

The Relation of Narcissism and Self-Esteem to Conduct Problems in Children: A Preliminary Investigation

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Investigated several possible models to explain the seemingly discrepant relations between self-esteem and conduct problems, as both low self-esteem and exaggerated levels of self-esteem, thought to be captured by narcissism, have been associated with aggressive and antisocial behavior. Our sample consisted of 98 nonreferred children (mean age = 11.9 years; SD = 1.68 years) recruited from public schools to oversample children at risk for severe aggressive and antisocial behavior. Results indicated that certain aspects of narcissism (i.e., those indicating a need to be evaluated well by, and obtain status over, others) were particularly predictive of maladaptive characteristics and outcomes such as low self-esteem, callous-unemotional (CU) traits, and conduct problems. In addition, the relation between narcissism and conduct problems was moderated by self-esteem level, such that children with relatively high levels of narcissism and low self-esteem showed the highest rates of conduct-problem symptoms.

Although there are many correlates of conduct problems and aggression (see Frick, 1998, for a review), many theories focus on the role of low self-esteem as a potentially important causal agent in the development of these behavior patterns. For example, it has been suggested that an individual who feels depressed may act out against others as a method of coping with negative feelings about him or herself (Baumeister, Smart, & Boden, 1996). Alternatively, low self-esteem may result in behavioral problems because it can lead a child to associate with deviant peers (McCarthy & Hoge, 1984). In support of this possibility, Brendgen, Vitaro, and Bukowski (1998) found that adolescents with low self-esteem tended to adopt positive attitudes toward delinquent behavior and to associate with deviant peers. As a result, many interventions for antisocial and aggressive youth focus on enhancing the youth's self-image (e.g., Tebbutt, Swanston, Oates, & O'Toole, 1997).

In seeming contradiction to these theories, and making these interventions potentially problematic,

other theories have suggested that high self-esteem may be associated with a tendency to act aggressively and in disregard for the rights of others (Baumeister et al., 1996; Papps & O'Carroll, 1998). Specifically, adults who show narcissistic traits, characterized by a grandiose self-view (Raskin & Terry, 1988), often show high rates of aggression, especially to perceived provocation (Papps & O'Carroll, 1998) or to negative performance feedback (Baumeister et al., 1996; Bushman & Baumeister, 1998; Heatherton & Vohs, 2000). Theories to explain this tendency of persons with narcissistic traits to act aggressively have focused on the need of such persons to see themselves and to be seen in a very positive light and to protect themselves against threats to their self-image (Paulhus, 1984; Raskin, Novacek, & Hogan, 1991).

Because of the importance of self-esteem for both theory and intervention, reconciling these seemingly contradictory bodies of research is critical. One possibility that has been proposed is that narcissism and high self-esteem should not be considered synonymous constructs. For example, some traditional conceptualizations suggest that narcissism may be a defensive mask that serves to hide feelings of insecurity about oneself (Kernberg, 1975; Klein, 1957; Reich, 1960) and thus is an indicator of underlying low self-esteem. Therefore, low self-esteem would be the major risk factor that links narcissism to aggression. Indeed,

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some studies have demonstrated low correlations between self-esteem and narcissism in adults (Bushman & Baumeister, 1998; Wink, 1991).

Alternatively, some personality theorists have distinguished narcissism from high self-esteem by suggesting that high self-esteem is a *self-evaluative* construct and is manifested as a person simply thinking well of him or herself (Bushman & Baumeister, 1998). On the other hand, narcissism seems to be both an evaluative and a *motivational* construct that is manifested as a desire to think well of oneself and to have others show the same high regard for one's worth (Bushman & Baumeister, 1998; Kernberg, 1975; Raskin et al., 1991). This distinction suggests that there may be differences in the specific types of positive evaluative biases associated with high self-esteem and narcissism (Campbell, Rudich, & Sedikides, 2002). These two views could be reconciled if one considers the desire to have others show a high regard for one's worth as being motivated by a low, or at least fragile, self-image that makes a person more reactive to potential threats to his or her self-image (Bushman & Baumeister, 1998). As a result, both of these explanations would predict an interaction between narcissism and self-esteem in their association with antisocial and aggressive behavior, with the combination of narcissism and low self-esteem showing the highest risk for problem behavior.

However, neither explanation accounts for the moderately positive correlation between narcissism and self-esteem found in adult samples (Emmons, 1987; Rhodewalt & Morf, 1998; Raskin & Terry, 1988; Watson, Taylor, & Morris, 1987). One possible explanation is that narcissism may be multidimensional, including both (a) self-evaluative components, which would be expected to be positively correlated with measures of self-esteem, and (b) motivational aspects, which would be expected to be negatively correlated with self-esteem. For example, a factor analysis of a self-report measure of narcissism, the Narcissism Personality Inventory for adults (NPI; Raskin & Hall, 1979), resulted in several distinct dimensions of narcissism (Raskin & Terry, 1988). Three dimensions clearly tap the motivational and hypothesized maladaptive aspects of narcissism by focusing on (a) a desire to achieve status over others (exploitativeness—"I find it easy to manipulate people"); (b) a desire to be viewed as more important than others (entitlement—"I insist on getting the respect that is due me"); and (c) a need to receive attention and praise from others (exhibitionism—"I get upset when people don't notice how I look when I go out in public"). In support of their maladaptive nature, these components of narcissism have shown the strongest correlations with measures of social maladjustment in adult samples (Emmons, 1984; Raskin & Terry, 1988; Watson & Biderman, 1993; Watson, Grisham, Trotter, & Biderman, 1984).

In contrast, there are other aspects of narcissism that focus more specifically on self-evaluation, such as (a) confidence in one's abilities (self-sufficiency—"I like to take responsibility for making decisions") and (b) the view of oneself as a leader (authority—"I see myself as a good leader"). These latter aspects of narcissism are generally correlated with positive psychological and social attributes such as assertiveness, independence, and self-confidence (e.g., Emmons, 1984; Raskin & Novacek, 1989; Raskin & Terry, 1988), as well as more healthy self-esteem in adult samples (Raskin et al., 1991). In short, the multidimensional nature of narcissism leaves open the possibility that there are only certain aspects of the construct that are maladaptive in terms of being associated with low self-esteem, predicting risk for antisocial and aggressive behavior, or both.

Another possibility for explaining the differential associations among narcissism, self-esteem, and antisocial behavior is that, although not a necessary component for most definitions of narcissism, many narcissistic individuals lack empathy toward others (Wink, 1991) or show a "benign indifference to shared responsibilities and the welfare of others" (Millon, 1997, p. 77). Further, narcissistic traits have often been associated with a broader constellation of callous-unemotional (CU) traits (e.g., absence of guilt, constricted display of emotion, failure to show empathy) that form the construct of psychopathy (Cleckley, 1976; Hare, 1994; Hare, Hart, & Harpur, 1991). In fact, in some conceptualizations of psychopathy, narcissism is the core feature (Gustafson & Ritzer, 1995). Research has consistently shown that in both adults (Hare et al., 1991) and children (Frick, Barry, & Bodin, 2000), persons who exhibit psychopathic traits show very high rates of antisocial behavior and aggression. Although narcissism has been shown to be just one of several dimensions associated with psychopathy (Cooke & Michie, 2001; Frick, Bodin, & Barry, 2000), it is possible that narcissism is predictive of aggression only for those individuals who show it in combination with other aspects of psychopathy.

Although much of the research linking narcissism with aggression and antisocial behavior has been conducted with adults, there is emerging research on developmental pathways to conduct problems in children that could incorporate the construct of narcissism. Specifically, there appear to be two distinct patterns of onset to severe conduct problems, one in which the onset of serious conduct problems occurs in childhood and one in which the onset of conduct problems coincides with the onset of puberty (Frick, 1998; Moffit, 1993; Patterson, DeBaryshe, & Ramsey, 1989). Importantly, the childhood-onset group appears to show a more severe disturbance involving significant psychosocial

and neuropsychological vulnerabilities. This group is more likely to exhibit the CU and narcissistic traits associated with psychopathy (Frick et al., 2000; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). In addition, children with conduct problems who do not show CU traits appear more distressed by their behavior (Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999) and, as a result, may have impairments in their self-concept as a result of this distress. Based on this research, the inconsistent relations between self-esteem and conduct problems may be, in part, a result of different developmental trajectories through which conduct problems develop. Narcissism may be associated with CU traits in some children with a childhood onset to their conduct problems, whereas for other children with either an early or late onset of their conduct problems, it may be associated with low self-esteem. This link with low self-esteem and conduct problems may become particularly strong in adolescence, as motivations surrounding one's image in the eyes of others—and the desire to protect that image through antisocial or aggressive behavior—might become particularly salient (Ruble, Boggiano, Feldman, & Loebel, 1980; Sprinthall & Collins, 1988).

Based on these issues, this study was designed to provide a preliminary investigation of the relations among narcissism, self-esteem, CU traits, and conduct problems and aggression in a sample of nonreferred children. It attempts to advance previous research in this area in several important ways. First, much of the literature on narcissism and its relation to aggression and antisocial behavior has been based on adult samples. Therefore, beginning to understand how narcissism may relate to both self-esteem and problem behavior in youth is important. Second, this study specifically tests some potential explanations for the association between narcissism and aggressive and antisocial behavior, such as whether self-esteem and narcissism interact to predict problem behavior, whether the association with problem behavior is greater for certain aspects of narcissism than others, and whether the association between narcissism and problem behavior is moderated by the presence of CU traits. Third, a nonreferred sample of children eliminates potential referral biases that could be present in clinic-referred or adjudicated samples. However, this community sample was selected in such a manner as to ensure that there were a substantial number of children with significant levels of conduct problems. This methodology increased the probability of detecting associations among conduct problems, narcissism, and self-esteem by increasing the variability of problem behavior in the sample. This approach was also important if the association between narcissism and antisocial behavior is present for only a subset of children with conduct problems (Frick et al., 2000).

Method

Participants

Participants were 98 children ranging in age from 9 to 15 years ($M = 11.9$; $SD = 1.68$ years) who were selected from a community-wide screening of 1,136 children in two cohorts, a third and fourth grade cohort and a sixth and seventh grade cohort (Frick et al., 2000). The subset of the sample was selected to ensure that half of the participants scored above the third quartile on ratings of *Diagnostic and Statistical Manual of Mental Disorders* (4th ed. [DSM-IV]; American Psychiatric Association, 1994) symptoms of oppositional defiant disorder and conduct disorder completed by the child's parent and teacher (Gadow & Sprafkin, 1995). Originally, the sample included 50 children above the third quartile on conduct problems and 50 non-conduct-problem children who scored below the median on conduct problems, with both groups equally divided between the two cohorts. However, two individuals (both high on conduct problems) were lost due to data-collection errors that were not detected until after data collection was complete. Sampling was conducted such that the sex, socioeconomic status (SES), and ethnic composition of both the conduct-problem and non-conduct-problem group reflected the demographics of that same group in the larger screening sample. The resulting sample consisted of 51 boys and 47 girls and was 21% African American; both of these statistics are representative of the school districts from which participants were recruited. The sample had an average Duncan's Socioeconomic Index (Hauser & Featherman, 1977) of 46.67 ($SD = 19.96$) and an average intelligence score on the Kaufman Brief Intelligence Test (Kaufman & Kaufman, 1991) of 104.83 ($SD = 12.88$).

Measures

Narcissistic Personality Inventory–Children (NPIC). A downward extension of the NPI (Raskin & Hall, 1979) for use with children was developed for this study (see Table 1). The development of this measure was necessary because no instruments have been validated for use with preadolescent children that include a content that is sufficient for designating the discrete dimensions of narcissism discussed previously. The adult NPI is a 40-item questionnaire asking respondents to endorse one of two statements for each item as being more characteristic of them (e.g., "I really like to be the center of attention" vs. "It makes me uncomfortable to be the center of attention"). The NPI was developed primarily for use in nonclinical populations of adults (Raskin & Hall, 1979), and its construct validity has been supported in numerous previous studies (e.g., Emmons, 1984; Raskin & Terry, 1988; Watson & Biderman, 1993).

Table 1. *Narcissistic Personality Inventory for Children*

Authority		
Item #		
1	<u>I am good at getting other people to do what I want.</u>	or I am not good at getting other people to do what I want.
8	<u>I will be a famous person.</u>	or I do not think about being famous much.
10	I am not sure if I would be a good leader.	or <u>I think I am a good leader.</u>
11	<u>I say what's on my mind.</u>	or I wish I would tell people what I think more often.
12	<u>I like to be the boss of other people.</u>	or I don't mind following orders.
32	Being an expert about something doesn't mean that much to me.	or <u>Other people seem to know that I am an expert on some things.</u>
33	<u>I would rather be a leader.</u>	or I don't care if I'm a leader or not.
36	<u>I have always been a leader.</u>	or It takes a while to become a good leader.
Exhibitionism		
Item #		
2	<u>I like to show off the things that I do well.</u>	or I do not show off the things that I do well.
3	<u>I would do almost anything if someone dared me to.</u>	or I am usually a careful person.
7	I like to blend in with other people around me.	or <u>I like to be the center of attention.</u>
20	I try not to be a show off.	or <u>I usually show off when I get the chance.</u>
28*	I don't pay attention to the latest craze or fashion.	or <u>I like to start new crazes and fashions.</u>
30	<u>I really like to be the center of attention.</u>	or I am not comfortable being the center of attention.
38	<u>I get upset when other people don't notice how I look.</u>	or I don't mind looking like just another person when other people are around.
Superiority		
Item #		
4	Sometimes, I get embarrassed when people say nice things about me.	or <u>I know I am good because everybody keeps telling me so.</u>
9	I am no better or no worse than most people.	or <u>I think I am a special person.</u>
26	When people say good things about me, I get embarrassed.	or <u>I like it when people say good things about me.</u>
37	<u>I wish someone would write a story about my life someday.</u>	or I don't like for people to be nosy about my life.
40	I am just like everybody else.	or <u>I am an outstanding person.</u>
Entitlement		
Item #		
5	It scares me to think about me ruling the world.	or <u>If I ruled the world, it would be a better place.</u>
14	<u>I make sure that people appreciate what I do.</u>	or People usually appreciate what I do.
18	I just try to be happy.	or <u>I want the world to think that I am something special.</u>
24	<u>I expect to get a lot from other people.</u>	or I like to do things for other people.
25	<u>I won't be happy until I get everything that I should get.</u>	or I am happy whenever something good happens.
27	<u>I want to control other people.</u>	or I'm not really interested in controlling others.
Exploitativeness		
Item #		
6	<u>I can usually talk my way out of anything.</u>	or I try to accept what happens to me because of my behavior.
13	<u>It is easy to get people to do what I want.</u>	or I don't like it when I try to get people to do what I want.
16	<u>I can tell what people are like.</u>	or Sometimes it's hard to know what people are like.
23	Sometimes I tell good stories	or <u>Everybody likes to hear my stories.</u>
35	People sometimes believe what I tell them.	or <u>I can make anybody believe anything I want them to.</u>
Self-Sufficiency		
Item #		
17	If I know what I'm doing, I like to make decisions.	or <u>I like to make decisions all the time.</u>
21*	<u>I always know what I am doing.</u>	or Sometimes I'm not sure of what I'm doing.
22*	Sometimes I need other people to help me get things done.	or <u>Most of the time, I don't need anyone else to help get things done.</u>
31	<u>I can do anything with my life that I want to.</u>	or People can't always do whatever they want with their lives.
34	<u>I am going to be a great person.</u>	or I hope that I am going to be great.
39	<u>I am able to do more things than other people.</u>	or I can learn a lot from other people.
Vanity		
Item #		
15	I don't like to show off my looks.	or <u>I like to show how good I look.</u>
19	My looks are nothing special	or <u>I like to see how good I look.</u>
29	<u>I like to look at myself in the mirror.</u>	or I am not really interested in looking at myself in the mirror.

Note: An asterisk (*) indicates items that were not included in analyses as a result of low ($r < .05$) item-total correlations. The underlined statement in each pair designates the more narcissistic of the pair. Factor labels and the items in each are based on research with the Narcissistic Personality Inventory with adults and are not based on actual analyses of the items with children.

The childhood extension of the instrument used items that closely mirrored items from the NPI but were more developmentally appropriate for children (e.g., “I like to show off the things that I do well” instead of “Modesty doesn’t become me”). In addition, the rating format was changed to increase the potential variability in item responses. For each item, after initially endorsing one statement from a pair, the child rated the endorsed statement as being either “sort of true” or “really true” of him or her, thereby creating a 4-point (rather than a 2-point) scale for each item.

Initial analyses revealed that 3 out of the 40 items had low (i.e., less than .05) or negative item-total correlations with the total narcissism scale (see Table 1 for item content). These three items were excluded from all analyses. The remaining 37 items were assigned to one of seven dimensions according to the factor structure from the corresponding NPI items (see Table 1). Intercorrelations among the seven subscales of the NPIC are shown in Table 2, along with the intercorrelations among the subscales found by Raskin and Terry (1988) in their large validation study of the NPI. As shown in Table 2, the relations among the dimensions of the NPIC in this study are similar to those found for the NPI with the exception of the relations involving the self-sufficiency dimension.

The internal consistency coefficient was .83 for the total score of all 37 items. Of the seven dimensions, the Vanity subscale had the highest internal consistency for this sample ($\alpha = .76$). The internal consistencies of the remaining individual scales were modest, at best. Therefore, only combinations of subscales that were of theoretical interest were used in analyses predicting dependent variables. The Authority and Self-Sufficiency subscales were combined to form an adaptive dimension of narcissism based on their associations with constructs such as assertiveness, self-confidence, need for achievement, and independence in adults (e.g., Raskin & Terry, 1988). This composite had an internal consistency of .70 in this sample. The Entitlement, Exploitativeness, and Exhibitionism subscales were combined to form a maladaptive dimension based on the relation of these three subscales in previous

studies to poor social adjustment, sensation seeking, and poor impulse control among adults (Emmons, 1984; Raskin & Terry, 1988; Watson & Biderman, 1993; Watson et al., 1984). This composite had an internal consistency of .72. The vanity and superiority dimensions were not included in analyses involving composites because they could not be a priori placed onto either an adaptive or maladaptive dimension based on past research.

Antisocial Process Screening Device (APSD; Frick & Hare, 2001). The APSD asks parents and teachers to rate children on 20 items patterned after characteristics associated with adult psychopathy and measured in adults by the Psychopathy Checklist–Revised (Hare, 1991). Items (e.g., “Does not show emotions”) on the APSD are scored on a 3-point scale, ranging from 0 (*not at all true*) to 2 (*definitely true*). Research on the factor structure of the APSD has consistently documented a callous–unemotional dimension (Frick, O’Brien, Wootton, & McBurnett, 1994; Frick, Bodin, et al., 2000) that assesses a lack of empathy, lack of guilt, and constricted emotions. The factor analyses reported by Frick, Bodin, et al. also isolated a seven-item narcissism dimension on the APSD. However, the APSD Narcissism subscale does not have adequate item content to tap the multiple dimensions of the construct and, therefore, was not considered sufficient to be the primary measure of narcissism for this study. Furthermore, because of the importance of the self-evaluative nature of the construct, a self-report measure of these traits was felt to be more appropriate to address the main study questions.

The responses on the APSD that were collected at the screening phase of participant recruitment were used in this study. Scores on these measures were based on a composite of both parent and teacher ratings, taking the higher of the two ratings from the two informants, as recommended in the scoring manual of the scale (Frick & Hare, 2001). This method has become common for combining information from multiple informants in assessing child adjustment (Frick, Lahey, et al., 1994; Lahey et al., 1994) and is

Table 2. Intercorrelations Among NPIC Subscales

	Authority	Exhibition	Superiority	Entitlement	Exploit	Self-Sufficiency	Vanity	Total Score
Authority	—	.48 (.42)	.39 (.39)	.20 (.34)	.28 (.34)	.53 (.39)	.25 (.21)	.72 (.58)
Exhibition		—	.23 (.37)	.27 (.34)	.42 (.32)	.37 (.19)	.32 (.26)	.72 (.51)
Superiority			—	.17 (.25)	.14 (.20)	.42 (.28)	.26 (.31)	.59 (.48)
Entitlement				—	.31 (.29)	.37 (.24)	.20 (.14)	.56 (.43)
Exploit					—	.33 (.25)	.10 (.12)	.56 (.41)
Self-sufficiency						—	.20 (.11)	.71 (.40)

Note: NPIC = Narcissistic Personality Inventory for children. Correlation coefficients for the NPIC in this study are shown followed in parentheses by correlation coefficients for the subscales of the adult NPI found by Raskin and Terry (1988). For this study, coefficients above .20 are significant at least at the $p < .05$ level.

justified based on several considerations (Piacentini, Cohen, & Cohen, 1992). First, the report of any single informant who may not see the child in multiple situations will be limited, and, therefore, use of ratings of either informant individually would not provide the most accurate assessment of these traits. Second, persons could be motivated to under-report a child's level of the traits assessed by the APSD, which are generally not socially desirable, but motivation for over-reporting such behaviors appears less likely. Therefore, considering a trait as present only when multiple informants report it as present does not seem justifiable. Third, a child who is scored high by multiple raters may not be more extreme on these traits than a child who is scored high by only one rater. It may simply be that the situation in which one rater sees the child is not as likely to elicit these traits than another situation, or it may be due to the fact that the child is able to mask such behaviors in certain situations. As a result, a simple summative or averaging approach to combining information across informants does not seem justifiable.

These points are illustrated by the finding that although parent and teacher ratings on the CU and Narcissism subscales of the APSD were positively correlated, they were only moderately so, suggesting that children may exhibit somewhat different characteristics in different settings. Specifically, the correlations between parent and teacher ratings on these two subscales were $r = .39, p < .01$, and $r = .26, p = .01$, for the CU and Narcissism subscales, respectively. These correlations indicate a level of cross-informant consistency that is typically found when assessing childhood psychopathology (Achenbach, McConaughy, & Howell, 1987; Kamphaus & Frick, 2002). Using the combined teacher and parent report, the coefficient alphas for the CU and Narcissism subscales were .72 and .84, respectively.

Behavioral Assessment System for Children (Reynolds & Kamphaus, 1992). This behavior rating scale system covers a broad range of both adaptive and maladaptive child behavior. It has been standardized on a large nationwide sample of children and adolescents, and each of the scales has demonstrated good internal consistency and test-retest reliability (Kamphaus & Frick, 2002). The Self-Esteem subscale of the Behavioral Assessment System for Children Self-Report of Personality (Reynolds & Kamphaus, 1992) was used as the measure of a child's perceived self-competence and self-satisfaction (e.g., "I like who I am" and "I like the way I look"). This scale has been shown to be positively correlated with other measures of self-concept and negatively correlated with indexes of negative self-evaluations (Reynolds & Kamphaus, 1992).

Diagnostic Interview Schedule for Children—Version 4 (DISC-4; Shaffer & Fisher, 1996). The Disruptive Behavior Disorders Module of the most recent revision of the National Institute of Mental Health's DISC-4 (Shaffer & Fisher, 1996) was administered to each child and parent to assess the symptoms of oppositional defiant disorder and conduct disorder according to criteria of the *DSM-IV-TR* (text rev.; American Psychiatric Association, 2000). The DISC-4 is a highly structured interview designed to be administered by lay interviewers with appropriate training and has proven to be highly reliable on both the symptom and diagnostic level for children within the age groups included in this study (Lahey et al., 1994). Interviewers were a licensed psychologist or advanced graduate students in psychology who were trained in standardized administration procedures for the DISC. For the purposes of data analyses, a symptom was considered present if endorsed by either the child or his or her parent, using the same rationale as that provided previously for combining informants from the APSD. The number of symptoms from the oppositional defiant disorder and conduct disorder criteria was then summed to form a composite score of conduct problems.

Age of onset of any conduct-problem symptom was also recorded from the DISC, but these estimates were based solely on parental report. An early onset was considered if there was a report of the presence of any symptom of conduct disorder before age 10, consistent with diagnostic criteria (*DSM-IV-TR*).

Procedure

The APSD forms completed by parents and teachers were collected as part of the community screening. All other measures were collected during two testing sessions for the 98 children chosen to participate in the study. The procedures were standardized for all participants, and the measures used in this study were a subset of measures collected as part of a larger data collection procedure (see Frick et al., in press). The first session began with an informed consent procedure conducted with the parent and child together. They were then separated, and parents were administered a semistructured interview to obtain demographic information followed by the DISC interview. In a separate room, the children were administered the Kaufman Brief Intelligence Test (Kaufman & Kaufman, 1991) as an intellectual screening, the DISC interview, the self-report version of the Behavioral Assessment System for Children, and the NPIC. Parents were provided with a \$100 check and children were given a \$15 gift certificate to a music store or bookstore for their participation.

Results

Descriptive Statistics and Zero-Order Correlations

Descriptive statistics for the main study variables are provided in Table 3, showing adequate variability in the measures to detect potential associations. In Table 4, zero-order correlations among the main study variables and between these variables and demographic characteristics are reported. First, self-esteem, the Total Score on the NPIC, the Adaptive composite, and the Maladaptive composite from the NPIC were

Table 3. Descriptive Statistics of Main Variables Under Investigation

	<i>M</i>	<i>SD</i>	Minimum	Maximum
NPIC Total	82.92	13.72	47	119
NPIC adaptive	27.59	5.86	12	43
NPIC maladaptive	35.88	6.89	17	52
Self-esteem	53.12	7.22	22	58
Conduct problems	2.82	3.56	0	16
CU traits	4.87	3.05	0	10
APSD narcissism	5.08	3.62	0	14
SES	46.67	19.96	0	87
IQ	104.83	12.88	61	131

Note: NPIC = narcissistic personality inventory for children; NPIC total = total score on 37-item NPIC; NPIC adaptive = total combined score on Authority and Self-sufficiency dimensions; NPIC = total combined score on Exhibitionism, Exploitativeness, and Entitlement dimensions; Self-esteem = T score on Self-esteem scale from self-report Behavioral Assessment System for Children; conduct problems = total oppositional defiant disorder and conduct disorder symptoms from Diagnostic Interview Schedule for Children; CU traits = total score on callous and unemotional dimension of Antisocial Process Screen Device (APSD); APSD Narcissism = total score on Narcissism scale of APSD; SES = score on Duncan’s Socioeconomic Index; IQ = composite IQ score on Kaufman Brief Intelligence test.

Table 4. Correlations Among Main Variables

	NPIC Total	NPIC Adaptive	NPIC Maladaptive	Self-Esteem	Conduct Problems	CU Traits	APSD Narcissism	SES	Ethnicity	IQ
NPIC Total	—	.84***	.83***	.00	.25*	.18	.07	.07	.15	-.16
NPIC Adaptive		—	.52***	.13	.16	.03	.01	.18	.20*	-.03
NPIC Maladaptive			—	-.23*	.32**	.28**	.10	-.09	-.01	-.18
Self-esteem				—	-.20*	-.08	.02	.06	-.04	.18
Conduct Problems					—	.31**	.44***	-.20*	.01	-.05
CU traits						—	.46***	-.38***	.28**	-.36***
APSD							—	-.19	.05	-.19
SES								—	-.18	.26*
Ethnicity									—	-.40***
IQ										—

Note: NPIC = narcissistic personality inventory for children; NPIC total = total score on 37-item NPIC; NPIC adaptive = total combined score on Authority and Self-sufficiency dimensions; NPIC = total combined score on Exhibitionism, Exploitativeness, and Entitlement dimensions; Self-esteem = T score on Self-esteem scale from self-report Behavioral Assessment System for Children; conduct problems = total oppositional defiant disorder and conduct disorder symptoms from Diagnostic Interview Schedule for Children; CU traits = total score on callous and unemotional dimension of Antisocial Process Screen Device (APSD); APSD Narcissism = total score on Narcissism scale of APSD; SES = score on Duncan’s Socioeconomic Index; IQ = composite IQ score on Kaufman Brief Intelligence test. Ethnicity scored as 1 (White), 2 (African American).

p* < .05. *p* < .01. ****p* < .001.

not significantly related to intelligence, SES, or ethnicity, with the exception of ethnicity being significantly related to scores on the Adaptive composite, *r* = .20, *p* < .05, such that ethnic minorities tended to score higher on this composite. CU traits were significantly negatively related to intelligence, *r* = -.36, *p* < .001, and SES, *r* = -.38, *p* < .001. A significant correlation between CU and ethnicity was also found, *r* = .28, *p* < .01, such that ethnic minorities tended to have relatively higher rates of CU traits in our sample.

Second, focusing on the main study variables, the self-report of narcissism on the NPIC (Total Score and both composites) was not significantly associated with the parent and teacher report of narcissism on the APSD (see Table 4). Neither the Total Score on the NPIC nor the Adaptive composite of the NPIC was significantly correlated with self-esteem, *r* = .00, *p* = *ns*, and *r* = .13, *p* = *ns*, respectively, although the correlation involving the Adaptive composite was in the positive direction. However, the Maladaptive composite from the NPIC was significantly negatively correlated with self-esteem, *r* = -.23, *p* < .05. CU traits showed a similar pattern of correlations (see Table 4). Finally, the measure of conduct-problem symptoms was positively correlated with the Total Score on the NPIC, *r* = .25, *p* < .05; the Maladaptive composite of the NPIC, *r* = .32, *p* < .01; CU traits, *r* = .31, *p* < .01; and narcissism from the APSD, *r* = .44, *p* < .001. Conduct problems were also negatively correlated with self-esteem, *r* = -.20, *p* < .05.

Interaction Between Narcissism and Self-Esteem in the Prediction of Conduct Problems

Multiple regression analyses were used to test the potential interaction between narcissism and self-es-

teem in the prediction of conduct problems. In these analyses, demographic variables (intelligence, age, SES, ethnicity, and sex), narcissism, and self-esteem were entered into a simultaneous regression equation with conduct problems as the dependent variable. Following this main effects equation, the interaction between narcissism and self-esteem was added to the equation to determine if the interaction term increased the amount of variance explained in the conduct-problem measure. These analyses were repeated for the Total Score, Maladaptive composite, and Adaptive composite separately. Scores on all variables were centered using the sample mean prior to their use in the regression analyses.

The results of the first set of analyses using the Total Score on the NPIC are summarized in Table 5. Prior to entering the interaction term, there was a significant main effect for narcissism in the prediction of conduct problems, $\beta = .29$, $t_{7,90} = 2.83$, $p < .01$, indicating a positive association between levels of narcissism and conduct-problem symptoms. There was a trend toward a significant main effect for self-esteem, $\beta = -.19$, $t_{7,90} = -1.93$, $p < .06$, with lower self-esteem being associated with more conduct problems. Importantly, the addition of the interaction term accounted for a significant incremental amount of variance in conduct problems, $F_{8,89} = 2.98$, $p < .01$, change in $R^2 = .04$. Regression lines depicting the interaction model were graphed (see Figure 1) according to the procedures outlined by Aiken and West (1991). As indicated in Figure 1, individuals with low self-esteem and relatively high levels of narcissism tended to have the highest levels of conduct problems. In contrast, children with high self-esteem had fairly low levels of conduct problems, irrespective of their scores on the narcissism measure.

For the regression model, including the Adaptive composite, analyses revealed a main effect for self-esteem, $\beta = -.22$, $t_{7,90} = -2.16$, $p < .05$, and a main effect

for the Adaptive composite, $\beta = .26$, $t_{7,90} = 2.36$, $p < .05$. In addition, there was a significant self-esteem by Adaptive composite interaction, $F_{8,89} = 2.80$, $p < .05$, change in $r^2 = .05$. Specifically, children with relatively higher scores on the Adaptive composite of the NPIC and low scores on self-esteem tended to exhibit the highest levels of conduct problems, whereas children with high scores on the Adaptive composite and relatively high self-esteem tended to exhibit lower levels of conduct problems.

For the regression model that included the Maladaptive composite, the main effect of self-esteem was no longer significant, $\beta = -.13$, $t_{7,90} = -1.29$, $p > .10$, indicating that, when the variance attributable to scores on the Maladaptive composite is controlled, self-esteem does not contribute uniquely to the prediction of conduct problems. In this model, there was a significant main effect for the Maladaptive composite, $\beta = .29$, $t_{7,90} = 2.76$, $p < .01$, with higher scores on this composite corresponding to higher levels of conduct problems. There was no significant interaction between scores on self-esteem and the Maladaptive composite for predicting conduct problems.

Interaction Between Narcissism and CU Traits in the Prediction of Conduct Problems

The multiple regression procedure described previously was repeated to test the potential interaction between narcissism and CU traits for predicting conduct problems. The results of these analyses for the NPIC Total Score are shown in Table 6. Again, the main effects model revealed a main effect for narcissism, $\beta = .26$, $t_{7,90} = 2.49$, $p < .05$. In addition, there was a main effect for CU traits, $\beta = .24$, $t_{7,90} = 2.13$, $p < .05$, with higher levels of CU traits corresponding to higher levels of conduct problems. However, no narcissism by CU traits interaction was found.

Table 5. Results of Multiple Regression Analyses With Narcissism and Self-Esteem as Predictors of Conduct Problems

	Initial Model β	Main Effects Model β	ΔR^2	Interaction Model β	ΔR^2
			.108**		.039*
IQ	-.05	.02		.02	
Age	-.03	-.09		-.04	
SES	-.16	-.20		-.18	
Ethnicity ^a	-.03	-.06		-.08	
Sex ^b	-.16	-.13		-.09	
Narcissism		.29**		.30**	
Self-esteem		-.19		-.16	
Narcissism \times Self-Esteem				-.21*	
R^2 for model	.064	.173		.211	

Note: Scores on all variables were centered for these analyses. IQ = composite score from the Kaufman Brief Intelligence test; Age = age in months; SES = socioeconomic index; Narcissism = total score on Narcissistic Personality Inventory for Children; Self-esteem = score on self-esteem domain of Behavioral Assessment System for Children (self-report).

^a1 (White), 2 (African American). ^b1 (boy), 2 (girl).

* $p < .05$. ** $p < .01$.

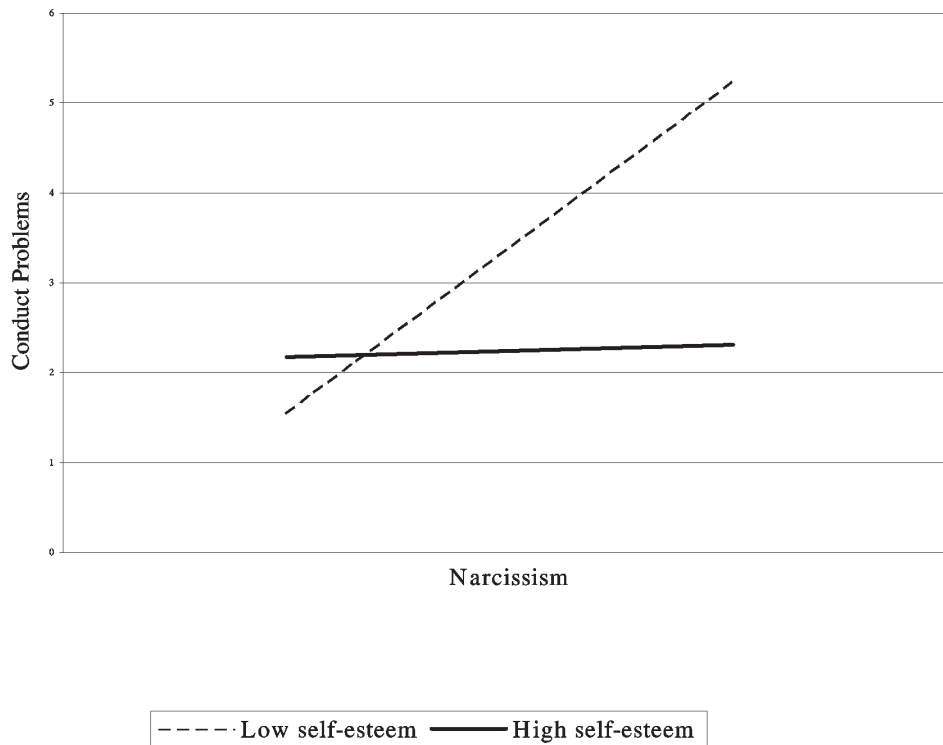


Figure 1. The interaction between narcissism and self-esteem for predicting conduct-problem symptoms.

Table 6. Results of Multiple Regression Analyses With Narcissism, and Callous–Unemotional Traits as Predictors of Conduct Problems

	Initial Model β	Main Effects Model β	ΔR^2	Interaction Model β	ΔR^2
			.115*		.001
IQ	-.05	.03		.04	
Age	-.03	-.10		-.10	
SES	-.16	-.13		-.13	
Ethnicity ^a	-.03	-.10		-.10	
Sex ^b	-.16	-.09		-.09	
Narcissism		.26*		.26*	
CU traits		.24*		.25*	
Narcissism \times CU traits				.03	
R^2 for model	.064	.180		.181	

Note: Scores on all variables were centered for these analyses. IQ = composite score from the Kaufman Brief Intelligence test; Age = age in months; SES = socioeconomic index; Narcissism = total score on Narcissistic Personality Inventory for Children; CU traits = scores on Callous–Unemotional scale of the Antisocial Process Screening Device.

^a1 (White), 2 (African American). ^b1 (boy), 2 (girl).

* $p < .05$.

The main effects model using the Adaptive composite revealed main effects for both the Adaptive composite, $\beta = .23, t_{7,90} = 2.12, p < .05$, and CU traits, $\beta = .28, t_{7,90} = 2.49, p < .05$, as described previously, with no significant interaction effect. For the model including the Maladaptive composite, a main effect for the Maladaptive composite was again apparent, $\beta = .27, t_{7,90} = 2.63, p < .05$, whereas the main effect for CU traits was no longer significant, $\beta = .22, t_{7,90} = 1.89, p < .07$. This finding indicates that the association between CU traits and conduct problems may have been partly due to the shared

variance between CU traits and maladaptive narcissism. No significant interaction between the Maladaptive composite and CU traits was found.

Post Hoc Analyses for Potential Effects of Demographic Variables and Conduct Problem Onset

The previous multiple regression analyses only control for the linear effects of age and sex on the dependent variable and do not test their potential moderating

effects of these variables. As a result, several analyses were conducted to determine if the findings were robust across sex and across the grade cohorts included in the study. First, a series of Cohort \times Sex (2×2) analyses of variance were conducted for all of the main variables of interest in this study. These analyses revealed a main effect for cohort, $F_{3, 94} = 4.53, p < .05$, for the Adaptive composite, with children in the older cohort scoring higher than children in the younger cohort. There was also a trend toward a main effect for sex, $F_{3, 94} = 3.33, p < .08$, for conduct problems, with boys tending to have more conduct-problem symptoms than girls.

When cohort was added to regression analyses for predicting conduct problems, none of the interactions involving cohort accounted for a significant amount of variance in the conduct-problem measure. However, an inspection of the correlations across cohorts revealed a few potentially interesting differences. In the younger cohort, self-esteem was negatively correlated with conduct problems, $r = -.36, p < .05$, and CU traits were positively correlated with conduct problems, $r = .32, p < .05$. In addition, there was a trend toward a significant negative relation between self-esteem and total scores on the NPIC, $r = -.26, p < .08$. However, neither the Total Score on the NPIC nor the Adaptive composite was significantly correlated with conduct problems in this cohort, $r = .20, p > .10, r = .11, p = ns$, respectively. Scores on the Maladaptive composite were positively correlated with conduct problems, $r = .31, p < .05$.

In the older cohort, CU traits were again positively correlated with conduct problems, $r = .30, p < .05$, as was the Total Score on the NPIC, $r = .35, p < .05$ and the Maladaptive composite, $r = .36, p = .01$. The Adaptive composite showed a trend in the same direction, $r = .25, p < .08$. However, within this older group, self-esteem was not related to conduct problems, $r = .00, p = ns$. Comparing the correlations between self-esteem and conduct problems in the two cohorts using Fisher's z transformation (Cohen & Cohen, 1983) revealed a significant difference in the size the correlations ($z = -3.7, p < .001$). There was a trend toward a positive relation between self-esteem and the Total Score on the NPIC, $r = .25, p < .08$, in this older cohort.

There were also no significant interactions when the multiple regression analyses were repeated including sex in the interaction terms. However, there were a few interesting differences in the pattern of correlations across sex. Specifically, for girls, only CU traits were significantly correlated with conduct problems, $r = .36, p < .05$. In contrast, CU traits were not significantly correlated with conduct problems among boys, $r = .22, p = ns$. In addition, there was a significant negative relation between self-esteem and conduct problems, $r = -.28, p < .05$, for boys and a significant positive relation between the Total Score on the NPIC and conduct

problems, $r = .36, p < .05$ and between the Maladaptive composite and conduct problems, $r = .40, p < .01$.

Because the older cohort in particular may have a mixture of children with early or late onset of conduct problems, age of onset of conduct problems was considered along with cohort in analyses of variance for predicting self-esteem, narcissism, and conduct problems. Using the method for determining early versus later onset of conduct problems described previously, the older cohort consisted of 23 children with no reported conduct problems, 19 children with a reported early onset of conduct problems, and 8 children with a reported late onset of these problems. A main effect for age at onset was revealed, $F(5, 92) = 9.61, p < .001$, such that children who began engaging in conduct problems earlier tended to exhibit more overall conduct-problem symptoms than children with a relatively late onset of such problems. Analyses involving narcissism revealed a trend toward a main effect for age at onset, $F(5, 92) = 2.57, p < .09$, with children who had any reported conduct problems scoring higher on narcissism than children with no reported conduct problems. However, there was no significant difference in narcissism between children with an early versus a late onset of conduct problems. Finally, there was a significant main effect for age at onset for predicting self-esteem, $F(5, 92) = 4.40, p < .01$, with children with a late onset of conduct problems reporting lower self-esteem ($M = 46.58, SD = 2.36$) than children with an early onset ($M = 53.97, SD = 1.09$).

Discussion

This study is one of the few to investigate the relations among narcissism, self-esteem, and conduct problems in a child sample. The results, although preliminary, are most clear in suggesting that narcissism and self-esteem, at least as measured in this study, are not synonymous constructs. Measures of the two constructs showed low correlations, and they correlated in opposite directions with a measure of conduct problems. Therefore, these data suggest that it is critical to investigate sources of divergence between self-esteem and narcissism and to understand how each might differentially relate to problems in adjustment (Bushman & Baumeister, 1998).

Based on the results of this study, the NPIC appears to be promising for further investigations of narcissistic characteristics among children. However, future studies on the reliability and validity of the NPIC as a measure of childhood narcissism are imperative. Applying the subscales of the adult NPI to this sample of children revealed similar patterns of intercorrelations, suggesting that these dimensions of narcissism may manifest similarly in children. The main exception to this similarity of patterns concerned the self-sufficien-

cy dimension of narcissism, which was not correlated with self-esteem in this study but has been found to be positively correlated with self-esteem in adults (Raskin et al., 1991). Furthermore, the relations between self-sufficiency and the other subscales of the NPIC were also somewhat different from the relations found in adults (see Table 2). The apparent developmental differences involving the self-sufficiency scale could be explained by the different meaning of this dimension to children and adults. Self-sufficiency is likely to be more indicative of positive psychosocial adjustment in adults, hence its stronger association with self-esteem, whereas some level of dependency may still be considered normative and appropriate for children.

Our data support the contention that considering different dimensions of narcissism may be important for understanding the divergence of this construct from self-esteem and for understanding its relation to conduct problems. Specifically, a maladaptive dimension of narcissism was more consistently (and positively) related to conduct problems, positively related to CU traits, and negatively related to self-esteem. These findings are similar to those found in adult samples (Emmons, 1984; Raskin & Terry, 1988; Watson & Biderman, 1993). Therefore, although overall levels of narcissism are related to conduct problems, it appears that the maladaptive aspects of narcissism are what accounts for this association and, in addition, these aspects of narcissism are associated with other risk factors for conduct problems in children (i.e., low self-esteem, CU traits).

There was also an interaction between self-esteem and overall narcissism for predicting these problems. The interaction (see Figure 1) indicated that a combination of high narcissism and low self-esteem was associated with high levels of conduct problems. This result is interesting for a number of reasons. First, it is consistent with long-standing ideas about the important role of low self-esteem in behavior problems among youth (Long, 1990; Oates & Forrest, 1985). Whereas narcissism has sometimes been conceptualized as inflated or extremely high self-esteem (Millon, 1997; Wink, 1991), this study supports the contention that, for some individuals, a need to have others view oneself as superior can be a sign of a low or fragile self-concept (Baumeister et al., 1996). Further, it suggests that this combination of low self-esteem and the need to be viewed in a grandiose manner by others is a particularly potent risk factor for conduct problems, compared to either construct alone. Although much more research is needed to understand this interaction and its implications more fully, results from this body of research could have important implications for treatments that focus on raising a child's self-esteem as a method of reducing or preventing conduct problems. Strategies for improving self-esteem that focus solely on a child receiving positive evaluations from others

and on expecting such positive feedback could be potentially harmful. Instead, interventions should also focus on coping with negative feedback from others (Lochman & Wells, 1996).

The possibility that narcissism would only be associated with conduct problems when it was combined with a lack of empathy and guilt (Frick et al., 2000) was also explored. Whereas both CU traits and narcissism were significantly related to conduct problems in this sample, there was no significant interaction between the two constructs. Further, narcissism showed a significant independent association with conduct problems, even after controlling for the presence of CU traits. These findings suggest that narcissism warrants further attention as a separate construct and not simply as one part of the broader construct of psychopathy.

The effects of age on the findings were not strong and consistent. However, a few findings emerged concerning the relations among narcissism, self-esteem, and conduct problems that should be explored in future research. Specifically, narcissism was related to conduct problems in the older, but not younger, cohort and largely among boys. In contrast, self-esteem was negatively related to conduct problems but only in the younger cohort. The cohort effects for narcissism could be explained by the increasing importance of acceptance by, and status relative to, one's peers during adolescence (Ruble et al., 1980; Sprinthall & Collins, 1988) and increased vigilance concerning threats to personal well-being (Arnett, 1999; Larson & Richards, 1994). Therefore, adolescents who show maladaptive aspects of narcissism may begin to experience more threats to their need to be viewed positively by others, or these threats may be interpreted as more damaging, in this developmental period. The results also suggest that boys may respond to these threats more through conduct problems than girls.

The findings for self-esteem may be a result of the different developmental trajectories to conduct problems that children may follow. The low self-esteem found in younger children with conduct problems may be a sign of the more severe disturbance that encompasses a greater number of psychosocial impairments and exposure to more failure experiences as a result of these impairments for children in the childhood-onset pathway (Capaldi, 1991, 1992). When the older cohort of children in this sample was divided into children with a late onset of conduct problems and those with an early onset, the children with a late onset had a lower reported self-esteem than children with an earlier onset of conduct problems. These two sets of findings are difficult to reconcile without longitudinal data but could reflect a combination of (a) the different developmental trajectories to conduct problems and (b) the different points along the developmental trajectory at which the two cohorts were during the study. Although the conduct problems in the younger cohort generally

reflected a childhood onset, the conduct problems in older cohort reflected more of a mixture of childhood and adolescent onset problems. It is plausible that, as children in the childhood-onset group approach adolescence and begin to associate and identify with a deviant peer group, their self-esteem could improve (Patterson, Reid, & Dishion, 1992), thus leading to the different findings in the two grade cohorts. In contrast, those youth with conduct problems in the adolescent-onset group are just beginning to experience significant conduct problems and the impairments associated with such problems, and this may lead to decreases in their self-concepts (Capaldi, 1991, 1992). If replicated, these findings suggest that considering the motivational underpinnings of conduct problems could have important implications for interventions.

All of these findings should be placed in the context of several important limitations of the study. First, this study was correlational and, thus, cannot prove causation. For example, the correlation between low self-esteem and conduct problems may indicate that (a) conduct problems, and associated failure experiences, result in lower self-esteem (Capaldi 1991, 1992) or (b) a poor self-concept places a child at risk for acting aggressively as a way of coping with distress (Long, 1990; Oates & Forrest, 1985). Second, this study represented the first attempt to measure narcissism in children via the NPIC. With a relatively small sample ($n = 98$), factor analyses could not be conducted on the 40-item instrument. Instead, the items that comprised each factor for this study were extrapolated from the research conducted on the NPI in adults. The appropriateness of this factor structure, as well as test-retest reliability for this new measure, clearly need to be examined in other larger child samples. Third, the nonreferred sample of children was recruited by oversampling children with conduct problems. As a result, although the sample would not be influenced by referral biases present in clinic-referred samples, it also did not possess the same distribution of conduct problems that would be found in a community sample. Fourth, conduct problems were based on the greater of child or parent report. Therefore, the presence of such problems at school was not directly assessed. In addition, this methodology may have resulted in reports of conduct problems that were essentially comprised of parent reports, as children tend to under-report behavior problems (Kamphaus & Frick, 2002). Fifth, the sample was fairly modest in size to detect potential interactions with such variables as age, cohort, and ethnicity. As a result, how robust these findings might be for subgroups of children, including children at different developmental stages and children from different cultural backgrounds, must await future research. Finally, age at onset of conduct problems was assessed retrospectively, so parent recollection of the time in which these problems first occurred may not have been entirely accurate.

Within the context of these limitations, the results indicate a need for further research concerning how narcissistic features and self-esteem may relate to children's adjustment. Our results suggest that these constructs are independent of each other and that each shows unique associations with conduct problems. Further, our findings highlight the specific aspects of a person's inflated self-concept that may be maladaptive. That is, the need to be viewed as superior by others seems to be a sign of a maladaptive self-image, whereas simply thinking positively of oneself and one's qualities is more adaptive. More clearly defining these different aspects of a child's self-concept could have important implications for understanding why some children are more reactive to social threats (Baumeister et al., 1996; Bushman & Baumeister, 1998) and for appropriately tailoring treatments that have, as a goal, the enhancement of a child's self-concept (Lochman & Wells, 1996; Vitaro & Tremblay, 1994). Finally, research focused on developing a better understanding of the different dimensions of narcissism could have important implications for models of psychopathological conditions, such as psychopathy, that have narcissism as a defining feature (Frick, Barry, et al., 2000; Hare, 1994) and for understanding the underlying processes operating in the different trajectories through which children develop behavior problems (Frick, 1998; Moffitt, 1993; Patterson et al., 1989).

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