



Do narcissistic boys and girls differ in their aggression?

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Table 2.

Hierarchical regression analyses predicting for aggression

	Aggression			
	Rejection (Model 1)		Victimization (Model 2)	
	<i>b</i>	ΔR^2	<i>b</i>	ΔR^2
<i>Step 1</i>		.00	Same as in	
Gender	-.02		Model 1	
<i>Step 2</i>		.07		.03
Narcissism	.06		.06	
Moderator	.26		.15	
<i>Step 3</i>		.00		.01
Narcissism x Moderator	-.02		-.07	
<i>Step 4</i>		.01		.02
Narcissism x Gender	-.11		-.08	
Moderator x Gender	.01		.15	
<i>Step 5</i>		.04		.03
Narcissism x Moderator x Gender	-.31		-.21	

p < .05 in bold

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

Table 3.

Narcissism-aggression associations as a function of moderator levels

		Moderators			
		Rejection		Victimization	
		<i>low</i>	<i>high</i>	<i>low</i>	<i>high</i>
Narcissism →	males	.05 [-.22, .11]	.29 [.12, 46]	.06 [-.07, 20]	.15 [-.01, 32]*
Aggression 95 % CI	females	.12 [-.02, 26]	-.16 [-.31, -.01]	.10 [-.02, 23]	-.22 [-.39, -.04]

p < .05 in bold; **p* = .05

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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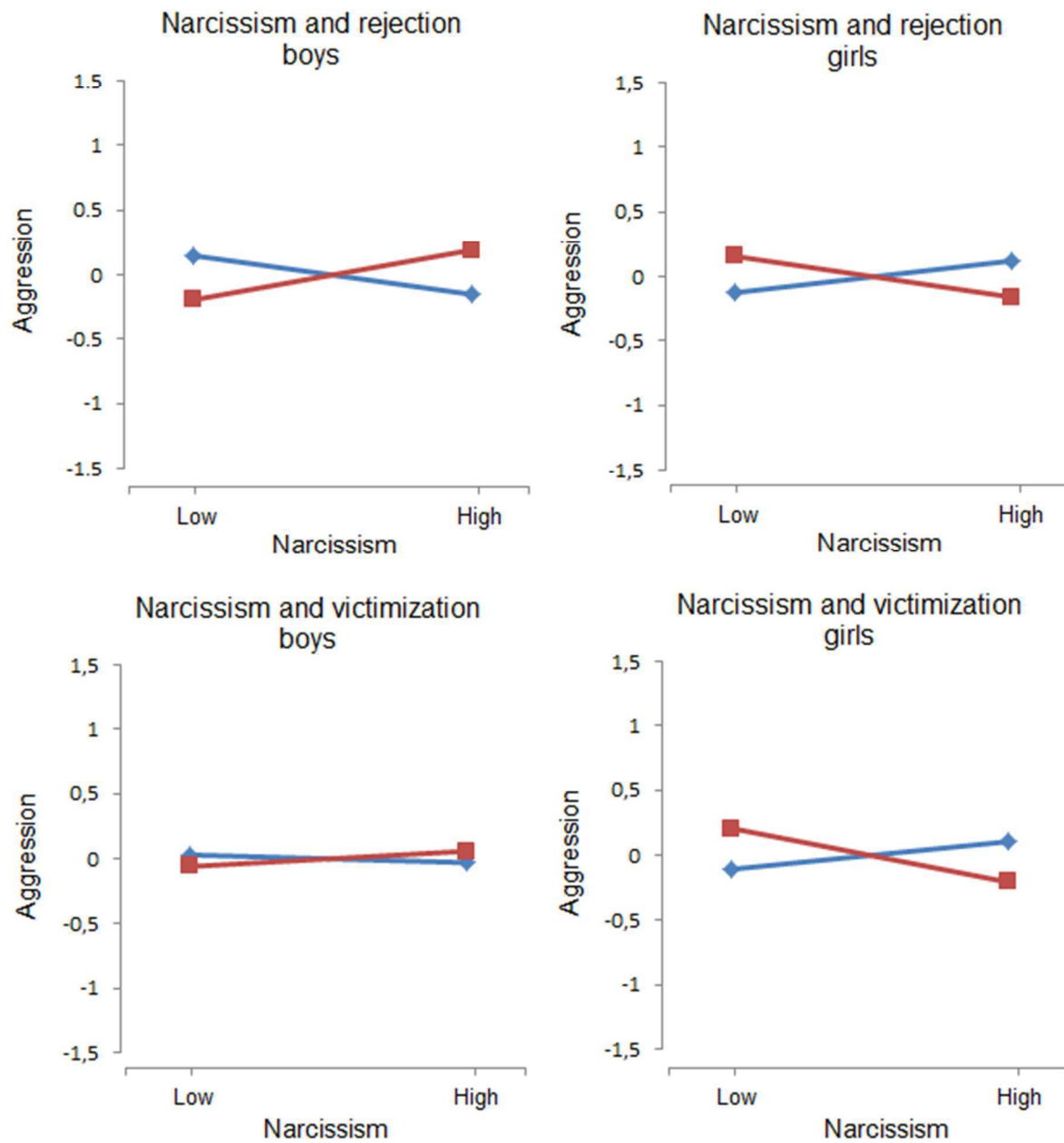


Figure 1. Statistically significant narcissism-aggression associations under high (■, $M + 1 SD$) and low (◆, $M - 1 SD$) values of the ego threat moderators

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

Abstract

Narcissistic individuals harbor self-views that are grandiose yet fragile. Evidence suggests that adult narcissists lash out when their highly inflated self-views are challenged. The present study sought to investigate whether being rejected or victimized accounts for increased aggression among adolescent narcissists. Cross-sectional self- and peer-reported data were obtained from a sample of 372 adolescents (mean age 14.4 years). Aggression measure combined self- and peer-reported aggression. Being rejected was associated with elevated aggression in narcissistic males. Being rejected or victimized was associated with having less aggression in narcissistic females. We conclude that rejection and victimization are possibly dealt with differently by narcissistic adolescent males and females.

Keywords: narcissism, aggression, adolescents, rejection, victimization

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

Introduction

Empirical research suggests that adult narcissists are prone to exhibit aggressive behaviors when their highly inflated self-views encounter challenges (e.g., Baumeister et al., 1996; Bushman & Baumeister, 1998; Twenge & Campbell, 2003). A narcissistic personality is one characterized by self-focus, feelings of superiority, and self-views which are inflated yet dependent on constant external affirmation (Morf & Rhodewalt, 2001). Rather than a stable trait, narcissism may be considered an ongoing process aimed at maintaining grandiose, unstable self-views (Baumeister & Vohs, 2001; Morf & Rhodewalt, 2001; Thomaes, Bushman, Orobio de Castro, & Stegge, 2009). In line with many other authors (e.g., Bushman et al. 2009; Thomaes, Bushman, Stegge, & Olthof, 2008a; Twenge & Campbell 2003), we consider narcissism dimensional and use the term “narcissists” simply to refer to individuals who score higher than others (without a specific cut-off) on the narcissistic continuum.

Although adult narcissists have been found to have difficulties in their interpersonal relationships (e.g., Campbell & Foster, 2002; Campbell, Foster, & Finkel, 2002), narcissism in adolescence has been less studied. Numerous studies have looked at how narcissists react to threats to their fragile self-views (e.g., Bushman & Baumeister, 1998; Bushman et al., 2009), but most of the research has been conducted with adults (with adolescents: e.g., Thomaes et al., 2008a). The goal of the present study was to examine how experiencing rejection and victimization relate to the narcissism-aggression link among adolescents.

Characteristics of Narcissists in Adulthood and Adolescence

Whereas self-esteem may be described as one’s overall perception of one’s own worth (Papps & O’Carroll, 1998), narcissism entails a heightened desire to feel superior to others, as well as indulgence of this desire (Baumeister & Vohs, 2001). When faced with positive or

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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3 negative information about oneself, narcissists react with greater changes in emotions like anger
4 and anxiety (Rhodewalt & Morf, 1998). They react to interpersonal setbacks more intensely and
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6 report more mood variations and intensity than do non-narcissists (Rhodewalt, Madrian, &
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10 Cheney, 1998).

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12 Narcissism starts to manifest at around age eight, when children become capable of
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14 differentiating between the ideal and actual self (Harter 1999, 2006; Thomaes et al., 2009).
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16 Parental overvaluation appears to be central to a child developing narcissism (Brummelman et
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18 al., 2015). Evidence suggests individuals become more narcissistic throughout adolescence until
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20 early adulthood (Carlson & Gjerde, 2009). The characteristics of adolescent narcissists seem to
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22 reflect those of their adult counterparts, but have not been studied as extensively. Adolescent
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24 narcissists feel superior to others and report less empathy than do non-narcissists (Thomaes,
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26 Stegge, Bushman, Olthof, & Denissen, 2008b). Like adult narcissists, they are extroverts but not
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28 very agreeable (Paulhus & Williams, 2002). They have also been shown to endorse stereotypical
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30 macho attitudes and to value physical attractiveness more than non-narcissists (Pauletto, Menon,
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32 Menon, Tobin, & Perry, 2012).

Narcissism, Aggression, and Moderators

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40 Although some evidence indicates that adult narcissists are generally more aggressive
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42 than non-narcissists (Reidy, Foster, & Zeichner, 2010; Reidy, Zeichner, Foster, & Martinez,
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44 2007), situational factors like ego threat can further enhance the likelihood of aggression among
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46 narcissists. We define ego threat in the manner of Baumeister, Smart, and Boden (1996, p. 1):
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48 “highly favorable views of self that are disputed by some person or circumstance.” An increasing
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50 number of studies link narcissism to increased aggression among adults after experiencing a
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52 threat to the ego (Barry, Chaplin, & Grafeman, 2006; Bushman & Baumeister, 1998; Bushman et
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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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3 al., 2009; Twenge & Campbell, 2003; all studies measured experimentally induced aggression).
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5 Research suggests that narcissism is a risk factor for aggression among adolescents as well
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7 (Barry, Grafeman, Adler, & Pickard, 2007; Fossati, Borroni, Eisenberg, & Maffei, 2010; Pauletti
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9 et al., 2012), and that adolescent narcissists experiencing ego threat react with increased
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11 aggression (young adolescents: Thomaes et al., 2008a; late adolescents: Martinez, Zeichner,
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13 Reidy, & Miller, 2007).

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17 Both adults (e.g., Twenge, Baumeister, Tice, & Stucke, 2001) and children and
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19 adolescents (e.g., Dodge et al., 2003) who experience rejection or social exclusion can react with
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21 aggression and this effect is larger in narcissists than in non-narcissists (Twenge & Campbell,
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23 2003). Being victimized by others can also lead to aggressive behavior (Hodges, Boivin, Vitaro,
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25 & Bukowski, 1999). In this study, we focused on phenomena that signal alienation from the peer
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27 group. Narcissists' grandiose self-views are likely to make the pain of rejection or victimization
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29 by peers all the more difficult to deal with. Compared to non-narcissists, narcissists are
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31 particularly dependent on external affirmation and being denied company (i.e., rejection) or
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33 being targeted for ridicule or violence (i.e., victimization) are likely to be seen as a challenge to
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35 the narcissist's fragile and inflated view of self.
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41 Although rejection and victimization are most likely to be universally hurtful, narcissists
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43 who feel threatened appear especially likely to react with aggression—even toward innocent
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45 third parties (Martinez et al., 2007; Twenge, Baumeister, Tice, & Stucke, 2001; Twenge &
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47 Campbell, 2003; though Bushman and Baumeister (1998) found no evidence for this). By
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49 externalizing the pain elicited by rejection (or other negative interpersonal experiences),
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51 narcissistic individuals may try to prevent further damage to their inflated self-image and “save
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53 face” (Thomaes et al., 2008a). In adolescence the peer group is of uttermost importance, which
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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

may make saving face all the more imperative for adolescent narcissists.

Previous studies have reported some gender differences in aggression, perhaps most notably boys using more direct and girls relational aggression (e.g., Crick, Bigbee, & Howes, 1996). When accounting for the gender difference in aggression subtypes it is unclear whether overall aggression levels differ between genders. However, Barry et al. (2006) found narcissistic young adult males lashed out whereas females did not, which makes it conceivable there are differences in how narcissistic boys and girls respond to rejection or victimization.

The Present Study

The purpose of the present study was to investigate whether being rejected or victimized would enhance narcissism-aggression links also among adolescents. The method chosen was cross-sectional. Experimental methods eliminate various sources of bias and allow for causal inference. However, an ego threat created in laboratory conditions is likely a different experience from real-world rejection or victimization from peers. Thus, a correlational study in an ecologically valid setting can add to the literature by examining whether experimental findings generalize outside of laboratory settings. We set out to investigate how having a reputation for rejection or victimization is associated with the aggression of adolescent narcissists. We were also interested in whether narcissistic boys and girls differed in their aggression, as was the case in the Barry et al. (2006) study.

Method

Participants

The target sample consisted of 377 eighth and ninth graders (169 males, $M_{age} = 14.36$; $SD = .75$) from two schools (21 classrooms) located in the south-western part of Finland. Out of 450 eligible participants, 389 received parental permission to take part in the study. In total, 377

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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3 students gave their own assent and filled out the questionnaires. Five students were excluded
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5 from the analyses for missing data, resulting in the final sample of 372 participants (167 males,
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7 $M_{age} = 14.36, SD = .75$). Out of the final sample, 95.2 percent of respondents were born in
8
9 Finland.

Procedure

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15 Data were collected via web-based questionnaires. Each student received a personal
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17 password to log onto the questionnaire site. Testing consisted of two sessions (in the fall of 2009)
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19 at each school, with average time lag of 7.7 weeks. Participants filled out all the questions in
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21 small groups in computer labs during regular school hours. Both testing sessions were supervised
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23 by one or two trained psychology Master's students. Rejection was assessed during the first
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25 testing session. All the other constructs were measured in the second session. Participants
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27 received a movie ticket for their effort.
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Measures

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33 **Narcissism.** Narcissism was measured with the 10-item Childhood Narcissism Scale
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35 (CNS; Thomaes et al., 2008b). The CNS is a well-established one-dimensional scale with good
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37 reliability and validity. Items assess the degree to which participants harbor a grandiose sense of
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39 self or feel entitled (e.g., "*I think it's important to stand out*", "*Without me, our class would be*
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41 *much less fun*", "*I often succeed in getting admiration*"). Response options were 0 ("*Not at all*
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43 *true*"), 1 ("*A little true*"), 2 ("*Somewhat true*"), 3 ("*Pretty true*"), and 4 ("*Really true*"). The
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45 scores were averaged across the items for each participant. (Cronbach's $\alpha = .88$.)
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49 **Aggression.** The aggression measure was a mean composite of self-reported aggression
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51 and peer-reported aggression, which measured both relational and direct physical aggression.
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53 Before combining (i.e., averaging) the aggression measures, averages were computed for each
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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

measure and they were then standardized. This composite aggression measure was created to encompass diverse aspects of how adolescent aggression manifests via both direct and relational and both self- and peer-reported aggression.

Self-reported aggression. Participants rated their frequency of aggression toward each same-sex classmate. There were three items (“*I pick on ____*”, “*I make fun of ____*”, and “*I gossip and say mean things about ____*”). Response options ranged from 0 (“*Not at all*”) to 4 (“*All the time*”). Each item was presented, one at a time, on the computer screen together with a list of the names of all same-sex classmates (targets). For each target, an average across the three items was created. Finally, all the aggression scores (toward each same-sex classmate) were summed up and divided by the number of targets. Hence, a higher score reflects a higher frequency of aggression toward a greater number of classmates (this procedure was similar to the one used by Peets, Hodges, & Salmivalli, 2008; items adapted from Dodge & Coie, 1987). A similar measure has been found have good reliability (see Peets et al., 2008).

Peer-reported aggression, rejection, and victimization. Peer-reported aggression, rejection, and victimization were measured via a peer-nomination procedure. Subjects could nominate aggressive peers on four items (“*S/he hits and pushes others around*”, “*S/he is just plain mean*”, “*S/he gossips and says mean things about others*”, and “*S/he makes fun of people*”; Card & Hodges, 2007; Toblin, Schwartz, Hopmeyer Gorman, & Abbou-ezzeddine, 2005; $\alpha = .84$) and victimization on three items (“*He gets picked on by other kids*”, “*Others gossip or say mean things about him/her*”, and “*Kids make fun of him*”; Card & Hodges, 2007; Toblin et al., 2005; $\alpha = .90$). Rejection was measured by asking participants to nominate the peers they liked the least (e.g., Coie, Dodge, & Coppotelli, 1982).

For each nomination item, participants received a roster with the names of their same-sex

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

classmates. They were asked to pick the names of up to three classmates (they could not nominate themselves) that they thought best fit the description in each item. For each item, the nominations each participant received were tallied and divided by the number of possible nominations. Finally, an average across the items was calculated.

Results

Mean-Level Gender Differences and Bivariate Correlations and Power

Gender differences were calculated using t-tests and adjusted degrees of freedom were reported when the assumption of homogeneity of variance was not met. There were no statistically significant mean-level gender differences (Table 1). Aggression was correlated with rejection ($r = .26$) and victimization ($r = .15$), which were also intercorrelated ($r = .49$).

Moderators were uncorrelated with narcissism ($r = -.01$ for both). Constituents of the aggression measure, peer-reported and self-reported aggression, were moderately intercorrelated ($r = .33$).

Power for detecting two-tailed $b = .15$ regression effects at $\alpha = .05$ was .83.

Main Analyses

Our primary hypotheses were tested with two hierarchical regression analyses, wherein we added variables to the model at 5 steps and calculated both the regression effects and changes in model R^2 . Aggression served as the criterion in both analyses. At step 1, gender was entered as a control variable. At step 2, the effects of narcissism and one of the moderators (rejection or victimization) were evaluated. At step 3 an interaction term between narcissism and one of the moderating variables was entered. At step 4 the 2 two-way interactions with gender (narcissism x gender, one of the moderating variables x gender) were assessed. Finally at step 5 we evaluated three-way interactions between narcissism, one of the moderating variables, and gender.

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

To probe a statistically significant interaction, simple slope analyses were conducted where narcissism-aggression associations were estimated at high (one *SD* above the mean) and low (one *SD* below the mean) levels of the moderator (Aiken & West, 1991). One *SD* below the mean was not within the observed range of values for the moderators, and simple slopes were thus estimated at the lowest observed value. When a three-way interaction was statistically significant, the two-way interaction between narcissism and the moderator was first evaluated for statistical significance among males or females. Statistically significant two-way interactions were followed up by evaluating narcissism-aggression associations at low and high levels of the moderator. Statistically nonsignificant three-way interactions were also probed for further information on the magnitude of moderation effects (for the case for looking past p-values, see e.g., Cumming, 2012, 2013; Eich, 2014; Ioannidis, 2005; Kline, 2004). All continuous variables were standardized.

Aggression. At step 1, gender was a statistically insignificant predictor for aggression (Table 2). When the effects of narcissism and one of the moderators were evaluated at step 2, both rejection ($b = .26, p = .00$) and victimization ($b = .15, p = .00$), but not narcissism, were found to predict aggression. At step 3, the interactions between narcissism and both moderators were not strong ($p > .1$). At step 4, added auxiliary interactions were statistically insignificant except for victimization x gender ($b = .15, p = .04$). At step 5, both three-way interactions, narcissism x rejection x gender ($b = -.31, p = .00, \Delta R^2 = .04$) and narcissism x victimization x gender ($b = -.21, p = .00, \Delta R^2 = .03$) were statistically significant.

To follow up the statistically significant three-way interactions, we first examined whether the two-way interaction of narcissism x rejection was statistically significant among males vs females. The interaction was found to be statistically significant among both males ($b =$

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

.19, $p = .01$) and females ($b = -.16, p = .01$). Simple slopes between narcissism and aggression were then estimated at high and low levels of rejection for males (Table 3; Figure 1). The results showed that for males who were highly rejected (one standard deviation above the sample mean), narcissism was positively associated with aggression ($b = .29, p = .00$). For females high in rejection, narcissism was negatively associated with aggression ($b = -.16, p = .04$).

The two-way interaction of narcissism x victimization was statistically significant among females ($b = -.21, p = .00$) but not for males. For females high in victimization, narcissism was negatively associated with aggression ($b = -.22, p = .01$). When we probed the interaction for males as well, we found that males high in victimization had a marginally stronger positive association between narcissism and aggression ($b = .15, p = .07$).

Discussion

Evidence suggests that narcissistic adults respond to ego threats with aggression (e.g., Barry et al., 2006; Bushman & Baumeister, 1998; Bushman et al., 2009; Twenge & Campbell, 2003). The goal of the present study was to test whether rejection and victimization enhance narcissism-aggression associations among adolescents and whether this mechanism is different for males and females. Most of the findings were dependent on gender. Rejected narcissistic males were more aggressive than non-rejected narcissistic males. Rejected or victimized narcissistic females were less aggressive than non-rejected and non-victimized narcissistic females, respectively. Thus male and female narcissists seem to deal with ego threat differently.

There are numerous studies that have shown that narcissistic adults (e.g., Bushman et al., 2009) as well as adolescents (Thomaes et al., 2008a) lash out in response to negative feedback. Experimentally manipulated rejection or negative feedback is often delivered by strangers whereas real-life rejection happens between peers who are in regular contact. Our findings seem

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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3 to be partially in line with experimental results in the way that narcissistic males were more
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5 aggressive if they were high in rejection or victimization.
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8 Although several studies have examined how various forms of ego threat moderate the
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10 narcissism-aggression association (Barry et al., 2006; Bushman & Baumeister, 1998; Bushman et
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12 al., 2009; Thomaes et al., 2008a; Twenge & Cambell, 2003), only one (to our knowledge) found
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14 evidence for, a 3-way moderation involving gender. In the Barry et al. (2006) study, narcissistic
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16 (undergraduate) males lashed out in reaction to ego threat, whereas narcissistic females did not.
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18 The authors reasoned that aggression resulting from ego threat may be specific to males.
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22 In our study, narcissistic females who were highly rejected or victimized were less likely
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24 to be aggressive than their non-narcissistic peers. Previous studies have not found that the
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26 aggression of narcissistic females would be dependent on ego threat (Barry et al., 2006; Pauletti
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28 et al., 2012). It is conceivable that instead of lashing out, narcissistic females might internalize
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30 some of their negative affect. Evidence indicates that adolescent females report more
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32 internalizing than adolescent males (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999). Future
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34 research could determine whether ego threat does moderate adolescent narcissistic females'
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36 internalizing behavior.
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40 Gender differences in both narcissism (e.g., Grijalva et al., 2014) and aggression (Archer,
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42 2004; Card et al., 2008) are well-documented, though our sample did not replicate the male-
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44 female differential in narcissism levels. One of the reasons for why narcissistic males who are
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46 disliked or victimized by others might lash out could be that such negative experiences challenge
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48 their tough macho image publicly. Pauletti et al. (2012) found that narcissistic males for whom it
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50 is important to act tough are the most aggressive. If they consider acting tough and saving face to
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52 be of more importance than do narcissistic females, they have "more to lose", and also may feel
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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

they have more reason to use aggression against perceived threats to the façade. Thus, differences in how narcissistic males and females deal with ego threat may also reflect differences in how they value dominance and emotional control (Hall & Halberstadt 1980; Mahalik et al., 2003).

Study limitations

First, many of the study measures relied on peers' ability to recollect other peers' behavior, which can only go so far in giving an objective picture. Because the study measured reputations (for rejection, victimization, and peer-reported aggression) and general tendencies (self-reported aggression) it was perhaps not able to truly tap narcissists' aggression that arises in specific situations in reaction to perceived threat.

Second, one possible shortcoming of the peer-nomination procedure was that subjects were only allowed to nominate classmates of the same gender. On the other hand, unrestricted nominations by gender could result in increased likes for one's own and dislikes for members of the other gender, since (at least) females appear to prefer same-gender peers (Nangle, Erdley, Stanchfield, & Gold, 2004; same reasoning used by Peets et al., 2008).

Third, one limitation of the study was that we only assessed aggression as the outcome. We have suggested that narcissistic girls suffering ego threat may internalize their hurt feelings, and this could have been operationalized as an outcome (e.g., depression). Future studies can determine whether this is the case.

Fourth, given the study was observational, direction of causality cannot be inferred from the results. It is plausible male narcissists experiencing more rejection are prone to lashing out more. The data, however, do not rule out an opposite interpretation: aggressive male narcissists are more prone to being rejected. Similar directional ambiguity holds for effects with females.

DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

Fifth, narcissists do not form a homogeneous group of individuals. Distinction has been made between overt and covert narcissism (and also, between grandiose and vulnerable narcissism (Dickinson & Pincus, 2003)). Overt narcissism is characterized by grandiosity, exhibitionism, and self-assuredness, whereas covert narcissists are introverted, defensive, emotional and seemingly lacking in self-confidence, though they too hold grandiose beliefs (Wink, 1991). It is possible that narcissistic females, more often than males, exhibit a more covert type of narcissism. Covert narcissism has been shown to only be associated with the relational kind of aggression (Fossati, Borroni, Eisenberg, & Maffei, 2010). Though we measured relational aggression as well, items may not have captured all sophisticated nuances of aggression-based narcissistic behavior.

Future Directions

Our results show that whereas narcissistic males who experience rejection also have elevated aggression and that narcissistic females who experience rejection or victimization are lower in aggression. Although an abundance of research on narcissism-aggression associations among adults exists, this is one of the few studies that have investigated the link among adolescents. The results presented here will benefit from future replication, also using different methodologies and age groups. It is worthwhile to improve our understanding of how narcissism develops in childhood and adolescence and what factors (e.g., parenting, peers, societal influences, and temperament) account for differences between the genders in order to pave ways for future interventions and help prevent unnecessary suffering.

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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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DO BOYS AND GIRLS DIFFER IN THEIR AGGRESSION

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Table 1

Means and standard deviations of study variables (before standardization)

Variables	All		Males		Females	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Narcissism	1.20	.76	1.16	.77	1.23	.76
Victimization	.06	.13	.07	.14	.06	.12
Rejection	.15	.19	.15	.18	.15	.20
Aggression (self-reported)	.24	.40	.25	.51	.22	.29
Aggression (peer-reported)	.05	.09	.05	.07	.05	.10

p < .05 in bold