as a key source of narcissistic rage but also reveal an important pathway to narcissistic aggression that does not involve competitiveness or exploitativeness. In addition, the results support clinical views of narcissistic aggression and implicate deficient self-esteem as an important driver of aggressive behavior.

Keywords: narcissism, aggression, anger

I am God . . . and zombies will pay for their arrogance, hate, fear, abandonment, and distrust.
—Dylan Klebold (2/21/1998), Columbine High School Shooter

In his 1932 paper “Libidinal Types,” Sigmund Freud offered a revolutionary description of narcissistic personality, proposing that preoccupation with oneself can lead to narcissistic injury that fuels anger and aggressive behavior (Freud, 1932). Although the idea of “narcissistic rage” as a key aspect of narcissism became widely accepted in clinical theory, the form this aggression takes and its underlying reasons have not been adequately understood. In this article we present empirical evidence on the features and sources of narcissistic rage. Evidence from four studies implicates an explosive mix of mistrust, anger, and shame as core ingredients of narcissistic rage. Furthermore, the data reveal this rage to be especially pervasive and undiscriminating in fueling aggression among the narcissistically vulnerable. Taken together, the studies identify an important driver of narcissistic aggression and implicate self-esteem dysregulation as a key source of aggressive impulses. Finally, they help us understand the extreme cases of rage illustrated by the opening quote.

Narcissism

Narcissism is a “cognitive–affective preoccupation with the self” (Westen, 1990, p. 226). The concept refers to Narcissus, the mythical character that fell in love with his own reflection. Psychological use of the term originates within psychoanalysis, and most theoretical development and empirical research has focused on narcissism as a personality structure, particularly in the form of a personality disorder (American Psychiatric Association, 2000; Kernberg, 1975; Kohut, 1971; Levy, Ellison, & Reynoso, 2011; J. D. Miller & Campbell, 2008; Millon, 1997; Ronningstam, 2005). These clinical accounts of narcissism are important because they have canonized the narcissistic phenotype (American Psychiatric Association, 1994). Furthermore, most personality measures of narcissism have been inspired by these accounts or have been based on formal diagnostic criteria for the narcissistic personality disorder (e.g., Pincus et al., 2009; Raskin & Hall, 1981). Most important, it is clinical theory that gave birth to the concept of narcissistic rage (Freud, 1921, p. 91; Kohut, 1972).

Clinical descriptions of narcissism emphasize vanity, self-absorption, arrogance, and entitlement as key personality characteristics; narcissistic individuals are overly invested in their self-image, obsessed about how they are viewed by others, and often dismissive of other’s needs and wants to the extent they interfere with one’s own (American Psychiatric Association, 2000; Cain, Pincus, & Ansell, 2008; Ronningstam, 2005; Westen, 1990). However, there are two distinct themes regarding narcissists’ emotion and interpersonal behavior, namely, those of narcissistic grandiosity and vulnerability (Cain et al., 2008). Narcissistic grandiosity refers to overconfidence, exhibitionism, self-promotion, and exploitativeness. Narcissistic vulnerability, on the other hand, refers to self-centeredness, defensiveness, insecurity, and resentfulness.
exhibited by narcissistic individuals (J. D. Miller & Campbell, 2008; Pincus & Lukowitsky, 2010; Wink, 1991).

Critically, empirical research on narcissistic personality traits reveals that people differ on two relatively independent dimensions of narcissistic features, corresponding to the conceptualizations of grandiosity and vulnerability. For example, Wink (1991) linked grandiosity and vulnerability factors extracted from numerous self-report measures of narcissism to spousal reports of personality. Although elevation on both narcissism dimensions predicted being viewed as “arrogant,” “argumentative,” and “opportunistic,” only grandiosity predicted being viewed as a “show-off,” “egotistical,” and “assertive,” whereas only vulnerability predicted being viewed as “complaining,” “bitter,” and “defensive.” Subsequent research has replicated these distinct dimensions in diverse populations and identified their distinct correlates. Specifically, grandiosity is linked to dominance, low emotional distress, and high self-esteem, whereas vulnerability is linked to introversion, high emotional distress, and low self-esteem, although both share a core of entitled and dismissive tendencies (Glover, Miller, Lynam, Crego, & Widiger, 2012; Krizan & Johar, 2012; J. D. Miller et al., 2011; Rathvon & Holmstrom, 1996; Wink, 1991).

It should be noted that the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1981), the most commonly used measure of narcissism within personality and social psychology, captures narcissistic grandiosity, not vulnerability (Krizan & Johar, 2012; J. D. Miller & Campbell, 2008; Rathvon & Holmstrom, 1996). This is important because the vast majority of theory and evidence in personality and social psychology is based on the use of this measure, and thus speaks only to grandiose aspects of narcissism. Furthermore, diagnostic criteria for narcissistic personality disorder do not currently include vulnerable symptoms of narcissism, despite these being key to clinical assessment of the disorder. As a result, there is a substantial concern that assessment of narcissism across both personality and clinical domains ignores important aspects of the construct (J. D. Miller, Gentile, Wilson, & Campbell, 2013; Pincus & Lukowitsky, 2010; Romningstam, 2005). As we elaborate later in the article, this imposes serious limitations on understanding narcissistic aggression.

Narcissism and Aggression

Sigmund Freud (1932) was the first to suggest that narcissists’ self-preoccupation leads them to aggress against others. The potential reasons for the link between anger, aggression, and narcissism were subsequently suggested by other psychoanalysts, whose clinical observations suggested that narcissistic self-absorption can fuel a vicious cycle of hostility, shame, and reactive aggression (Alexander, 1938; Jacobson, 1964; Saul, 1947). Defined by Heinz Kohut (1972) as “narcissistic rage,” these clinical observations describe a precarious condition in which frustrations of a narcissistically perceived reality and a vulnerable sense of self result in dejection and shame that fuel anger, resentment, and vindictiveness. Moreover, they suggest narcissistic rage to be immature and dysfunctional, as it is disproportionate or misdirected. Other theorists have also suggested that narcissistic individuals exhibit patterns of rage, instigated by rejection that opens childhood wounds or events that contradict one’s sense of specialness (Kernberg, 1975; Millon, 1997). The Diagnostic and Statistical Manual of Mental Disorders (4th ed.; American Psychiatric Association, 1994) itself states that narcissistic individuals react to interpersonal slights with “disdain, rage, or defiant counterattack” (p. 659).

Following these views, we first outline key theoretical features of narcissistic rage, building on the pioneering work by Kohut (1972). Then, we review existing empirical evidence on narcissism and aggression with a focus on rage reactions. We argue that the almost exclusive focus on grandiose narcissism yielded little support for theoretical accounts of narcissistic rage. In response, we present four studies that looked to vulnerable narcissism as a key source of narcissistic rage. As a whole, the studies represent the first systematic examination of narcissistic rage within the context of both vulnerable and grandiose narcissism. Furthermore, they provide key tests of clinical accounts of narcissistic aggression so far not adequately addressed in nonclinical populations.

What Is Narcissistic Rage?

Although it can be traced back to Freud, narcissistic rage was first extensively described by the psychoanalyst Heinz Kohut (1972). According to him, “the need for revenge, for righting a wrong, for undoing a hurt by whatever means, and a deeply anchored, unrelenting compulsion in the pursuit of all these aims . . . are the characteristic features of narcissistic rage in all its forms” (p. 638). He succinctly summarized a key observation of many clinicians, namely, that narcissistic individuals whose self-involved perception of reality are questioned will respond with vitriol and retaliation in addition to shame and depression (Alexander, 1938; Kernberg, 1975; Kohut, 1972; Romningstam, 2005). In fact, these observations view the lack of a cohesive sense of self as key both to externalizing reactions such as aggression and to internalizing reactions such as depression. Moreover, these other- and self-destructive reactions are thought to become mutually reinforcing, producing a self-perpetuating “shame–rage” spiral (H. B. Lewis, 1987; Scheff, 1987; Tangney, Wagner, Fletcher, & Gramzow, 1992). As specified next, these analyses imply three key aspects of narcissistic rage. We first outline these features of the narcissistic rage hypothesis and then critically evaluate to what extent existing empirical evidence on narcissism bears on them.

Anger and Hostility

First and foremost, narcissistic rage is defined by pervasive, intense, and ill-directed anger. As the word rage itself implies, narcissists’ angry responses to even minor provocations should be disproportionate and unfocused. As M. Lewis (1992) puts it, “rage is anger out of control” (p. 153). Numerous psychoanalytic accounts link threats to narcissistic self-views (i.e., “narcissistic injuries”) to intense anger and hostility (e.g., Alexander, 1938; Freud, 1921). As Kohut (1972) elaborates,

the fanaticism of the need for revenge and the unending compulsion of having to square an account after an offense are therefore not the attributes of aggressivity that is integrated with the mature purposes . . . the shame-prone individual who is ready to experience setbacks as narcissistic injuries and respond to them with insatiable rage does not recognize his opponent as a center of independent initiative with whom he happens to be at cross purposes . . . the narcissistically injured . . . cannot rest until he has blotted out a vaguely experienced offender who dared to oppose him, to disagree with him, or to outshine him. (pp. 643–644)
Accordingly, the narcissistically wounded are thought to distrust others and be suspicious of their intentions, as they need to rationalize why these others are getting in their way or withholding special treatment that the narcissist expects (Bursten, 1973; Mil- lon, 1997; Ronningstam, 2005). In concert with other clinical accounts of narcissism (American Psychiatric Association, 2000; Kernberg, 1975), these observations explicate narcissistic rage as a pervasive and dysfunctional anger coupled with hostile suspicions, presumably resulting in misdirected or disproportionate aggression in response to even minor provocations.

Shame and Inferiority

Second, narcissistic rage is thought to be aggravated by inferiority and shame (Broucek, 1982; Kohut, 1972). Shame involves feelings of being exposed and devalued for one’s deficiencies, and can be one of the most devastating human emotions (Smith, Webster, Parrott, & Eyre, 2002; Tangney & Dearing, 2002). Scholars have long noted that the pain of shame is so severe that it may often go consciously unacknowledged or misidentified, transforming into vague feelings of depression or anger at sources of shame (Alexander, 1938; H. B. Lewis, 1971). On one hand, anger at others that shamed us may be initially adaptive, as it can help us to forget shame-based pain, to recast the blame for painful feelings on others rather than ourselves, or to eliminate the person that shamed us (Kohut, 1972; M. Lewis, 1992, pp. 150–151). On the other hand, such responses to shaming, if prolonged, can lead to chronic rage reactions, which further exacerbate existing feelings of shame and guilt, which then further fuel anger, ultimately creating a “shame–rage spiral” (H. B. Lewis, 1971; M. Lewis, 1992; see also Scheff, 1987). Empirical research confirms a close link between shame and anger, and suggests that shame-prone individuals are more likely to experience anger and to engage in destructive behaviors as a result (Bennett, Sullivan, & Lewis, 2005; Harper & Arias, 2004; Tangney et al., 1992; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). In short, narcissistic individuals are expected to experience rage in part because they are especially prone to shame and dejection when flaws in themselves and their narcissistically perceived reality are exposed.

Reactive and Displaced Aggression

Third and final, narcissistic rage should lead to disproportionate and unfocused acts of aggression in response to provocation. These aggressive behaviors are expected to be “reactive” rather than “proactive,” that is, driven by anger, relatively spontaneous, and focused on harming the other individual (rather than deliberate and calculating; see Anderson & Bushman, 2002; Crick & Dodge, 1994). Given the intense rage compounded by feelings of shame or inferiority, narcissistic individuals are thought to engage in immature, dysfunctional aggressive acts. As Kohut (1972, p. 639) sug-gests, “there is utter disregard for reasonable limitations and a boundless wish to redress an injury and to obtain revenge.” Furthermore, this rage is expected to fuel displaced aggression as others’ unrelated or minor provocations get in the way and add fuel to the proverbial fire (Vaknin, 2001). Consistent with this reasoning, increased anger and suspicions about others’ behavior generally exacerbate displaced aggression, particularly in the presence of additional minor provocations (i.e., “triggers”; see N. Miller, Pedersen, Earleywine, & Pollock, 2003). In addition, angry rumi-nation may undermine self-control, suggesting an additional level of unpredictability in aggression among the wounded narcissists (Denson, Pedersen, Friese, Hahm, & Roberts, 2011). In short, narcissists are expected to react with aggression to even minor provocations and to displace their aggression onto others who stand in their way or prove to be minor annoyances.

Does Evidence Support the Narcissistic Rage Hypothesis?

Having summarized the theoretical proposals about narcissistic rage, it is essential to evaluate to what extent the empirical liter-ature addressed or supported them. Research on narcissistic grandiosity using the NPI (Raskin & Hall, 1981) does reveal that narcissistic individuals are more prone to aggression when faced with strong threats to self (e.g., public impeachments of one’s ability, intelligence, or social status; Bushman & Baumeister, 1998; Rhodewalt, Madrian, & Cheney, 1988; Rhodewalt & Morf, 1998; Stucke & Sporer, 2002; Twenge & Campbell, 2003). Re-search focusing more specifically on narcissistic explosiveness and entitlement reveals similar results (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; Konrath, Bushman, & Campbell, 2006; Reidy, Zeichner, Foster, & Martinez, 2008). These aggressive responses to impeachments of one’s image or status are often interpreted as maneuvers aimed at restoring one’s superiority, necessitated by (grandiose) narcissists’ inflated self-esteem and entitlement (Bushman & Baumeister, 1998; Morf & Rhodewalt, 2001). These superiority-imposing tactics are also considered to be only one tool out of the narcissists’ considerable set of self-enhancing strategies (Campbell, Reeder, Sedikides, & Elliot, 2000; Gabriel, Critelli, & Ee, 1994; Krizan & Bushman, 2011; Morf & Rhodewalt, 1993; Vazire, Naumann, Rentfrow, & Gosling, 2008).

Although these findings are often taken as support for the narcissistic rage hypothesis (e.g., Rhodewalt & Morf, 1998, p. 678), a careful survey of evidence on grandiose narcissism reveals little to no direct support that it is linked with rage. On one hand, some studies do find a link between narcissistic grandiosity and chronic anger or hostility—signature features of narcissistic rage (e.g., Raskin, Novacek, & Hogan, 1991; Rhodewalt & Morf, 1995). On the other hand, many studies find that grandiosity either does not consistently predict chronic anger nor hostility, or does so only when unique effects of entitlement and competitiveness are considered (e.g., Atlas & Them, 2008; Besser & Priel, 2010; Bradlee & Emmons, 1992; Ruiz, Smith, & Rhodewalt, 2001; Witte, Callahan, & Perez-Lopez, 2002). Furthermore, studies examining angry and hostile responses to specific hypothetical or real-life situations offer similarly weak support for broad rage reactions among those high in grandiosity, showing their angry responses to be either average or exacerbated only by direct threats to one’s competence or social status (Kernis & Sun, 1994; McCann & Biaggio, 1989; Rhodewalt & Morf, 1998; Smalley & Stake, 1996; Stucke & Sporer, 2002). Taken together, this evidence does not provide convincing support for the notion that chronic and unrestrained anger typifies those with grandiose narcissism.

When it comes to shame or dejection, the second signature of narcissistic rage, evidence indicates that grandiose narcissists are actually less likely to experience these reactions than others. First,
grandiose narcissism predicts lower depression and anxiety (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Wright, O’Leary, & Balkin, 1989) and beliefs in one’s own superiority rather than inferiority (Campbell, Rudich, & Sedikides, 2002; Krizan & Bushman, 2011). Second, when it comes to shame specifically, grandiosity is either unrelated or negatively related to shame responses (Gramzow & Tangney, 1992; Krizan & Johar, 2012; Pincus et al., 2009; Wright et al., 1989). In short, there is no evidence that narcissistic grandiosity engenders shame; in fact, evidence points to the contrary.

Turning to aggressive behavior itself, there is surprisingly little evidence that grandiosity fuels rage-driven aggression. To be sure, grandiose individuals are more likely to aggress against others who have directly and publicly impeached their image of superiority and status (Bushman & Baumeister, 1998; Ferriday, Vartanian, & Mandel, 2011; Reidy et al., 2008; Smalley & Stake, 1996; Twenge & Campbell, 2003). However, there is little evidence that such aggression occurs in the absence of public ego threats (see Betencourt, Talley, Benjamin, & Valentine, 2006; Ferriday et al., 2011; Jones & Paulhus, 2010). Even under conditions of ego threat, it is not clear that the observed aggression is driven by anger (Bushman & Baumeister, 1998; Stucke & Sporer, 2002). In this vein, note that aggression in studies on narcissism is typically assessed with the Competitive Reaction Time Task (Taylor, 1967; for a critique, see Ferguson & Rueda, 2009). As the name implies, this task assesses competitive noise blasts throughout a course of a multitrial performance competition. Given grandiose individuals’ competitiveness and investment in social status and superiority (Campbell et al., 2000, 2002; Krizan & Bushman, 2011; Morf & Rhodewalt, 2001), it should not be surprising that their engagement in a competitive task with a person who has just berated them motivates competitive noise blasting. Does grandiose narcissism promote displaced aggression? Only three studies examined displaced aggression, and they provide conflicting findings (Bushman & Baumeister, 1998; Martinez, Zeichner, Reidy, & Miller, 2008; Twenge & Campbell, 2003). Furthermore, given that displaced aggression was always assessed with competition-based measures, the exact interpretation of the observed aggression should be tentative.

Finally, we should note that narcissistically grandiose (but not vulnerable) individuals frequently report engaging in proactive, instrumental aggression, that is, deliberate acts of aggression that are used to further one’s social status or other goals, often by scheming or manipulating others (Barry et al., 2007; Fossati, Borroni, Eisenberg, & Maffei, 2010). In addition, grandiosity is related to sadism and unprovoked aggression, with enjoyment of aggression found to mediate the link between grandiosity and aggressive behavior (Buckels, Jones, & Paulhus, 2013; Girgis, 2006; Reidy, Foster, & Zeichner, 2010). Taken together, these findings suggest the possibility that grandiose individuals’ aggressive responses to ego threat are deliberate means of asserting superiority and dominance or twisted games to be enjoyed, rather than uncontrolled acts of rage.

Summary

In short, existing evidence based on the NPI (Raskin & Hall, 1981) reveals weak and inconsistent links between (grandiose) narcissism and chronic anger or hostility, negative links with shame and inferiority, and little evidence for unrestrained or displaced aggression. As a result, we conclude that evidence bearing on narcissistic grandiosity does not provide strong support for the idea of narcissistic rage. In accord with this sentiment, Costa and Widiger (1993) state that “narcissist is not particularly hostile . . . or even particularly aggressive” (p. 48). More importantly, we contend that many of these studies are not ideal tests of the narcissistic rage hypothesis, as they examine narcissism exclusively in terms of narcissistic grandiosity. Measures of narcissistic grandiosity do not seem to capture individuals on which clinical accounts of narcissism and narcissistic rage are based, given grandiose individuals’ relative social adjustment, lack of depression and anxiety, and lack of treatment seeking (Corruble, Ginestet, & Guelfi, 1996; Peck, 1998; Pincus & Lukowitsky, 2010; Sedikides et al., 2004). This raises additional doubts about whether many existing studies of narcissism and aggression should be taken as tests of the narcissistic rage hypothesis in the first place.

Narcissistic Vulnerability as a Source of Narcissistic Rage

In order to marshal evidence for the narcissistic rage hypothesis, we looked to narcissistic vulnerability. We hypothesized that vulnerable narcissism will be a powerful predictor of rage reactions and will thus be strongly linked to all the three core features of narcissistic rage outlined earlier. In the paragraph below we briefly discuss existing evidence in support of our proposal that vulnerable narcissism should be a key predictor of these features, namely, anger, shame, and reactive, as well as displaced aggression. We conclude with an overview of four studies we conducted that examined narcissistic rage as a function of narcissistic vulnerability (in addition to grandiosity).

First, investigations that directly contrasted narcissistic vulnerability and grandiosity as predictors of anger suggest vulnerability to be a stronger predictor. For example, vulnerability, relative to grandiosity, is associated more strongly with angry hostility (a facet of neuroticism), and with hostile and paranoid personality features (J. D. Miller & Campbell, 2008; J. D. Miller et al., 2011; Okada, 2010). Moreover, vulnerability is a stronger predictor of anger reported in response to hypothetical provocation scenarios (J. D. Miller et al., 2011; Okada, 2010), as well as hostile envy of others (Krizan & Johar, 2012). Second, evidence suggests that vulnerable narcissism predicts stronger shame responses, whereas grandiose narcissism actually predicts less shame (Krizan & Johar, 2012; Pincus et al., 2009). In addition, vulnerability is strongly associated with depressive reactions, a key feature of shameful experiences (Pincus et al., 2009; Tritt, Ryder, Ring, & Pincus, 2010). Third, those high on vulnerability are more likely to report generally engaging in aggressive behavior than those high on grandiosity (Pincus et al., 2009). To our knowledge, no published studies examined the link between vulnerability and displaced aggression. Regardless, these findings are consistent with our proposal that it is narcissistic vulnerability (rather than grandiosity) that is the seat of narcissistic rage.

Overview of Studies

To marshal evidence for the narcissistic rage hypothesis, four studies examined vulnerable narcissism as a predictor of anger and
hostility, shame and dejection, and reactive and displaced aggression; the key ingredients of narcissistic rage. All studies also examined narcissistic grandiosity, in order to directly evaluate the importance of each narcissism dimension for rage and aggression. Study 1 compared narcissistic vulnerability and grandiosity as predictors of anger externalization, internalization, and control. Study 2 utilized multiple measures of narcissism in a sample of community adults and compared narcissistic vulnerability and grandiosity factors as predictors of chronic aggressiveness, anger, hostility, and shame. Study 3 tested a structural model that specified distrust of others and angry rumination as key factors underlying narcissists‘ reactive and displaced aggression. Study 4 sought behavioral laboratory evidence that vulnerable (but not grandiose) narcissism fuels dejection, hostility, anger, and aggression in response to provocation. By employing diverse samples and methodological approaches, the data triangulate on the important role that narcissistic rage plays in aggressive behavior while illuminating the complex nature of narcissism.

**Study 1: Narcissism and Anger**

First, we tested vulnerable and grandiose narcissism as predictors of anger experience and expression. We hypothesized that only vulnerable narcissism would be substantially associated with anger externalization, anger internalization, and poor anger control. Given existing theories of narcissistic aggression focus on entitlement as a key reason for narcissists aggressive responses to threat (Bushman & Baumeister, 1998), we also examined entitlement and the extent to which it would be indicative of more maladaptive anger responses.

**Method**

One hundred twenty-eight undergraduate students completed online surveys in exchange for course credit. They completed a battery of personality measures, including the NPI (Raskin & Hall, 1981; to measure grandiosity), the Hypersensitive Narcissism Scale (HNS; Hendin & Cheek, 1997; to measure vulnerability), and the Psychological Entitlement Scale (Campbell et al., 2004; to measure narcissistic entitlement). To assess anger expression, participants completed the Anger-Out (e.g., “I express my anger”), Anger-In (e.g., “I’m irritated a great deal more than people are aware of”), and Anger Control Scales (e.g., “I control my temper”) from the State-Trait Anger Expression Inventory (Spielberger, 1999).

**Results and Discussion**

Correlations between narcissism dimensions and anger expression are presented in Table 1. Critically, vulnerability was associated with anger externalization, internalization, and poor anger control. Grandiosity and entitlement were also associated with anger externalization, but did not predict other aspects of anger expression. Taken together, these findings imply that only vulnerable narcissists are prone to intense and misdirected anger.

**Study 2: Narcissism and Aggressiveness in a Sample of Community Adults**

Having established preliminary support for vulnerable narcissism as the key predictor of uncontrolled anger, we wanted to replicate this finding and expand our analysis to hostility (cynical and negative views of others), shame, and aggressive behavior itself. To aid generalizability, Study 2 involved a sample of community adults of varying ages, and employed multiple measures of narcissism that were used to extract underlying grandiosity and vulnerability factors. Moreover, we assessed socially desirable responding in order to examine to what extent any observed associations between reported narcissism and aggression may be skewed because of biased responding. We expected both dimensions of narcissism to relate to reports of aggressive behavior itself, but we expected vulnerability to have much stronger association with aggressive tendencies overall (i.e., anger, hostility, and aggression). In addition, we expected that only vulnerable narcissism would be associated with higher shame-proneness, and that grandiose narcissism would predict less shame.

**Method**

One hundred sixty-one community residents (57% female; aged 18 to 37 years; 62% Caucasian) were recruited online in major cities of the United States (e.g., Chicago, Los Angeles, and Atlanta) via Craigslist (www.craigslist.org) advertisements for a survey study on “personality.” Each respondent was compensated with $10 for their participation.

The questionnaires were administered online, and each participant completed numerous measures, including the following (or-

| Table 1 | Correlations Between Narcissism and Anger Expression in Study 1 (ns 124 to 128) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | 1               | 2               | 3               | 4               | 5               | 6               | 7               |
| Narcissism     |                 |                 |                 |                 |                 |                 |                 |
| 1. Narcissistic Grandiosity | .80 (40)        |                 |                 |                 |                 |                 |                 |
| 2. Narcissistic Vulnerability | .04             | .81 (10)        |                 |                 |                 |                 |                 |
| 3. Psychological Entitlement Scale | .42***          | .31***          | .87 (9)         |                 |                 |                 |                 |
| Anger          |                 |                 |                 |                 |                 |                 |                 |
| 4. Anger Externalization | .36***          | .31***          | .38***          | .79 (8)         |                 |                 |                 |
| 5. Anger Internalization | .08             | .40***          | .12             | .50***          | .77 (8)         |                 |                 |
| 6. Anger Control | -.09            | -.18*           | -.20**          | -.38***         | -.06            | .87 (8)         |                 |

*Note.* Cronbach’s alphas are reported along the diagonal with the number of items in parentheses.  
* p < .10.  ** p < .05.  *** p < .01.
dered randomly). First, to comprehensively assess narcissistic personality traits, participants completed the HNS (Hendin & Cheek, 1997), the NPI (Raskin & Hall, 1981), the State-Trait Grandiosity Scale (Rosenthal, Hooley, & Steshenko, 2003), the Psychological Entitlement Scale (PES; Campbell et al., 2004), and all the subscales from the Pathological Narcissism Inventory (Pincus et al., 2009). Second, to assess aggressiveness, participants completed the Buss-Perry Aggression Questionnaire, which consists of subscales for physical aggression, verbal aggression, hostility, and anger (Buss & Perry, 1992). Third, to assess shame propensity, participants completed the Shame Proneness scale (Wolf, Cohen, Panter, & Insko, 2010), which assesses avoidant and self-evaluative reactions to hypothetical situations that induce shame. Fourth and final, to assess socially desirable responding, participants completed the Balanced Inventory of Socially Desirable Responding that yields a self-deceptive enhancement and an impression management score (Paulhus, 1998). The reliabilities appear in the diagonal of Table 2.

Results and Discussion

In order to extract grandiosity and vulnerability factors underlying the various measures of narcissism, we conducted a principal factor analysis (with oblimin rotation) on our 11 measures of narcissism with the aim of extracting two correlated narcissism factors. The analysis revealed two factors with an eigenvalue greater than 1 (accounting for 37% and 23% of the variance after rotation). Similarly, the scree plot, as well as parallel analysis, supported a two-factor solution (Horn, 1965). The factor loadings from the pattern matrix (controlling for factor dependence) are shown in Table 3 and represent the two factors of narcissistic vulnerability and grandiosity (which correlated .31). Examining factor loadings confirms that entitlement is a core feature of narcissism common to both dimensions, and also supports the validity of NPI and HNS as valid measure of narcissistic grandiosity and vulnerability, respectively. Critically, we derived narcissism factor scores, which we then linked to narcissism, aggressiveness, and shame.

The correlations between grandiose and vulnerable factors, aggressiveness, shame, and socially desirable responding are presented on the left side of Table 2. First, vulnerability was more strongly associated with overall trait aggressiveness than was grandiosity (.56 vs. .38). Second, only vulnerability was a consistent predictor of all aspects of aggressiveness, including hostility and anger. Finally, whereas vulnerability was positively related to shame responses, grandiosity was negatively related.

In order to examine the unique relations between the two dimensions of narcissism and aggressive tendencies, we conducted a series of hierarchical regression analyses in which each feature of aggressiveness was simultaneously predicted by both narcissism factors, controlling for gender and socially desirable responding. The results of these regressions appear on the right side of Table 2. Note that only vulnerability was a unique predictor of aggression, anger, and hostility, with grandiosity only showing unique links with physical aggression.

**Study 3: Accounting for Narcissists’ Reactive and Displaced Aggression**

The evidence from the first two studies clearly implicates narcissistic vulnerability as a potent predictor of anger, hostility, shame, and aggressiveness, consistent with the narcissistic rage hypothesis. Although narcissistic grandiosity did predict higher likelihood of reporting aggressive behavior itself, it did not predict other key features of narcissistic rage, such as intense, uncontrolled anger, or shame-propensity. However, the evidence presented thus far does not reveal the particular form that narcissistic aggression is likely to take. As noted earlier, narcissistic rage should be ultimately expressed in (a) hostile, reactive aggression, and (b) displaced aggression toward individuals who find themselves in narcissists’ destructive path. To this end, Study 3 tested a structural equation model linking narcissistic traits to reactive

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**Table 2**

**Correlations Between Narcissism Factors, Aggression, and Shame, and Regression on Narcissism Factors (Study 2)**

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<tr>
<td>Aggressiveness</td>
<td>.23</td>
<td>.56</td>
<td>.94</td>
<td>.29</td>
<td></td>
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<td></td>
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<td>.05</td>
<td>.53</td>
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<tr>
<td>3. Overall Aggressiveness</td>
<td>.31</td>
<td>.38</td>
<td>.83</td>
<td>.85</td>
<td>.9 (9)</td>
<td></td>
<td></td>
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<td>4. Physical Aggression</td>
<td>.28</td>
<td>.29</td>
<td>.77</td>
<td>.58</td>
<td>.78</td>
<td>.5 (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.13</td>
<td>.33</td>
</tr>
<tr>
<td>5. Verbal Aggression</td>
<td>.15</td>
<td>.56</td>
<td>.63</td>
<td>.63</td>
<td>.68</td>
<td>.82</td>
<td>.7 (7)</td>
<td></td>
<td></td>
<td>.02</td>
<td>.49</td>
<td></td>
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<tr>
<td>6. Anger</td>
<td>.07</td>
<td>.58</td>
<td>.83</td>
<td>.51</td>
<td>.50</td>
<td>.89</td>
<td>.8 (8)</td>
<td></td>
<td></td>
<td>.11</td>
<td>.57</td>
<td></td>
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<tr>
<td>7. Hostility</td>
<td>.32</td>
<td>.29</td>
<td>.11</td>
<td>.04</td>
<td>.05</td>
<td>.08</td>
<td>.25</td>
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<td>.43</td>
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<td>8. Negative Self Evaluation</td>
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<td>.31</td>
<td>.20</td>
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<td>.32</td>
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<td>.46</td>
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<td>.10</td>
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<td>9. Avoidance</td>
<td>.16</td>
<td>-.45</td>
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<td>-.13</td>
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<td>-.28</td>
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<td>10. Self-Deceptive</td>
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<td>-.41</td>
<td>-.39</td>
<td>-.33</td>
<td>-.17</td>
<td>-.37</td>
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<td>11. Impression Management</td>
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Note. *ms* = 147 to 151. Reliabilities appear in the diagonal with the number of items in parentheses. Standardized regression coefficients in the last two columns were obtained after controlling for gender and social desirability.

*p < .10. **p < .05. *** p < .01.*
and displaced aggression specifically, while simultaneously examining key personality features responsible for this link.

Specifically, we modeled mistrust in others (a key feature of hostility), angry rumination, and entitlement as factors accounting for the link between vulnerable and grandiose narcissism, on one hand, and reactive and displaced aggression, on the other. Based on our theorizing and the data from Studies 1 and 2, we expected only vulnerability to predict both reactive and displaced aggression, whereas grandiosity to only predict reactive aggression, if predicting it at all. We further anticipated that mistrust and angry rumination would be key factors accounting for the links of vulnerability to both reactive and displaced aggression, with mistrust itself also predicting increased angry rumination. Finally, we anticipated that entitlement would only predict reactive aggression, and that both vulnerable and grandiose narcissism would predict entitlement (as in Studies 1 and 2). After testing this initial model, modification indexes suggested (a) that the direct path from grandiosity to reactive aggression was unnecessary, and (2) that mistrust only predicted aggression through angry rumination (i.e., it did not have a direct effect on aggression). As a result, both of these paths were dropped from the final model (see Figure 1, with removed paths from the initial model illustrated as dashed lines).

**Method**

Three hundred seventy-four undergraduate students completed online surveys in exchange for course credit. They completed a battery of personality measures, including the following sets of measures assessing narcissism (grandiosity and vulnerability), the hypothesized aggression-driving features of narcissism (mistrust, angry rumination, and entitlement), and aggressive behavior (reactive aggression and displaced aggression). First, to assess narcissism, participants completed the NPI (to measure grandiosity) and the HNS (to measure vulnerability), as in Study 1.

Second, to measure features of narcissism hypothesized to account for the link between narcissistic traits and aggressive behavior, they completed the following. To measure mistrust in others, they completed the International Personality Item Pool Distrust scale (Goldberg, 1999). Mistrust is a key feature thought to underlie hostile attitudes toward others, and assessing it directly (rather than hostility more broadly) should specifically implicate expectations of others’ behavior as key to narcissistic aggression (Gurtman, 1992). Angry rumination was assessed with the Anger Rumination Scale (Sukhodolsky, Golub, & Cromwell, 2001), which has demonstrated appropriate reliability and validity. Entitlement was measured with the PES, as in Study 1.

Finally, to measure reactive aggression, participants completed the Richardson (1998) Conflict Response questionnaire. This measure asks participants to rate their tendency to respond to conflict with either direct (e.g., verbal abuse) or indirect (e.g., property damage) aggression, thus broadly sampling from potential aggressive responses to provocation which do not always involve face-to-face retaliation (see Richardson & Green, 2006, for validity evidence). To measure displaced aggression, participants completed the Displaced Aggression subscale from the Displaced Aggression Questionnaire (Denson, Pedersen, & Miller, 2006), which has been behaviorally validated as a predictor of triggered-displaced aggression.

### Table 3

<table>
<thead>
<tr>
<th>Narcissistic Traits</th>
<th>Factor</th>
<th>Vulnerability</th>
<th>Grandiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcissistic Personality Inventory</td>
<td>-.18</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Hypersensitive Narcissism Scale</td>
<td>.64</td>
<td>-.05</td>
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<tr>
<td>State-Trait Grandiosity Scale</td>
<td>-.04</td>
<td>.79</td>
<td></td>
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<tr>
<td>Psychological Entitlement Scale</td>
<td>.23</td>
<td>.44</td>
<td></td>
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<tr>
<td>Pathological Narcissism Inventory</td>
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<td></td>
<td></td>
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<tr>
<td>Contingent self-esteem</td>
<td>.90</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>Exploitativeness</td>
<td>.11</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Self-sacrificing self-enhancement</td>
<td>.49</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Self-hiding</td>
<td>.61</td>
<td>-.11</td>
<td></td>
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<tr>
<td>Grandiose fantasy</td>
<td>.54</td>
<td>.34</td>
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<tr>
<td>Devaluing</td>
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<td>-.00</td>
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<tr>
<td>Entitlement rage</td>
<td>.86</td>
<td>.08</td>
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</tbody>
</table>

*Note.* The coefficients represent unique factor loadings from a principal factors analysis with oblimin rotation.

**Figure 1.** A structural model with Anger Rumination, Mistrust, and Entitlement as factors accounting for the links between narcissism and aggression in Study 3. Originally hypothesized paths not included in the final model are shown as dashed lines. "p < .001.
Results and Discussion

Correlations between the variables in the model are presented in Table 4. As we anticipated, only vulnerability was a potent predictor of reactive and displaced aggression, whereas grandiosity was not. The structural model that examined mistrust, angry rumination, and entitlement as factors accounting for narcissistic aggression is presented in Figure 1; it was estimated using full-information maximum likelihood procedures in Mplus (Muthén & Muthén, 2012). The fit of the model was good, \(\chi^2(10) = 19.41, p = .03\), comparative fit index = .99, root mean square error of approximation = .05, 95% confidence interval (CI) [.01, .08]. Several key results are worth highlighting. First, vulnerable narcissism was a significant predictor of mistrust and angry rumination, which accounted for its links to both reactive and displaced aggression. Second, grandiosity only predicted entitlement, with entitlement playing only a minor role in predicting reactive aggression and no role in predicting displaced aggression. Third and final, we were able to almost fully account for the links between both dimensions of narcissism and aggression, with the sole exception of the vulnerability-to-displaced-aggression pathway. Taken together, these results reveal narcissistic vulnerability as a key facilitator of reactive and displaced aggression, and point to mistrust and angry rumination as personality features responsible for these outcomes.

The findings from the first three studies thus consistently reveal narcissistic vulnerability to be a driver of narcissistic rage, an explosive mix of mistrust, anger, and rumination that results in lashing out at those who stand in the way. However, the findings thus far are all based on concurrent self-reports of narcissism, anger, and aggression. To address this limitation and establish direct behavioral evidence for the narcissistic rage hypothesis, Study 4 evaluated narcissistic vulnerability and grandiosity as predictors of future aggressive behavior, unsuspectedly assessed within a laboratory study presumably investigating food tasting. This approach allowed us to objectively examine actual aggressive behavior, while also assessing participants’ emotions and their impressions of the supposed provocateur.

Study 4: Narcissism and Aggression in the Laboratory

To marshal direct evidence that narcissistic vulnerability fuels actual aggressive behavior, Study 4 measured aggressive behavior as a choice of a noxious stimulus administered to another individual within a laboratory study. This procedure portrayed the study to participants as a test of people’s food preferences and created an opportunity for participants to assign “hot sauce” to a presumed coparticipant who has in some way provoked the participant earlier during the study (as in the “hot-sauce paradigm”; see Lieberman, Solomon, Greenberg, & McGregor, 1999). Given that capsaicin (the chemical responsible for the spicy flavor, coughing, sweating, or choking) is an actual weapon that is used on other people (e.g., in pepper spray), this paradigm has appealing ecological validity (Milne, 1995). Moreover, we made a number of adjustments to the original paradigm in order to strengthen its internal validity (i.e., to ensure that the choice of hot sauce is a freely chosen act intended to cause harm to another; see Ritter & Eslea, 2005).

In Study 4 we manipulated provocation and examined whether narcissism (assessed prior to the experiment) augmented aggressive responses to provocation. In addition, we manipulated whether the eventual target of aggression was the initial provocateur, or a third party who was not responsible for the original provocation (yet was rude, i.e., could “trigger” aggression). This enabled a direct assessment of both reactive and triggered-displaced aggression (i.e., choosing a hot sauce intended either for the initial provocateur or an annoying third party, respectively). Note that the provocation in this paradigm does not involve an explicit “ego threat,” typical of research on narcissistic grandiosity and an established predictor of grandiose narcissists’ laboratory aggression (at least when assessed with the Competitive Reaction Time task; Bettencourt et al., 2006; Bushman & Baumeister, 1998; see also previous discussion). Rather, participants were provoked by believing another person freely assigned them an unpleasantly bitter substance. Only a narcissist that takes everything personally should be especially vengeful toward another person who provoked them in this way. In this vein, we expected narcissistic vulnerability, but not grandiosity, to augment aggressive responses to such provocation. Specifically, only those high on vulnerable narcissism should be especially likely to aggressively retaliate when provoked in this largely nonpersonal way. Furthermore, this retaliation should take place regardless of the target: When provoked, vulnerable narcissists’ anger should lead them to aggress against even those who are a minor annoyance but are not responsible for the original provocation. Finally, we expected those high on vulnerable narcissism, when provoked, to be especially prone to anger, hostility, as well as depression, in accord with theorizing about the role of fragility and shame in narcissistic rage.

Table 4

| Correlations Between Narcissism, Anger, Aggression, and Entitlement in Study 3 |
|-------------------|---|---|---|---|---|---|---|
|                  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | M   | SD  |
| 1. Grandiosity   |  .80 |
| 2. Vulnerability | - .09* | .84 |
| 3. Angry Rumination | - .06 | .58** | .92 |
| 4. Entitlement   | .37** | .21** | .17** | .88 |
| 5. Mistrust      | - .12* | .42** | .51** | .02 | .76 |
| 6. Reactive Aggression | .04 | .40** | .48** | .19** | .23** | .90 |
| 7. Displaced Aggression | - .03 | .45** | .50** | .08 | .27** | .50** | .90 |

Note. \(n = 374\) to 378. Reliabilities appear in the diagonal.  
* \(p < .05\). ** \(p < .01\).
Method

Overview. Participants signed up for a study they thought was about people’s “food preferences,” specifically on how people react to other people’s food choices. In this vein, participants were to exchange information about their tastes with a presumed coparticipant (actually fictitious), who was to assign a particular food item for the participant to taste. This allowed manipulating provocation; the participants were assigned to taste something bitter and were assigned (presumably by their coparticipant) to have either a mildly bitter unsweetened tea (control condition) or a vial, disgusting bitter melon juice (provocation condition). Subsequently, participants thought they were randomly assigned to give hot, spicy food back to a coparticipant and were given a choice to assign them either a mild or a hot version of a spicy sauce. They had to taste both sauces before their choice and made the choice without the experimenter in the room. This choice constituted the main measure of aggression. Furthermore, the participants were to assign the spicy food to either a supposed coparticipant who assigned them the bitter food initially (original-target condition) or to a supposed future participant (displaced-target condition); this constituted the manipulation of the intended target of the participants’ aggression and enabled the assessment of trigger-displaced aggression. Additional “taste reactions” questionnaires administered during the study enabled the assessment of anger, depression, and perceived untrustworthiness of the provocateur, psychological reactions thought to underlie narcissistic rage.

Participants and design. Two hundred eight students participated in exchange for course credit. They completed measures of narcissism at a mass-testing session at the beginning of the semester, with NPI–16 used to measure grandiosity (α = .60; Ames, Rose, & Anderson, 2006) and the HNS used to measure vulnerability (α = .68). Upon arriving to the laboratory later in the semester to participate in a study on “food preferences,” they were randomly assigned to one condition in a 2 (provocation: absent vs. present) × 2 (target: original vs. displaced) between-subjects design. Upon the completion of experimental procedures, participants underwent a “funnel” debriefing procedure that probed them for suspicion with increasing levels of specificity. If a participant indicated any suspicion about the purpose of the study (i.e., even a vague sense of doubt about the veracity of the cover story), he or she was removed from the analyses. This resulted in the final sample of 182 participants. Inclusion of the removed participants did not change the outcome of any key statistical analyses.

Procedure and measures. Participants came to a study they thought was about people’s “food preferences,” specifically about how people react to other people’s food choices for them. Given that it was essential that participants believed there was another coparticipant in the study, experimenters went to great lengths to suggest that another participant was present (always of the same gender). Following consent, the experimenter introduced the study as examining the “social dimension of eating,” aimed at assessing people’s reactions to foods chosen for them by others. The experimenter then explained that there was another participant in the laboratory who would remain physically separated so as to not bias participants’ taste reactions.

The experimenter added that each person would be randomly assigned to give a particular form of a food (from one of the basic taste categories) to the other person. The participants were told that they will first be assigned a bitter food by their (supposed) coparticipant, while they would later have an opportunity to give spicy food to the same coparticipant. Then, the experimenter asked the participant to complete a “Food Preferences Inventory” in order to give some basic information about their tastes to their coparticipant. This questionnaire asked participants to rate how much they like foods from the basic taste categories (sweet, sour, bitter, salty, and spicy), with several examples provided for each, as well as filler questions about their eating habits. None of the participants indicated that they liked bitter food. Once finished, the experimenter took the participants’ inventory, said “Let me go and give this to the other participant—this will give them some information about your tastes. I will be right back,” and left the room for 30 s.

Provocation phase. After returning, the experimenter explained that the first step would involve the participant tasting a food chosen for them by the coparticipant and that “bitter” was the assigned flavor. The experimenter added the following:

Every participant will have a choice between a milder and a more concentrated version of the same taste category to allow for individual differences in taste preferences. In this case of bitter foods, the person assigning the food to you will have a choice between Black Tea or Bitter Gourd Juice [pointing out the bottles in front of them]. The person assigning the food can select any amount for the other person to taste they feel is appropriate, as long as it fits in the 4 oz container. Later on, you will have a chance to assign a food to them. Note that all participants in this study will always sample the food item they are assigning to the other participant themselves first. In addition, the person tasting the food assigned to them will have to ingest the entire amount of that food. Any questions?

At this point the experimenter left the room again to pick up the supposed food selection made by the other participant (who would have already presumably received information about the participants’ taste preferences via the Food Preferences Inventory, indicating participants’ dislike for bitter foods). The experimenter waited 30 s and poured either 3 oz of unsweetened tea (the control condition) or bitter gourd juice (the provocation condition) in a 4-oz container with a lid, and carried it on a tray back to the participant. The experimenter explained the following:

At this point you will sample the bitter food chosen for you by the other participant. They have chosen the Bitter Gourd Juice [Unsweetened Tea]. Note that you have to ingest the entire amount. Following the tasting, we will administer the Food Reactions Questionnaire in order to assess your reactions to the food. When you ingest it, make sure to do so slowly and notice all the aspects of the taste that you can. Try to focus on the different sensations you are experiencing.

If participants were reluctant to finish the bitter gourd juice (many were), they were encouraged to do so (all did). The experimenter concluded, “Thank you for tasting. To get a sense of your reactions, please complete this Food Reactions Questionnaire. Please complete it as honestly and accurately as you can. Note that your responses are completely confidential.” The experimenter than left to presumably check on the coparticipant, waited 60 s, and then returned.

The Food Reactions Questionnaire had embedded items to assess key variables. As a manipulation check, the participants indicated the perceived bitterness of what they tasted ("How would
you rate the bitterness of the juice that you sampled?")) on a scale of 1 (not at all bitter) to 9 (extremely bitter), and liking ("How would you rate your liking of the juice that you sampled?")) on a scale of −4 (extremely dislike) to +4 (extremely like). Anger and depression were assessed by aggregating items for the Hostility and Dejection subscales from the PANAS-X, respectively (Watson & Clark, 1994), which was presented, as needed, to assess current psychological state. Finally, we measured impressions of trustworthiness, as participants rated the presumed coparticipants on 12 interpersonal adjectives using a 1 (not at all) to 11 (great amount) scale (i.e., likable, arrogant [R], friendly, genuine, trustworthy, self-centered [R], conceited [R], dishonest [R], moral, malevolent [R], considerate, and ethical), presumably to control for any biases.

**Aggressive-choice phase.** The experimenter continued by stating it was then the participants turn to assign spicy food to the coparticipant. Participants were then told that they would assign this food either to their coparticipant (the original-target condition), or because their supposed coparticipant turned out to be allergic to capsaicin and could not taste it, to a participant that would be in the next study session (the displaced-target condition). They were also given the Food Preferences Inventory supposedly e-mailed by this other participant, which always clearly indicated that the person did not like spicy foods at all. Furthermore, in order to insure a "trigger" in the displaced-target condition, the comment section of the inventory from the supposed future coparticipant always had a written note that read, "Don’t be a jerk and give me something I don’t like!"

The experimenter continued,

Again, you were assigned to allocate spicy foods. Specifically, you will be allocating hot-sauce for them to sample. You will have a choice between Buffalo Wild Wings Mild and Buffalo Wild Wings Hot sauce. Just as you did, the person tasting the food you allocate will be required to ingest the entire amount. Note that the choice of food is completely up to you, and that you can select as little or as much as you want (provided it’s less than the 4 oz container). Before proceeding, you will have to sample both sauces in order to give you a sense of the foods. I will administer a very small amount of both the Mild and the Hot Sauce for you to taste.

Both bottles were always full, and the experimenter administered a taste of each sauce to the participant via a straw.

The experimenter then instructed the participant to select one of the sauces, pour or spoon the amount they selected in a clean 4 oz container, and cover it with a lid. Their choice of hot over mild sauce constituted the key dependent variable of aggression. The participants were also given a Food Allocation Record, which asked them to rate both of the sauces they tried on heat intensity ("How would you rate the hotness of the sauce that you will allocate?") on a scale of 1 (not at all hot) to 9 (extremely hot), and expected liking by their coparticipant ("How much do you think them?") on a scale of 1 (not at all) to 9 (very much). Finally, the experimenter let the participant to make their choice of sauce privately. Upon their return, the study was concluded, the experimenter conducted the funnel debriefing described earlier, explained the need for deception in detail, and assuaged any participant concerns.

**Results and Discussion.**

We first present analyses of the manipulation check variables and experimental manipulations, followed by the main results regarding the impact of narcissism on aggression, anger, hostility, and depression. Correlations among dependent variables are shown in Table 5. First, the experimental manipulation of frustration via noxious stimulus was successful—participants who tasted the bitter gourd juice rated it as much more bitter (M = 7.72, SD = 1.40) than participants who tasted the tea (M = 4.19, SD = 1.95), F(1, 176) = 184.9, p < .001, d = 2.1. Similarly, participants who tasted the bitter gourd juice rated it as much more unpleasant (M = −3.54, SD = .82) than participants who tasted the tea (M = .24, SD = 2.17), F(1, 176) = 209.9, p < .001, d = −2.3 (no other main effects or interactions impacted these variables, all ps > .28). Accordingly, a 2 × 2 ANOVA on anger confirmed that those in the provocation condition experienced much more anger (M = 1.79, SD = .78) than those in the control condition (M = 1.15, SD = .41), F(1, 173) = 43.0, p < .001, d = 1.0. Similarly, participants attributed less trustworthiness to the presumed coparticipant in the provocation (M = 5.43, SD = 1.58) relative to the control condition (M = 7.87, SD = 1.30), F(1, 175) = 113.7, p < .001, d = −1.7. Finally, participants reported virtually identical, low levels of depression in the provocation (M = 1.22, SD = .50) and in the control condition (M = 1.17, SD = .34), F(1, 173) = .61, p = .44, d = .12. These analyses did not yield any evidence for other main effects or interactions, all ps > .12.

Did participants retaliate aggressively when provoked? Indeed, 26.1% of participants chose the hot version of the sauce in the provocation condition, whereas only 9.0% did so in the control condition, F(1, 173) = 8.32, p < .001, odds ratio (OR) = 3.58. Moreover, the expected target of aggression did not matter much, with similar proportion of participants choosing the hot sauce in the original (20.2%) and the displaced target (14.8%) condition, F(1, 173) = .001, p = .98, OR = 1.44, with no evidence of an interaction (F < 1, p = .49). Together with the experimental results on anger and trustworthiness reported earlier, this analysis supports the conclusion that choice of hot sauce reflected aggressive intent and that participants displaced their aggression to an "innocent" other when "triggered" by their minor annoyance. Furthermore, 90% of participants reported consulting the others’ Taste Preferences Inventory “somewhat” to “very much” when
making sauce choices (which always indicated a strong dislike of spicy foods). In addition, those who chose the hot version of the sauce expected the coparticipant to dislike their choice even more, \( r = -0.27, p < .001 \). Taken together with the fact that the presumed coparticipant was not initially provoked by the participant, and had a free choice between administering a mild (tea) and noxious (bitter gourd juice) food, these observations confirm that participants’ choice of hot sauce reflected hostile aggression. Note that gender did not interact with any experimental manipulations to shape key dependent variables and including it in the analyses reported next did not alter their outcome.

**Narcissism and aggression.** Did narcissism augment these hostile and aggressive responses to provocation? Recall that we expected vulnerable (but not grandiose) narcissism to intensify aggressive retaliation and rage reactions, and to do so even toward an “innocent” target. In the context of our experimental design, this implied an interaction between narcissistic vulnerability and the provocation condition, but no three-way interaction between these factors and target condition (as vulnerability should augment aggressive responses to provocation both against the initial provocateur and a third party). Accordingly, a logistic regression analysis (with main effects, two-way interactions, and the three-way interaction entered in successive blocks) on hot-sauce choice revealed a significant interaction between narcissistic vulnerability and provocation \((B = 1.76, SE = .821, Wald = 4.62, p < .05)\), in addition to replicating the main effect of provocation described earlier \((B = 2.90, SE = 1.43, Wald = 4.13, p < .05; \text{no other effects were significant})\).

The nature of this interaction is illustrated in Figure 2, in which predicted proportions of choosing hot over mild sauce across the control and the provocation conditions are indicated for individuals standing one standard deviation above, and one below, on the measure of vulnerable narcissism. Whereas the aggressive choice among those low on vulnerability only increased by 17% as a function of provocation (simple slope \(B = 1.13, SE = 1.05, p = .28\)), the same choice among those high on narcissistic vulnerability increased by 43% as a function of provocation (simple slope \(B = 4.67, SE = 2.08, p < .05\)), indicating a much stronger aggressive response to provocation.

There was no evidence for a three-way interaction between narcissistic vulnerability, provocation, and target conditions \((B = -1.37, SE = 1.06, Wald = 1.69, p = .19)\), indicating that vulnerability increased aggression equally against the original provocateur and the annoying third party.

**Anger.** Similarly, a hierarchical regression analysis examining anger as a function of experimental conditions and narcissistic vulnerability revealed an interaction between provocation and vulnerability \((B = .30, t = 2.37, p < .05)\), in addition to replicating the experimental effect of provocation \((B = .73, t = 5.19, p < .001; \text{no other main effects or interactions were significant, all } ps > .29)\). These results are illustrated in Figure 3, in which anger reported across the control and the provocation conditions is indicated for individuals standing one standard deviation above and below on vulnerable narcissism. Simple slope analyses confirmed that those high on vulnerable narcissism reported increases in anger that were more than twice as large \((B = 1.04, t = 5.40, p < .001)\) than did those low on vulnerable narcissism \((B = .43, t = 2.29, p = .02)\).

**Trustworthiness.** Furthermore, a hierarchical regression analysis examining perceived trustworthiness as a function of experimental conditions and narcissistic vulnerability revealed an interaction between provocation and vulnerability \((B = -47, t = -2.05, p < .05)\), in addition to replicating the experimental effect of provocation \((B = -2.74, t = -8.44, p < .001; \text{no other main effects or interactions were significant, all } ps > .16)\). These results are illustrated in Figure 4, in which trustworthiness reported across the control and the provocation conditions is indicated for individuals standing one standard deviation above and below on vulnerable narcissism. Simple slope analyses confirmed that those high on vulnerable narcissism perceived one and a half times less trustworthiness \((B = -3.30, SE = .44, p < .001)\) as a function of provocation than did those low on vulnerable narcissism \((B = -2.20, SE = .44, p < .001)\).

**Depression.** Finally, in accord with the narcissistic rage hypothesis, vulnerability interacted with provocation in predicting depressive responses \((B = -.16, t = 2.33, p < .05; \text{with no other effects reaching significance, all } ps > .10)\). This interaction is illustrated in Figure 5, and simple slope analyses confirmed that only those high on vulnerable narcissism responded with more depressive reactions \((B = .42, SE = .13, p < .01; \text{whereas those low on vulnerable narcissism did not } (B = -.08, SE = .13, p = .51). Of note, the same analysis conducted on the specific item “ashamed” revealed a similar interaction pattern, although not reaching the conventional level of significance \((B = .10, p = .18)\). Despite the fact the provocation was not overtly personal (i.e., did not resemble a typical “ego threat”), the fact that narcissistic participants reacted to the provocation with depression, even shame, does suggest they took it personally. Taken together, these results implicate narcissistic vulnerability as a potent predictor of aggression, anger, mistrust, and depression in the face of provocation; all key signatures of narcissistic rage.

**Narcissistic grandiosity.** Critically, narcissistic grandiosity did not interact with any experimental manipulations in shaping aggressive choices \((all ps > .17; \text{anger } (all ps > .58); \text{trustworthiness } (all ps > .27); \text{or depression } (all ps > .33)). In contrast to prior findings on the role of grandiosity in aggression, when aggression was examined as retaliation for a relatively minor,
nonpersonal provocation, grandiose narcissism did not influence behavior nor associated emotional reactions.

Summary and a Meta-Analysis

The four studies presented in this article consistently reveal narcissistic vulnerability to be a potent predictor of anger, hostility, and both reactive and displaced aggression, establishing direct evidence for the narcissistic rage hypothesis within a broader personality domain. These findings manifested regardless of whether narcissism was assessed via single measures or factor scores based on multiple measures, in college students or urban residents, or by self-report versus objective behaviors. Finally, the data repeatedly reveal anger, hostile mistrust, and dejection and shame to be key factors contributing to both reactive and displaced aggression.

The central feature of narcissistic rage is anger, and it was assessed in all four studies reported here. To this end, we meta-analyzed the correlations between measures of narcissistic grandiosity and vulnerability from each study and the respective measures of anger, employing the varying-coefficient model (Bonett, 2008; Krizan, 2010). Recall that grandiosity and vulnerability were measured with the NPI and HNS in all studies except Study 2 (in which factors scores were used). Regarding anger, for Study 1, we used a single correlation averaged across anger-in, anger-out, and poor-anger-control, in order to preserve statistical independence of observations across data points. For other studies, the relevant anger measures were the Anger subscale from the Buss-Perry Aggression Questionnaire (Study 2), the Angry Rumination Scale (Study 3), and the State Hostility subscale from the PANAS-X (Study 4, only for the provocation condition). This meta-analysis revealed a strong link between narcissistic vulnerability and anger, $\rho = .42$ (95% CI [.35, .49]), as suggested by the narcissistic rage hypothesis. However, meta-analysis on narcissistic grandiosity revealed it not to predict anger, $\rho = .06$ (95% CI [.03, .14]). This further confirms that angry rage may not be the key ingredient in grandiose individuals’ aggression, but that the narcissistic rage hypothesis holds validity when examined with respect to vulnerable narcissism.

General Discussion

The notion that self-absorbed individuals are prone to aggression has been around since the time of Freud, and clinical theorizing about narcissistic rage suggests that narcissistic individuals often respond with intense anger and aggression when their narcissistic worldview is questioned. In parallel, personality and social-psychological research has identified links between narcissistic grandiosity and aggressive responses to direct assaults on the narcissists’ status or sense of competence. Although such aggression has often been invoked as evidence for the narcissistic rage hypothesis, we have argued that this perspective has been demonstrated as both misguided and unproductive, yielding a confusing body of evidence that does not provide an appropriate test of the proposals about narcissistic rage arising from clinical theory. In response, we outlined key theoretical features of narcissistic rage and sought evidence for it by looking to narcissistic vulnerability as the personality diathesis for intense
internalizing and externalizing reactions to perceived provocation. Evidence presented here offers strong support for narcissistic vulnerability as the source of narcissistic rage, while also revealing narcissistic grandiosity not to be a potent predictor of reactive or displaced aggression.

Understanding Narcissism and Narcissistic Aggression

Taken together, the findings provide support for clinical theorizing about narcissistic rage, illuminate the multifaceted nature of narcissistic aggression, and expose limitations in existing measurement and conceptualization of narcissism. First, the findings lend clear support to clinical proposals about narcissistic rage. According to these proposals, narcissists’ fragmented sense of self and desperation for external validation leads them to experience both shame about their narcissistic needs and unrestrained anger toward those responsible for exposing flaws in their narcissistically perceived reality, resulting in “narcissistic rage” that fuels aggression (Alexander, 1938; American Psychiatric Association, 1994; Jacobson, 1964; Kernberg, 1975; Kohut, 1972; Ronningstam, 2009; Saul, 1947). Although existing research on narcissistic aggression has often been inspired by these proposals and is evaluated from that perspective (e.g., Rhodewalt & Morf, 1998, p. 678; Ronningstam, 2009, p. 117; Thomaes, Stegge, Olthof, Bushman, & Nezlek, 2011), we have argued that evidence linking grandiosity (measured with the NPI) to aggression has not supported central elements of the narcissistic rage hypothesis. Accordingly, our findings confirm that grandiosity does not intensify angry rage, shame, or aggressive behavior in response to interpersonal frustration. Moreover, we have argued that this should not be particularly surprising; although the traditional assessment of grandiosity via the NPI captures the grandiose aspects of narcissism and features of arrogance, entitlement, and exhibitionism key to narcissistic personality disorder, it does not capture features of resentfulness, fragility, and victimization key to clinical accounts of narcissism and narcissistic rage (Pincus & Lukowitsky, 2010). By adopting a comprehensive strategy for assessing narcissism, we were able both to validate clinical accounts of narcissism within the domain of normal personality functioning and to account for the existing inconsistent findings regarding narcissism and rage.

The findings also speak to the multifaceted nature of narcissism and narcissistic aggression. According to the “threatened egotism” hypothesis, when narcissists’ entitled self-views are questioned or when their status is impeached, they react with aggression as means of restoring their bloated ego (Bushman & Baumeister, 1998). As alluded to earlier, experimental evidence assessing narcissistic grandiosity and entitlement supports these assertions, although aggression has been typically assessed within competitive contexts. However, these observations do not necessarily reflect narcissistic rage per se; rather, they seem to reflect narcissistic attempts to assert a public image of competence, dominance, and superiority (Campbell et al., 2002; Krizan & Bushman, 2011; Wallace & Baumeister, 2002), or reveal their sadistic games at others’ expense (Buckels et al., 2013; Girgis, 2006; Reidy et al., 2010). Thus, grandiosity-driven narcissistic aggression may best be interpreted as a self-enhancing strategy aimed at restoring or enforcing a sense of superiority (Campbell et al., 2000; Morf & Rhodewalt, 1993, 2001). In this vein, narcissistic grandiosity may be critical in promoting instrumental aggression, somewhat delib-
The Role of Self-Esteem in Aggression

The findings also carry implications for understanding how self-esteem links to aggression. There is still a raging (no pun intended) debate regarding this issue. One set of arguments suggests that low self-esteem is a diatheses for aggressive behavior, as it should reduce the sense of belonging necessary for conformity to prosocial norms or motivate attempts to blame others for one's feelings of inferiority (Adler, 1956; Rosenberg, 1965). Consistent with this reasoning, research indicates that individuals with low self-esteem (often children) are typically more prone to antisocial behavior and delinquency (e.g., Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Fergusson & Horwood, 2002). The other set of arguments (e.g., the threatened egotism hypothesis) suggests that inflated high self-esteem leads to aggression, as entitlement should increase aggression when favorable self-views are questioned by others (Baumeister, Bushman, & Campbell, 2000; Bushman & Baumeister, 1998; Thomaes et al., 2011). As indicated, experimental work supports this reasoning, as does work on workplace aggression (e.g., Darling, Dupre', & Kelloway, 2009; Bettencourt et al., 2006). Although settling this dispute is beyond the scope of this article, how do current findings inform this debate?

Note that narcissistic vulnerability is correlated both with low self-esteem and narcissistic entitlement (Krizan & Johar, 2012; J. D. Miller et al., 2011; Pincus et al., 2009). As a result, this dimension may simultaneously reflect high self-involvement and low self-worth, creating a perfect storm for aggressive behavior. The data reported in this study support this conclusion. Given that overall level of self-esteem does not capture the underlying entitlement nor the stability of self-worth (Campbell et al., 2004; Kernis, Granneman, & Barclay, 1989), it may not be surprising that literature on self-esteem and aggression provides conflicting results. For example, self-esteem has been found to predict aggression in the same sample of children whether it was too low, or was exaggerated and threatened (Diamantopoulou, Rydell, & Henricsson, 2008). This suggests that this debate may be somewhat counterproductive and that research efforts should focus on specific components of self-esteem (e.g., stability, performance domain) and their impact on aggression in different forms and settings.

Limitations

Although our findings convincingly implicate narcissistic vulnerability in anger, rage, and aggression, they do have several limitations worth considering. First, they focus on norm populations and relatively common (i.e., not extreme) forms of aggressive behavior. It is possible that narcissism does not play such a cardinal role in more extreme cases of aggression such as assault and manslaughter, or in populations prone to crime and delinquency. However, given that vulnerability seems to fuel anger even in response to minor provocations (Study 4), one would expect that more serious provocations would lead to more extreme rage responses, particularly among those prone to aggression.

Second, some readers may question whether it is appropriate to label the anger observed in our studies “rage,” as we have measured or induced relatively common levels of anger. Although we were not able to produce true rage in the laboratory for obvious ethical reasons, the anger among those high on narcissistic vulnerability does seem extreme. For example, in Study 2, an individual scoring at the 75% percentile of narcissistic vulnerability was expected to report anger and hostility higher than roughly 66% of the sample (based on correlations in Table 2). Whereas it will be important to relate narcissistic vulnerability to real-world cases of angry rage, these observations suggest that even in our “normal” samples, high narcissistic vulnerability is related to very high anger.

Third, this research focused on reactive, anger-driven aggression and thus does not speak to more proactive, instrumental cases of aggression (e.g., threatening a robbery victim to steal money). Such cases of instrumental aggression may be quite distinct and not driven by narcissistic vulnerability. In support of this possibility, only narcissistic grandiosity predicts instrumental, proactive aggression (Fossati et al., 2010; see also earlier discussion). Finally, although we controlled for some variables (e.g., socially desirable responding), it is possible that the documented effects of narcissism are partially attributable to some basic feature of personality (e.g., neuroticism or disagreeableness). Nevertheless, the findings clearly implicate narcissistic vulnerability (but not grandiosity) in rage-fueled behavior.

Conclusion

The opening quote illustrates the damage that can result when mundane resentments transform into rage. The evidence presented herein empirically illustrates the nature of this angry rage and reveals narcissistic qualities key to its manifestation. The findings carry important implications for understanding real-world cases of rage-fueled aggression such as school shootings, often driven by frustrations of self-worth, hostile views of others, and shame. Importantly, they caution that the most dangerous people may not always be the ones asserting their dominance and pushing others around, but rather those quietly sitting in the corner ready for the trigger that will unleash their fury. In the words of Dylan Klebold (1997), who helped murder 13 of his classmates during the Columbine school shooting in 1998, “The lonely man strikes with absolute rage!”

References


Goldberg, L. R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models.
NARCISSISTIC RAGE

In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), Personality psychology in Europe (Vol. 7, pp. 7–28). Tilburg, Netherlands: Tilburg University Press.


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