The Associations of Self-Reported and Peer-Reported Relational Aggression with Narcissism and Self-Esteem Among Adolescents in a Residential Setting

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The present study investigated the relations of self-reported and peer-nominated relational aggression (RA) with self-esteem and narcissism among 43 at-risk 16- to 18-year-olds. Self-reported and peer-nominated RA were positively intercorrelated, and each was positively correlated with narcissism. An interaction between self-esteem and narcissism predicted peer-nominated RA, such that narcissism was related to peer-nominated RA particularly for individuals with high self-esteem. Maladaptive, but not adaptive, narcissism uniquely predicted peer-nominated RA. The implications and limitations of this study for research on adolescent self-perception and RA are discussed.

Psychologists have discerned two general forms of aggression: overt and relational (Crick & Grotpeter, 1995; Prinstein, Boergers, & Vernberg, 2001). Overt aggression is characterized by direct actions such as bullying, teasing, and hitting (Prinstein et al., 2001). Relational aggression (RA) is typically more covert and targets a person’s social status. RA includes spreading rumors to ruin someone’s reputation or manipulating a peer’s social status by encouraging others to avoid that peer (Prinstein et al., 2001). Thus, a child or adolescent’s peer context is clearly the venue for RA, and peer informants can be extremely useful. According to Crick and Grotpeter, peer reports of RA provide information that may be more difficult for those outside the peer network to obtain or that individuals may be reluctant to self-report. Adolescence appears to be a prime developmental time to consider correlates of RA given the importance of peer status for adolescents and even the potential positive consequences of RA in adolescent peer contexts (e.g., Card, Stucky, Sawalani, & Little, 2008; Hawley, Little, & Card, 2007).

Much less is known about RA and other forms of indirect aggression relative to what is known about direct, or overt, aggression. A recent meta-analysis by Card and colleagues (2008) suggests that indirect aggression is related to externalizing and internalizing problems in children and adolescents. However, direct aggression appears to be a better indicator of more varied forms of behavioral problems, with indirect aggression actually demonstrating a unique effect on prosocial behavior when controlling for direct aggression. Therefore, it may be that, although RA presumably takes a negative toll on its victims, its effects are not uniformly negative relative to more overt forms of aggression. The review by Card and colleagues (2008) necessitates a clearer understanding of the variables associated with youth RA and its wide array of potential intentions and social consequences.

Self-perception variables such as narcissism may provide some insight as to which youth engage in, or are perceived to engage in, RA. Narcissism is characterized by highly exaggerated self-views and a tendency to seek power by dominating or exploiting others (Campbell, 1999). Narcissism has been related to delinquency, both overt and relational aggression, and conduct problems in community samples of children and at-risk samples of adolescents (e.g., Barry, Frick, & Killian, 2003; Barry,
Narcissism in adults is tied to a propensity to go to extremes to protect one’s self-concept (Raskin, Novacek, & Hogan, 1991). For example, college students with high levels of narcissism tend to engage in direct aggression after negative performance feedback (Bushman & Baumeister, 1998) and social rejection (Twenge & Campbell, 2003). Thus, others’ negative perceptions may motivate the narcissist to use aggression to preserve his or her positive self-presentation and self-view, and because narcissism is linked to a desire to obtain status relative to others (Raskin et al., 1991; Twenge & Campbell, 2003), narcissistic individuals may use RA to do so. RA may be advantageous for those high on narcissism, as the covert, indirect nature of RA may allow them to successfully preserve high social standing more than would overt, direct aggression.

Different dimensions of narcissism, thought to be relatively adaptive or maladaptive based on their correlates (e.g., Emmons, 1984; Raskin & Terry, 1988), may shed some light on the link between narcissism and RA. Notions of maladaptive and adaptive narcissism have recently been applied to youth, with maladaptive narcissism (i.e., items derived from the Explotitiveness, Entitlement, Exhibitionism scales of the Narcissistic Personality Inventory [NPI]; Raskin & Terry, 1988) being correlated with conduct problems and low self-esteem in a community sample of children (Barry et al., 2003) and uniquely predicting later delinquency in that same sample (Barry, Frick, Adler, & Grafeman, 2007). In adults, adaptive narcissism (i.e., the Self-Sufficiency, Authority scales) is related to constructs such as self-assurance and assertiveness (Raskin & Terry, 1988) that are encouraged in individualistic societies. Further, maladaptive, but not adaptive, narcissism is related to self-reported RA in at-risk adolescents (Barry, Grafeman et al., 2007). This finding suggests that definitions of narcissism that focus on one’s desire to be a leader and make decisions might not include the use of rumors or gossip to attain such a position. However, definitions that focus on a sense of deserving respect and power may very well include RA as means to garner such responses from others.

Much effort has also been devoted to distinguishing the correlates of narcissism and self-esteem. These constructs are positively correlated in adults (e.g., Emmons, 1984; Raskin et al., 1991) and adolescents (e.g., Barry, Grafeman et al., 2007). Narcissism is associated with self-reported intelligence, extraversion, and openness. High self-esteem among adults is associated with not only reporting such egoistic values but also moralistic values, such as being nice and getting along with others (Campbell, Rudich, & Sedikides, 2002).

The relation between self-esteem and aggression has been the subject of debate, with some suggesting that high self-esteem, as opposed to low self-esteem, may be more of a risk factor for aggression (Baumeister, Smart, & Boden, 1996) and other evidence pointing to low self-esteem as a risk factor for aggression among adolescents and young adults (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). There has been no consistent association between self-esteem and RA in adolescents (Prinstein et al., 2001), but the inclusion of self-esteem in examining the link between narcissism and RA, particularly peer-nominated RA, may prove useful. In one study with children, self-esteem moderated the relation between narcissism and conduct problems such that a combination of narcissism and low self-esteem was associated with the highest levels of conduct problems (Barry et al., 2003). In adult and adolescent laboratory studies, a combination of narcissism and high self-esteem has been most predictive of aggression following a threat (Bushman et al., 2009; Thomaes, Bushman, Stegge, & Olthoff, 2008), suggesting a potential developmental difference in the role of self-esteem in the relation between narcissism and problem behaviors.

Both self-reports and peer nominations have been used in the study of youth RA (e.g., Crick & Grotpeter, 1995; Merrell, Buchanan, & Tran, 2006), and both methods have been considered useful in different respects. Some recent evidence suggests that self-reported RA in young adults is related to beliefs about aggression as an appropriate response in threatening situations (Bailey & Ostrov, 2008). Merrell and colleagues (2006) pointed out that peer reports provide multiple perspectives on one peer from others within a social system. In short, this study sought to extend previous research by considering both self-reported and peer-nominated RA in an at-risk sample of adolescents and the role of self-perception in predicting peer-nominated levels of RA.

It was hypothesized that overall and maladaptive narcissism would be positively associated with self-reported and peer-nominated RA (Hypothesis 1). In addition, a combination of high narcissism and high self-esteem was expected to correspond to high levels of peer-reported RA (Hypothesis 2) based on adolescent and adult research (Bushman et al., 2009; Thomaes et al., 2008).

**METHOD**

**Participants**

Participants included 43 adolescents (24 male, 19 female), ages 16 to 18 ($M = 16.76$ years, $SD = .77$) enrolled in the Mississippi Youth Challenge Program, a 22-week residential intervention program designed for adolescents who have withdrawn from school. Thirty-five of the participants were Caucasian, and 8
were African American. Throughout the duration of the program, youth live in a group (i.e., platoon) of approximately 20 to 35 who attend all activities together. A male platoon and a female platoon were selected randomly for potential participation in this study. Youth participation in the study was voluntary and did not affect progress in the program or the intervention provided.

**Procedures**

The Institutional Review Board at The University of Southern Mississippi approved this study. Participants’ parents were informed of the study when youth enrolled in the intervention program and provided written consent for their children’s participation. Youth were provided with a thorough explanation of the study and gave written assent if they agreed to participate. Data were collected from the youth approximately 6 weeks after entering the program and once more approximately 6 weeks later. During the initial data collection, the participants completed all self-report measures as part of a larger research project. A male platoon of 24 individuals and a female platoon of 19 individuals completed the peer nomination measure about 6 weeks later, after completing a separate written assent form covering the peer nomination procedure. It was expected that participants would be able to provide meaningful peer nominations due to their close living arrangements and the fact that approximately 3 to 4 months had passed before that phase of the data collection.

**Measures**

*Background form.* A background information form gathered demographic information on participants, including age, race, and sex.

*Narcissistic personality inventory for children (NPIC; Barry et al., 2003).* The NPIC is a downward extension of the adult NPI (Raskin & Terry, 1988) and was created to assess narcissism in youth (Barry et al., 2003). The NPIC is a 40-item forced-choice questionnaire. For each item, after choosing one of two provided statements, participants are asked to rate their response as “really true” or “sort of true.” The NPIC has seven theoretical subscales based on the subscales of the NPI (Raskin & Terry, 1988). Based on previous uses of the NPIC (e.g., Barry et al., 2003; Barry, Grafeman et al., 2007), the Authority and Self-Sufficiency subscales were combined as a measure of adaptive narcissism. Combined scores on Entitlement, Exploitativeness, and Exhibitionism formed a measure of maladaptive narcissism. In this sample, the internal consistency of the overall narcissism score was good ($\alpha = .89$), whereas the internal consistencies for the adaptive narcissism and maladaptive narcissism composites were somewhat lower ($\alpha = .75$ and $\alpha = .79$), but acceptable. The NPIC was highly correlated with the NPI in a similar sample of adolescents and predicted unique variance in delinquency when considered simultaneously with NPI scores (Grafeman, Barry, Adler, & Helms, 2006). The NPIC has demonstrated moderate positive correlations with self-esteem and behavioral problems (Barry, Grafeman et al., 2007) as would be expected. Further, the adaptive versus maladaptive distinction has apparent validity based on their different correlates (Barry et al., 2003), as well as their predictive utility (Barry, Frick et al., 2007).

**Peer conflict scale (Marsee, Kimonis, & Frick, 2004).** The Peer Conflict Scale is a self-report inventory consisting of 20 RA items (e.g., “I spread rumors and lies about others to get what I want”) and 20 overt aggression items (e.g., “I start fights to get what I want”). Each item has a 4-point Likert-type response scale ranging from *not at all true* to *definitely true*. The content was developed from existing aggression inventories to provide an evaluation of overt and relational aggression in one inventory (see Kimonis, Frick, Munoz, & Aucoin, 2007, for discussion). For each overt aggression item, an analogous RA item was included or developed (see Marsee & Frick, 2007). Both the overt aggression and RA components have been significantly related to adolescent delinquency (Barry, Grafeman, et al., 2007) and anger to provocation (Marsee & Frick, 2007). In this sample, the RA scale showed high internal consistency ($\alpha = .94$).

**Peer nomination measure.** The four-item RA subscale from the peer nomination measure developed by Crick and Grotpeter (1995) was used in the study. Participants were provided with a group roster listing names of only those participants who lived in the same platoon. They were asked to nominate up to three peers from the list for each item. The internal consistency of the raw scores (i.e., number of nominations) for RA was high ($\alpha = .93$). Peer nomination procedures such as this one are thought to provide unique information on child/adolescent behavior and tend to be particularly stable for aggression (see Frick, Barry, & Kamphaus, in press). Scores for RA were derived by standardizing the nominations within each of the two platoons separately.

**Rosenberg self-esteem scale (RSE; Rosenberg, 1965).** The RSE is a commonly used 10-item measure
of global self-esteem. This measure is scored on a 5-point Likert scale. A total RSE score was determined as a measure of global self-esteem for each participant with greater scores indicating higher levels of self-esteem. There is evidence to support the reliability and validity of the RSE in adolescent samples (see Bagley & Mallick, 2001). The internal consistency of the RSE in this sample was $\alpha = .88$.

**RESULTS**

Descriptive statistics\(^1\) for study variables are shown in Table 1, and correlations among the variables in this study are shown in Table 2. Narcissism was positively correlated with both self-reported and peer reported RA, supporting Hypothesis 1. Both maladaptive and adaptive narcissism were significantly correlated with peer nominated as well as self-reported RA (see Table 2). The correlation between self-reports and peer nominations of RA was also significant.

In regression analyses using narcissism and self-esteem to predict peer-nominated RA, there was a main effect for narcissism ($\beta = .38$, $p < .05$, $R^2 = .22$). The interaction between self-esteem and narcissism entered in the next step was significant ($\beta = .33$, $p < .05$, $\Delta R^2 = .11$). Post hoc probing was conducted and the form of the interaction is provided in Figure 1 (see Holmbeck, 2002). The slope of the line for high self-esteem was significant, $t(42) = 3.38$, $p < .01$, indicating that, in support of Hypothesis 2, narcissism was related to peer-nominated RA especially for individuals who also had high self-esteem.

Multiple regression analyses also were used to explore the unique effects of narcissism and self-esteem on peer nominations of RA when controlling for self-reported RA. For the model using overall narcissism, there was a main effect for narcissism ($\beta = .40$, $p < .05$, $R^2 = .20$) but no significant main effect for self-reported RA. That is, narcissism predicted unique variance in peer-nominated RA even when self-reported RA was considered. A similar pattern emerged for self-esteem, with high self-esteem being tied to unique variance in peer-nominated relational aggression ($\beta = .30$, $p < .05$, $R^2 = .18$). The effect for self-reported

\(^{1}\)As shown in Table 1, the raw peer nomination total was positively skewed and leptokurtic for this sample, indicating that most individuals received very few nominations (mode = 2) across the four relational aggression items. Of interest in this study are not only the many individuals with few nominations but also the few individuals who received a relatively high number of nominations from their peers. We feel that the distribution of peer nominations in this sample is likely an accurate reflection of peer perceptions of relational aggression in a residential context, although no known studies have reported such data to date.

### TABLE 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>$(M \ (SD))$</th>
<th>Min.</th>
<th>Max.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Narcissism $(0–120)$</td>
<td>54.71 (14.74)</td>
<td>15</td>
<td>107</td>
<td>.20</td>
<td>1.95</td>
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<tr>
<td>Adaptive Narcissism $(0–42)$</td>
<td>21.03 (6.72)</td>
<td>1</td>
<td>42</td>
<td>-.02</td>
<td>-.31</td>
</tr>
<tr>
<td>Maladaptive Narcissism $(0–54)$</td>
<td>21.81 (8.15)</td>
<td>4</td>
<td>50</td>
<td>.55</td>
<td>2.38</td>
</tr>
<tr>
<td>Self-Reported RA $(0–60)$</td>
<td>11.07 (10.69)</td>
<td>0</td>
<td>35</td>
<td>.58</td>
<td>-.95</td>
</tr>
<tr>
<td>Peer Nominated RA $(0–72)$</td>
<td>5.93 (8.19)</td>
<td>0</td>
<td>49</td>
<td>.38</td>
<td>18.44</td>
</tr>
<tr>
<td>Self-Esteem $(0–30)$</td>
<td>18.07 (5.85)</td>
<td>3</td>
<td>30</td>
<td>-.23</td>
<td>-.03</td>
</tr>
</tbody>
</table>

Note: Peer nominations reflect the raw sum of nominations for an individual across four relational aggression (RA) items. For all analyses, nominations of RA were z-scored within each group (i.e., boys, girls), as nominations occurred separately for boys and girls.

### TABLE 2

<table>
<thead>
<tr>
<th>1.</th>
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<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
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</thead>
<tbody>
<tr>
<td>1. Peer Nominated RA</td>
<td>.31*</td>
<td>.44**</td>
<td>.37*</td>
<td>.42**</td>
<td>.32**</td>
</tr>
<tr>
<td>2. Self-Reported RA</td>
<td>.57***</td>
<td>.46**</td>
<td>.56***</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>3. Narcissism</td>
<td>.83***</td>
<td>.93***</td>
<td>.44**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adaptive Narcissism</td>
<td>.65**</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Maladaptive Narcissism</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-Esteem</td>
<td>—</td>
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</tr>
</tbody>
</table>

RA = relational aggression.

* $p < .05$. ** $p < .01$. *** $p < .001$.
RA in this model was marginally significant ($\beta = .28$, $p < .06$).

These analyses were also conducted for maladaptive and adaptive narcissism. There was a significant main effect for maladaptive narcissism ($\beta = .36$, $p < .05$, $R^2$ for model = .18), with maladaptive narcissism predicting unique variance in peer-reported RA when controlling for self-reported RA. There were no significant main effects in the model using adaptive narcissism as a predictor.

DISCUSSION

The results of this study indicate that peers perceive their cohorts who are narcissistic—particularly those who display more maladaptive features of narcissism—as being particularly likely to engage in RA. The entitlement and exploitative aspects of maladaptive narcissism may help explain these results insofar as they are associated with a desire for social dominance. Someone who indicates a desire for power over others may engage in RA to attain that status. Peers, particularly those with much contact, are likely to be aware of the use of RA. Because RA is a relatively covert form of aggression, the results also raise the possibility that narcissistic individuals are less skilled at keeping their use of gossip, rumors, or manipulation covert or that they may not care to do so.

In addition, perhaps partly reflective of an overlap with narcissism, individuals with higher self-esteem were more likely to be nominated as relationally aggressive. The developmental timing of such an association seems particularly relevant in this case, as someone may derive high self-esteem from successfully manipulating the social status of peers on one hand, or he or she may possess the self-confidence to subsequently engage in RA (or be perceived to engage in RA) on the other hand.

A combination of high narcissism and high self-esteem predicted the highest rates of peer-nominated RA. This pattern is in contrast to the interaction between narcissism and (low) self-esteem in predicting child conduct problems (Barry et al., 2003) but is consistent with laboratory evidence in adolescents and adults (Bushman et al., 2009; Thomaes et al., 2008). Thus, in adolescence and adulthood, there appears to be a greater likelihood of aggression toward others among those who have both high self-esteem and a desire for others to hold oneself in the same high regard (narcissism). Further research should examine how narcissism and self-esteem independently or conjointly relate to RA and other youth behavior problems and across youth development.

The results of this study indicated that there was moderate convergence between self-reported and peer-nominated RA in this sample of adolescents. Such a relation may be indicative of the validity of both peer nominations and self-reports of this construct while also suggesting that each source provides unique information on RA (Frick et al., in press). Given the social and covert nature of RA, peer perspectives on its occurrence are clearly valuable.

This study was not without limitations. The participants comprised a small at-risk sample living in a residential setting with peer nominations standardized within gender. Thus, the findings may not be representative of the entire population in terms of social, emotional, or behavioral functioning or psychiatric history. Similarly, because of their residential placement, these participants had much more contact with each other than would be typical for adolescent peer groups. However, this sample afforded a unique opportunity to assess RA among an adolescent group who had lived together and shared numerous activities with each other over the course of a few months. Therefore, this population may have been particularly well-suited to provide peer-referenced information.

Limitations in the peer nomination method should also be considered. The procedure was selected to mimic that used in the seminal work by Crick and Grotpeter (1995) and subsequent research. However, nominations within a residential setting may result from different processes than those operating in a school setting. In addition, unlimited peer nomination methods may offer some advantages over the procedure used in this study, although there remains little evidence as to the superiority of either approach (Frick et al., in press). The concurrent nature of this study also makes it impossible to determine the developmental relations among the variables of interest—an important step for research in this area. Last, there was an approximately 6-week interval between collection of self-report data and peer nominations because of the need to collect self-report data earlier as part of a larger project. Thus, the associations between variables of interest may have been attenuated or otherwise influenced by this timing.

Implications for Research, Policy, and Practice

Future research should examine these issues longitudinally with more varied samples and more varied methods such as unlimited peer nomination procedures. Furthermore, studies that incorporate peer reports on other domains can shed further light on the social consequences of narcissism. Investigations should also continue to consider whether conceptualizing narcissism as multidimensional (e.g., adaptive vs. maladaptive) has relevance for children and adolescents.
Meaningful individual differences appear to exist on youth narcissism, and peers report that individuals with narcissism tend to engage in RA. Thus, some forms of self-perception seem to be important targets of intervention efforts aimed at youth aggression. In addition, research has continued to show that peer reports can be beneficial for gaining information about social behaviors, as opposed to relying solely on self-reports or adult informants. Thus, the current study, and others like it, point to the utility of including peer perception in the understanding of youth behavior and adjustment.

REFERENCES
