

Research Article

Attenuating the Link Between Threatened Egotism and Aggression

Sara Konrath,¹ Brad J. Bushman,^{1,2} and W. Keith Campbell³

¹University of Michigan; ²Vrije Universiteit, Amsterdam, The Netherlands; and ³University of Georgia

ABSTRACT—Research has found that narcissists behave aggressively when they receive a blow to their ego. The current studies examined whether narcissistic aggression could be reduced by inducing a unit relation between the target of aggression and the aggressor. Experimental participants were told that they shared either a birthday (Study 1) or a fingerprint type (Study 2) with a partner. Control participants were not given any information indicating similarity to their partner. Before aggression was measured, the partners criticized essays written by the participants. Aggression was measured by allowing participants to give their partner loud blasts of noise through a pair of headphones. In the control groups, narcissists were especially aggressive toward their partner. However, narcissistic aggression was completely attenuated, even under ego threat, when participants believed they shared a key similarity with their partner.

When they discover the center of the universe, a lot of people will be disappointed to discover they are not it.

—Bernard Bailey (The Quotations Page, 1994–2005)

Individuals with inflated egos think they are the center of the universe. Unfortunately, such individuals also become aggressive when they are criticized or rejected by others (e.g., Bushman & Baumeister, 1998, 2002; Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; Stucke & Sporer, 2002). Support for the threatened-egotism model of aggression has led to a fundamental reconceptualization of the roots of violence in many areas (Baumeister, Smart, & Boden, 1996). For example, the FBI

report on school violence now lists threatened egotism as a risk factor (O’Toole, 1999).

What is missing from this line of research is a technique or strategy for attenuating the link between threatened egotism and aggression. Uncovering such a technique would have both theoretical benefits in understanding why egotism and violence are linked and applied benefits in reducing aggression. Our goal in the present study was to test one potential moderator of the egotism-aggression link: an induced unit relation between the ego-threatened individual and the ego threatener. A *unit relation* refers to two or more entities “belonging together” on the basis of a specific attribute (Heider, 1958).

EGOTISM, THREAT, AND AGGRESSION

Baumeister and his colleagues (1996) specified a model in which egotism, in response to ego threat, leads to aggression. There are thus three key variables in this model: egotism, threat, and aggression.

Egotism is an inflated, perhaps untenable or unstable, view of self. Egotism is typically operationalized as narcissism (Bushman & Baumeister, 1998, 2002) or as one of its more destructive variants, including narcissistic entitlement (Campbell et al., 2004), narcissism in conjunction with low self-concept clarity (Stucke & Sporer, 2002), or narcissism with self-esteem partialled out (Paulhus, Robins, Trzesniewski, & Tracy, 2004).

It is important to note that self-esteem does not appear to be related to aggression (e.g., Baumeister et al., 1996; Bushman & Baumeister, 1998, 2002). What makes narcissism relevant to aggression when self-esteem by itself is not? Both narcissism and self-esteem are associated with a highly positive view of the self, so simple positivity of self-views is not the key. Unlike self-esteem, however, narcissism is associated with a very positive view of the self in agentic domains (e.g., intelligence, status) and a more modest (but still inflated) self-view in communal domains (e.g., caring, empathy; Campbell, Rudich, & Sedikides, 2002).

Address correspondence to Brad J. Bushman, Institute for Social Research, University of Michigan, 426 Thompson St., Ann Arbor, MI 48106, e-mail: bbushman@umich.edu.

These less positive communal self-views correspond with a relative lack of close connections with other individuals (e.g., Carroll, 1987; Watson, Grisham, Trotter, & Biderman, 1984). In short, then, it is plausible that a key factor in narcissistic aggression is the lack of a close connection with the other person.

Ego threat occurs “when favorable views about oneself are questioned, contradicted, impugned, mocked, challenged or otherwise put in jeopardy” (Baumeister et al., 1996, p. 8). Several types of threats increase aggression. The most commonly used ego threat in aggression research is negative feedback or criticism (e.g., Bushman & Baumeister, 1998); but there is also evidence that social rejection (e.g., dislike and disrespect; Twenge & Campbell, 2003) and a restriction of freedom or autonomy (Bushman, Bonacci, Van Dijk, & Baumeister, 2003) similarly provoke aggression. Each of these threats challenges an individual’s view of self in an agentic domain.

Aggression is any behavior intended to harm another person. Following threat, narcissists typically aggress only against the source of the perceived threat (e.g., Bushman & Baumeister, 1998). There is also some evidence that the aggression can be directed against an individual with the same identity as the threatener (e.g., the individual and the threatener are on the same athletic team; e.g., Gaertner & Iuzzini, in press). However, there is no evidence for the unguided narcissistic rage described in the psychodynamic literature. This is not to say that such rage will not occur in certain circumstances, but in a typical lab study involving participants from nonclinical samples, there is usually a good deal of control over aggression. That is, aggression is primarily used for direct reprisals against the individual who delivered the ego threat (e.g., Bushman & Baumeister, 1998).

ATTENUATING NARCISSISTIC AGGRESSION

What manipulation would mitigate narcissistic aggression? One possibility would be minimizing the positivity of the self in an agentic domain. If a narcissistic man, for example, could be led to think that he was not very smart, negative feedback about his performance on an exam might not lead to an aggressive response. Unfortunately, such a manipulation itself is likely to set off narcissistic aggression.

A more promising direction would be to increase the psychological connection (i.e., unit relation) between the narcissist and the threatener (Heider, 1958). If done correctly, this would mitigate the lack of interpersonal connection that makes the aggression possible. This manipulation would also capitalize on narcissists’ weakness—self-love. Narcissists love themselves, and if someone else is like them, how can they hurt that other person? The ideal manipulation would create a positive unit relation that is not so specialized that it challenges the narcissist’s high need for uniqueness (Emmons, 1984). For example, convincing the narcissist that he or she shares the same birthday or fingerprint type with the threatener may create a unit relation without threatening him or her unduly.

There are several lines of research that demonstrate the general social benefits of such invoked unit relations. These benefits include greater compliance to the requests of other people (Burger, Messian, Patel, del Prado, & Anderson, 2004), greater cooperation in prisoners’ dilemma games (Miller, Downs, & Prentice, 1998), and even more positive judgments of Rasputin (the notorious Russian monk) if people think they share his birthday (Finch & Cialdini, 1989). More interesting, perhaps, there is also reason to expect that manipulating unit relations might have an effect that is specific to egotism. Evidence for this possibility is found in the literature on the self-serving bias. In general, self-serving behavior is constrained by close relationships with other people. For example, if two individuals work together on a task, receive failure feedback, and are asked who should be blamed for the poor performance, an individual will blame his or her partner less to the extent that there is a close relationship between the two (Sedikides, Campbell, Reeder, & Elliot, 1998). This effect, however, is significantly moderated by narcissism. When the self can be enhanced only at the expense of the other (e.g., taking credit for success means giving less credit to the partner), there is a clear crossover interaction: Narcissists will self-enhance and non-narcissists will other-enhance (Campbell, Reeder, Sedikides, & Elliot, 2000). Given that (a) self-serving attribution processes are significantly related to aggression in narcissists (Stucke, 2003) and (b) self-serving attributional processes are on average displayed in relational contexts only by narcissists, it is arguable that a successful manipulation that forms a unit relation between two individuals will have an effect only on narcissists.

OVERVIEW OF THE PRESENT RESEARCH

In the present research, we experimentally manipulated the perceived unit relation between two individuals. This was done by creating contexts in which individuals believed that they shared a birthday (Study 1) or shared a fingerprint type (Study 2). In both studies, we first measured participants’ levels of self-esteem and narcissistic entitlement. In Study 1, we then exposed participants to a negative evaluation from either a purported student partner or the experimenter (this experimenter-given threat served as an important control condition). Participants were led to believe that their partner either had the same birthday they did or a different birthday. In Study 2, we exposed participants to either a positive or a negative evaluation from a purported student partner (the positive evaluation acted as another important control condition). Participants either were told that they shared a fingerprint type with their partner or were given no information about their partner’s fingerprint type. Finally, in both studies, participants were given an opportunity to aggress against their partner. We predicted that sharing a feature with the partner would attenuate the link between narcissism and direct aggression typically found after ego threat.

STUDY 1

Method

Trait Measures

Participants first completed an on-line survey that included personal information (e.g., their birthday) and the trait measures of self-esteem and narcissistic entitlement. Self-esteem was measured using the Rosenberg (1965) Self-Esteem Scale. Narcissistic entitlement was measured using the Entitlement subscale of the Narcissistic Personality Inventory (Raskin & Terry, 1988). This subscale consists of six forced-choice items (e.g., “If I ruled the world it would be a much better place” vs. “The thought of ruling the world frightens the hell out of me”). The six items are summed, with higher scores indicating higher levels of narcissistic entitlement.¹

In the present sample, the alpha coefficients for self-esteem and narcissistic entitlement were .86 and .44, respectively. Although the value for narcissistic entitlement was low, it is similar to the .45 alpha coefficient reported by Raskin and Terry (1988). The correlation between the two scales was .05. Men ($M = 3.25$, $SD = 0.43$) scored marginally higher in self-esteem than did women ($M = 3.13$, $SD = 0.46$), $t(257) = 1.89$, $p < .06$, $p_{rep} > .86$. Men ($M = 2.59$, $SD = 1.54$) scored significantly higher in narcissistic entitlement than did women ($M = 2.00$, $SD = 1.42$), $t(257) = 2.86$, $p < .01$, $p_{rep} > .95$.

Participants

Participants were 274 undergraduate students (75 men, 199 women) who received course credit in exchange for their voluntary participation. We excluded 14 who failed to follow instructions. Thus, the final sample consisted of 260 participants (67 men, 193 women).

Procedure

Participants were tested individually, but they were told they would be interacting with a partner of the same sex during the study. The “partner” was actually a confederate pretending to be another participant. Participants were told that the study was on “first impressions,” and that they would be completing a number of tasks with a partner in order to form an impression of him or her, but that they would not have face-to-face contact with their partner.

After signing the consent form, each participant completed a short form that requested his or her name, gender, ethnic background, and birth date. The experimenter gave this form to the partner, and gave the participant the form that was supposedly filled out by the partner. By the flip of a coin, the partner had either the same birthday as the participant or a different birthday. The experimenter did not make any remarks about the

birthdays and responded neutrally if the participant mentioned that the birthdays were the same.

Next, the participant was given 5 min to write an essay on abortion, endorsing whichever position he or she preferred. After completing the essay, the participant was randomly assigned to be evaluated by the partner or the experimenter. In the *direct-aggression* condition, the participant’s essay was given to the partner for evaluation; thus, any aggression against the partner would be direct. In the *displaced-aggression* condition, the participant was told that the experimenter would rate the essay because the partner was running behind; thus, any aggression against the partner would be displaced. Meanwhile, the participant was given the partner’s essay for evaluation. A few minutes later, the participant was given his or her own essay back, with negative ratings and comments ostensibly made by either the partner or the experimenter. The evaluations consisted of negative ratings on organization, originality, writing style, clarity of expression, persuasiveness of arguments, and overall quality. There was also a handwritten comment stating, “This is one of the worst essays I have read!” We have used this ego-threat procedure successfully in our previous research (e.g., Bushman & Baumeister, 1998).

The next part of the procedure was presented as a competitive reaction time task (based on Taylor’s, 1967, paradigm, which has been established as a valid and reliable measure of aggression—e.g., Anderson & Bushman, 1997; Giancola & Zeichner, 1995). Participants were told that they and their partner would have to press a button as fast as possible on each of 25 trials and that whoever was slower would receive a blast of noise. In advance of each trial, participants set the level of noise their partner would receive. Choices ranged from 60 dB (*Level 1*) to 105 dB (*Level 10*). A nonaggressive no-noise level was also provided. The partners set random noise levels throughout the task. Basically, within the ethical limits of the laboratory, participants controlled a weapon that could be used to blast their partners if the participants won the reaction time competition. Finally, participants were questioned about their suspicions, debriefed, and dismissed. The experimenter rated how suspicious participants were using an 11-point scale ranging from 0 (*not at all suspicious*) to 10 (*extremely suspicious*).

Results

In order to create a reliable measure of aggression, we standardized the noise-intensity data and averaged the resulting values across all 25 trials. The data were analyzed using a hierarchical regression analysis. Continuous predictor variables were centered when testing the interaction effects to avoid multicollinearity (e.g., Aiken & West, 1991; Jaccard, Turrsi, & Wan, 1990). In the first step, we entered covariates (i.e., experimenter’s sex and participant’s suspicion level). In the second step, we entered birthday status (1 = same birthday, 0 = different birthday), aggression type (1 = direct, 0 = displaced),

¹As in past research (e.g., Bushman & Baumeister, 2002), the Entitlement subscale of the Narcissistic Personality Inventory was a better predictor of aggression than was the entire scale.

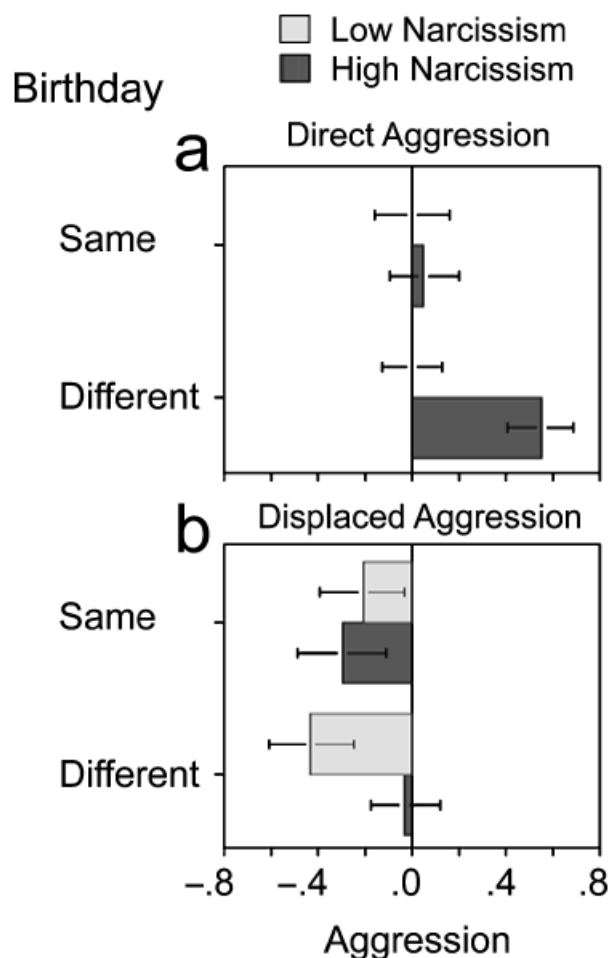


Fig. 1. Results from Study 1: (a) direct aggression toward the partner after the partner's threatening feedback and (b) displaced aggression toward the partner after the experimenter's threatening feedback, both as a function of birthday condition and level of narcissistic entitlement. For ease of presentation, a median split was used to divide participants into the high- and low-narcissism categories, as shown here, but regression analyses were conducted. Capped vertical bars denote ± 1 SE.

and narcissistic entitlement (continuous). In the third step, we added the two-way interactions of these three predictor variables. In the fourth step, we added the three-way interaction.

The covariates explained 2.2% of the variance in aggression. The second step explained 3.4% of the variance. There was a main effect of aggression type; direct aggression was higher than displaced aggression, $t(259) = 2.44, p < .02, p_{\text{rep}} > .93, b = 0.78, \beta = .19$. In the third step, the interaction between aggression type and narcissistic entitlement was significant, $t(259) = 2.06, p < .05, p_{\text{rep}} > .89, b = 2.52, \beta = .23$. Adding the two-way interactions increased the explained variance from 3.4% to 3.5%. In the fourth step, the predicted three-way interaction of birthday status, aggression type, and narcissistic entitlement was significant, $t(259) = -1.97, p < .05, p_{\text{rep}} > .88, b = -4.04, \beta = -.22$. Adding the three-way interaction increased the explained variance from 3.5% to 3.7%.

To interpret the three-way interaction, we examined the two-way interaction between birthday status and narcissistic entitlement separately for direct and displaced aggression. This is a conservative test of our hypothesis because in splitting the data, we lost the degrees of freedom associated with the other type of aggression.

As expected, the two-way interaction was significant for direct aggression, $t(153) = -2.22, p < .03, p_{\text{rep}} > .91, b = -3.20, \beta = -.21$ (see Fig. 1a). When the partner had a different birthday, the higher the participant's level of narcissistic entitlement, the higher his or her level of aggression, $t(88) = 3.32, p < .002, p_{\text{rep}} > .99, b = 2.89, \beta = .33$. When the partner had the same birthday, however, narcissistic entitlement was not related to aggression, $t(64) < 0.06, p < .95, p_{\text{rep}} < .13, b = 0.011, \beta = .007$.

The interaction between narcissistic entitlement and birthday status was not significant for displaced aggression, $t(153) = 0.61, p < .55, p_{\text{rep}} < .47, b = 0.859, \beta = .075$ (see Fig. 1b.) Self-esteem did not predict aggression, either alone or interacting with other variables.

Discussion

In Study 1, we used a simple birthday manipulation to induce a unit relation between participants and their purported partners. We found the usual positive relationship between narcissistic entitlement and aggression when participants believed that their birthdays were different from their partners' birthdays. However, when participants believed that their partners shared a birthday with them, narcissistic entitlement was unrelated to aggression. Even at the highest levels of narcissistic entitlement, participants in this condition did not respond aggressively toward their partners despite receiving ego-threatening feedback. Thus, although past research has consistently and robustly found links between threatened egotism and aggression, in a single lab session we were able to eliminate this relationship by introducing a simple unit-relation manipulation.

STUDY 2

In Study 2, we tried a different manipulation (i.e., fingerprint type) to induce a unit relation to conceptually replicate Study 1. In addition, we added a positive-feedback control group to further verify that aggression increases only after ego-threatening feedback. We again expected that our unit-relation manipulation would eliminate narcissistic aggression.

Method

Trait Measures

Before coming to the lab, participants completed the same online survey as in Study 1. The alpha coefficients for self-esteem and narcissistic entitlement were .88 and .45, respectively. The correlation between the two scales was .10. Unlike in Study 1,

men ($M = 3.16$, $SD = 0.50$) did not differ in self-esteem from women ($M = 3.13$, $SD = 0.46$), and men ($M = 2.06$, $SD = 1.50$) did not differ in narcissistic entitlement from women ($M = 1.86$, $SD = 1.44$).

Participants

Participants were 466 undergraduate students (123 men, 343 women) who received course credit or were paid \$10 in exchange for their voluntary participation. We excluded 10 participants: 1 who failed to follow the experimental instructions, 1 who had a disability that prevented him from being fingerprinted, and 8 for whom the computer malfunctioned or failed to record the data. Thus, the final sample consisted of 456 participants (117 men, 339 women).

Procedure

The procedure of Study 2 was the same as the procedure of Study 1, with the following exceptions. First, we manipulated similarity and told participants either that they had the same fingerprint type as their partner or that they had a different fingerprint type (Burger et al., 2004). Thus, we changed the cover story to reflect the new manipulation: Participants were told that the researchers were studying biology, personality, and intelligence, and that the tasks they would be completing would assess how biological markers (e.g., fingerprints) and personality characteristics are related to everyday intelligence.

Participants were fingerprinted at the beginning of the study. After they had finished writing their essay on abortion and evaluating their partner's essay, the experimenter came into the room and gave them their fingerprints back, after purportedly analyzing them by computer. One third of participants were told that they shared a rare fingerprint type with their partner ("You both have Type E fingerprints. That's very rare! Only about 2% of the population has Type E fingerprints."). Another third were told that they shared a common fingerprint type with their partner ("You both have Type E fingerprints. Of course, that's not too surprising. About 80% of the population has Type E fingerprints."). The remaining third, the control group, received their fingerprints back without any comment from the experimenter.

Unlike in Study 1, half of the participants in Study 2 were randomly assigned to receive positive feedback. We sought to replicate the previous research finding that entitled narcissists aggress only when they receive a blow to their ego. The positive feedback consisted of positive ratings on the same scales as in Study 1; in this case, the handwritten comment stated, "No suggestions, great essay!" This positive-feedback manipulation has been used successfully in previous research (e.g., Bushman & Baumeister, 1998). The negative feedback was the same as in Study 1. We eliminated the experimenter-feedback condition in Study 2 because we found no evidence of displaced aggression in Study 1.

After completing the essay task and receiving their fingerprints, participants completed the same competitive reaction time measure of aggression as in Study 1. Finally, participants were questioned about their suspicions (as in Study 1, suspicion was rated on an 11-point scale ranging from 0, *not at all suspicious*, to 10, *extremely suspicious*), debriefed, and dismissed.

Results

We again standardized the noise-intensity data and averaged them across all 25 trials and used hierarchical regression analysis. In the first step, we entered covariates (i.e., experimenter's sex, participant's suspicion level, and recruitment pool: credit or paid). In the second step, we entered two dummy-coded variables for fingerprint type: rare type (1 = shared rare fingerprint, 0 = otherwise) and common type (1 = shared common fingerprint, 0 = otherwise). We also entered valence of the feedback (1 = negative, 0 = positive) and narcissistic entitlement (continuous). In the third step, we added all two-way interactions. Finally, in the fourth step, we added the two three-way interactions (Narcissistic Entitlement \times Valence \times Rare Fingerprint Type and Narcissistic Entitlement \times Valence \times Common Fingerprint Type).

In the first step, the covariates explained 1.3% of the variance in aggression. In the second step, narcissistic entitlement, $t(455) = 2.08$, $p < .04$, $p_{\text{rep}} > .89$, $b = 0.75$, $\beta = .095$, and valence, $t(455) = 5.20$, $p < .00001$, $p_{\text{rep}} > .99$, $b = 0.91$, $\beta = .18$, both independently predicted aggression. The second step explained 2.9% of the variance in aggression.

In the third step, the two-way interaction between rare fingerprint type and narcissistic entitlement was marginally significant, $t(455) = -1.80$, $p < .08$, $p_{\text{rep}} > .85$, $b = -1.60$, $\beta = -.10$, and there was a significant interaction between common fingerprint type and narcissistic entitlement, $t(455) = -2.07$, $p < .04$, $p_{\text{rep}} > .89$, $b = -1.80$, $\beta = -.11$. The interaction between valence and narcissistic entitlement was not significant. Adding the two-way interactions increased the explained variance from 2.9% to 3.2%.

The most important test, however, came at the fourth step, when we entered the three-way interactions into the model. The three-way interaction among common fingerprint type, valence, and narcissistic entitlement was not significant, but as expected, the three-way interaction among rare fingerprint type, valence, and narcissistic entitlement was significant, $t(455) = -1.99$, $p < .05$, $p_{\text{rep}} > .88$, $b = -3.54$, $\beta = -.11$. Adding the three-way interactions increased the explained variance from 3.2% to 3.3%.

To interpret the significant three-way interaction, we examined the two-way interactions between common fingerprint type and narcissistic entitlement and between rare fingerprint type and narcissistic entitlement, separately for the positive- and negative-feedback conditions. The model that included the two-way interactions between the fingerprint types and narcissistic entitlement was marginally significant in the negative-feedback

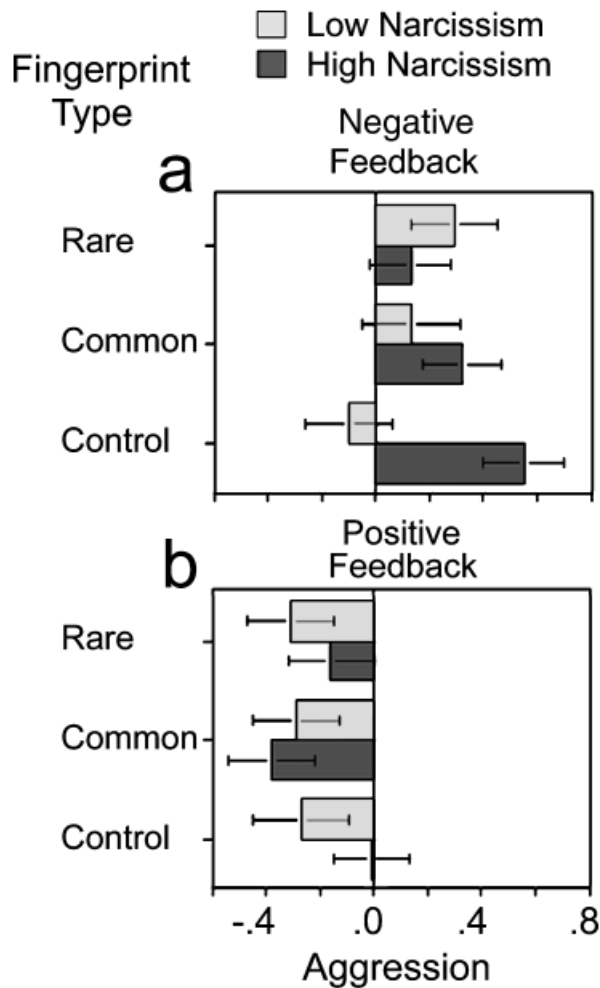


Fig. 2. Results from Study 2: (a) aggression toward the partner after the partner's ego-threatening feedback and (b) aggression toward the partner after the partner's positive feedback, both as a function of fingerprint-type condition and level of narcissistic entitlement. Participants in the control group were not given any information about their partner's fingerprint type, whereas participants in the common- and rare-fingerprint groups were told, respectively, that they shared with their partner a fingerprint type that occurred frequently (80%) or rarely (2%) in the population. For ease of presentation, a median split was used to divide participants into the high- and low-narcissism categories, as shown here, but regression analyses were conducted. Capped vertical bars denote ± 1 SE.

condition, $F(1, 218) = 1.79, p < .05, p_{\text{rep}} > .84$ (see Fig. 2a). Both interactions between fingerprint type and narcissistic entitlement were significant, $t(227) = -1.99, p < .05, p_{\text{rep}} > .88, b = -2.70, \beta = -.15$, for common fingerprint type and $t(227) = -2.40, p < .02, p_{\text{rep}} > .92, b = -3.30, \beta = -.18$, for rare fingerprint type. Breaking the results down by fingerprint type, not correcting for degrees of freedom for a more conservative test, we found that in the no-fingerprint control condition, the higher participants' level of narcissistic entitlement, the more aggressive they were, $t(74) = 3.11, p < .003, p_{\text{rep}} > .97, b = 2.83, \beta = .34$. When partners shared either a rare or a common fingerprint type with participants, narcissistic entitlement was not related to aggression, $t(72) = 0.19, p < .85, p_{\text{rep}} < .24, b =$

$0.21, \beta = .02$, and $t(79) = -0.67, p < .55, p_{\text{rep}} < .47, b = -0.73, \beta = -.052$, respectively.

In the positive-feedback condition, the overall model that included the two-way interactions between the fingerprint types and narcissistic entitlement was not significant, $F(1, 216) = 1.61, p_{\text{rep}} < .79$, and neither of the two-way interactions between fingerprint type (rare or common) and narcissistic entitlement was significant (see Fig. 2b). Self-esteem did not predict aggression, either alone or interacting with other variables.

Discussion

In Study 2, we induced a unit relation between participants and their partners with a similarity manipulation. We found the usual positive relationship between narcissism and aggression when participants received ego-threatening feedback from partners who did not share their fingerprint type. If, however, participants believed that they shared a fingerprint type with their partners, especially if the type was a rare one, narcissism was unrelated to levels of aggression. Indeed, following ego threat, narcissists were descriptively less aggressive than nonnarcissists in the rare-fingerprint-type condition. Thus, we were again able to attenuate the narcissism-aggression relationship in a single lab session.

GENERAL DISCUSSION

In two experiments, we tested a potential moderator of the narcissism-aggression link: an induced unit relation between the ego-threatened individual and the ego threatener. In Study 1, this unit relation was created through a shared-birthday manipulation; in Study 2, it was created through a shared-fingerprint-type manipulation. Across studies, the results support the conclusion that the narcissism-aggression relationship can be attenuated if participants can be made to believe that they share a characteristic with the ego threatener.

The effect of the unit-relation induction was limited to participants high in narcissism. Given that the manipulation creates a connection between two individuals, this result suggests that a lack of connection with other individuals is a key contributor to narcissistic aggression. Future research may be well served by focusing on those aspects of egotism that are associated with the inability or unwillingness to form connections with other individuals.

Interestingly, in Study 2, we found evidence that the unit-relation manipulation actually led to a small but noticeable increase in aggression for participants low in narcissism. Why might this be the case? In past research on the self-serving bias, it has been found that some (presumably low-narcissistic) individuals will behave in a more self-serving way when they feel maligned or mistreated by a close other than when they are so treated by a stranger (Sedikides, Campbell, Reeder, & Elliot, 2002). Mistreatment by a close other can be seen as a violation of relationship norms. We speculate that reaction to such a viola-

tion might be reflected in our data; that is, participants low in narcissism may have become particularly reactive when they felt betrayed by a close other.

This research has important practical implications. Specifically, it suggests a strategy (i.e., inducing a shared unit relation) that might result in lower levels of narcissistic aggression. The manipulations used in the present research might not be ideal for this task. Efforts to create unit relations between individuals using more plausible techniques (e.g., shared school identity) might be effective. This is an important topic for future research.

In conclusion, it appears that narcissistic aggression following ego threat thrives when the connection between individuals is weak. Thus, establishing commonalities between individuals may be a powerful strategy for keeping ego-driven aggression in check.

Acknowledgments—Preparation of this article was supported by a Social Sciences and Humanities Research Council of Canada Doctoral Fellowship awarded to the first author.

REFERENCES

- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Anderson, C.A., & Bushman, B.J. (1997). External validity of “trivial” experiments: The case of laboratory aggression. *General Psychology Review, 1*, 19–41.
- Baumeister, R.F., Smart, L., & Boden, J.M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review, 103*, 5–33.
- Burger, J.M., Messian, N., Patel, S., del Prado, A., & Anderson, C. (2004). What a coincidence! The effects of incidental similarity on compliance. *Personality and Social Psychology Bulletin, 30*, 35–43.
- Bushman, B.J., & Baumeister, R.F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology, 75*, 219–229.
- Bushman, B.J., & Baumeister, R.F. (2002). Does self-love or self-hate lead to violence? *Journal of Research in Personality, 36*, 543–545.
- Bushman, B.J., Bonacci, A.M., Van Dijk, M., & Baumeister, R.F. (2003). Narcissism, sexual refusal, and aggression: Testing a narcissistic reactance model of sexual coercion. *Journal of Personality and Social Psychology, 84*, 1027–1040.
- Campbell, W.K., Bonacci, A.M., Shelton, J., Exline, J.J., & Bushman, B.J. (2004). Psychological entitlement: Interpersonal consequences and validation of a new self-report measure. *Journal of Personality Assessment, 83*, 29–45.
- Campbell, W.K., Reeder, G.D., Sedikides, C., & Elliot, A.J. (2000). Narcissism and comparative self-enhancement strategies. *Journal of Research in Personality, 34*, 329–347.
- Campbell, W.K., Rudich, E., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin, 28*, 358–368.
- Carroll, L. (1987). A study of narcissism, affiliation, intimacy, and power motives among students in business administration. *Psychological Reports, 61*, 355–358.
- Emmons, R.A. (1984). Factor analysis and construct validity of the Narcissistic Personality Inventory. *Journal of Personality Assessment, 48*, 291–300.
- Finch, J.F., & Cialdini, R.B. (1989). Another indirect tactic of (self-) image management: Boosting. *Personality and Social Psychology Bulletin, 15*, 222–232.
- Gaertner, L., & Iuzzini, J. (in press). Rejection and entitativity: A synergistic model of mass violence. In K.D. Williams, J.P. Forgas, & W. von Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying*. New York: Psychology Press.
- Giancola, P.R., & Zeichner, A. (1995). Construct validity of a competitive reaction-time aggression paradigm. *Aggressive Behavior, 21*, 199–204.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Jaccard, J., Turrsi, R., & Wan, C.K. (1990). *Interaction effects in multiple regression*. Newbury Park, CA: Sage.
- Miller, D.T., Downs, J.S., & Prentice, D.A. (1998). Minimal conditions for the creation of a unit relationship: The social bond between birth-daymates. *European Journal of Social Psychology, 28*, 475–481.
- O’Toole, M.E. (1999). *The school shooter: A threat assessment perspective*. Retrieved September 15, 2006, from <http://www.fbi.gov/publications.htm>
- Paulhus, D.L., Robins, R.W., Trzesniewski, K.H., & Tracy, J.L. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research, 39*, 303–328.
- The Quotations Page. (1994–2005). *Quotation #26823 from Michael Moncur’s (Cynical) Quotations*. Retrieved September 18, 2006, from <http://www.quotationspage.com/quote/26823.html>
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validation. *Journal of Personality and Social Psychology, 54*, 890–902.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Sedikides, C., Campbell, W.K., Reeder, G.D., & Elliot, A.J. (1998). The self-serving bias in relational context. *Journal of Personality and Social Psychology, 74*, 378–386.
- Sedikides, C., Campbell, W.K., Reeder, G.D., & Elliot, A.J. (2002). The self in relationships: Whether, how, and when close others put the self “in its place.” *European Review of Social Psychology, 12*, 237–265.
- Stucke, T.S. (2003). Who’s to blame? Narcissism and self-serving attributions following feedback. *European Journal of Personality, 17*, 465–478.
- Stucke, T.S., & Sporer, S.L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality, 70*, 509–532.
- Taylor, S.P. (1967). Aggressive behavior and physiological arousal as a function of provocation and the tendency to inhibit aggression. *Journal of Personality, 35*, 297–310.
- Twenge, J., & Campbell, W.K. (2003). “Isn’t it fun to get the respect that we’re going to deserve?”: Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin, 29*, 261–272.
- Watson, P.J., Grisham, S.O., Trotter, M.V., & Bideman, M.D. (1984). Narcissism and empathy: Validity evidence for the Narcissistic Personality Inventory. *Journal of Personality Assessment, 48*, 301–305.

(RECEIVED 9/15/05; REVISION ACCEPTED 2/28/06;
FINAL MATERIALS RECEIVED 3/13/06)