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Trumping Shame by Blasts of Noise: Narcissism, Self-Esteem, Shame, and Aggression in Young Adolescents

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This experiment tested how self-views influence shame-induced aggression. One hundred and sixty-three young adolescents ($M = 12.2$ years) completed measures of narcissism and self-esteem. They lost to an ostensible opponent on a competitive task. In the shame condition, they were told that their opponent was bad, and they saw their own name at the bottom of a ranking list. In the control condition, they were told nothing about their opponent and did not see a ranking list. Next, participants could blast their opponent with noise (aggression measure). As expected, narcissistic children were more aggressive than others, but only after they had been shamed. Low self-esteem did not lead to aggression. In fact, narcissism in combination with high self-esteem led to exceptionally high aggression.

Violent aggressive behavior in youth leaves scars on perpetrators, victims, and society at large. Among the many factors that contribute to youth aggression, the self-regard of perpetrators has been a theoretically important but empirically controversial cause. For many years, the prevailing view has held that aggressive youth have low self-esteem (e.g., California Task Force to Promote Self-Esteem and Personal and Social Responsibility, 1990; Carr, 1999; Heide, 1997; Kaplan, 1975; Keith, 1984; Willock, 1987). Applied and practical efforts have also focused on low self-esteem as a cause of violence. For example, following a series of incidents in which schoolchildren fired guns and killed their classmates at various American schools, several organizations (including the U.S. Department of Education) prepared lists of alleged warning signals to be used to identify youth who might be relatively likely to engage in such destructive violence, and nearly all the lists included low self-esteem as a significant risk factor (e.g., Lord, 1999).

Despite this apparent consensus, no compelling theoretical rationale existed to explain why low self-

esteem would cause aggression. Even more problematic, a persuasive body of empirical evidence was lacking. Although there have been a few exceptions (Lochman & Dodge, 1994), most studies involving elementary school-aged children found no concurrent or prospective links between low self-esteem and aggression (Gresham, MacMillan, Bocian, Ward, & Forness, 1998; Hymel, Rubin, Rowden, & LeMare, 1990; Kupersmidt & Patterson, 1991). In fact, several studies found that aggressive children have inflated rather than deflated self-views (Brendgen, Vitaro, Turgeon, Poulin, & Wanner, 2004; David & Kistner, 2000; Zakriski & Coie, 1996) and that high self-esteem is a risk factor for exacerbating aggression problems over time (Menon et al., 2007).

One possible explanation of these findings is that low self-esteem may only cause aggression in adolescents because they are more concerned than younger children about maintaining desired self-images (Harter, 2006; Rosenberg, 1986). Contrary to that reasoning, however, the bulk of studies involving adolescents also found no link between low self-esteem and aggression (East & Rook, 1992; Esposito, Kobak, & Little, 2005; Olweus, 1994; Prinstein, Boergers, & Vernberg, 2001; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999; but see Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005, for an exception). As it

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stands, there is little reason to adhere to the view that low self-esteem causes aggressive behavior in youth.

Narcissism and Aggression

In a comprehensive literature review, Baumeister, Smart, and Boden (1996) rejected the view that low self-esteem causes aggression. They proposed instead that violence most commonly occurs when inflated views of self and unstable beliefs in personal superiority are threatened. These conceptions of excessive self-love are relevant to narcissism, a term that comes from the Greek myth about a handsome young man who falls in love with his own reflection in the water. In its extreme form, narcissism is a personality disorder that involves grandiose views of self, an inflated sense of entitlement, and exploitative attitudes toward others (American Psychiatric Association, 1994). Most current psychological research focuses on "normal narcissism," operationalized as a trait on which people in the general population vary (Morf & Rhodewalt, 2001; Raskin & Terry, 1988). Intuition suggests that narcissism is equivalent to excessively high self-esteem, but research showed that narcissism and self-esteem are not strongly correlated (Brown & Zeigler-Hill, 2004). Narcissists are self-absorbed and arrogant, but they differ in feelings of self-assurance and sufficiency (reflecting higher levels of self-esteem) or self-doubt and insufficiency (reflecting lower levels of self-esteem; Cain, Pincus, & Ansell, 2007; Dickinson & Pincus, 2003; Rose, 2002; Wink, 1991).

The link between narcissism and aggression has been firmly established in adults (e.g., Bushman & Baumeister, 1998; Bushman, Bonacci, van Dijk, & Baumeister, 2003; Donnellan et al., 2005; Stucke & Sporer, 2002; Twenge & Campbell, 2003). Preliminary evidence suggests that narcissists with high self-esteem are particularly prone to behave aggressively (Papps & O'Carroll, 1998; Wink, 1991). Unfortunately, few studies have examined the effects of narcissism and self-esteem on aggression in youth. This lack of emphasis is surprising because childhood is the time when the foundation for lifelong aggressive or non-aggressive behavior styles is laid (e.g., Loeber & Hay, 1997). For both clinical and theoretical reasons, it is important to study the psychological mechanisms underlying aggressive inclinations at a time that they unfold. One cause of the paucity of research on narcissistic aggression in youth has been the absence, until recently, of a scale designed to measure early manifestations of narcissism. Recent developments indicate, however, that the construct of narcissism can

be reliably identified and distinguished from related personality dimensions in older children and adolescents (C. T. Barry, Frick, & Killian, 2003; Frick, Bodin, & Barry, 2000). We recently developed the Childhood Narcissism Scale, a reliable and valid measure of narcissistic traits in normal child and adolescent populations (Thomaes, Stegge, Bushman, Olthof, & Denissen, 2008).

Shame-Induced Aggression

Violence and aggression often occur when an individual's pride, reputation, or self-esteem has been impugned or threatened. In late childhood and adolescence, such situations are typically experienced as shameful (Nishina & Juvonen, 2005; Olthof, Ferguson, Bloemers, & Deij, 2004; Reimer, 1996). Shameful events often involve the public exposure of some failure or shortcoming (Olthof, Schouten, Kuiper, Stegge, & Jennekens-Schinkel, 2000; Smith, Webster, Parrott, & Eyre, 2002). When shamed, people are painfully aware that others might think they are flawed (Lewis, 1971; Tangney & Dearing, 2002). Importantly, this awareness of others' disapproval is easily internalized as a global condemnation of the self (e.g., "I am a bad and worthless person"). Over the course of late childhood, such self-condemning negative self-appraisals become a more pronounced part of the shame experience (Ferguson, Stegge, & Damhuis, 1991). Gradually, shameful events come to constitute a more serious threat to self-esteem.

How do people behave when they are shamed? Shameful events may cause people to withdraw and hide from social contact (e.g., Lindsay-Hartz, De Rivera, & Mascolo, 1995). Alternatively, shameful events may cause people to lash out aggressively against others. Across the life span, shame-prone individuals are predisposed to externalize blame, to feel anger, and to behave aggressively (Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). Situationally induced shame produces similar reactions (Bennett, Sullivan, & Lewis, 2005; Thomaes, Stegge, & Olthof, 2005). Shame-induced aggression may serve an ego-protective function (Tangney & Dearing, 2002). By directing blame and anger on others, people can prevent their self-esteem from (further) damage. Aggression shifts attention away from painful awareness of a devalued self. Also, by asserting the dominant aggressive stance, people can reaffirm the self and "save face" in front of others. In summary, shame-induced aggression may originate from the basic human motive to preserve self-esteem.

Self-Views and Shame-Induced Aggression

If the traditional view that low self-esteem causes aggression is true, one would predict that youth with low self-esteem should be particularly aggressive when shamed because shameful events make them feel even more inferior. This prediction, however, is inconsistent with what we know about the motivations that surround self-esteem. Self-verification theory holds that people generally try to maintain consistent self-appraisals and dislike changing their self-views (Swann & Read, 1981). From this perspective, youth with low self-esteem should be relatively untouched by shameful events because their habitual self-appraisals are already low. In contrast, youth with inflated narcissistic self-views should be more vulnerable than others to shameful events because they are highly motivated to protect their inflated self from being damaged. Indeed, vulnerability to shame has been described as a key component of narcissism (Morrison, 1989; Tracy & Robins, 2004). These notions are consistent with the empirical findings in adult samples showing that narcissists are aggressive following ego threat.

Present Experiment

A between-subjects experimental design was used to examine how self-views influence aggressive responses to induced shame. Participants were 10–13 years old. From several developmental perspectives, this is an ideal age period for the purposes of this experiment. First, in early adolescence, shame is both a frequent and an aversive emotional experience due to developmental increases in self-consciousness (Ryan & Kuczkowski, 1994; Simmons, Rosenberg, & Rosenberg, 1973), the ability to view the self from others' perspective (Harter, 2006), and the ability to make global negative evaluations of the self (Ferguson et al., 1991). Second, early adolescence is a time when children become increasingly concerned about maintaining worth and approval, and self-protective motives come to exert a stronger influence on their behavior (Harter, 2006; Rosenberg, 1986). Third, early adolescence is an ideal time to measure childhood narcissism. Young children typically hold unrealistically positive self-views because they lack the abilities to differentiate their actual self from their ideal self and to base their self-views on social comparisons (Harter, 2006). By age 10, most youth have overgrown age-normative overestimation of competence that likely is a prerequisite for the meaningful assessment of individual differences in childhood narcissism (Thomaes et al., 2008). Fourth, early ado-

lescence is a time when children's self-views are still relatively malleable before they become crystallized in late adolescence and adulthood (Trzesniewski, Donnellan, & Robins, 2003). Thus, early adolescence may be a critical age period to initiate aggression interventions targeted at changing self-views. This experiment tested whether a link between self-views and aggression has already been established by then.

Aggressive behavior was examined in a *situational context* of shame. We did not address how *felt* shame was involved in youth's aggressive behavior. Several authors have noted that although feelings of shame may mediate shame-induced aggression, these feelings are not necessarily consciously experienced (e.g., Lewis, 1971; Robins, Tracy, & Shaver, 2001). For conceptual clarity, we chose to focus on shame-induced aggression on a situational level.

We used a shame manipulation based on the easy task failure paradigm (e.g., Lewis, Alessandri, & Sullivan, 1992). People who fail an easy task are especially likely to experience shame. Participants in our experiment failed a competitive reaction time task. They were randomly assigned to shame or no-shame control conditions. Participants in the shame condition were told that their opponent was one of the slowest contestants tested so far, and they saw their own name at the bottom of a ranking list posted on the bogus FastKid! Web page (below their opponent's name). The Internet rankings highlighted public exposure, which should enhance feelings of shame (Smith et al., 2002). Participants in the control condition were told nothing about their opponent's abilities and did not see the bogus Web page. A validation study showed this shame manipulation to be highly effective (Thomaes et al., 2005). The shame condition elicits feelings of shame in young adolescents, whereas the control condition does not. Next, participants were given a chance to blast their opponent with loud noise through headphones (the aggression measure). We predicted that narcissistic youth would behave most aggressively, but only in the shame condition. We did not predict high levels of aggression in youth with low self-esteem. On the contrary, on the basis of prior research, we predicted that high self-esteem would enhance narcissistic aggression (Pappas & O'Carroll, 1998; Wink, 1991).

Method*Participants*

Participants were 163 young adolescents (54% boys) from two public middle schools serving middle- and

upper-middle-class neighborhoods in southeastern Michigan. In the school district, 8% of students are eligible for reduced-price lunch programs. Participants ranged in age from 10 to 13 years ($M = 12.2$, $SD = 0.6$). Almost all were Caucasians (96%). To participate, adolescents received informed parental consent (29% of parents consented) and gave their own assent (98% of adolescents assented). Participants received a small gift (e.g., mechanical pens, markers) in exchange for their voluntary participation.

Self-View Questionnaire

A few weeks prior to the experiment ($M = 3$ weeks, range = 1–5 weeks), participants completed self-report measures of narcissism and self-esteem at their school. Narcissism was measured using the reliable and valid Childhood Narcissism Scale (Thomaes et al., 2008). This 10-item scale assesses grandiose views of self, inflated feelings of superiority and entitlement, and exploitative interpersonal attitudes. Sample items include “Without me, our class would be much less fun,” “Kids like me deserve something extra,” and “I often succeed in getting admiration.” Items are rated along a 4-point scale ranging from 0 (*not at all true*) to 3 (*completely true*). Responses were summed, with higher scores indicating higher levels of narcissism. In the present experiment, the alpha coefficient for the scale was .76.

Self-esteem was measured using the 6-item *global self-worth* subscale of the Self-Perception Profile for Children (Harter, 1985). This scale assesses the extent to which participants are satisfied with themselves and the way they are leading their lives. Sample items include “Some kids like the kind of person they are” and “Some kids are not very happy with the way they do a lot of things.” Following others (e.g., Brendgen et al., 2004), we used a 4-point scale response format ranging from 0 (*I am not like these kids at all*) to 3 (*I am exactly like these kids*). After reverse scoring negatively worded items, responses were summed, with higher scores indicating higher levels of self-esteem. The alpha coefficient for the scale was .72.

Procedure

Participants were tested individually in a quiet room at their school. They were told that they would be competing on an Internet reaction time game called FastKid! against an opponent of the same sex and age from a school in Columbus, OH. In reality, there was no opponent and the computer controlled all events. Participants were told that FastKid! consisted of two 5-trial rounds, each with a bonus. The first-round

bonus was the ability to send a written message to the opponent. The second-round bonus was the ability to blast the opponent with loud white noise (sounds like radio static) through headphones after winning a trial. Through a rigged lottery, the opponent had the bonus in the first round, whereas the participant had the bonus in the second round. Participants were given samples of noise they could set for their opponent. The noise levels ranged from 55 (Level 1) to 100 dB (Level 10) in 5-dB increments. The maximum noise level, 100 dB, is about the same intensity as a smoke alarm. A nonaggressive no-noise setting (Level 0) was also included.

Participants were randomly assigned to shame or no-shame control conditions. In the shame condition, participants were told that they were lucky to compete against one of the worst players thus far. The experimenter then logged onto the fictitious FastKid! Web site and showed participants their opponent’s name at the bottom of the ranking list. The experimenter said, “This means you should win easily!” Participants were told that immediately after the first round of the game, new rankings would appear on the very popular FastKid! Web site and that their own name would be included in those rankings. After competing with the opponent on the first five reaction time trials, a message appeared on screen that said, “Sorry (participant’s name), you lost!” The opponent then sent the participant a message that said, “Can’t wait to see the rankings!” Then, the new rankings showed the participant’s name at the bottom of the list, beneath the opponent’s name. The control condition was similar to the shame condition, with three exceptions. First, participants received no information about how good their opponent was (and saw no rankings on the Web site before the game). Second, participants saw no rankings after the game. Third, the opponent’s message said, “Huh?! Is the first round finished already?” We used a losing control condition because we wanted to test the effects of shame above and beyond the effects of mere disappointment or frustration from losing a game.

In the second round of the game, participants had the “noise bonus,” so they could blast their opponent with loud noise after winning a trial. Prior to each of the five trials of Round 2, participants set the noise level their opponent would receive if the opponent lost. After each trial, participants were informed whether they had won (i.e., Trials 1, 2, 4, and 5) or lost (i.e., Trial 3) that trial. To obtain an aggression measure unconfounded by the (nonmanipulation) effect of losing Trial 3, the average level of noise set for the opponent across the first three trials was used to measure aggression. The alpha coefficient for the

aggression measure was .85. Finally, participants were thoroughly debriefed to remove lingering effects of the manipulations and were given a small gift.

Results

Preliminary Analyses

Sex differences and age. Boys were significantly more aggressive than girls, $F(1, 161) = 8.37, p < .01, d = 0.45$. Aggression was not affected by age, $t(161) = -0.33, p > .74, b = -0.07, \beta = -.03$. Because there were also no interactions involving sex or age, the data from boys and girls of different ages were combined for subsequent analyses.

Equivalence of experimental conditions. Narcissism and self-esteem scores did not differ in the shame and no-shame groups ($ps > .30$). Thus, random assignment to conditions was effective. Narcissism and self-esteem were only weakly correlated ($r = .09$).

Primary Analyses

Table 1 contains the descriptive statistics for the experiment. Data were analyzed using hierarchical multiple regression analysis. The dependent variable was aggressive behavior, defined as the average intensity of noise participants gave their ostensible opponent. The main effects for condition, narcissism, and self-esteem were entered in Step 1; the two-way interactions involving these variables were entered in Step 2; and the three-way interaction was entered in Step 3. Narcissism and self-esteem scores were centered to reduce multicollinearity (Aiken & West, 1991; Jaccard & Turrissi, 2003). A maximum variance inflation factor (VIF) greater than 10 indicates that multicollinearity may be unduly influencing the least squares estimates (e.g., Neter, Wasserman, & Kutner, 1990). The maximum VIF in the regression analysis

was 3.26, indicating that multicollinearity was not a problem.

The analysis revealed a main effect for narcissism, $t(159) = 2.01, p < .05, b = 0.41, \beta = .16$. This main effect, however, was qualified by a significant interaction between narcissism and condition, $t(156) = 2.03, p < .05, b = 0.82, \beta = .21$ (see Figure 1). As expected, narcissism was positively related to aggression when participants were shamed, $t(81) = 2.91, p < .01, b = 0.89, \beta = .31$. Narcissism was not related to aggression when participants were not shamed, $t(78) = 0.04, p > .96, b = 0.01, \beta = .01$.

Although self-esteem did not directly influence aggression levels, on the basis of prior research, we anticipated that narcissism in combination with high self-esteem would lead to exceptionally high levels of aggression in the shame condition (Papps & O'Carroll, 1998; Wink, 1991). As expected, there was a significant Narcissism $\times$ Self-Esteem $\times$ Condition interaction, $t(155) = 2.00, p < .05, b = 0.84, \beta = .19$. To interpret the three-way interaction, we examined the two-way interactions between narcissism and self-esteem separately for the shame and no-shame control conditions. As expected, narcissism and self-esteem interacted to influence aggression in the shame condition, $t(79) = 2.65, p < .01, b = 0.91, \beta = .28$ (see Figure 2; high values of narcissism and self-esteem were 1 SD above the mean and low values were 1 SD below the mean; Aiken & West, 1991). Figure 2 shows that narcissism and aggression were

Table 1
Means and Standard Deviations in the Shame and No-Shame Control Conditions

	Range	Shame (N = 83)	Control (N = 80)
		M (SD)	M (SD)
Narcissism	2–26	12.04 (4.32)	11.29 (4.92)
Self-esteem	3–18	13.60 (2.89)	13.51 (3.38)
Aggression	1–10	7.06 (2.51)	7.02 (2.66)
Age (months)	131–166	146 (8)	146 (8)

Figure 1. Relationship between narcissism and aggression for participants in the shame and the no-shame control conditions.

Figure 2. Relationship between narcissism and aggression for participants with high and low self-esteem in the shame condition.
Note. High values of narcissism and self-esteem are 1 SD above the mean; low values of narcissism and self-esteem are 1 SD below the mean.

Figure 3. Relationship between narcissism and aggression for participants with high and low self-esteem in the no-shame control condition.
Note. High values of narcissism and self-esteem are 1 SD above the mean; low values of narcissism and self-esteem are 1 SD below the mean.

strongly associated in shamed youth with high self-esteem, $t(79) = 4.00, p < .001, b = 1.69, \beta = .59$. In contrast, narcissism and aggression were not associated in shamed youth with low self-esteem, $t(79) = -0.29, p > .77, b = -0.14, \beta = -.05$. As expected, narcissism and self-esteem did not interact to influence aggression in the no-shame control condition, $t(76) = 0.30, p > .76, b = 0.07, \beta = .04$. As shown in Figure 3, narcissism and aggression were not associated in nonshamed youth with high or low self-esteem, $t(76) = 0.24, p > .81, b = 0.09, \beta = .04$ and $t(76) = -0.17, p > .86, b = -0.06, \beta = -.03$, respectively.

Discussion

The present experiment examined how narcissism and self-esteem influence young adolescents' shame-induced aggressive behavior. As predicted, narcissistic youth were more aggressive than others, but only after they had been shamed. Narcissists seem highly motivated to create and maintain a grandiose view of self. They tend to interpret social situations in terms of how they reflect on the self, and they engage in self-regulatory strategies to protect self-esteem when they need to (Morf & Rhodewalt, 2001). As shameful situations constitute a threat to grandiosity, narcissis-

tic shame-induced aggression can likely be viewed as defensive effort to maintain self-worth.

No support was found for the traditional view that low self-esteem underlies aggression. In fact, that view was contradicted by the finding that high self-esteem (not low self-esteem) increased narcissistic shame-induced aggression. One explanation for this finding, based on self-verification theory, is that narcissistic youth with high self-esteem are more vulnerable to shameful events than are youth with low self-esteem. Another explanation is that narcissistic youth with high and low self-esteem do not differ in their vulnerability to shameful events, but they do differ in the way they deal with those events. This latter explanation is consistent with research showing that narcissists' interpersonal orientation tends to vary along with their level of self-esteem (e.g., Cain et al., 2007; Wink, 1991). *Overt narcissists*, who have high self-esteem, have been described as extraverts marked by a dominant and aggressive interpersonal orientation. *Covert narcissists*, who have much lower self-esteem (i.e., their self-absorption co-occurs with feelings of self-doubt and insufficiency), have been described as "worriers" marked by an anxious and internalizing interpersonal orientation. They may feel aggrieved and hurt when shamed, but in our experiment, they were not aggressive.

Researchers have argued that aggression is an appealing behavioral alternative to shamed individuals because it serves an ego-protective function (Tangney & Dearing, 2002). Aggression provides immediate relief from the pain of shame, which is a tempting benefit in the short run. In the long run, however, predispositions to behave aggressively when shamed may have serious costs. Children who persistently deflect the painful feelings associated with their flaws and shortcomings may become less motivated to overcome them. Consequently, they may become less well adapted to the demands of their social environment. Also, affectively aggressive children are unpopular with peers (e.g., Price & Dodge, 1989; Prinstein & Cillessen, 2003). Thus, aggressive behaviors meant to discard shame in the short run may ironically increase children's liability to be the target of victimization in the long run.

The present experiment contributes to the literature in several ways. To our knowledge, it is the first study to examine the link between youth's self-views and their actual aggressive behavior in an *in vivo* situational context. Other studies have relied on measures of reported aggression that often include more diffusely defined antisocial acts such as lying or stealing (e.g., Donnellan et al., 2005). Our findings are consistent with those of previous work that found that narcissism is linked to reported aggression and conduct problems in youth (C. T. Barry et al., 2003; T. D. Barry et al., 2007). Also, the present experiment highlights the importance of shame as an emotional context for examining the link between self-views and aggression. Most important, this experiment shows the value of differentiating among different forms of self-view (Salmivalli, 2001). Most previous research involving children has relied exclusively on measures of self-esteem, which by itself is an unreliable predictor of aggression. This study indicates that narcissism is an important predictor of aggression, especially in the context of shame.

Limitations and Future Research

We have argued that early adolescence is an ideal age period for the present experiment. However, our developmental focus limits the ability to make generalizations to other age periods. Future research should test whether the link between self-views and aggression is moderated by age. Such knowledge would help clinicians to identify critical age periods to target the self-views underlying children's aggressive behavior.

The parental consent rate for our experiment was low (i.e., 29%). This may have occurred because the

letter from the principal endorsing our study was accidentally not included with the consent form. Low parental consent does not threaten the internal validity of our experiment because participants were randomly assigned to shame or no-shame groups. We cannot, however, exclude the possibility that self-selected biased sampling has influenced the magnitude of the experimental effects observed. Future research may assess the extent to which our experimental findings generalize to other community and noncommunity samples.

Experimental aggression research is sometimes criticized for using laboratory paradigms that are supposedly unrepresentative of "real-world" aggression. The validity of laboratory aggression paradigms (including the noise blast procedure we used) has been supported in two meta-analyses. One meta-analysis demonstrated high levels of convergence across a wide range of laboratory aggression measures (Carlson, Marcus-Newhall, & Miller, 1989). The other meta-analysis showed that "real" and laboratory measures of aggression are influenced in similar ways by situational variables (e.g., provocation) and by individual difference variables (e.g., trait aggressiveness; Anderson & Bushman, 1997).

In contrast to the adult literature, aggression in the context of self-esteem threats such as shame is rarely examined in the child literature. We believe this is unfortunate because such threats are common experiences (particularly in early adolescence) known to elicit aggression in subsets of children (Dodge, Coie, & Lynam, 2006). In this experiment, we manipulated a situation of self-attributable shortcoming. However, shame and other self-esteem threats can also result from shortcomings pinpointed by others. In fact, peer harassment among schoolchildren typically involves damaging others' self-esteem or status (Galen & Underwood, 1997; Nishina & Juvonen, 2005). Continued research on shame-induced aggression is needed to obtain a more complete view on the emotional processes involved in children's and adolescents' aggression.

Conclusion

Many efforts to reduce violence and aggression in youth have relied on boosting self-esteem (e.g., Kusché & Greenberg, 1994; Ringwalt, Graham, Paschall, Flewelling, & Browne, 1996). Although intuitively plausible, there are no clear theoretical or empirical reasons why boosting self-esteem should be effective in reducing aggression. In fact, the present experiment suggests that practices aimed at boosting self-esteem may even bring substantial costs. If these

practices cultivate the inflated views of self that are characteristic of narcissism, they are likely to increase (rather than to decrease) the aggressive behavior of youth at risk.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Anderson, C. A., & Bushman, B. J. (1997). External validity of "trivial" experiments: The case of laboratory aggression. *Review of General Psychology*, 1, 19–41.
- Barry, C. T., Frick, P. J., & Killian, A. L. (2003). The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. *Journal of Clinical Child and Adolescent Psychology*, 32, 139–152.
- Barry, T. D., Thompson, A., Barry, C. T., Lochman, J. E., Adler, K., & Hill, K. (2007). The importance of narcissism in predicting proactive and reactive aggression in moderately to highly aggressive children. *Aggressive Behavior*, 33, 185–197.
- 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.
- Bennett, D. S., Sullivan, M. W., & Lewis, M. (2005). Young children's adjustment as a function of maltreatment, shame, and anger. *Child Maltreatment*, 10, 311–323.
- Brendgen, M., Vitaro, F., Turgeon, L., Poulin, F., & Wanner, B. (2004). Is there a dark side of positive illusions? Overestimation of social competence and subsequent adjustment in aggressive and nonaggressive children. *Journal of Abnormal Child Psychology*, 32, 305–320.
- Brown, R. P., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality*, 38, 585–592.
- 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., 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.
- Cain, N. M., Pincus, A. L., & Ansell, E. B. (2007). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28, 638–656.
- California Task Force to Promote Self-Esteem and Personal and Social Responsibility. (1990). *Toward a state of esteem*. Sacramento: California State Department of Education.
- Carlson, M., Marcus-Newhall, A., & Miller, N. (1989). Evidence for a general construct of aggression. *Personality and Social Psychology Bulletin*, 15, 377–389.
- Carr, A. (1999). *The handbook of child and adolescent clinical psychology: A contextual approach*. London: Routledge.
- David, C. F., & Kistner, J. A. (2000). Do positive self-perceptions have a "dark-side"? Examination of the link between perceptual bias and aggression. *Journal of Abnormal Child Psychology*, 28, 327–337.
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders*, 17, 188–207.
- Dodge, K. A., Coie, J. D., & Lynam, D. (2006). Aggression and antisocial behavior in youth. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 719–788). New York: Wiley.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological Science*, 16, 328–335.
- East, P. L., & Rook, K. S. (1992). Compensatory patterns of support among children's peer relationships: A test using school friends, nonschool friends, and siblings. *Developmental Psychology*, 28, 163–172.
- Esposito, A. J., Kobak, R., & Little, M. (2005). Aggression and self-esteem: A diary study of children's reactivity to negative interpersonal events. *Journal of Personality*, 73, 887–906.
- Ferguson, T. J., Stegge, H., & Damhuis, I. (1991). Children's understanding of guilt and shame. *Child Development*, 62, 827–839.
- Frick, P. J., Bodin, S. D., & Barry, C. T. (2000). Psychopathic traits and conduct problems in community and clinic-referred samples of children: Further development of the psychopathy screening device. *Psychological Assessment*, 12, 382–393.
- Galen, B. R., & Underwood, M. K. (1997). A developmental investigation of social aggression among children. *Developmental Psychology*, 33, 589–600.
- Gresham, F. M., MacMillan, D. L., Bocian, K. M., Ward, S. L., & Forness, S. R. (1998). Comorbidity of hyperactivity-impulsivity-inattention and conduct problems: Risk factors in social, affective, and academic domains. *Journal of Abnormal Child Psychology*, 26, 293–406.
- Harter, S. (1985). *The self-perception profile for children: Revision of the perceived competence scale for children*. Denver, CO: University of Denver.
- Harter, S. (2006). The self. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 505–570). New York: Wiley.
- Heide, K. M. (1997). Juvenile homicide in America: How can we stop the killing? *Behavioral Sciences and the Law*, 15, 203–220.
- Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of

- internalizing and externalizing problems from middle to late childhood. *Child Development*, 61, 2004–2021.
- Jaccard, J., & Turrisi, R. (2003). *Interaction effects in multiple regression* (2nd ed.). Newbury Park, CA: Sage.
- Kaplan, H. B. (1975). *Self-attitudes and deviant behavior*. Pacific Palisades, CA: Goodyear.
- Keith, C. R. (1984). *The aggressive adolescent: Clinical perspectives*. New York: Free Press.
- Kupersmidt, J. B., & Patterson, C. J. (1991). Childhood peer rejection, aggression, withdrawal, and perceived competence as predictors of self-reported behavior problems in preadolescence. *Journal of Abnormal Child Psychology*, 19, 427–449.
- Kusché, C., & Greenberg, M. (1994). *PATHS: Promoting alternative thinking strategies*. South Deerfield, MA: Developmental Research Programs.
- Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.
- Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task-difficulty. *Child Development*, 63, 630–638.
- Lindsay-Hartz, J., De Rivera, J., & Mascolo, M. (1995). Differentiating shame and guilt and their effects on motivation. In J. Tangney & K. Fischer (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 274–300). New York: Guilford.
- Lochman, J. E., & Dodge, K. A. (1994). Social cognitive processes of severely violent, moderately aggressive, and nonaggressive boys. *Journal of Consulting and Clinical Psychology*, 62, 366–374.
- Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*, 48, 371–410.
- Lord, M. (1999, October 11). The violent kid profile: A controversial new technique for beating violence. *U.S. News & World Report*, 127, 56–57.
- Menon, M., Tobin, D. D., Corby, B. C., Menon, M., Hodges, E. V. E., & Perry, D. G. (2007). The developmental costs of high self-esteem. *Child Development*, 78, 1627–1639.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Morrison, A. P. (1989). *Shame: The underside of narcissism*. Hillsdale, NJ: Analytic.
- Neter, J., Wasserman, W., & Kutner, M. H. (1990). *Applied linear statistical models* (3rd ed.). Homewood, IL: Irwin.
- Nishina, A., & Juvonen, J. (2005). Daily reports of witnessing and experiencing peer harassment in middle school. *Child Development*, 76, 435–450.
- Olthof, T., Ferguson, T. J., Bloemers, E., & Deij, M. (2004). Morality- and identity-related antecedents of children's guilt and shame attributions in events involving physical illness. *Cognition and Emotion*, 18, 383–404.
- Olthof, T., Schouten, A., Kuiper, H., Stegge, H., & Jennekens-Schinkel, A. (2000). Shame and guilt in children: Differential situational antecedents and experiential correlates. *British Journal of Developmental Psychology*, 18, 51–64.
- Olweus, D. (1994). Bullying at school: Long-term outcomes for the victims and an effective school-based intervention program. In R. Huesmann (Ed.), *Aggressive behavior: Current perspectives* (pp. 97–130). New York: Plenum.
- Papps, B., & O'Carroll, R. E. (1998). Extremes of self-esteem and narcissism and the experience and expression of anger and aggression. *Aggressive Behavior*, 24, 421–438.
- Price, J. M., & Dodge, K. A. (1989). Reactive and proactive aggression in childhood: Relations to peer status and social-context dimensions. *Journal of Abnormal Child Psychology*, 17, 455–471.
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 30, 479–491.
- Prinstein, M. J., & Cillessen, A. H. N. (2003). Forms and functions of adolescent peer aggression associated with high levels of peer status. *Merrill-Palmer Quarterly*, 49, 310–342.
- 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.
- Reimer, M. S. (1996). "Sinking into the ground": The development and consequences of shame in adolescence. *Developmental Review*, 16, 321–363.
- Ringwalt, C. L., Graham, L. A., Paschall, M. J., Flewelling, R. L., & Browne, D. C. (1996). Supporting adolescents with guidance and employment (SAGE). *American Journal of Preventive Medicine*, 12, 31–38.
- Robins, R. W., Tracy, J. L., & Shaver, P. R. (2001). Shamed into self-love: Dynamics, roots, and functions of narcissism. *Psychological Inquiry*, 12, 230–236.
- Rose, P. (2002). The happy and unhappy faces of narcissism. *Personality and Individual Differences*, 33, 379–391.
- Rosenberg, M. (1986). Self-concept from middle childhood through adolescence. In J. Suls & A. Greenwald (Eds.), *Psychological perspective on the self* (Vol. 3, pp. 107–135). Hillsdale, NJ: Erlbaum.
- Ryan, R. M., & Kuczkowski, R. (1994). The imaginary audience, self-consciousness, and public individuation in adolescence. *Journal of Personality*, 62, 219–238.
- Salmivalli, C. (2001). Feeling good about oneself, being bad to others? Remarks on self-esteem, hostility, and aggressive behavior. *Aggression and Violent Behavior*, 6, 375–393.
- Salmivalli, C., Kaukiainen, A., Kaistaniemi, L., & Lager-spetz, K. (1999). Self-evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. *Personality and Social Psychology Bulletin*, 25, 1268–1278.
- Simmons, R. G., Rosenberg, F., & Rosenberg, M. (1973). Disturbance in the self-image at adolescence. *American Sociological Review*, 38, 553–568.
- Smith, R. H., Webster, J. M., Parrott, W. G., & Eyre, H. L. (2002). The role of public exposure in moral and

- nonmoral shame and guilt. *Journal of Personality and Social Psychology*, 83, 138–159.
- 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.
- Swann, W. B., Jr., & Read, S. J. (1981). Self-verification processes: How we sustain our self-conceptions. *Journal of Experimental Social Psychology*, 17, 351–372.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York: Guilford.
- Tangney, J. P., Wagner, P. E., Hill-Barlow, D., Marschall, D. E., & Gramzow, R. (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, 70, 797–809.
- Thomaes, S., Stegge, H., Bushman, B. J., Olthof, T., & Denissen, J. (2008). Development and validation of the Childhood Narcissism Scale. *Journal of Personality Assessment*, 90, 382–391.
- Thomaes, S., Stegge, H., & Olthof, T. (2005, August). "Shame feels angry": On humiliated fury in children. Poster presented at the 12th European conference on Developmental Psychology, La Laguna, Tenerife, Spain.
- Tracy, J. L., & Robins, R. W. (2004). Keeping the self in the self-conscious emotions: Further arguments for a theoretical model. *Psychological Inquiry*, 15, 171–177.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life-span. *Journal of Personality and Social Psychology*, 84, 205–220.
- Twenge, J. M., & 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.
- Willock, B. (1987). The devalued (unloved, repugnant) self. A second facet of narcissistic vulnerability in the aggressive, conduct-disordered child. *Psychoanalytic Psychology*, 4, 219–240.
- Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, 61, 590–597.
- Zakriski, A. L., & Coie, J. D. (1996). A comparison of aggressive-rejected and nonaggressive-rejected children's interpretations of self-directed and other-directed rejection. *Child Development*, 67, 1048–1070.