# NARCISSISM, ADJUSTMENT, AND TARGET-SPECIFIC AGGRESSION IN PREADOLESCENCE: A TEST OF THE SELF-IMAGE FAILURE HYPOTHESIS

by

Rachel E. Pauletti

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This dissertation was prepared under the supervision of the candidate's dissertation advisor, Dr. David G. Perry, Department of Psychology, and has been approved by the members of her supervisory committee. It was submitted to the faculty of the Charles E. Schmidt College of Science and was accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

	SUPERVISORY COMMITTEE:
	Musey
	David G. Perry, Ph.D.
	Dissertation/Advisor
	The
	Brett Laursen, Ph.D.
	Text B!
	David Pjorklund, Pn.D.
	Tale
	Ryne Sherman, Ph.D.
Domd L. Worf, -	Li
David L. Wolgin, Ph.D.	Kevin Lanning, Ph.D.
Chair, Department of Psychology	
Thous B. Johann ( 6. Perry	_
Gary W. Peney, Ph.D.	
Dean, Charles E. Schmidt College of	
Science	
long 1. form	July 11, 20/3
Barry T/Rosson, Ph.D.	Date /
Dean Graduate College	

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#### **ABSTRACT**

Author: Rachel E. Pauletti

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This study examined the consequences of self-image failure among narcissistic children. It was hypothesized that narcissistic children who perceive themselves as falling short of their hoped-for grandiose self (e.g., whose self-esteem is low) would not only increase over time in general aggression and decrease prosocial behavior, but also increase in the tendency to direct aggression specifically toward more socially successful peers (i.e., their putative rivals for social status). Participants were 195 (101 boys) fourth-through seventh-graders who were tested in both the fall and the spring of a school year. Results yielded some support for the hypotheses. Narcissism combined with low self-appraisals of the real self to predict decreases in prosocial behavior and increased aggression toward popular and attractive peers. These findings not only provide longitudinal evidence for the self-image failure hypothesis but also underscore the importance of a target-specific approach to investigating children's aggression.

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#### INTRODUCTION

Narcissism – a strong need to be admired for a grandiose self – has long been linked to aggression in both children and adults. Recently, studies of nonclinical populations of children have demonstrated that when narcissism combines with self-perceived inadequacies (e.g., low self-esteem, low self-efficacy for valued domains), it is associated not only with aggression (Barry, Frick, & Killian, 2003) but also depression (Pauletti, Menon, Menon, Tobin, & Perry, 2012). The current study had two goals. The first was to test the hypothesis that narcissism combines with self-perceived failures to produce maladjustment with a longitudinal design. Tests of this hypothesis to date have used a concurrent design. The second goal was to investigate whether narcissistic children who perceive inadequacies in themselves direct their aggression toward specific peers or behave aggressively indiscriminately.

Theorists differ with regard to the correct conceptualization of narcissism. One issue typically revolves around narcissism's somewhat confusing relationship with self-esteem. It is therefore important to establish how these two constructs are conceptualized here. Whereas the adult literature has established that narcissism is usually associated with high self-esteem (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), studies with children have found the relationship to be small or sometimes even negative (Barry et al., 2003; Harter & McCarley, 2004; Pauletti et al., 2012). One solution is to think of

narcissism as grandiosity in the *ideal* self, characterized by a need to be admired and respected, as well a sense of entitlement to be placed above others and to think of self-esteem, on the other hand, as an appraisal of the *actual* self. Different measures are used to assess narcissism and self-esteem, and these measures reflect this distinction. These separate conceptualizations (and operationalizations) of narcissism and self-esteem allow for their statistical and theoretical independence, and potential interactive influences, in childhood. In this paper, both narcissism and self-esteem are conceptualized (and measured) as continuous dimensions. Thus, it should be understood that the term "narcissistic children" refers to children who are relatively more narcissistic than others.

Recently, Pauletti et al. (2012) hypothesized two cognitive routes by which narcissism might be associated with maladjustment in children (and possibly adults). First, they suggested that narcissism might motivate children to act on grandiose, self-promoting gender stereotypes. For instance, narcissistic boys who endorse specific stereotypes for masculinity (e.g., the belief that boys should control others) should be more likely to emulate the stereotype (e.g., behave in an aggressive manner with their peers) than narcissistic boys who do not possess such stereotypes or non-narcissistic boys who do possess the stereotype. Support was found for this hypothesis, which the authors called the stereotype-emulation hypothesis. The focus of the present study was not on this hypothesis, however, but rather on a second hypothesis advanced by Pauletti et al.

In their second hypothesis, Pauletti et al. (2012) suggested that narcissists might be particularly vulnerable to perceived discrepancies between their sought-after grandiose sense of self and self-appraisals of how they are actually faring. That is, they proposed

that narcissistic children with low self-esteem or other negative self-evaluations (i.e., with a gap between their ideal self and their actual self) would be vulnerable to both aggression and depression. They called this the self-image failure hypothesis. They found support for this hypothesis using concurrent data. The first purpose of the present study was to evaluate this hypothesis using a longitudinal design.

Self-image failure is proposed to be a process that a subset of narcissistic individuals experience. Presumably, narcissists possess a strong sense of entitlement to admiration and respect, yet some narcissistic persons find it difficult to achieve these goals. In this case, their *ideal* selves (e.g., their grandiose wish for admiration) fail to match up to their actual selves (e.g., their self-esteem or self-efficacy perceptions). In other words, children scoring high on narcissism and low in self-esteem (or self-efficacy for a valued domain) are likely to have a strong need to be admired but are also likely to see themselves as failing to gain any actual respect. It is this discrepancy in the selfconcept that Pauletti et al. suggested fuels maladaptive behaviors and cognitions in narcissistic children. Pauletti et al. found that narcissistic children (of both sexes) with low self-esteem or with low self-efficacy for physical attractiveness were depressed, and narcissistic boys with low self-esteem were also aggressive and exhibited little prosocial behavior. Thus, narcissistic children do seem to be particularly sensitive to their own selfperceived failures, leading them either to lash out at their peers or to engage in selfpunitive behaviors (or both). Other studies with children and adolescents have yielded results consistent with the self-image failure hypothesis, demonstrating that narcissism is a particularly powerful predictor of aggression when it is coupled with low self-esteem

(Barry et al., 2003; Harter & McCarley, 2004). However, authors of these other studies did not interpret these results as supporting a self-image failure mechanism. These other studies also did not investigate depression as a possible outcome of self-image failure.

The self-image failure hypothesis is consistent with a growing literature, mainly with adults, illustrating that narcissistic persons are motivated to seek admiration from others in order to keep their grandiose self intact, but at the same time are highly sensitive to threats to their self-image. Indeed, the seeking of admiration from others, especially peers, is not only a key feature of the narcissistic personality but also is likely responsible for many of the negative consequences of the narcissist's failure to maintain his or her grandiose self. Although many narcissistic persons are successful in their quest for admiration and approval because they are socially skilled enough to do so, many are not (Back, Schmukle, & Egloff, 2010; Morf & Rhodewalt, 2001). Some narcissistic individuals many deny or defend against self-perceptions of inadequacy. For example, John and Robins (1994) reported that narcissistic adults in a vocational setting tended to self-enhance (i.e., to seeks ways to affirm their self-esteem), yet were often inaccurate in their positive self-appraisals. Thus, it appears that narcissists are highly motivated to maintain a positive self-image. Additional evidence for this idea comes from a study of internet social networking sites by Ong et al. (2011), who found that narcissistic adolescents were more concerned with positive self-presentation (e.g., selection of flattering pictures for posting on the site) and more likely to engage in exhibitionist behaviors (e.g., excessive notification of others of their whereabouts and feelings) than other adolescents. Even narcissistic children who appear to be highly motivated to

maintain a grandiose image may have difficulty shaking off negative social evaluations from peers when these evaluations become obvious and are shared by high-status and popular peers, whose admiration narcissistic children likely particularly desire. Thomaes, Stegge, Bushman, Olthof, and Denissen (2008) reported particularly low self-esteem in narcissistic children who were disliked by popular peers, and found regaining of self-esteem to be dependent on acceptance. Given their preoccupation with popularity and acceptance in childhood, it stands to reason that narcissistic children would be especially vulnerable to failures in these domains. According to the self-image failure hypothesis, then, narcissistic children who perceive themselves to be unpopular or otherwise receive some cue of their poor social standing might be particularly likely to respond with some form of maladjustment, such as depression.

As noted, Pauletti et al. (2012) found that narcissistic children with self-image failure (i.e., narcissistic children with low self-esteem or low self-efficacy for attractiveness) were depressed. Low self-esteem is strongly associated with depression at all ages (Harter, 2006; Orth, Robins, & Roberts, 2008, Orth, Robins, Trzensniewski, Maes, & Schmitt, 2009; Pauletti et al., 2012). More interesting, however, is that links between narcissism and depression have also been found in adult (Wink, 1991) and adolescent samples (Barry & Malkin, 2010; Washburn, McMahon, King, Reinecke, & Silver, 2004). However, the cognitive routes by which narcissism exerts its influence on depression remain to be fully illuminated. Hyde, Mezulis, and Abramson (2008) have suggested that girls, in particular, are likely to respond to self-perceived failures with depression (but they did not implicate narcissism as a personality feature that makes

some girls more vulnerable to the negative consequences of self-image failure than others).

Although depression would seem to be a natural consequence of self-image failure and indeed has been shown to be a consequence of failures to achieve a soughtafter ideal self (Higgins, 1987), aggression may also be a reaction to narcissistic failure. In addition to the evidence cited above showing that narcissistic children who suffer from low self-esteem (i.e., who are experiencing self-image failure) tend to be generally aggressive (e.g., Pauletti et al., 2012), there is ample evidence that narcissists sometimes react with hostility to threats to their self-concept made by others (e.g., insults). This is sometimes taken as support for what is called the threatened egotism theory of aggression (Baumeister, Smart, & Boden, 1996). Experimental studies with adults have routinely demonstrated that narcissists who feel upbraided or otherwise receive negative feedback are particularly likely to exhibit hostility toward the offending party (Barry, Chaplin, & Grafeman, 2006; Bushman & Baumeister, 1998; Kernis & Sun, 1994). Narcissistic adults seem particularly sensitive to interpersonal negative feedback that ostensibly comes from peers. For instance, Bushman and Baumeister (1998) found that narcissists were most likely to aggress against a confederate (perceived as a peer) who insulted their essaywriting skills. Similarly, Kernis and Sun (1994) demonstrated that narcissists are hostile to peers who insulted their ability to give a good speech. While there has yet to be explicit research on the topic, it is possible that narcissists are particularly offended by insults from those they perceive as social equals (e.g., other students with similar goals as their own).

Several studies do suggest more clearly that narcissists' aggression follows from insults or threats perceived as relevant to one's social standing (i.e., perceived as relevant to one's feelings of superiority). Barry et al. (2006) found that narcissists are quicker to react in a hostile manner to feedback based on their performance relative to others than to feedback based on their own individual improvement, suggesting that narcissists are somewhat competitive and likely to engage in aggressive behavior in rivalry contexts involving social comparisons. Similarly, comparing public and private feedback, Ferriday, Vartanian, and Mandel (2011) discovered that narcissists are most aggressive towards those who deliver negative feedback that is witnessed by others. These data add a new potential qualification to the relationship between narcissistic failure and aggression. Specifically, narcissists may be particularly attuned to feedback that they feel compromises their ability to maintain an air of superiority in the eyes of others. This emphasis on public failure as the root of narcissists' hostile reactions to failure may seem at odds with findings supporting the self-image failure hypothesis. These data have shown that that narcissistic children respond to self-perceived failures (e.g., low selfesteem, low self-efficacy for valued domains) with aggression and depression (Pauletti et al., 2012). However, it has been suggested that people use their self-esteem as a sociometer, that is, as a proxy for how well they are faring socially or publicly (Leary, Tambor, Terdal, & Downs, 1995). In this view, the function of low self-esteem is to warn or prepare oneself for imminent or current exclusion from the peer group. Thus, selfperceived failures may be dismaying to narcissists because it constitutes a cue of social rejection.

Narcissism is reported to be correlated with trait aggression, that is, with a generalized disposition to behave aggressively across many situations and toward many targets. This has led to an emphasis on the qualities of narcissistic persons that lead them to be generally aggressive in a trait-like way. For example, narcissists as a group exhibit callous-unemotional traits (Barry et al., 2003; Barry, Frick, Adler, & Grafeman, 2007) and sub-clinical psychopathy (Baughman, Dearing, Giammarco, & Vernon, 2012), suggesting that one feature of the narcissistic personality may be enduring aggressive cognition and affective dispositions. These enduring trait-like qualities of narcissistic persons, however, do not necessarily mean that narcissists are indiscriminate in the situations in which they exhibit aggression or in the targets on whom they inflict their aggression. Typically, most studies of narcissistic aggression have used self- or otherreports of global aggressive behavior (e.g., spreading rumors, physical aggression toward other students). Such measures do not take the nature of the provocation or the identity of the target into account. Thus, it may be worthwhile to extend the study of narcissists' aggression to increase the focus on situational and target specificity.

The evidence just summarized underscores that narcissists are particularly likely to behave angrily and aggressively in situations in which they have experienced insulting provocation. Moreover, additional evidence indicates that narcissists are particularly likely to direct their aggression toward the specific individual who provoked them rather than to aggression more generally. Bushman and Baumeister (1998) found that narcissistic adults, when given the opportunity to target either the person who had given them negative feedback or an innocent third party, chose the former. Presumably,

narcissists are sensitive to the source of the feedback as well as to the valence and delivery of the feedback itself (Barry et al., 2006; Ferriday et al., 2011). The target-specificity of narcissistic aggression has been reported in other studies with adults, as well (Stucke & Sporer, 2002). These studies suggest that research on narcissists' aggression might profit from additional theory and study of the situational and target specificity of narcissists' aggression.

Together, these data and considerations suggest that narcissistic aggression is a product not only of the enduring features of the narcissistic personality (e.g., need for admiration from peers combined with self-image failures) but also of salient features of the situation (Ferriday et al., 2011). According to Mischel and Shoda (1995) the narcissistic personality can be conceptualized as an enduring personality cognitive affective processing system (CAPS) that motivates children to attend and react to features of the social situation that are important to them (i.e., relevant to their narcissistic concerns and issues). From this perspective, the peers (or relevant attributes of a given peer) that a narcissist encounters can be considered to be a salient feature of the situation that may or may not motivate aggression. Narcissism, therefore, may interact with features of an interaction partner (e.g., personality characteristics, relevant behaviors, peer social standing) to produce target-specific aggression toward that partner.

The person x situation approach to personality (Mischel & Shoda, 1995) carries promise for understanding aggressive behavior in childhood. It is clear that children's aggression depends on characteristics of their interaction partner. Salient target features that influence children's aggression include peer social rejection (Veenstra et al., 2007;

Veenstra, Lindenberg, Munniksma, & Dijkstra, 2010), personal liking vs. disliking of a peer (Peets, Hodges, & Salmivalli, 2011), the quality of the relationship with the peer (Peets, Hodges, Kikas, & Salmivalli, 2007), and peer vs. adult target (Mischel & Shoda, 1995). This array of findings appears to indicate that one important way to characterize the "situation" may be to identify important features of one's interaction partners (Fournier, Moskowitz, & Zuroff, 2008). Work with adults has corroborated this point of view. For example, Zayas and Shoda (2010) found that among adult males, an avoidant romantic attachment style was as an enduring cognitive factor that motivated attraction to female romantic partners with an anxious attachment style. Taken together, these studies highlight the importance of a person x situation approach to aggression in children and adults.

How might features of the *narcissistic* personality interact with specific features of potential targets to motivate aggression? The literature reviewed above on narcissistic cognition has established that narcissists are highly motivated to gain and maintain admiration (perhaps in the form of popularity in children) from their peers. Moreover, they appear especially vulnerable to threats to their superiority posed by peer rivals. Pauletti et al.'s (2012) self-image image failure hypothesis suggests that narcissists who are in a chronic state of self-image failure (e.g., narcissists with low self-esteem) are especially insecure and therefore are easily threatened, given to frustration, and subject to poor self-regulatory control. Thus, it seems likely that these children (narcissistic ones experiencing self-image failure) may be the most reactive to targets who activate their feelings of threat and frustration. The peers most likely to elicit threat in narcissistic

children experiencing self-image failure are likely to be peers whom the narcissistic children view as rivals for admirations and social superiority. Peers most likely to threaten the narcissistic children's sense of entitlement and superiority should in fact be peers who are succeeding in securing their peers' admiration and respect. There are two reasons why one might make this prediction. First, the narcissistic child may feel that popular, attractive, and other high-status peers are taking positions among peers that are meant for them; thus, they see these successful peers as direct threats and as confirmation of their own inadequacy – a self-perception that should be intolerable to them. Second, such a pattern would be consistent with the empirical evidence showing the competitive or rivalry-motivated nature of narcissistic aggression (Barry et al., 2006; Bushman & Baumeister, 1998; Kernis & Sun, 1994). In other words, narcissistic failure should motivate aggression toward specific peers whom the narcissist holds responsible for his or her self-perceived failures. The second major purpose of the present study was to test this expanded version of Pauletti et al.'s (2012) self-image failure hypothesis.

#### **The Current Study**

The current study had two main objectives. The first was to evaluate Pauletti et al.'s (2012) original self-image failure hypothesis using longitudinal data collected from fall to spring of a school year. To recap, the self-image failure hypothesis is that narcissism combines with self-perceived failures to produce maladaptive outcomes (especially aggression and depression) in narcissistic children. Thus far, research with preadolescent children has demonstrated that narcissism combines with negative appraisals of the actual self (e.g., low self-esteem, low self-perceived physical

attractiveness) to predict generalized aggression and low prosocial behavior in boys and to predict depression in children of both sexes. However, the data have been concurrent, making it difficult to detect likely causal pathways. Thus, the first purpose of this study was to see if narcissism interacts with self-appraisals to predict over-time changes in aggression and prosocial behavior in ways predicted by the self-image failure hypothesis. The current study did not investigate depression as an outcome of self-image failure.

Support for the self-image failure mechanism is obtained when narcissism synergistically combines with low self-appraisals to predict adjustment difficulties. Because narcissistic children should be particularly sensitive to social failure in the peer group, the primary hypothesis was that narcissism would interact with relevant indicators of peer social standing to predict changes in peer-reported externalizing behaviors (e.g., aggression) and prosocial behavior over time. It was expected that narcissistic children experiencing self-image failure in the peer domain in the fall of the school year would show increases in problem behaviors over the year. The specific self-appraisals included to assess self-image failure were self-esteem, self-efficacy for popularity (i.e., how competent one feels in gaining and maintaining popularity with peers), and self-efficacy for attractiveness (i.e., how competent one feels in being attractive). It was expected that high narcissism would combine with a low level of each of these three self-appraisals to encourage the adjustment problems. Although some researchers have found that low prosocial behavior may be an outcome specific to male narcissists (Pauletti et al., 2012), we make no a priori hypotheses about gender. Nonetheless, we routinely tested for possible moderator effects of gender throughout our analyses. Our primary dependent

measures (of adjustment) were prosocial behavior and aggression. However, for comparison, we also assessed four additional peer-reported adjustment outcomes that were also treated as dependent variables – sports competence, cross-gender-typed behavior, internalizing behavior, and coercive behavior.

The second goal of the study was to investigate the role of self-image failure in the target-specificity of narcissistic children's aggression. It is clear that narcissism is related to aggression and research in children has specifically linked narcissism to aggression in the peer context. Using the self-image failure hypothesis as a framework, we sought to explore the dispositional (i.e., person) and situational (i.e., peer) features that account for target-specific aggression. To accomplish this goal, we investigated whether narcissistic preadolescents would react to their own social failures in the peer group by selecting certain types of peers for aggressive behaviors. Given the literature on narcissistic aggression, we hypothesized that children scoring high in narcissism but low on self-appraisals of peer social status would show increased aggression toward peers whom they perceived as rivals for their social standing. Thus, focal target features included peer-rated likeability and peer-rated attractiveness. We expected narcissistic children who were experiencing self-image failure to show increased aggression toward these types of peer targets.

We employed hierarchical linear modeling (HLM) to assess the target-specificity of children's aggression. In both the fall and the spring of the school year, we measured (using peer nominations) the degree to which each child was aggressive toward each of his or her classmates. Then, for each child, we calculated a within-child beta that served

as an "aggression signature" to capture the degree to which the child increased or decreased his or her aggression toward peers with specific characteristics (relative to their aggression toward peers lacking the characteristics) from the fall to the spring. We expected that narcissistic children experiencing self-image failure would especially increase their aggression toward likeable and attractive peers (relative to their aggression toward less likeable and less attractive peers) over the year. To rule out the possibility that narcissistic failure fosters aggression toward other types of targets, we examined whether narcissists who perceive themselves as failing also increased their aggression towards peers who were proficient in sports, peers who were cross-gender-typed, peers who were weak (i.e., had internalizing problems), or peers who were coercive, in an effort to compensate for or draw attention away from their own self-perceived failure. This cross-checking of target features was intended to evaluate whether narcissists are likely to select *specific* targets for aggression, rather than indiscriminately aggress against all peers.

To summarize, the current study was designed to provide more evidence for a budding conceptualization of narcissism in relation to maladjustment in childhood – the self-image failure hypothesis. By expanding upon the cognitive features of the narcissistic personality (e.g., need for admiration, preoccupation with popularity), we expect to find evidence for a pattern indicating that narcissism combines with other salient features of the self-system (especially negative self-appraisals) to produce undesirable outcomes not only for the narcissist, but for his or her interaction partners as

well. The focus on target-specific aggression is a particularly innovative feature of the current study.

#### **METHOD**

#### **Participants and Procedure**

Participants were 195 (101 boys) fourth- through seventh-graders (M age = 10.1 years) recruited from a university laboratory school in South Florida. The sample represented about 75% of those invited to participate and were approximately 51% White, 21 % Black, 20% Hispanic, and 8% other.

Participants completed a group and an individual testing session in both the fall and spring of the school year. The group session consisted of a battery of self-report questionnaires and was completed in small same-sex groups of 8-10 students. In the individual session, participants completed several self- and peer-report questionnaires. Both sessions were done in spare rooms in the school and were administered by a graduate student. Parental consent was obtained prior to the fall testing and child assent was obtained at each testing session.

#### **Self-Perception Questionnaires**

Narcissism. Narcissism was assessed with the 10-item Childhood Narcissism Scale (Thomaes, Stegge, et al., 2008). This self-report questionnaire asks participants to rate on a scale of 0 (Not at all true) to 3 (Completely true) the extent to which they believe statements such as "I am a very special person" and "Kids like me deserve something extra." Scores were the average of responses across all 10 items. Cronbach's

alpha was .79 in both the fall and the spring, and the stability coefficient across testing periods was .63. **Self-esteem.** Self-esteem was measured using Harter's (1985) six-item global self-worth scale. Items were designed to minimize response bias and were scored on a scale of 1 to 4. Cronbach's alphas were .73 and .80 in the fall and spring, respectively, and the stability from fall to spring was .49.

Self-efficacy. Ten items of a self-report questionnaire assessed self-efficacy for appearance (4 items) and for popularity (6 items) Scores were the average of responses to items such as "Being attractive is \_\_\_\_\_ for me" and "Being liked by my classmates is \_\_\_\_\_ for me." A score of 1 indicated that the activity was HARD! and a 4 indicated that the activity was EASY! for the participant. For the appearance self-efficacy scale, Cronbach's alphas were .87 and .90 in the fall and spring, respectively, and the stability from fall to spring was .67. For the popularity self-efficacy scale, Cronbach's alphas were .84 and .89 in the fall and spring, respectively, and the stability from fall to spring was .79.

### **Assessment of Peer-Reported Adjustment**

During the individual testing session, participants completed a 23-item peernomination inventory intended to capture several dimensions of social behavior.

Participants were asked to indicate which of their peers fit the description provided by each item. Most of the items are reported elsewhere (Pauletti et al., 2012). Participants could nominate as many or as few classmates as they saw fit for each item and they could not nominate themselves. Participants in the fourth and fifth grades rated all of their classmates (minimum = 14), while participants in the sixth and seventh grades rated a

random sample representing half of their grademates (minimum = 21). The average number of classmates who could provide nominations for each participant was 16.1.

A principal components analysis (with varimax rotation) revealed five components, all of which were employed in the current study. They were *sports competence* ("She is good at sports," "She is a cool kid"), *attractiveness-prosocial behavior* (high loadings for prosocial behavior and physical attractiveness; e.g., "She tries to help kids who are sad or afraid," "She is a good-looking kid"), *cross-gender-typed behavior* ("She likes to play with boys," "She acts like a boy"), *internalizing problems* ("She is afraid to do things," "She seems unhappy and looks sad often"), and *coercive behavior* ("She is mean to other kids," "She always manages to get her way"). Analysis of the spring data indicated a nearly identical structure. We saved scores on each of the factors, for both time points, using the SPSS regression method. Stability coefficients from the fall to the spring, in the order above, were .91, .85, .82, .71, and .77.

#### Assessment of Aggression and Victimization

Target-specific aggression and victimization. To assess each child's aggression toward each classmate, we asked participants to indicate whether each classmate was or was not "mean to" each other classmate. The researcher explained to the participant the various ways that a child could be "mean to" each other student by reading the following statement:

We want to find out which kids sometimes do mean things to other kids, and who they are doing it to. There are many different ways to be mean to other kids. For example, a kid could hit or punch someone, tease someone or say something

mean about them, or do something mean over a cell phone or the internet. For each kid, we want you to tell us

whether he or she is sometimes mean to each kid on the list. Each participant was then given a booklet. At the top of each page in the booklet was a fellow classmate's name (potential aggressor), followed by a list of every other child in the class (potential victims). Participants were asked to indicate "Yes" or "No" as to whether the child at the top of the page was "mean to" each of the children on the ensuing list. Participants in the fourth and fifth grades were given a booklet containing the name of every child in their class (minimum = 14) as a potential aggressor. Since the sixth and seventh graders were not limited to specific classrooms or teachers, and knew every child in their grade, we selected a random sample of 14-15 grademates for them to nominate as potential aggressors. Though we limited the list of potential aggressors in this manner, all participants could nominate each classmate (for fourth and fifth graders) or grademate (for sixth and seventh graders) as a potential victim. Thus, children could nominate from a roster of 28.5 potential victims (minimum = 14). Participants did not nominate themselves as either an aggressor or a victim. A participant's aggression score toward a classmate was the proportion of nominators identifying the child as being "mean to" that classmate. This procedure also yielded a score indicating how much each participant was victimized by each classmate; this was the proportion of nominators indicating that the participant was a victim of mean behavior by a given classmate. Henceforth, the term "dyadic aggression" is used to refer to a child's aggression toward a classmate, and the term "dyadic victimization" is used to refer to a child's victimization by a classmate.

To determine whether children's choices of peer targets for aggression were stable over the year, we correlated children's profile of aggression scores toward their classmates (dyadic aggression) in the fall with their profile of aggression scores toward those same classmates in the spring. We used the HLM program (Raudenbush & Bryk, 2002) to calculate a within-child beta predicting spring dyadic aggression toward each peer from fall dyadic aggression toward each peer. This served as an estimate of stability for each child's preferred targets for aggression. The average (and SD) of these betas was .64 (.29). We calculated stability of dyadic victimization in an identical manner and found the average (and SD) of the betas to be .76 (.31). Thus, in general, children tended to be aggressive toward (and to be victimized by) the same peers across the school year.

General aggression and victimization. We also assessed each participant's general propensity for aggression and general propensity to be victimized (for purposes described later). To measure general aggression (or victimization), we averaged each participant's dyadic aggression (or victimization) scores across all classmates. The stability coefficient from fall to spring was .80 for general aggression and .67 for general victimization.

**Peer-rated likeability.** We asked each participant to tell us how much they liked each of their classmates (minimum = 14, M = 28.5), on a scale of 1 (Not at all) to 4 (A lot). This yielded a measure of how much each child was liked by each of their classmates, which we averaged to give us a score of general likeability, or peer-rated acceptance. The stability coefficient from fall to spring was .82.

#### RESULTS

#### **Descriptive Statistics**

Means and standard deviations for measures at both time points are given separately for boys and girls in Table 1. Correlations among measures in the fall are presented in Table 2 and correlations among measures in the spring are presented in Table 3. Relations among focal variables were similar to those reported in previous studies (Barry et al., 2003; Pauletti et al., 2012). Most notably, narcissism and self-esteem were unrelated at both time points.

### **Self-Image Failure and Adjustment**

A central aim of the current study was to investigate whether the self-image failure hypothesis was supported with longitudinal data. Hence, we examined whether narcissism and self-perceived failures in the fall interacted to predict adjustment difficulties in the spring (i.e., changes in adjustment difficulties over the course of the school year). Here, self-perceived failure was assessed using perceptions of self-efficacy for popularity or appearance (i.e., being attractive), and self-esteem. Time 2 (spring) peer-reports of generalized aggressive behavior and attractiveness-prosocial behavior served as focal dependent variables. Hence, six regression analyses were conducted. On the first step, we entered participant age, sex, and Time 1 score on the dependent variable (attractiveness-prosocial behavior or generalized aggressive behavior). The second step controlled the main effects of narcissism and one of the self-perception variables (i.e.,

popularity self-efficacy, appearance self-efficacy, or self-esteem). The third step (the focal step) examined the interaction of narcissism and one of the three self-perception variables. The fourth and fifth steps probed interactions with participant sex.

There was limited support the self-image failure hypothesis. Narcissism and self-esteem in the fall interacted to predict peer-reported attractiveness-prosocial behavior in the spring (B = .08, p = .05). The pattern indicates that narcissistic children with low self-esteem are those that are least likely to exhibit prosocial behavior (and be considered attractive by their peers). Self-esteem was positively associated with attractiveness-prosocial behavior only when narcissism was high (B = .11, p = .056; See Figure 1). These results are consistent with those reported by Pauletti et al. (2012). Narcissism did not interact with self-perceived failure to predict general aggression.

Twelve additional regressions were conducted where Time 2 scores on each of four peer-reported adjustments measures (e.g., sports competence, cross-gender-typed behavior) served as dependent variables. Narcissism also interacted with self-esteem in the fall to predict changes in peer-reported internalizing behavior over the school year (B = .12, p = .015). Here, self-esteem predicted decreases in internalizing behavior only when narcissism was low (B = -.21, p = .001, see Figure 2). This pattern is not consistent with predictions made by the self-image failure hypothesis, and the reasons for this discrepancy will be explored later. However, the results indicate that it is children who are low in *both* self-esteem and narcissism that are most likely to exhibit increases in internalizing problems over the course of the school year.

#### **Self-Image Failure and Target-Specific Aggression**

Our second goal was to investigate narcissistic aggression from a target-specific approach. We hypothesized that narcissists experiencing self-image failure (i.e., low self-esteem, low popularity self-efficacy, or low appearance self-efficacy) would be more likely to increase their aggression toward peers who were successful in these domains (e.g., attractive peers, likeable peers). A series of HLM analyses evaluated this issue. We will first discuss our analysis strategy and then turn to the findings.

Analysis strategy. Each HLM analysis involved two steps. First, for each participant, the program calculated a beta indicating the extent to which aggression toward classmates changes over the course of the school year as a function of a specific target characteristic. In this case, the focal target characteristics were peer-rated assessments of the targets' likeability (i.e. peer acceptance) and attractiveness-prosocial behaviors (i.e., social proficiency). The program computed a per-child equation that predicted the child's dyadic aggression toward his or her classmates in the spring from the classmates' characteristic in the fall (Level-1 equation). The equation controlled three variables – the child's dyadic aggression toward the classmates in the fall, the classmates' nomothetic victimization in the fall (the average raw aggression a classmate received from other children), and the classmates' dyadic aggression toward the child in the fall. All variables in the Level-1 equation were group-mean centered. Thus, this step yielded a beta coefficient for each child indicating how that child's aggression toward classmates changed from fall to spring depending his or her classmates' in peer-rated

attractiveness-prosocial behaviors or likeability (i.e., social proficiency) in the fall. This Level-1 equation was:

$$ParAggToTar2ij = b0j + b1j*(ParAggToTar1ij) +$$

b2j\*(NomVicOfTar1ij) + b3j\*(TarAggToPar1ij) + b4j\*(TarSocProf1ij) + rij

In this equation, ParAggToTar2 and ParAggToTar1 are participant's aggression toward target in spring and fall, respectively; b0j is the intercept; NomVicOfTar1 is nomothetic victimization of target in fall; TarAggToPar1 is target's aggression toward participant in fall; TarSocProf1 is target social proficiency (i.e., likeability or attractiveness-prosocial behaviors) in fall; and rij is error. The beta yielded by the equation for the TarSocProf1 term (b4j) indicated how change in the child's aggression over the year depended on target's social proficiency in the fall. The unconditional models for these Level 1 equations (averages for each Level 1 beta) are presented in Table 4. Here, the unconditional models predict Time-2 aggression toward each target from each target's attractiveness-prosocial behaviors (model A) and likeability (model B). These results indicate that, on average, participants decreased their aggression toward attractive-prosocial and likeable peers over the course of the school year.

In the second step of each HLM analysis, the focal within-child betas yielded by the foregoing equation (i.e., betas for the *TarSocProf1* term) served as the dependent variable in a series of between-child analyses in which the focal variables (i.e., narcissism and self-perception) took turns as predictors ("slopes-as-outcomes analyses"). Each analysis involved computing an equation that predicted the within-child betas from the focal interaction of narcissism and self-perception (Level-2 equation). These analyses

controlled children's peer-rated general aggression, sex, and age. In all analyses, betas were predicted from an interaction of two variables and therefore controlled for lower-level effects (e.g., when evaluating a two-way interaction, the two main effects were controlled). All variables in the Level-2 were grand-mean centered. The Level-2 equation was:

$$b_{4j} = \gamma_{30} + \gamma_{31}*(ParGeneralAgg1_j) + \gamma_{32}*(ParAge_j) + \gamma_{33}*(ParSex_j) + \gamma_{34}*(ParNarc_i) + \gamma_{35}*(ParSelfPer1_i) + \gamma_{36}*(ParNarc1xParSelfPer1_i) + u_{4j}$$

In this equation,  $b_{4j}$  is the within-child beta yielded by the Level-1 equation for the TarSocProf1 term;  $\gamma_{30}$  is the intercept; ParGeneralAgg1 is participant's general aggression in fall; ParAge and ParSex are the participant's fall age in months and sex, respectively; ParNarc1 and ParSelfPer1 are participants' fall scores for narcissism and one of three self-perception variables;  $ParNarc1xParSelfPer1_j$  is the focal interaction between the participant's narcissism and self-perception scores; and  $u_{4j}$  is error. The statistical significance of the coefficient of this last term ( $\gamma_{36}$ ) indicated whether narcissism combined with self-perceptions of social failures to predict change over time in children's aggression as a function of the peers' social proficiency in the fall. We also examined whether any interactions were moderated by participant sex. Means and standard deviations for each Level 2 variable are presented in Table 1. Although we have described the analysis as proceeding in two steps, in actuality the HLM program estimates the two equations simultaneously.

In overview, changes in aggression toward attractive-prosocial or likeable peers (relative to changes in aggression toward peers lacking those qualities; Level 1) were

predicted from the interactions of narcissism and either popularity self-efficacy or appearance self-efficacy (Level 2), or self-esteem. Hence, we conducted six focal HLM analyses using the foregoing analysis strategy. To demonstrate target-specificity of aggression, we also investigated whether these two focal interactions at Level 2 predicted changes in aggression toward peers exhibiting a number of other peer-reported characteristics. These characteristics included the four additional peer-nomination inventory components derived from the principal components analysis described in the methods. To reiterate, they were sports competence, cross-gender-typed behavior, internalizing problems, and coercive behaviors. We also routinely probed interactions with child sex in the Level-2 equation. This involved examining additional models, where the three-way interaction of narcissism x self-perception x participant sex were entered as additional predictors of the focal beta, along with lower-order interactions with sex entered as controls.

**Predicting aggression toward socially proficient peers.** We first examined main effects of each of the four independent variables (i.e., narcissism, self-esteem, popularity self-efficacy, or appearance self-efficacy) on each of the six betas, controlling participant age and sex. There were no main effects of any of the four independent variables on either aggression toward likeable or attractive-prosocial peers. There was a main effect of popularity self-efficacy on the internalizing beta ( $\gamma = -.004$ , p = .05), indicating that popularity self-efficacy predicted decreases in aggression toward peers exhibiting internalizing behaviors. Three main effects were moderated by sex. Child sex interacted with self-esteem to predict changes in aggression toward both cross-gender

typed ( $\gamma$  = -.011, p = .008) and likeable ( $\gamma$  = .037, p = .049) peers. Follow-up analyses revealed that self-esteem significant predicted decreases in aggression toward crossgender-typed children ( $\gamma$  = -.006, p = .026) for boys, but not for girls, and that self-esteem predicted increases in aggression toward likeable peers ( $\gamma$  = .037, p = .008) for boys, but not for girls. Child sex also interacted with narcissism to predict changes in aggression toward coercive peers ( $\gamma$  = -.012, p = .007). Again, for boys, but not for girls, narcissism was associated with decreased aggression toward coercive peers ( $\gamma$  = -.006, p = .029). Finally, child sex interacted with popularity self-efficacy to predict changes in aggression toward attractive-prosocial peers ( $\gamma$  = .011,  $\rho$  = .03). However, popularity self-efficacy was not a significant predictor of aggression toward attractive-prosocial peers for either sex. Although interesting, these results are not central to the hypotheses of the study.

The focus of the present analyses was to evaluate the hypothesis that narcissism would interact with each of the three self-perception variables to predict changes in aggression toward likeable or attractive-prosocial peers over time. The results are presented in Table 5 and were generally consistent with the self-image failure hypothesis. Narcissism interacted with both appearance and popularity self-efficacy to predict increases in aggression toward both likeable ( $\gamma = -.028$ , p = .01 and  $\gamma = -.031$ , p = .019, respectively) and attractive-prosocial peers ( $\gamma = -.010$ , p = .012 and  $\gamma = -.013$ , p = .006, respectively). These interactions are depicted in Figures 3 (popularity self-efficacy) and 4 (appearance self-efficacy). In all four cases, follow-up analyses revealed that aggression toward socially proficient peers is greatest when high narcissism (+1 SD) is combined with low self-efficacy (-1 SD). For instance, appearance self-efficacy was negatively

associated with aggression toward likeable peers only when narcissism is high ( $\gamma = -.008$ , p = .043). These results are what would be expected given the self-image failure hypothesis. Self-esteem did not interact with narcissism to predict aggression toward sports-competent peers, nor were any of the interactions moderated by child sex.

**Predicting aggression toward other types of peers.** To demonstrate the target-specificity of aggression by narcissists experiencing self-image failure, we also examined whether four additional within-child betas were predictable from the interactions of narcissism and each of the three self-perception variables. There were several significant interactions. Narcissism interacted with self-esteem to predict aggression toward crossgender typed peers ( $\gamma = .009$ , p = .035). Follow-up analyses indicated meaningful, but nonsignificant slopes. Self-esteem predicted increases in aggression toward cross-gender-typed peers when narcissism was high ( $\gamma = .005$ , p = .072), but not when it was low. Narcissism also interacted with both popularity and appearance self-efficacy to predict aggression toward cross-gender-typed peers ( $\gamma = .008$ , p = .014 and  $\gamma = .005$ , p = .028, respectively). The patterns were similar to that reported for self-worth, though the individual slopes often did not reach significance. In all three cases, the patterns indicate that narcissism is most likely to predict aggression toward cross-gender-typed peers when self-perceptions are high (i.e., high self-efficacy or self-esteem).

The three-way interaction of narcissism x self-esteem x sex predicted changes in aggression toward coercive peers ( $\gamma = .028$ , p = .006). Follow-up analyses revealed that the two-way interaction of narcissism x self-esteem significantly predicted changes in aggression toward coercive peers for girls ( $\gamma = .028$ , p = .004) but not for boys. For girls,

self-esteem predicted significant increases in aggression toward coercive peers when narcissism was low ( $\gamma = .021$ , p = .003) but was not associated with changes in aggression toward coercive peers when narcissism was high. Overall, the pattern suggests that having non-narcissistic high self-esteem motivates girls to target coercive peers for aggression. While this pattern is not explicitly predicted by the self-image failure hypothesis, it is of interest to understanding narcissism and self-esteem and will be discussed later. There were no interactions predicting aggression toward internalizing peers or sports-competent peers.

#### DISCUSSION

## Narcissistic Self-Image Failure and Adjustment

Certain results generally supported the self-image failure hypothesis, which specifies that narcissism pathologizes self-perceived failures in important domains. Perhaps the most robust findings were those predicting prosocial behavior. Earlier work with this construct indicated that boys scoring high on narcissism and low on self-esteem were the least likely to exhibit prosocial behavior (Pauletti et al., 2012). This pattern was replicated here for children of both sexes. While this discrepancy between previously reported concurrent analyses and presently reported longitudinal analyses not hypothesized, it deserves some comment. One possible explanation involves the resiliency of girls' prosocial behavior compared to boys' prosocial behavior. While boys and girls do not differ in their overall mean levels of prosocial behavior, there appear to be sex-specific motivations for the behavior (Eagly, 2009). Froming, Nasby, and McManus (1998), for instance, found girls' prosocial behavior to be more resilient to self-awareness, particularly when the salience of prosocial behavior was low. In other words, it may simply take longer for girls to react to a poor self-concept with diminished prosocial behavior. Regardless of these gender nuances, it appears clear that perhaps the most likely outcome of narcissistic self-image failure is absence of helping others.

One finding was contrary to the self-image failure hypothesis. It was not the case that narcissistic self-image failure predicted increases in peer-reported internalizing

behaviors over time. To the contrary, it was individuals scoring low in both narcissism and self-esteem who were most likely to exhibit internalizing behaviors. This is particularly puzzling given that narcissistic self-image failure has predicted self-reported depression in previous studies (Pauletti et al., 2012), and we would expect, given that internalizing difficulties are typically characterized by outwardly displayed depression and anxiety, that these results would be consistent with one another. It is probably easiest to explain this discrepancy with a failure of our internalizing measure to properly detect the kind of self-pitying depression that accompanies narcissistic self-image failure.

Instead, it may have more adequately captured a self-loathing that follows from non-narcissistic low self-esteem, where grandiosity is replaced with true feelings of inadequacy. In other words, our internalizing measure may have picked up on the type of anxiety and depression that characterizes an individual that truly questions their self-worth, rather than that which characterizes an individual who has failed to live up to a grandiose ideal.

Perhaps the most well-documented correlate of narcissism is aggression, and this relation has been moderated by self-esteem (Barry et al., 2003; Harter & McCarley, 2004; Pauletti et al., 2012). Typically, this relation has been assessed in terms of generalized aggression, and we sought to replicate that here. The findings were not as expected. The longitudinal analyses reported here did not find that the relationship between narcissism and generalized aggression was moderated by self-esteem. This discrepancy is difficult to explain, but may have to do with the nature of the narcissism questionnaire employed in the study. Previous studies have used the Narcissistic Personality Inventory for Children

(NPIC; Barry et al., 2003). The current study used the Childhood Narcissism Scale (CNS; Thomaes et al., 2008). While these questionnaires both demonstrate fidelity to adult versions of narcissism inventories, they differ in several respects. For instance, they are scored on a different scale. The NPIC asks participants to choose between two competing statements (one narcissistic and the other not), while the CNS asks participants to respond to a narcissistic statement on a four-point scale. It may also be the case that items on the NPIC are not as appropriate for children as they are for adults. Thomaes, Stegge, et al. (2008) have argued that items on the NPIC, such as "If I ruled the world, it would be a better place" and "People usually appreciate what I do," are more relevant to adults and may not adequately capture narcissism in children. Divergent findings from studies using the two scales speak to this possibility. While Barry and colleagues, along with others, have found that narcissism combines with low self-esteem to predict aggression, researchers using the CNS have found that the combination of narcissism and high selfesteem combines to predict aggression under certain conditions (Thomaes, Bushman, Stegge, & Olthof, 2008). It is beyond the scope of this paper to pinpoint the reasons for these divergent findings, but these results, taken with results of other studies, suggest that the correlates of narcissism need more study. Given that the present study examined this interaction longitudinally, it stands to reason that the combination of narcissism and selfesteem may be less likely to predict generalized aggression in the long-term. To our knowledge, the present study is the only study that has examined this interaction on a longitudinal basis at any sample age. Thus, narcissistic self-image failure (or self-image fulfillment, as reported by Thomaes et al.) may only be associated with increases in

generalized aggression in the short-term. In other words, the impact of narcissistic self-image failure on aggression may wear off or become less effective on generalized aggression as time goes on. It should be noted that we explored the interaction of narcissism and self-perception with respect to its impact on generalized aggression on a concurrent basis (Time 1), and did not find any significant effects. As we have seen, however, this is not the case for target-specific aggression.

In summary, narcissism seems to be particularly detrimental to adjustment outcomes when it is coupled with negative self-perceptions. The results presented here raise the possibility that this type of pathology might have long term consequences and that narcissistic self-image failure might have a causal role in low levels of prosocial behavior. When it comes to predicting aggression, however, the results are not as clear. This, in part, may have something to do with the manner in which narcissism is assessed. It may also be the case that generalized aggression is not a clear outcome of narcissistic self-image failure, as narcissists experiencing these maladaptive cognitions may become more selective of their victims over time.

## Does Narcissistic Self-Image Failure Predict Target-Specific Aggression?

The principal aim of the current study was to identify the victims of narcissistic aggression. While previous studies have done a thorough job of demonstrating that narcissism is tied to a generally aggressive personality, at least on a concurrent basis, few studies to date have assessed narcissism in a peer-context to identify specific types of peers that are targeted by narcissists. We take that a step further here by examining the role of narcissistic self-image failure in the selection of certain targets for victimization.

We hypothesized that individuals scoring high in narcissism and low in self-perceptions (i.e., self-esteem, self-efficacy for popularity and appearance) would be most aggressive toward peers who possessed the characteristics they lacked (i.e., peer-rated as likeable and/or attractive-prosocial). We based our prediction on findings from earlier research demonstrating that narcissists are likely to lash out at individuals who they perceive as threatening to their self-image (Bushman & Baumeister, 1998; Kernis & Sun, 1989) or as a threat to their public image (Ferriday et al., 2011).

Our results tended to support this hypothesis. Narcissism interacted with both popularity and appearance self-efficacy to predict aggression toward specific types of peers. With both interactions, we successfully predicted increased aggression toward attractive-prosocial peers and likeable peers. In other words, narcissists who perceived themselves as either unpopular or unattractive appeared to target peers who possessed those qualities.

There are two questions this relationship that must be discussed. The first concerns why popularity and appearance self-efficacy, as opposed to the more omnibus self-esteem, would motivate this kind of aggression in narcissists. The answer is well-documented and has to do with the specificity of narcissists' social goals. Narcissists appear to be particularly motivated by maintaining a positive image with their peers (Ong et al., 2011), often going out of their way to self-enhance when given the opportunity (Horvath & Morf, 2010). It is also the case that narcissists are particularly sensitive to feedback from others, particularly in the peer context (Morf & Rhodewalt, 2001; Thomaes, Stegge, et al., 2008). It stands to reason, then, that narcissistic self-perceptions

are based primarily on how they think *others* perceive them. Popularity and appearance are two salient features of the peer context, and self-efficacy in these domains should be particularly sensitive for narcissists. Perhaps self-esteem is not sufficiently contextually relevant in the peer context to predict target-specific aggression.

A second question is the issue of why narcissistic children who perceive themselves as failing are aggressive against peers who possess these qualities rather than attempting to be riend them. It seems somewhat counterintuitive that an individual who is motivated by popularity would choose a well-liked person as a victim. Common sense would dictate that the most efficient path to popularity would be to make friends with those who are already well-liked. It appears, however, that narcissists do not perceive the situation is this light. It is likely that, instead, narcissists view other likeable peers as rivals, and therefore, the source of threat to their self-image. Other researchers have demonstrated this phenomenon is experimental settings (Bushman & Baumeister, 1998; Kernis & Sun, 1989). Other work on narcissism has also demonstrated that narcissists are motivated, not by respect from peers, but by admiration from and dominance over peers (Ojanen, Findley, & Fuller, 2012; Salmivalli, Ojanen, Haanpää, & Peets, 2005). When narcissists seek popularity, friendship and communal orientation are not among their goals. Instead, they seek to demonstrate social superiority. It is likely that they perceive other likeable children as standing in the way of this goal. Perhaps aggression toward popular and attractive peers then, serves two functions. The first is probably a form of ego defense outlined by authors who have suggested that narcissistic aggression is an attempt to maintain a consistent, positive self-image (e.g., Baumesiter, Smart, & Boden,

1996). The second purpose of aggression against socially proficient peers may be to compromise their social standing. Pointing out a likeable person's flaws or mocking their appearance could be tools (however ineffective) which narcissists employ to raise their own social status while simultaneously diminishing that of their rivals. The finding that narcissists who do not perceive themselves as failing in these domains do not exhibit increases in aggression toward popular and attractive peers speaks to this point. These children feel content with their social status (they rate themselves as both popular and attractive) and are, therefore, not threatened by potential rivals. These findings are analogous to other studies demonstrating that narcissists will not aggress against individuals whom they perceive as benign or friendly.

The evidence of the target-specificity of narcissism self-image failure is corroborated when we look at the results of analyses of aggression toward other types of victims. It is not the case the narcissists who perceive themselves as failing generalize their aggression toward other types of peers. In the case of aggression toward crossgender-typed peers, it appears that narcissists who are *fulfilled* (i.e., have positive self-perceptions), rather than threatened, are more likely to increase their aggression toward cross-gender-typed peers. While it is beyond the scope of this study to explain the psychological links between narcissism and aggression toward cross-gender-typed behavior, two features of this dynamic warrant brief discussion. First, the pattern exhibited in these interactions accords with previous findings using this questionnaire and predicting *generalized* aggression. In other words, these results suggest that individuals who aggress against cross-gender-typed peers (and perhaps other socially compromised

peers) exhibit the same psychological qualities as those who are generally rated as having an aggressive personality. Second, the pattern is indicative of what narcissism produces when it is met with high self-esteem or positive self-perceptions. It is likely that researchers who have traditionally attributed aggression to a narcissistic personality were referring conceptually to this type of fulfilled narcissism.

Our results also indicated a significant pattern that might be characterized as the opposite of narcissistic self-image failure. We found that girls who were high in self-esteem, but low in narcissism, were more likely to increase their aggression toward coercive peers (compared to girls who experienced any other combination of narcissism and self-esteem). This combination of high self-esteem and low narcissism might be considered by some to be an optimal self-concept. The finding that these girls target coercive peers is interesting, because it suggests that an optimal self-concept motivates aggression toward negative, manipulative peers. This pattern of self-perceptions (high self-esteem combined with low narcissism) uniquely predicts aggression toward peers who are probably unlikeable and unproductive members of the social group. Perhaps these girls are exhibiting a protective behavior against manipulation of the peer group, and it is their optimal self-concept that allows them to do so. By examining aggression toward other types of coercive (e.g., aggressive, dishonest, sexist) peers, future research might gain valuable insight into the dynamics between narcissism and self-esteem.

## A New Approach to Aggression Research

Our results on the target-specificity of narcissistic aggression call into question traditional methods for studying aggression in children. It is clear that when we examine

aggression in a generalized way (e.g., "He or she is mean to other kids"), we fail to capture the entirety of the outcomes associated with narcissism. It is important, therefore, that we examine not only how much narcissists exhibit aggressive behavior but also explore the targets of their aggression. Here, we have identified four specific target types for narcissists (i.e., attractive peers, likeable peers, cross-gender-typed peers, and coercive peers). However, the self-perceptions that presumably lead to the selection of these victims are different. On the one hand, we have traditionally aggressive individuals. They appear to be motivated by a grandiose self that is reinforced by feelings of success in peer-related domains. On the other hand, we have individuals who aggress against socially strong peers who do not make for typical (or easy) victims. These individuals are motivated by a grandiose self that is insecure, vulnerable, and self-loathing. We have also presented evidence that girls experiencing an "optimal" self-concept consisting of high self-esteem that is not coupled with narcissism are more likely to increase their aggression toward peers who are coercive in the peer context. In other words, it appears as though narcissistic aggression is multi-dimensional, and particularly sensitive to contextual cues.

We make the case that, at least in the peer context, situation-specificity is an important predictor of aggressive behavior. Work in various fields of psychology has acknowledged that contextual cues will have an impact on behavior. Mischel and Shoda (1995) were the most vocal, hypothesizing that salient features of the situation will interact with cognitive-affective features of the personality to predict behavior (including aggression). Higgins (1999) suggested that actual-ideal self-discrepancies (conceptually

akin to the dynamic of high narcissism combined with low self-esteem) are most likely to produce outcomes such as dejection and agitation when the discrepancy is (a) relevant to the individual and (b) applicable and relevant in the current context. Here, we have conceptualized the "situation" as the peer interaction partner and we can use Higgins' framework to explain the targets of narcissistic aggression. Narcissists experiencing self-image failure aggress against likeable peers because they meet both of the criteria above. A likeable rival is relevant to the narcissist, because they are perceived as an ego threat, and relevant to the situation, because they threaten the narcissists' public image in the peer context. On the hand, cross-gender-typed and internalizing peers are neither relevant to the failing narcissists, nor are they relevant to the contextual cues to which a narcissist would be expected to attend.

The conceptualization of the peer as the relevant situation is not a novel one. Fournier, Moskowitz, and Zuroff (2008) observed that "...the most salient psychological features of the situation are found in the behavior of the individual with whom one is interacting." While quite a few studies have examined peers as situational features in a global context (e.g., male vs. female, liked vs. disliked), very few have looked at within-subject correlations between personality features of the peer and aggression toward those peers. Zayas and Shoda (2008) demonstrated that antisocial men were most likely to aggress against women who exhibited vulnerability, but this study assessed hypothetical aggression, rather than peer-reports of observed aggression. Pauletti, Cooper, Handrinos, and Perry (submitted) have attempted to use this paradigm to study aggression against cross-gender-typed children. Specifically, they have found that individuals endorsing

strict gender norms, but exhibiting low self-esteem, are most likely to aggress against cross-gender-typed peers. These results taken with others highlight the importance of a target-specific approach to aggression, particularly when high-risk populations, such as cross-gender-typed children are involved.

The paradigm has other benefits and potential applications as well. Current trends in aggression research favor the social information processing model (Crick & Dodge, 1994), which suggests that aggression is a product of social goals, response choices, and attention to salient cues in the environment (among other things). Each of these are relevant here. Narcissistic social goals are well-documented, as are aggressive responses to ego threat. Specific interaction partners (i.e., potential targets for aggression) constitute salient cues in the environment. Logic follows that narcissists may be more attuned to the behavior of likeable peers than other children and are, therefore, more likely to target them for aggression upon a perceived provocation. A second application of the paradigm is the potential to study the long-term consequences of target-specific aggression for both perpetrators and victims. For instance, Cooper, Pauletti, Handrinos, and Perry (2012) have demonstrated that boys who aggress against cross-gender-typed peers, and feel pressure to maintain gender norms, exhibit increased endorsement of gender stereotypes over the school year. It is also possible that being victimized by certain types of aggressors will have long term consequences. For instance, narcissists might be particularly sensitive to victimization by popular peers and experience depression or increased aggression in the long term.

The current approach to aggression research also has practical implications. Typically, aggression research has focused on what might be considered "typical" victims. These are children who are characterized as socially rejected, physically weak, and anxious (Hodges & Perry, 1999). Studying weaker victims is of both theoretical and practical importance and can be underscored and perhaps better studied with the current paradigm (Pauletti, Handrinos, Cooper, & Perry, 2012; Pauletti, Cooper, Handrinos, & Perry). However, extreme acts of violence between peers in school settings (e.g., school shootings), typically involve socially prominent victims and socially excluded aggressors. Here, we have identified some cognitive-affective factors associated with aggression toward likeable and attractive children that appear to be in line with research on school violence (Harter, 2006; Newman & Fox, 2009). Preventions in acts of school violence should be aimed at narcissistic individuals who will particular put off by feelings of unpopularity or social exclusion. While the precise nature of these interventions will require more research, one suggestion from the current study would be to reduce the school-wide emphasis on popularity. It is well-documented that narcissistic children are particularly aware of the social climate and seek inclusion in important social groups. If there is no "cool" group of peers, narcissistic children will not feel excluded from them.

### **Limitations and Future Directions**

The current study has several limitations and, from these, follow suggestions for an expansion of narcissism and aggression research. First, our measure of aggression did not distinguish among different forms of (e.g., relational vs. physical) or motivations for (e.g., reactive vs. proactive) aggressive behavior. The young age of our participants and

limitations involved in collecting data in a school setting both contributed to this limitation. However, we acknowledge that an ideal use of this paradigm would conceptualize aggression as a multi-dimensional concept and examine the cognitive-affective predictors of each form of aggression.

Second, we believe that other types of victims are likely to be affected by narcissistic self-image failure, particularly when the self-perceived shortcoming is relevant to the narcissistic individual. Narcissists are motivated by social dominance and it therefore stands to reason that a narcissist who perceives themselves to be submissive will aggress against dominant individuals. Another possibility is that narcissists who feel gender atypical will be more likely to aggress against peers who meet the ideals for gendered behavior. Morf and Rhodewalt (2001) have made a convincing argument that narcissists are motivated to maintain gender norms and seek inclusion in gender-typical activities more than non-narcissists. These types of questions are beyond the scope of the current study, but future research on this topic might include these sorts of conceptual expansions.

The short-term nature of our data collection precluded our ability to make extensive causal influences about the relationship among these variables and to predict trajectories of behavior over longer periods of time. In the future, researchers might benefit from examining the consequences of narcissistic aggression. Do narcissists achieve dominance or popularity goals by exhibiting these behaviors? If not, what sorts of outcomes do they experience? Do they turn to weaker victims or do they turn to those closer to them, such as spouses or children? The paradigm presented here would allow

for an empirical examination of these questions and would have vast practical applications.

## Conclusion

It is clear from the current set of findings that narcissistic self-image failure is an important influence on childhood adjustment and target-specific aggression. It contributes to the literature by furthering our understanding of narcissistic cognitions and motivations, by providing extensive longitudinal support for the self-image failure hypothesis. The study also provides a unique and fruitful approach to aggression research. We are able to identify not only narcissistic personalities, but also those of the children they select as victims. It has been demonstrated here that narcissists select a non-traditional subset of the peer group as targets for aggression, and the current paradigm was necessary to demonstrate that distinction.

# APPENDIX

Table 1

Means and Standard Deviations of Each Measure

		Fall m	easures			Spring measures				
	Во	oys	Gir	ls	Boy	S	Girls			
Measure	M	(SD)	M	(SD)	M	(SD)	M	(SD)		
Self-perception variables										
Narcissism	1.71	.58	1.70	.54	1.71	.59	1.71	.53		
Self-esteem	3.56	.47	3.60	.42	3.62	.45	3.60	.53		
Popularity self-efficacy	3.32	.61	3.29	.56	3.41	.62	3.34	56		
Appearance self-efficacy	3.04	.76	3.21	.68	3.16	.73	3.26	.71		
Adjustment variables/Target Features										
Generalized aggressive behavior	.05	.07	.05	.06	.07	.09	.07	.09		
Attractiveness-prosocial	36	.87	.42	.96	37	.92	.40	.93		
behaviors										
Sports competence	.31	1.04	32	.86	.29	1.00	31	.91		
Cross-gender-typed behavior	12	.97	.13	1.04	09	1.02	.10	.97		
Internalizing behaviors	.06	1.04	06	.95	.16	1.06	17	.90		
Coercive behaviors	21	.87	.21	1.08	13	.94	.13	1.05		
Likeability	2.62	.44	2.73	.46	2.52	.43	2.64	.43		

Table 2

Intercorrelations of Measures in the Fall

		3	4	5	6	7	8	9	10	11	12
	.33	06	04	05	.20	31	.20	04	.27	.18	59
10		.09	.34	36	.07	.02	.13	11	.08	.08	10
.12	.15		.23	.22	.09	.08	.09	.06	19	.20	.09
09	.43	.19		.51	.11	.11	.23	.05	37	.28	.18
13	.44	.23	.62		.09	.07	.03	06	13	.27	.10
14	.05	21	14	.05		52	18	.07	16	.48	59
14	.01	.15	.15	03	47		.01	21	04	05	.77
.23	.00	.03	.36	.30	17	.23		.48	.01	04	.17
08	.14	01	02	.02	.27	.13	32		16	03	.06
.17	34	11	43	46	.26	.09	05	.16		03	33
03	.15	16	.19	.15	.53	13	.19	03	.07		21
19	.05	.03	.33	.11	53	.78	.45	11	22	17	
	10 .120913141414 .2308	1012 .1509 .4313 .4414 .05 14 .01  .23 .0008 .14  .173403 .15	1009 .12 .1509 .43 .1913 .44 .2314 .0521 14 .01 .15  .23 .00 .0308 .1401  .17341103 .1516	1009 .34 .12 .152309 .43 .1913 .44 .23 .6214 .052114 14 .01 .15 .15  .23 .00 .03 .3608 .140102  .1734114303 .1516 .19	1009 .34 36 .12 .1523 .2209 .43 .195113 .44 .23 .6214 .052114 .05 14 .01 .15 .1503  .23 .00 .03 .36 .3008 .140102 .02  .173411434603 .1516 .19 .15	10        .09       .34       36       .07         .12       .15        .23       .22       .09        09       .43       .19        .51       .11        13       .44       .23       .62        .09        14       .05      21      14       .05         14       .01       .15       .15      03      47        23       .00       .03       .36       .30      17        08       .14      01      02       .02       .27         .17      34      11      43      46       .26        03       .15      16       .19       .15       .53	10        .09       .34       36       .07       .02         .12       .15        .23       .22       .09       .08        09       .43       .19        .51       .11       .11        13       .44       .23       .62        .09       .07        14       .05      21      14       .05       52        14       .01       .15       .15      03      47         23       .00       .03       .36       .30      17       .23        08       .14      01      02       .02       .27       .13         .17      34      11      43      46       .26       .09        03       .15      16       .19       .15       .53      13	10        .09       .34       36       .07       .02       .13         .12       .15        .23       .22       .09       .08       .09        09       .43       .19        .51       .11       .11       .11       .23        13       .44       .23       .62        .09       .07       .03        14       .05      21      14       .05       52      18        14       .01       .15       .15      03      47        .01         .23       .00       .03       .36       .30      17       .23         08       .14      01      02       .02       .27       .13      32         .17      34      11      43      46       .26       .09      05        03       .15      16       .19       .15       .53      13       .19	1009 .34 36 .07 .02 .1311 .12 .1523 .22 .09 .08 .09 .0609 .43 .1951 .11 .11 .23 .0513 .44 .23 .6209 .07 .030614 .052114 .055218 .07 14 .01 .15 .1503470121  .23 .00 .03 .36 .3017 .234808 .140102 .02 .27 .13321734114346 .26 .0905 .1603 .1516 .19 .15 .5313 .1903	10        .09       .34       36       .07       .02       .13      11       .08         .12       .15        .23       .22       .09       .08       .09       .06      19        09       .43       .19        .51       .11       .11       .23       .05      37        13       .44       .23       .62        .09       .07       .03      06      13        14       .05      21      14       .05       52      18       .07      16        14       .01       .15       .15      03      47        .01      21      04        23       .00       .03       .36       .30      17       .23        .48       .01        08       .14      01      02       .02       .27       .13      32       16         .17      34      11      43      46       .26       .09      05       .16         03       .15      16       .19       .15       .53       <	10        .09       .34       36       .07       .02       .13      11       .08       .08         .12       .15        .23       .22       .09       .08       .09       .06      19       .20        09       .43       .19        .51       .11       .11       .23       .05      37       .28        13       .44       .23       .62        .09       .07       .03      06      13       .27        14       .05      21      14       .05       52      18       .07      16       .48        14       .01       .15       .15      03      47        .01      21      04      05         .23       .00       .03       .36       .30      17       .23        .48       .01      04        08       .14      01      02       .02       .27       .13      32       16      03         .17      34      11      43      46       .26       .09      05       .16

*Note.* Correlations for girls are above the diagonal; correlations for boys are below the diagonal. Entries in bold are significant at p < .05.

Table 3 Intercorrelations of Measures in the Spring

	Measure	1	2	3	4	5	6	7	8	9	10	11	12
	1. Age		.25	12	16	06	.02	24	.14	08	.10	.16	48
	2. Narcissism	09		.10	.21	.27	03	.13	.05	03	04	.02	.04
	3. Self-esteem	.03	.10		.50	.27	.08	.16	.04	.07	34	.14	.19
	4. Popularity self-efficacy	06	.51	.39		.54	.09	.13	.09	05	38	.20	.28
	5. Appearance self-efficacy	19	.53	.23	.69		.11	.09	.03	22	13	.24	.08
	6. Generalized aggressive	28	.09	27	18	.03		35	07	.16	.09	.49	34
47	behavior												
7	7. Attractiveness-prosocial	11	01	.20	.26	.15	51		02	18	.02	02	.71
	behaviors												
	8. Sports competence	.09	.15	.14	.46	.49	20	.26		.49	.12	15	.26
	9. Cross-gender-typed	06	.16	05	07	.05	.25	.09	34		.02	13	.16
	behavior												
	10. Internalizing behaviors	13	29	34	43	36	.22	.11	18	.01		06	29
	11. Coercive behaviors	15	.26	01	.16	.21	.45	09	.22	.10	.10		13
	12. Likeability	19	.05	.19	.44	.36	51	.75	.56	10	24	.06	

*Note.* Correlations for girls are above the diagonal; correlations for boys are below the diagonal. Entries in bold are significant at p < .05.

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Table 4

Time-2 Aggression Toward Each Target Predicted From Time-1 Measures at Level 1

Model A	Time-2 aggression	toward target	
Level 1 predictors	β (Sig.)	SE	
Intercept	.06 (< .001)	.00	
Time-1 aggression toward target	.55 (<.001)	.02	
Time-1 nomothetic victimization of target	.01 (.008)	.01	
Time-1 target aggression toward participant	.03	.02	
Time-1 attractiveness-prosocial behavior of target	01 (<.001)	.00	
Model B	Time-2 aggression	toward target	
Level 1 predictors	β (Sig.)	SE	
Intercept	.06 (< .001)	.00	
Time-1 aggression toward target	.53 (<.001)	.02	
Time-1 nomothetic victimization of target	.01	.01	
Time-1 target aggression toward participant	.01	.01	
Time-1 likeability of target	04 (< .001)	.00	

Note. P-values indicated where effect was significant. All Level 1 variables were group-mean centered.

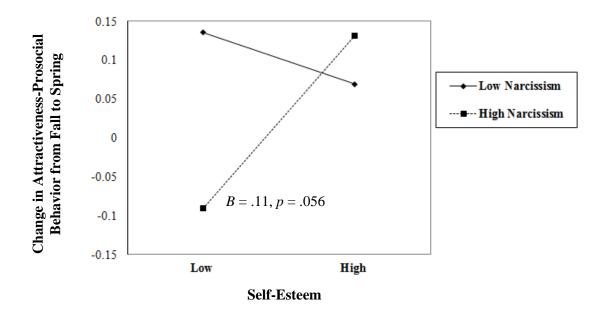
Table 5

Level 1 Focal Outcomes Predicted From Level 2 Focal Interactions

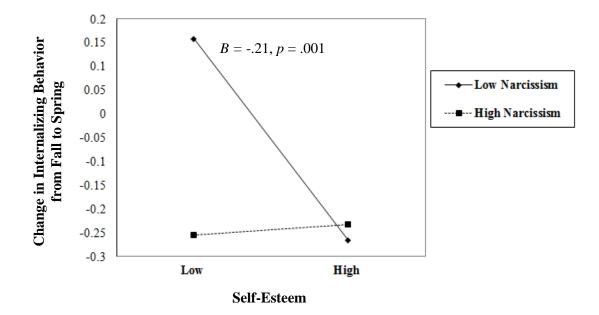
	Level 1 outcome							
	Change in aggres prosocial-attrac		Change in aggression toward likeable peers					
Level 2 predictors	γ (Sig.)	SE	γ (Sig.)	SE				
Intercept	01 (< .001)	.00	04 (< .001)	.01				
Age	.00 (< .001)	.00	.00 (.001)	.00				
Sex	00	.00	00	00				
Generalized aggressive behavior	.08 (< .001)	.02	.21 (<.001)	.06				
Narcissism	.00	.00	.01	.01				
Appearance self-efficacy	00	.00	00	.01				
Narcissism x appearance self- efficacy	01(.012)	.00	03 (.01)	.01				
Level 2 predictors	γ (Sig.)	SE	γ (Sig.)	SE				
Intercept	01 (< .001)	.00	04 (< .001)	.01				
Age	.00 (.002)	.00	.00 (.003)	.00				
Sex	00	.00	00	.01				
Generalized aggressive behavior	.09 (< .001)	.02	.21 (.001)	.06				
Narcissism	.00	.00	.01	.01				
Popularity self-efficacy	00	.00	00	.01				
Narcissism x popularity self- efficacy	01 (.006)	.00	03 (.019)	.01				
Level 2 predictors	γ (Sig.)	SE	γ (Sig.)	SE				
Intercept	01 (< .001)	.00	05 (< .001)	.01				
Age	.00 (< .001)	.00	.00 (< .001)	.00				
Sex	00	.00	00	.01				
Generalized aggressive behavior	.08 (< .001)	.02	.19 (< .001)	.06				
Narcissism	.00	.00	.01	.01				
Self-esteem	.01	.00	.01	.01				
Narcissism x self-esteem	00	.01	01	.01				

Note. P-values indicated where effect was significant. All Level 2 variables were grand-mean centered.

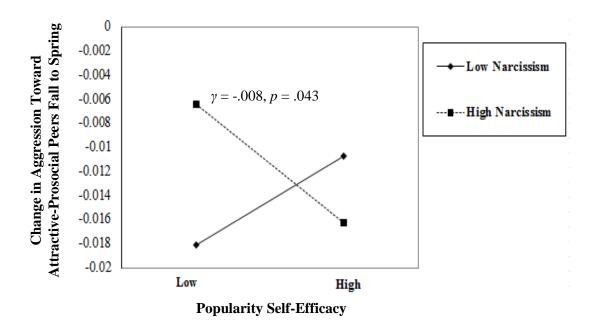
Figure 1. Change in attractiveness-prosocial behavior from fall to spring as a function of children's narcissism and self-esteem.

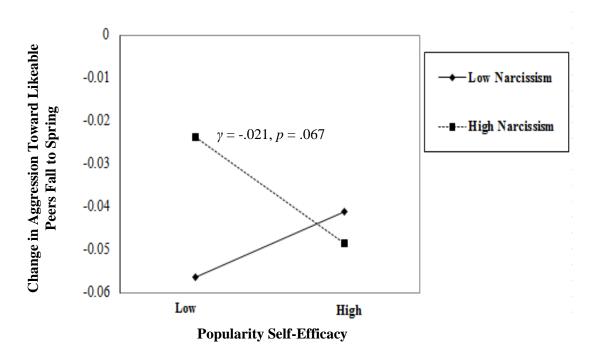


*Figure 2.* Change in internalizing behavior from fall to spring as a function of children's narcissism and self-esteem.

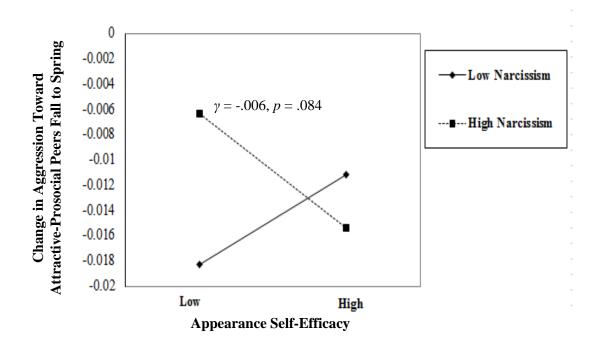


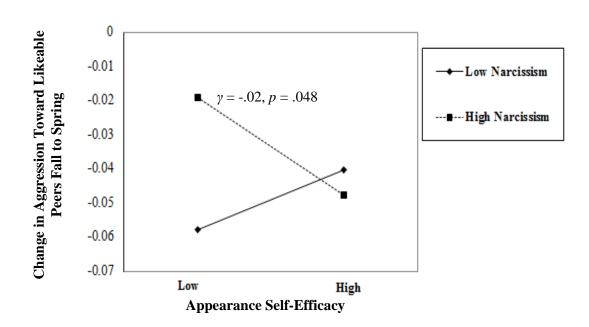
*Figure 3.* Change in aggression from fall to spring toward attractive-prosocial (upper panel) and likeable (lower panel) peers as a function of children's narcissism and popularity self-efficacy.





*Figure 4.* Change in aggression from fall to spring toward attractive-prosocial (upper panel) and likeable (lower panel) peers as a function of children's narcissism and appearance self-efficacy.





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