

NIH Public Access

Author Manuscript

Child Dev. Author manuscript; available in PMC 2012 March 6

Published in final edited form as: *Child Dev.* 2005 ; 76(2): 309–323. doi:10.1111/j.1467-8624.2005.00847_a.x.

Need for Approval and Children's Well-Being

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Abstract

This research examined the hypothesis that a tendency to base one's self-worth on peer approval is associated with positive and negative aspects of children's well-being. 153 4th - 8th graders (9.0 to 14.8 years) reported on need for approval (NFA), global self-worth, social-evaluative concerns, anxiety and depression, and exposure to victimization. Teachers reported on social behavior. Results confirmed that NFA is a two-dimensional construct composed of positive (enhanced self-worth in the face of social approval) and negative (diminished self-worth in the face of social disapproval) approval-based self-appraisals. NFA had trade-offs for well-being that depended on the dimension (positive versus negative), the psychological domain (emotional versus social adjustment), children's sex and age, and children's social context (high versus low peer victimization).

Prominent early (Cooley, 1902; Mead, 1934) and contemporary (Cole, Jacquez, & Maschman, 2001; Harter, 1998) developmental theories suggest that children's sense of selfworth emerges from an internalization of the views of significant others. Yet, as children begin to develop a more coherent and stable sense of self over the course of development, individual differences likely arise in the extent to which children's self-worth remains contingent on approval from others (Harter, Stocker, & Robinson, 1996). The present research examined the emotional and social correlates of these individual differences in need for approval. More specifically, this research evaluated the hypothesis that a heightened need for approval has trade-offs for children's well-being.

Normative Development of Self-Concept

According to symbolic interactionist theories (Cooley, 1902; Mead, 1934), the judgments of significant others are incorporated over time into one's self-concept. During late childhood, the peer group acts as a key socialization context for children (Buhrmester & Furman, 1987). The influence of peer approval on children's appraisals of self-worth is therefore critical during this time (Harter, 1998; Harter, Waters, & Whitesell, 1998). Indeed, research confirms that peer experiences exert a potent influence on children's self-appraisals. For example, rejection, victimization, and other stressful peer experiences are associated with self-blame, low perceived self-competence and self-efficacy, and diminished self-worth (Boivin & Hymel, 1997; Caldwell, Rudolph, Troop-Gordon, & Kim, 2004; Crick & Grotpeter, 1996; Egan & Perry, 1998; Graham & Juvonen, 1998; Ladd & Troop-Gordon, 2003). Research also highlights the influence of *appraisals* by significant others (Cole et al., 2001), as well as *reflected appraisals* (i.e., perceptions of approval from others), on children's self-concept (Harter, 1998; Harter et al., 1998).

Although early self-concept development is shaped by social experiences and appraisals, self-concept gradually becomes distinct from its social origins (Harter, 1998). In the present

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study, we therefore expected that younger children would have a higher need for approval that is, their self-worth would be more contingent on social approval—than older children. We also expected that normative socialization experiences would lead to sex differences in need for approval. Specifically, consistent with research indicating that females place more investment in relationships as a source of self-definition and psychological well-being (e.g., Cross & Madson, 1997) and have more social-evaluative concerns (La Greca & Lopez, 1998; Rudolph & Conley, in press) than do males, we anticipated that girls would endorse a higher need for approval from peers than would boys.

Development of Individual Differences in Approval-Based Self-Appraisals

Although children who follow a healthy developmental trajectory are expected to demonstrate declines in need for approval over time (Harter, 1998), some children may continue to demonstrate an overreliance on approval for their self-worth. Whereas the former group would gradually develop a stable sense of self that is not directly tied to the appraisals of others, the latter group may possess a self-concept that fluctuates according to the views of others. Indeed, several theories of personality development share the perspective that some individuals are more likely than others to base their self-worth on approval or success in relationships (e.g., Beck, 1983; Blatt & Homann, 1992; Crocker & Wolfe, 2001; Fritz & Helgeson, 1998; Markus & Kitayama, 1991; Robins & Block, 1988). The present study examined the correlates of these individual differences in need for approval, building on prior theory and research in two important ways.

First, although the proposed link between social approval and self-appraisal is integral to several theories of personality development, prior research typically infers this link from the observed association between social approval and well-being. In contrast, we assessed directly whether children's self-worth was based on approval or disapproval. Second, we distinguished between two dimensions of need for approval. Whereas most prior research has viewed the need for approval as a unidimensional construct, we proposed that this need may be driven by the motivation either to *obtain positive* judgments or to *avoid negative* judgments. The motivation to obtain positive judgments is reflected in enhanced self-worth, such as feeling proud of oneself or feeling like a good person, in the face of social approval (positive approval-based self-appraisals). The motivation to avoid negative judgments is reflected in low self-worth, such as feeling ashamed of oneself or feeling like a bad person, in the face of social disapproval (negative approval-based self-appraisals). We expected that these dimensions would be associated, but distinct. That is, some children will be more likely than others to base their self-worth on the judgments of others. However, some children may focus more on approval, whereas others may focus more on disapproval. Only one prior study (Harter et al., 1996) distinguished between self-appraisals focused on peer approval versus peer disapproval. However, the measure in this study included only one, forced-choice item for each construct, and the two items were collapsed for analyses. Thus, this work did not distinguish the correlates of positive versus negative approval-based selfworth.

Trade-offs for Well-Being

Individual differences in the extent to which children's self-worth is contingent on approval likely have critical implications for their well-being. Typically, a heightened need for approval is viewed as a psychological liability (Beck, 1983; Blatt & Zuroff, 1992; Harter, 1999; Harter et al., 1996). This view is due, in part, to a focus on the tendency for individuals to base low self-worth on disapproval. Moreover, prior research emphasizes the emotional correlates of need for approval. Because the present research conceptualized need for approval as a two-dimensional construct, and examined both emotional and social

correlates, we expected that a heightened need for approval would be associated with both positive and negative aspects of well-being (see Figure 1).

Emotional correlates—We expected that negative approval-based self-appraisals would be associated with emotional distress, as reflected in low global self-worth, anxiety, and depression, whereas positive approval-based self-appraisals would be associated with emotional well-being. Children whose self-worth is threatened by disapproval may be susceptible to daily fluctuations in their self-views (Harter et al., 1996, 1998). Such fluctuations have been linked to lower global self-worth and negative emotions (Crocker & Wolfe, 2001; Kernis & Waschull, 1995). Children with negative self-appraisals also are likely to worry a great deal about the perceptions of others, which may place them at risk for anxiety. If children deem that they have not fulfilled their goal of avoiding disapproval, they may experience self-disappointment, shame, and sadness. Moreover, children whose goal is to avoid disapproval may place others' needs over their own in an effort to please others. This self-neglect may lead to emotional distress (Fritz & Helgeson, 1998). In contrast, experiencing enhanced self-worth in the face of social approval may act as a buffer against negative emotions. Children who incorporate positive social feedback into their self-views may be more likely to focus on positive social encounters, and to minimize or discount negative encounters.

Research has not yet examined the emotional correlates of these two separate dimensions of need for approval. However, consistent with our predictions about negative approval-based self-appraisals, research does link low perceived approval from peers and low relational self-worth with emotional distress (Harter, Marold, & Whitesell, 1992; Harter & Whitesell, 1996; Harter et al., 1996; Harter et al., 1998). Moreover, personality attributes that reflect a focus on relationships as a source of self-definition have been implicated as vulnerability factors for negative emotions (Beck, 1983; Blatt & Zuroff, 1992; Fritz & Helgeson, 1998; Kuiper & Olinger, 1986). To date, however, research has not yet explored the proposed buffering effect of positive approval-based self-appraisals.

Social correlates—A heightened need for approval also is likely to influence children's social orientation. We expected that children with *positive* self-appraisals would be motivated to nurture their relationships in an effort to elicit approval from peers. Thus, these children are likely to engage in prosocial behaviors, such as cooperation and help-giving, and to inhibit antagonistic behaviors, such as aggression. Predictions about the link between negative self-appraisals and social well-being are more complex. On the one hand, children whose self-worth is threatened by disapproval may be motivated to improve their relationships in an effort to avoid disapproval. Thus, both dimensions of need for approval may be associated with a positive social orientation. Consistent with this prediction, theory and research suggest that personality attributes similar to need for approval foster interpersonal behaviors that create harmony and connectedness with others, and suppress interpersonal behaviors that create friction or rejection in relationships (Cross & Madson, 1997; Helgeson, 1994; Rudolph & Conley, in press; Zuroff, Stotland, Sweetman, Craig, & Koestner, 1995). On the other hand, children whose self-worth is threatened by peer disapproval may be especially attuned to social cues indicating disapproval, and may therefore be prone to information-processing biases, such as attributing hostile intent in ambiguous situations (Crick & Dodge, 1994). These biases may, in turn, create a heightened sensitivity to rejection (Downey, Lebolt, Rincon, & Freitas, 1998; Purdie & Downey, 2000). Information-processing biases (Crick & Dodge, 1994) and rejection sensitivity (Downey & Feldman, 1996) are, in turn, linked to a wide range of difficulties in relationships. Thus, it is possible that negative approval-based self-appraisals are linked either to more or less socially competent behavior.

Moderating Role of Sex and Age

We also predicted that the correlates of need for approval would differ by sex and age. With regard to emotional well-being, we expected that girls may generalize their approval-based self-appraisals to their global psychological well-being more than boys, leading to stronger links between need for approval and emotional well-being in girls than in boys (i.e., positive self-appraisals would be more protective against distress, and negative self-appraisals would act as more of a risk for distress). With regard to social well-being, as discussed earlier, theory and research suggest that negative self-appraisals may be associated with either more or less socially competent behavior. We speculated that older children and girls, who possess greater self-regulatory resources (e.g., Higgins, 1991), may be able to inhibit maladaptive social tendencies that stem from negative self-appraisals, and to mobilize their concerns about disapproval to foster better relationships. In contrast, younger children and boys, who possess fewer self-regulatory resources, may show a greater tendency toward information-processing biases and may be less able to inhibit impulsive social tendencies. Thus, negative self-appraisals may be associated with *more* socially competent behavior in older children and girls, and with *less* socially competent behavior in younger children and boys.

Moderating Role of Social Context

Finally, we expected that the correlates of need for approval would be affected by children's social context. Children with a high need for approval may show different patterns of wellbeing depending on whether they are exposed to relationship success or adversity. In the present study, we examined whether exposure to peer victimization moderated the association between need for approval and well-being. Victimization may involve overt acts of aggression, such as physical harm and name-calling, as well as relational acts of aggression, such as exclusion and manipulation (Crick & Grotpeter, 1996). These types of victimization provide very explicit and concrete feedback to children regarding peer disapproval, and thus were expected to intensify the emotional and social correlates of need for approval.

Specifically, we expected that negative self-appraisals would be more strongly associated with emotional distress when children are exposed to high than low levels of victimization. Children whose self-worth is threatened by disapproval may experience some emotional distress even when their relationships are stable, due to their tendency to anticipate, or overreact to, even minor problems in peer relationships. However, they are particularly likely to experience distress when confronted with direct evidence of disapproval as reflected in victimization. Similarly, positive self-appraisals may be more strongly associated with emotional well-being when children are exposed to low than high levels of victimization.

We also anticipated that the social correlates of need for approval may differ according to children's social experiences. Two types of moderation may occur. On the one hand, children with a heightened need for approval (both positive and negative self-appraisals) may be even more motivated to engage in relationship-enhancing behavior when victimized, in an effort to repair their relationships. On the other hand, children with a heightened need for approval may feel threatened when victimized; this sense of threat may create angry, hostile feelings and defensiveness that compromise their social efficacy. For example, theory and research (Baumeister, Smart, & Boden, 1996; Bushman & Baumeister, 1998) suggest that individuals with unstable (but favorable) self-appraisals show more aggression when they encounter negative feedback than when they do not feel threatened. Thus, it is possible that a heightened need for approval is associated with either *more* or *less* socially competent behavior under conditions of high victimization than low victimization.

To summarize, the present study examined the following hypotheses: (1) Younger children and girls would endorse a higher need for approval than older children and boys, respectively; (2) Positive self-appraisals would be associated with less emotional distress, particularly in girls and in low-victimized children; (3) Positive self-appraisals would be associated with more social competence; (4) Negative self-appraisals would be associated with more emotional distress, particularly in girls and in high-victimized children; (5) Negative self-appraisals would be associated with more social competence in girls and in older children, and with less social competence in boys and in younger children; and (6) The association between need for approval (positive and negative self-appraisals) and social competence would be moderated by children's exposure to victimization.

Method

Participants

Participants were 153 $4^{\text{th}} - 8^{\text{th}}$ graders recruited from a grade school and a junior high school in a small town in the Midwest (*M* age = 11.4 years, *SD* = 1.6; 69 boys; 84 girls; 100% White). The school district was heterogeneous in terms of socioeconomic status, with about 18% of the participants receiving a federally subsidized school lunch.

Procedures

Parents received letters describing the study and returned a signed consent form indicating willingness for their children to participate. Children completed self-report measures in the classroom. Each item was read aloud by a research assistant while children recorded their responses. Teachers completed ratings of children's behavior in the peer group for 98% of the participants.

Measures

Global self-worth—Global self-worth was assessed with the self-worth subscale of the Perceived Competence Scale for Children (Harter, 1982). This measure contains 6 items that assess children's general evaluation of themselves ($\alpha = .79$). Children are presented with descriptions of two types of children differing in their self-worth (e.g., "Some kids are very happy being the way they are, but other kids wish they were different."). Children first select which of the described children is more like themselves, and then select whether the description is "Sort of True" or "Very True" for them. The mean of the scale was calculated, with higher scores reflecting greater self-worth.

Anxiety symptoms—Anxiety symptoms were assessed with the Revised Child Manifest Anxiety Scale (Reynolds & Richmond, 1978). This measure contains 28 symptoms that are rated by children as absent (0) or present (1). Strong psychometric properties have been reported (Reynolds & Richmond, 1978). High internal consistency was found in the present sample ($\alpha = .86$).

Depressive symptoms—Depressive symptoms were assessed with the Children's Depression Inventory (Kovacs, 1980/81). This measure includes 27 items that assess a range of depressive symptoms. For each item, children endorse one of three statements that describe none (0), mild (1), or severe (2) depressive symptoms. One item related to suicidal ideation was omitted. Strong psychometric properties have been reported (Kovacs, 1980/81). High internal consistency was found in the present sample ($\alpha = .86$).

Social competence—Teachers completed the Teacher Assessment of Social Behavior (Cassidy & Asher, 1992). Three subscales were used that assess prosocial behavior (e.g., "This child is friendly and nice to other children."), overt aggression (e.g., "This child starts

fights."), and social withdrawal (e.g., "This child does not work or play much with other children."). Each subscale contains three items that are rated on a 5-point scale (1 = Very Uncharacteristic to 5 = Very Characteristic). Scores were calculated as the average of the three items on the prosocial (α = .77), aggression (α = .75), and withdrawal (α = .72) subscales. This measure has been well-validated in past research (Cassidy & Asher, 1992; Rudolph & Clark, 2001).

Victimization—Children completed a revised version of the Social Experience Questionnaire (SEQ), a well-validated measure of victimization (Crick & Grotpeter, 1996). The 5-item overt victimization scale examines exposure to behaviors involving direct forms of aggression, such as pushing, hitting, and name-calling (e.g., "How often do you get hit by another kid?" "How often does another kid yell at you or call you mean names?"). The 10item relational victimization subscale examines exposure to behaviors aimed at damaging peer relationships, such as gossiping, exclusion, and manipulation (e.g., "How often do other kids leave you out on purpose when it is time to play or do an activity?" "How often does another kid tell lies about you to make other kids not like you anymore?"). Five of the relational victimization items were drawn from the original questionnaire, and five additional items were included to assess relational victimization in the context of friendships (e.g., "How often does a friend get even with you by spending time with new friends instead of you?"). A factor analysis of the revised SEQ paralleled the original version, with the overt victimization items loading on one factor ($\alpha = .87$) and the relational victimization items loading on another factor ($\alpha = .88$). Scores were calculated as the mean of the 5 overt victimization items and the 10 relational victimization items, with higher scores reflecting more victimization.

Social-evaluative concerns—Children completed the fear of negative evaluation subscale of the Social Anxiety Scale - Revised (La Greca & Stone, 1993). Each item is rated on a scale of 1 (Not at All) to 5 (Very Much). The mean of the 8 items was calculated, with higher scores reflecting heightened social-evaluative concerns (e.g., "I'm afraid that other kids will not like me." "I worry about what other kids say about me."). Test-retest reliability and validity of this measure have been established in prior research (LaGreca & Stone, 1993). High internal consistency was found in the present sample ($\alpha = .93$).

Need for approval—The Need for Approval Questionnaire was designed for this study to measure the extent to which children base positive views of the self on peer approval (e.g., "When other kids like me, I feel happier about myself." "Being liked by other kids makes me feel better about myself."), and the extent to which children base negative views of the self on peer disapproval (e.g., "I feel like I am a bad person when other kids don't like me." "When other kids don't like me, I feel embarrassed about myself."). Each subscale is composed of four items rated on a scale of 1 (Not at All) to 5 (Very Much).

Confirmatory factor analyses were conducted using Amos Version 4.0 (Arbuckle & Wothke, 1999) to test the hypothesis that need for approval is a two-dimensional construct. Two latent variables were created, one composed of the four items reflecting positive approval-based self-appraisals, and the other composed of the four items reflecting negative approval-based self-appraisals. This measurement model provided an excellent fit to the data, $\chi^2(19, N = 148) = 15.99$, $\chi^2/df = .84$, p = .66, CFI =1.00, IFI =1.00, RMSEA = .000 (see Figure 2). Moreover, this model fit the data significantly better, $\Delta \chi^2(1) = 103.11$, p < .01, than a model in which all eight items loaded on a single latent variable, $\chi^2(20, N = 148) = 119.10$, p < .01, $\chi^2/df = 5.96$, CFI = .75, IFI = .75, RMSEA = .184. The two latent factors were positively correlated, $\Phi = .39$, p < .01.

Next, we evaluated the discriminant validity of the need for approval measure by examining whether negative and positive approval-based self-appraisals are distinct from global self-worth. Two additional sets of models were evaluated. The first set of models included (a) a model composed of two latent variables, one reflecting positive self-appraisals and one reflecting global self-worth, and (b) a model composed of one latent variable reflecting both positive self-appraisals and global self-worth. Model (a) showed a significantly better fit to the data than Model (b), $\Delta \chi^2(1) = 134.01$, p < .01, demonstrating that positive self-appraisals are distinct from global self-worth. The second set of models included (c) a model composed of two latent variables, one reflecting negative self-appraisals and one reflecting global self-worth, and (d) a model composed of one latent variable reflecting global self-worth, and (d) a model composed of one latent variable reflecting self-appraisals and global self-worth. Model (c) showed a significantly better fit to the data than Model (d), $\Delta \chi^2(1) = 130.70$, p < .01, demonstrating that negative self-appraisals are distinct from global self-worth. Based on these results, positive ($\alpha = .75$) and negative ($\alpha = .84$) self-appraisal subscales were created by averaging scores on the relevant items.

To further explore the nature of the need for approval construct, we examined the association between need for approval and children's concerns about social evaluation. Conceptually, one might expect children with a heightened need for approval to be attuned to, and perhaps preoccupied with, social cues relevant to approval. For example, research demonstrates that children who believe that they need to have others evaluate them positively to value their own worth are more preoccupied with approval (Harter et al., 1996). We therefore examined whether need for approval was associated with a focus on the judgments of peers, as reflected in social-evaluative concerns. Hierarchical multiple regression analyses were conducted in which social-evaluative concerns were predicted from negative and positive self-appraisals (entered at the first step) and their interaction (entered at the second step). Both of the predictors were mean-centered. At the first step, analyses revealed a significant main effect of negative self-appraisals, $\beta = .56$, t(148) = 7.82, p < .01, and a nonsignificant main effect of positive self-appraisals, $\beta = .02$, t(148) = .31, ns. These effects were qualified by a significant Negative Self-Appraisals × Positive Self-Appraisals interaction, $\beta = -.18$, t(147) = -2.52, p < .05. Following Aiken and West (1991), this interaction was interpreted by solving the unstandardized regression equation to predict social-evaluative concerns from negative self-appraisals at low (-1 SD) and high (+1 SD) levels of positive self-appraisals. Analysis of the slopes of the lines revealed that negative self-appraisals were significantly more strongly associated with social-evaluative concerns when children had low, $\beta = .79$, t(147) = 6.88, p < .01, than high, $\beta = .42$, t(147) = 4.72, p < .01, levels of positive self-appraisals.

Overall, validation analyses supported the idea that need for approval is a two-dimensional construct. The positive correlation between the two dimensions indicates that high scores on these two dimensions reflect a general tendency to base self-worth on social approval. Moreover, model comparisons demonstrated that need for approval is distinct from global self-worth, suggesting that positive approval-based self-appraisals do not merely reflect high self-worth, and negative approval-based self-appraisals do not merely reflect low self-worth. Finally, children who base negative self-views on peer disapproval tend to ruminate about the judgments of their peers. However, a tendency to base positive self-views on peer approval diminishes this evaluative focus.

Results

Preliminary Analyses

Correlational analyses—Table 1 presents intercorrelations among the variables. Positive self-appraisals were significantly associated with lower levels of depression and lower levels of withdrawal. Negative self-appraisals were significantly associated with lower levels of

global self-worth, and higher levels of anxiety and depression. Significant associations were found among the three indexes of emotional distress (global self-worth, anxiety, and depression) and the three indexes of social competence (prosocial behavior, aggression, and withdrawal).

Tests for interactions—Hierarchical multiple regression analyses were conducted to examine whether positive and negative self-appraisals interacted in the prediction of emotional distress or social competence. For each regression, the main effects of positive and negative self-appraisals were entered in the first and second step, and the interaction was entered in the third step. None of the interactions was significant. Thus, the independent contributions of positive and negative self-appraisals were examined in the structural equation modeling analyses.

Main effects of age and sex—*T*-tests were conducted to examine age (younger: $4^{\text{th}} - 5^{\text{th}}$ graders, *M* age = 10.1; older: $6^{\text{th}} - 8^{\text{th}}$ graders, *M* age = 14.8) and sex differences in need for approval. Younger children (*M* = 4.31, *SD* = .70) reported significantly higher levels of positive self-appraisals than did older children (*M* = 4.03, *SD* = .79), *t*(150) = 2.35, *p* < .05. Younger (*M* = 2.24, *SD* = .94) and older (*M* = 2.18, *SD* = 1.04) children did not significantly differ in their negative self-appraisals, *t*(149) = .35, *ns*. No significant sex differences were found in positive self-appraisals (girls: *M* = 4.15, *SD* = .75; boys: *M* = 4.18, *SD* = .78) or negative self-appraisals (girls: *M* = 2.25, *SD* = .95; boys: *M* = 2.15, *SD* = 1.04), *ts* < 1,*ns*.

Structural Equation Modeling

To examine the correlates of need for approval, we conducted structural equation modeling using Amos Version 4.0 (Arbuckle & Wothke, 1999). Positive and negative approval-based self-appraisals were represented by observed variables. Emotional distress was represented by a latent variable composed of three indicators: (low) self-worth, anxiety symptoms, and depressive symptoms. Social competence was represented by a latent variable composed of three indicators: (low) altent variable composed of three indicators: prosocial behavior, (low) aggression, and (low) withdrawal. All of the indicators loaded significantly on their respective latent factors (see Figures 3 – 5). Several fit indexes were examined, including the Comparative Fit Index (CFI; Bentler, 1990), the Incremental Fit Index (IFI; Bollen, 1990), and the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990). For the CFI and IFI, values above .90 indicate good model fit (Bentler, 1990; Bollen, 1990; Kline, 1998). For the RMSEA, values below . 05 indicate an excellent model fit, whereas values of .05 to .08 indicate a good fit (Browne & Cudeck, 1993). In addition, the χ^2/df ratio was examined; ratios of less than 2.5 or 3 reflect a good model fit (Kline, 1998).

Paths were included from positive and negative self-appraisals to emotional distress and social competence. Because the confirmatory factor analysis revealed that positive and negative self-appraisals were significantly associated, these variables were allowed to covary. In addition, because we expected a significant negative association between emotional distress and social competence, the errors for these two variables were allowed to covary. To test our moderation hypotheses, we conducted a series of multi-group comparison analyses to examine the invariance of the model across sex, age, and exposure to victimization. For each set of analyses, a model that constrained the four directional paths among the variables to be equal across groups was compared to a series of models in which one of the directional paths was allowed to vary across groups. These paths were allowed to vary in the following order: positive self-appraisals to emotional distress (Path A; Model 1); positive self-appraisals to social competence (Path B; Model 2); negative self-appraisals to emotional distress (Path C; Model 3); and negative self-appraisals to social competence (Path D; Model 4). Table 2 displays a summary of the moderational effects. When more than

Comparisons across sex—The first set of multi-group comparison analyses examined the invariance of the proposed model across sex. We anticipated that the association between need for approval and emotional distress would be significantly stronger in girls than in boys. We expected that positive self-appraisals would be associated in a similar way with social competence in girls and boys. However, we expected that negative self-appraisals would be associated with *lower* levels of social competence in boys and *higher* levels of social competence in girls.

The fully constrained model, $\chi^2(38, N = 146) = 70.38, p < .01, \chi^2/df = 1.85, CFI = .92, IFI$ = .93, RMSEA = .077, was compared to the four unconstrained models. Chi-square difference tests, $\Delta \chi^2 s(1) < .05$, ns, revealed that the constrained and unconstrained models fit equally well for comparisons to Models 1 and 2, suggesting that Paths A and B did not vary across sex. However, the model fit was significantly improved when the path between negative self-appraisals and emotional distress (Path C) was allowed to vary across sex (Model 3), $\Delta \chi^2(1) = 7.83$, p < .01. Examination of the path coefficients revealed that Path C was larger in girls than in boys (see Table 2). The model fit also was significantly improved when the path between negative self-appraisals and social competence (Path D) was allowed to vary across sex (Model 4), $\Delta \chi^2(1) = 4.13$, p < .05. Examination of the path coefficients revealed that Path D was positive but nonsignificant in girls and negative in boys (see Table 2). Next, Paths C and D were allowed to vary simultaneously. In this model, Path D remained negative in boys ($\beta = -.19$), but was no longer significant. Thus this path was dropped from the final model. The final model showed a good fit to the data, $\chi^2(38) = 62.91$, $p < .01, \chi^2/df = 1.66, CFI = .94, IFI = .94, RMSEA = .067$. As displayed in Figure 3, positive self-appraisals were associated with less emotional distress and more social competence in girls and boys. Negative self-appraisals were associated with more emotional distress in girls and boys, although the association was larger in girls.

Comparisons across age—The second set of multi-group comparison analyses examined the invariance of the proposed model across age. We expected that positive self-appraisals would be associated in a similar way with social competence in younger and older children. However, we expected that negative self-appraisals would be associated with *less* social competence in younger children and *more* social competence in older children. No specific hypotheses were made concerning differences in the association between need for approval and emotional distress in younger versus older children.

The fully constrained model, $\chi^2(38, N = 146) = 72.30$, p < .01, $\chi^2/df = 1.90$, CFI = .92, IFI = .92, RMSEA = .079, was compared to the four unconstrained models. Chi-square difference tests, $\Delta\chi^2s(1) < .99$, *ns*, revealed that the constrained and unconstrained models fit equally well for comparisons to Models 1, 2, and 3, suggesting that Paths A, B, and C did not vary across age. However, the model fit was significantly improved when the path between negative self-appraisals and social competence (Path D) was allowed to vary across age (Model 4), $\Delta\chi^2(1) = 9.47$, p < .01. Examination of the path coefficients revealed that negative self-appraisals were *negatively* associated with social competence in younger children but *positively* associated with social competence was nonsignificant in both groups in this model (β s = .09 for younger children, and .10 for older children), this path was dropped from the final model. The final model showed a good fit to the data, $\chi^2(40) = 64.66$, p < .01, $\chi^2/df = 1.62$, CFI = .94, IFI = .95, RMSEA = .065. As displayed in

Figure 4, positive self-appraisals were associated with less emotional distress, and negative self-appraisals were associated with more emotional distress, in younger and older children. Negative self-appraisals were associated with *less* social competence in younger children, and *more* social competence in older children.

Comparisons across victimization level—The third set of multi-group comparison analyses examined the invariance of the proposed model across victimization level. To create victimization groups, we divided children into those who experienced victimization below the median level (< 2) and at or above the median level (\geq 2). Analyses first were conducted separately for overt and relational victimization. Because findings were highly similar, we created a single score that averaged across the two (α = .91). We anticipated that the association between positive self-appraisals and emotional well-being would be significantly stronger in children exposed to low than high levels of victimization, whereas the association between negative self-appraisals and emotional distress would be significantly stronger in children exposed to high than low levels of victimization. We thought it possible that need for approval could be associated with either *more* or *less* socially competent behavior under conditions of high than low victimization.

The fully constrained model, $\chi^2(38, N = 146) = 75.68, p < .01, \chi^2/df = 1.99$, CFI = .90, IFI = .91, RMSEA = .083, was compared to the four unconstrained models. Chi-square difference tests, $\Delta \chi^2 s(1) < 2.91$, *ns*, revealed that the constrained and unconstrained models fit equally well for comparisons to Models 1, 2, and 4, suggesting that Paths A, B, and D did not vary across victimization level. However, the model fit was significantly improved when the path between negative self-appraisals and emotional distress (Path C) was allowed to vary across victimization level (Model 3), $\Delta \chi^2(1) = 8.01$, p < .01. Examination of the path coefficients revealed that Path C was larger in the high than low victimization group (see Table 2). Because the path from negative self-appraisals to social competence was nonsignificant in both groups ($\beta s = -.07$ for low victimization, and -.09 for high victimization), this path was dropped from the final model. The final model showed a good fit to the data, $\chi^2(36) = 61.03$, p < .01, $\chi^2/df = 1.70$, CFI = .94, IFI = .94, RMSEA = .069. As displayed in Figure 5, positive self-appraisals were associated with less emotional distress and more social competence in both groups. Negative self-appraisals were associated with more emotional distress in both groups, although the association was larger in victimized children.

Discussion

The present study explored the correlates of individual differences in need for approval. We expected that need for approval would have trade-offs for children's well-being depending on the dimension (positive versus negative approval-based self-appraisals), the psychological domain (emotional versus social adjustment), children's sex and age, and children's social context (exposure to high vs. low levels of peer victimization). As anticipated, results suggested that a need for approval represents both an asset and a liability for children's well-being.

Need for Approval as a Two-Dimensional Construct

Confirmatory factor analyses validated need for approval as a two-dimensional construct consisting of a tendency to base high self-worth on social approval and low self-worth on social disapproval. This two-dimensional structure supports the idea that a heightened need for approval may be driven either by the motivation to obtain positive social judgments or by the motivation to avoid negative social judgments. These two dimensions were positively associated, suggesting that some children have a generalized tendency to link their selfworth to social judgments. However, the correlation was only moderate, suggesting that although some children possess both types of need for approval, others may possess only one or the other. This approach-avoidance distinction is consistent with research on achievement motivation, which suggests that individuals may be motivated either by a desire to achieve success or by a desire to avoid failure (Atkinson, 1957; Elliot, 1999). The potential parallel between these two forms of motivation in the achievement and social domains suggests the utility of research examining the motivational underpinnings of need for approval. At a more general level, this distinction is consistent with psychological conceptualizations that distinguish between behavior that is motivated by the receipt of positive consequences versus behavior that is motivated by the absence of negative consequences (Skinner, 1953).

Emotional Implications of Need for Approval

The present research supported hypotheses that the two dimensions of need for approval have opposite associations with children's emotional well-being. As expected, positive approval-based self-appraisals buffered children from emotional distress, whereas negative approval-based self-appraisals were associated with heightened emotional distress. Children whose self-worth is threatened by disapproval from peers may exert significant time and energy worrying about their relationships and, perhaps, wondering if they have failed in their interpersonal efforts. In an effort to avoid disapproval, they also may defer to the needs and interests of others. This worry, concern, and self-neglect may create a vulnerability to emotional distress. In contrast, children who use positive feedback as a source of selfenhancement are less likely to experience self-doubt, worry, dejection, and hopelessness. As expected, girls were more vulnerable than boys to the emotional costs of negative selfappraisals, suggesting that they may generalize these approval-based self-appraisals more than boys, fostering global negative self-views and accompanying emotional distress. These findings are consistent with research demonstrating that girls show more emotional distress in response to difficulties in their peer relationships than do boys (Rudolph, 2002), and suggest one possible mechanism underlying this sensitivity. However, a moderate association also emerged between negative self-appraisals and emotional distress in boys, suggesting that they are not immune to these adverse emotional effects.

This research also revealed that the influence of need for approval on emotional well-being depends on children's social context. Specifically, negative self-appraisals made a stronger contribution to emotional distress in children exposed to high than low levels of peer victimization, supporting the hypothesis that negative self-appraisals are associated with emotional difficulties in the face of relationship adversity. These results are consistent with the idea that children with negative approval-based self-appraisals experience fluctuating self-worth, which has been linked to sensitivity to evaluation (Harter, 1998). Indeed, children with negative self-appraisals reported high levels of social-evaluative concerns, particularly when they had low positive self-appraisals, suggesting that these children are preoccupied with social cues relevant to approval. Interestingly, the link between positive self-appraisals and emotional distress was not moderated by victimization, perhaps because positive self-appraisals strengthen self-enhancement strategies such that children are able to discount or reinterpret negative social information. Consistent with this idea, recent research suggests that positive approval-based self-appraisals are associated with diminished recall of negative social events (Rudolph & Pickett, 2004). Thus, children with positive selfappraisals may preserve their self-worth and emotional well-being even in the face of negative feedback.

This research also confirmed predictions that a heightened need for approval may represent either an asset or a liability for children's social adjustment. Positive approval-based selfappraisals contributed to heightened social competence. Possessing positive self-appraisals may promote a prosocial orientation for several reasons. Children whose self-worth is enhanced by approval are presumably motivated to act in ways that maximize positive feedback. Thus, these children may be helpful and cooperative, and may refrain from aggressive behaviors that are likely to evoke rejection or disapproval. Positive selfappraisals also may indirectly foster adaptive behavior in relationships by facilitating children's detection and accurate interpretation of social cues.

We anticipated that the social correlates of negative approval-based self-appraisals would be more complex. Negative self-appraisals may create a sensitivity to rejection that fosters information-processing biases and consequent social difficulties (e.g., Crick & Dodge, 1994; Downey et al., 1998). However, because avoiding disapproval is of utmost importance to children with negative self-appraisals, these children may be even more motivated to display behaviors that enhance their relationships and to inhibit behaviors that threaten their relationships. We proposed that whether or not children are able to reap the potential social benefits of negative self-appraisals may depend on both personal attributes and social context.

With regard to personal attributes, we hypothesized that children with greater self-regulatory resources may be better able to modulate their social behavior, and thus engage in purposeful efforts to enhance their relationships, than children with fewer self-regulatory resources. The observed associations were consistent with this idea. That is, negative self-appraisals were associated with *lower* levels of social competence in younger children and (marginally) in boys, who likely possess fewer self-regulatory resources, and with *higher* levels of social competence in older children and (nonsignificantly) in girls, who likely possess greater self-regulatory resources. To confirm this speculation, however, future research will need to directly evaluate whether or not self-regulatory abilities actually moderate the influence of negative self-appraisals on social competence through such mechanisms as information-processing biases and inhibition of impulsive actions. Research also is needed to examine whether children with negative self-appraisals engage in covert or indirect forms of aggression (see Crick & Grotpeter, 1996) that may elicit approval from their co-conspirators at the expense of the target of the aggression.

With regard to social context, we speculated that children with a heightened need for approval either may be more motivated to repair their relationships when threatened, leading to *more* socially competent behavior, or may become angry and defensive when their relationships are threatened, leading to *less* socially competent behavior. Contrary to these possibilities, model comparisons did not reveal a significantly better fit when the paths between need for approval and social competence were allowed to vary across victimization level. These findings differ from research by Baumeister and colleagues (Baumeister et al., 1996; Bushman & Baumeister, 1998), which suggests that individuals with unstable self-appraisals become aggressive when their self-appraisals are threatened by negative feedback. However, this heightened sensitivity to threat is specific to individuals with highly favorable self-appraisals that are *resistant* to feedback, reflected in narcissistic tendencies. Because the self-worth of children with a high need for approval is explicitly based on the judgments of others, they may not demonstrate this defensive sensitivity.

It also is possible that the moderating effect of victimization depends on other attributes, such as sex and age, that cause children to respond in more or less impulsive ways when victimized. Because of our sample size, we were unable to investigate the simultaneous

moderational influences of sex, age, and victimization. Indeed, because we could not conduct multi-group comparison analyses with multiple moderators simultaneously, the fit of our models, although good, was not optimal. Future research with larger samples is needed to explore the interactive role of sex, age, and social context in moderating the association between need for approval and well-being.

Developmental Implications

This research raises important questions about the emergence of self-worth and its consequences across development. Many theories of self-concept development presume that self-concept emerges, in part, from an internalization of the judgments of others. Yet, these theories also propose that children who follow a healthy developmental trajectory gradually achieve a self-concept that is distinct from the appraisals of others (Harter, 1998). Consistent with this view, children's tendency to base enhanced self-worth on approval decreased between late childhood and early adolescence in the present research. However, certain children continue to rely on social approval for their self-worth, resulting in a sense of self that fluctuates according to their social context. At what point in development does this need for approval become less normative and threaten children's well-being, particularly when children focus on disapproval? Why do some children continue to base their self-worth on approval, whereas others develop a stable sense of self that is less vulnerable to evaluative feedback? For example, do particular parent socialization styles or experiences in the peer group exacerbate children's need for approval? What are the implications of possessing a high need for approval for long-term development? Answering these questions would provide a broader perspective on the developmental antecedents and consequences of need for approval.

Another key developmental question concerns the direction of the association between need for approval and well-being. The present study conceptualized need for approval as a contributor to well-being. However, children's well-being may influence their need for approval. For example, children experiencing high levels of emotional distress show heightened attention to negative information about the self and others, leading them to focus on their flaws (Pomerantz & Rudolph, 2003). The uncertainty about their self-worth that arises from this negative self-focus may cause them to depend on others for approval. Because data on need for approval and well-being were collected simultaneously in the present study, we were not able to determine the direction of effects. Longitudinal research is necessary to provide insight into the nature of these links.

It also will be important to determine the role of differing social contexts as moderators of the association between need for approval and well-being across development. Although peer victimization represents one of the more salient forms of negative approval-related feedback during late childhood and early adolescence, other forms of feedback may become more prominent at later stages of development. For example, lack of approval in close friendships or in romantic relationships may play a larger role in triggering the negative emotional consequences of need for approval during mid to late adolescence and adulthood.

Finally, in light of current developmental theory and research emphasizing the multidimensional nature of the self (Crocker & Wolfe, 2001; Harter, 1998; Hymel, MeMare, Ditner, & Woody, 1999), future research should investigate how a need for approval interfaces with other sources of self-worth, such as a need for competence (e.g., Elliot, McGregor, & Thrash, 2002), in the determination of children's well-being over time. For example, perhaps a heightened need for approval is less strongly associated with emotional distress in boys than in girls because boys are more likely than girls to integrate other dimensions of competence into their global sense of self.

Conclusion

Consistent with a growing body of theory and research suggesting that various psychological attributes have trade-offs for development (Cross & Madson, 1997; Higgins, 1991; Pomerantz, Saxon, & Oishi, 2000; Rudolph & Conley, in press), the present research showed that a heightened need for approval has both positive and negative implications for well-being. Positive approval-based self-appraisals were associated with less emotional distress and more socially competent behavior. Negative approval-based self-appraisals were associated with more emotional distress, particularly when children were victimized, and with either more or less social competence, depending on children's sex and age. Girls were more susceptible than boys to the emotional costs of negative self-appraisals, and unfortunately these costs were not counterbalanced by greater protection by positive self-appraisals. Elaborating on these trade-offs of a heightened need for approval across development would be a valuable direction for future inquiry.

Acknowledgments

We thank the students, teachers, and principals of the participating schools for their contributions to this study. We also appreciate the assistance provided by Julie Eisengart, and the helpful comments provided by Ed Diener, Sumie Okazaki, Cynthia Pickett, and Eva Pomerantz. This research was supported by a University of Illinois Research Board Beckman Award awarded to Karen D. Rudolph. The first author also was supported by a William T. Grant Foundation Faculty Scholars Award and National Institutes of Mental Health Grant R01 MH56327.

References

- Aiken, LS.; West, SG. Multiple regression: Testing and interpreting interactions. Thousand Oaks, CA: Sage; 1991.
- Arbuckle, JL.; Wothke, W. Amos 4.0 User's Guide. Chicago, IL: SmallWaters Corporation; 1999.
- Atkinson JW. Motivational determinants of risk-taking behavior. Psychological Review. 1957; 6:359–372. [PubMed: 13505972]
- Baumeister RF, Smart L, Boden JM. Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. Psychological Review. 1996; 103:5–33. [PubMed: 8650299]
- Beck, AT. Cognitive therapy of depression: New perspectives. In: Clayton, PJ.; Barrett, JE., editors. Treatment of depression: Old controversies and new approaches. New York: Raven; 1983. p. 265-290.
- Bentler PM. Comparative fit indexes in structural models. Psychological Bulletin. 1990; 107:238–246. [PubMed: 2320703]
- Blatt SJ, Homann E. Parent-child interaction in the etiology of dependent and self-critical depression. Clinical Psychology Review. 1992; 12:47–91.
- Blatt SJ, Zuroff DC. Interpersonal relatedness and self-definition: Two prototypes for depression. Clinical Psychology Review. 1992; 12:527–562.
- Boivin M, Hymel S. Peer experiences and social self-perceptions: A sequential model. Developmental Psychology. 1997; 33:135–145. [PubMed: 9050398]
- Bollen KA. Overall fit in covariance structure models: Two types of sample size effects. Psychological Bulletin. 1990; 107:256–259.
- Browne, MW.; Cudeck, R. Alternative ways of assessing model fit. In: Bollen, KA.; Long, JS., editors. Testing structural equation models. New York: Sage Publications; 1993.
- Buhrmester D, Furman W. The development of companionship and intimacy. Child Development. 1987; 58:1101–1113. [PubMed: 3608659]
- Bushman BJ, Baumeister RF. Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? Journal of Personality and Social Psychology. 1998; 75:219–229. [PubMed: 9686460]
- Caldwell MS, Rudolph KD, Troop-Gordon W, Kim D. Reciprocal influences among relational selfviews, social disengagement, and peer stress during early adolescence. Child Development. 2004; 75:1140–1154. [PubMed: 15260869]

- Cassidy J, Asher SR. Loneliness and peer relations in young children. Child Development. 1992; 63:350–365. [PubMed: 1611939]
- Cole DA, Jacquez FM, Maschman TL. Social origins of depressive cognitions: A longitudinal study of self-perceived competence in children. Cognitive Therapy and Research. 2001; 25:377–395.
- Cooley, CH. Human nature and the social order. New York: Scribner; 1902.
- Crick NR, Dodge KA. A review and reformulation of social information-processing mechanisms in children's social adjustment. Psychological Bulletin. 1994; 115:74–101.
- Crick NR, Grotpeter JK. Children's treatment by peers: Victims of relational and overt aggression. Development and Psychopathology. 1996; 8:367–380.
- Crocker J, Wolfe CT. Contingencies of self-worth. Psychological Review. 2001; 108:593–623. [PubMed: 11488379]
- Cross SE, Madson L. Models of the self: Self-appraisals and gender. Psychological Bulletin. 1997; 122:5–37. [PubMed: 9204777]
- Downey G, Feldman SI. Implications of rejection sensitivity for intimate relationships. Journal of Personality and Social Psychology. 1996; 70:1327–1343. [PubMed: 8667172]
- Downey G, Lebolt A, Rincon C, Freitas AL. Rejection sensitivity and children's interpersonal difficulties. Child Development. 1998; 69:1074–1091. [PubMed: 9768487]
- Egan SK, Perry DG. Does low self-regard invite victimization? Developmental Psychology. 1998; 3:299–309. [PubMed: 9541782]
- Elliot AJ. Approach and avoidance motivation and achievement goals. Educational Psychologist. 1999; 34:169–189.
- Elliot, AJ.; McGregor, HA.; Thrash, TM. The need for competence. In: Deci, EL.; Ryan, RM., editors. Handbook of self-determination research. Rochester, NY: University of Rochester Press; 2002. p. 361-387.
- Fritz HL, Helgeson VS. Distinctions of unmitigated communion from communion: Self-neglect and overinvolvement with others. Journal of Personality & Social Psychology. 1998; 75:121–140. [PubMed: 9686454]
- Graham S, Juvonen J. Self-blame and peer victimization in middle school: An attributional analysis. Developmental Psychology. 1998; 34:538–587.
- Harter S. The Perceived Competence Scale for Children. Child Development. 1982; 53:87-97.
- Harter, S. The development of self-representations. In: Damon, W.; Eisenberg, N., editors. Handbook of child psychology: Vol. 3. Social, emotional, and personality development. 5. New York: Wiley; 1998. p. 553-617.(Series Ed.), (Vol. Ed.)
- Harter S. Symbolic interactionism revisited: Potential liabilities for the self constructed in the crucible of interpersonal relationships. Merrill-Palmer Quarterly. 1999; 45:677–703.
- Harter S, Marold DB, Whitesell NR. Model of psychosocial risk factors leading to suicidal ideation in young adolescents. Development and Psychopathology. 1992; 4:167–188.
- Harter S, Stocker C, Robinson NS. The perceived directionality of the link between approval and selfworth: The liabilities of a looking glass self-orientation among young adolescents. Journal of Research on Adolescence. 1996; 6:285–308.
- Harter S, Waters P, Whitesell NR. Relational self-worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. Child Development. 1998; 69:756–766. [PubMed: 9680683]
- Harter S, Whitesell NR. Multiple pathways to self-reported depression and psychological adjustment among adolescents. Development and Psychopathology. 1996; 8:761–777.
- Helgeson VS. Relation of agency and communion to well-being: Evidence and potential explanations. Psychological Bulletin. 1994; 116:412–428.
- Higgins, ET. Development of self-regulatory and self-evaluative processes: Costs, benefits, and tradeoffs. In: Gunnar, MR.; Sroufe, LA., editors. Self processes and development: The Minnesota Symposia on Child Development. Vol. 23. Hillsdale, NJ: Erlbaum; 1991. p. 125-166.
- Hymel S, LeMare L, Ditner E, Woody EZ. Assessing self-concept in children: Variations across selfconcept domains. Merrill-Palmer Quarterly. 1999; 45:602–623.

- Kernis, MH.; Waschull, SB. The interactive roles of stability and level of self-esteem: Research and theory. In: Zanna, MP., editor. Advances in experimental social psychology. Vol. 27. San Diego, CA: Academic; 1995. p. 93-141.
- Kline, RB. Principles and practice of structural equation modeling. In: Kenny, DA., editor. Methodology in the social sciences. New York: Guilford; 1998. (Series Ed.)
- Kovacs M. Rating scales to assess depression in school-aged children. Acta Paedopsychiatry. 1980/81; 46:305–315.
- Kuiper, NA.; Olinger, LJ. Dysfunctional attitudes and a self-worth contingency model of depression. In: Kendall, PC., editor. Advances in cognitive-behavioral research and therapy. Vol. 5. New York: Academic; 1986. p. 115-142.
- Ladd GW, Troop-Gordon W. The role of chronic peer difficulties in the development of children's psychological adjustment problems. Child Development. 2003; 74:1325–1348.
- La Greca AM, Lopez N. Social anxiety among adolescents: Linkages with peer relations and friendships. Journal of Abnormal Child Psychology. 1998; 26:83–94. [PubMed: 9634131]
- La Greca AM, Stone WL. Social Anxiety Scale for Children-Revised: Factor structure and concurrent validity. Journal of Clinical Child Psychology. 1993; 22:17–27.
- Markus H, Kitayama S. Culture and the self: Implications for cognition, emotion, and motivation. Psychological Review. 1991; 98:224–253.
- Mead, GH. Mind, self, and society. Chicago, IL: University of Chicago Press; 1934.
- Pomerantz EM, Rudolph KD. What ensues from emotional distress? Implications for the development of competence estimation. Child Development. 2003; 74:329–345. [PubMed: 12705558]
- Pomerantz EM, Saxon JL, Oishi S. The psychological trade-offs of goal investment. Journal of Personality and Social Psychology. 2000; 79:617–630. [PubMed: 11045742]
- Purdie V, Downey G. Rejection sensitivity and adolescent girls' vulnerability to relationship-centered difficulties. Child Maltreatment: Journal of the American Professional Society on the Abuse of Children. 2000; 5:338–349.
- Reynolds CR, Richmond BO. What I Think and Feel: A revised measure of children's manifest anxiety. Journal of Abnormal Child Psychology. 1978; 6:271–280. [PubMed: 670592]
- Robins CJ, Block P. Personal vulnerability, life events, and depressive symptoms: A test of a specific interactional model. Journal of Personality and Social Psychology. 1988; 54:847–852. [PubMed: 3379582]
- Rudolph KD. Gender differences in emotional responses to interpersonal stress during adolescence. Journal of Adolescent Health. 2002; 30:3–13. [PubMed: 11943569]
- Rudolph KD, Clark AG. Conceptions of relationships in children with depressive and aggressive symptoms: Social-cognitive distortion or reality? Journal of Abnormal Child Psychology. 2001; 29:41–56. [PubMed: 11316334]
- Rudolph KD, Conley CS. The costs and benefits of social-evaluative concerns: Do girls care too much? Journal of Personality. in press.
- Rudolph KD, Pickett CL. Need for approval and processing of social information. 2004 Manuscript in preparation.
- Skinner, BF. Science and human behavior. Oxford: England: MacMillan; 1953.
- Steiger JH. Structural model evaluation and modification: An interval estimation approach. Multivariate Behavioral Research. 1990; 25:173–180.
- Zuroff DC, Stotland S, Sweetman E, Craig J, Koestner R. Dependency, self-criticism and social interactions. British Journal of Clinical Psychology. 1995; 34:543–553. [PubMed: 8563661]



Figure 1.

Theoretical model of the emotional and social correlates of need for approval. Paths marked + indicate positive effects; paths marked - indicate negative effects. Path marked +/- indicates the possibility of either positive or negative effects.

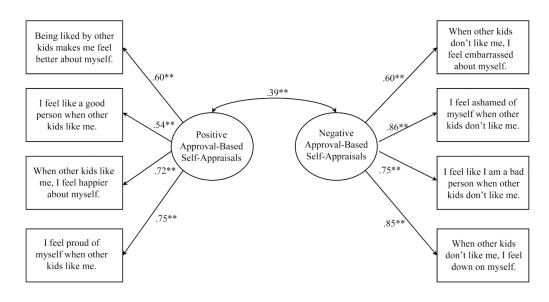


Figure 2.

Confirmatory factor analysis of the Need for Approval Questionnaire.



Figure 3.

Structural equation model of the emotional and social correlates of need for approval, moderated by sex. Path coefficients for boys are in parentheses. Paths that differed significantly by sex are indicated in bold. *p < .05. **p < .01.

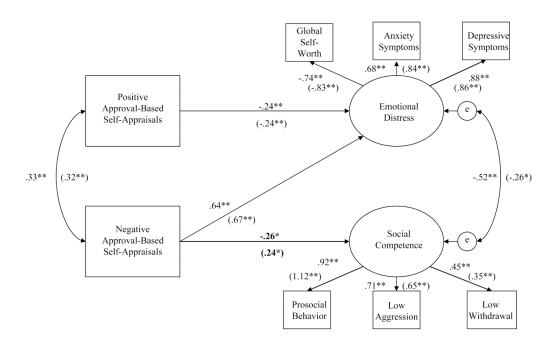


Figure 4.

Structural equation model of the emotional and social correlates of need for approval, moderated by age. Path coefficients for older children are in parentheses. Paths that differed significantly by age are indicated in bold. *p < .05. **p < .01.

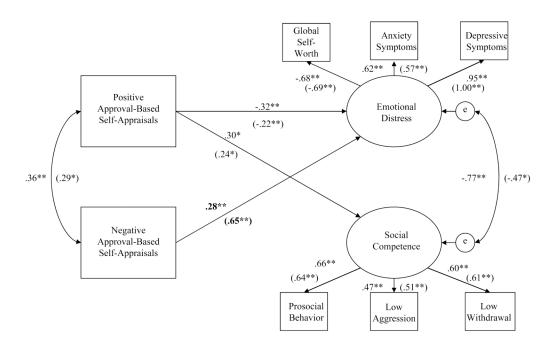


Figure 5.

Structural equation model of the emotional and social correlates of need for approval, moderated by victimization level. Path coefficients for high-victimized children are in parentheses. Paths that differed significantly by victimization level are indicated in bold. *p < .05. **p < .01.

Table 1

Intercorrelations Among the Variables in the Full Sample

	Positive Self-Appraisals	Positive Self-Appraisals Negative Self-Appraisals Global Self-Worth Anxiety Symptoms Depressive Symptoms Prosocial Behavior Aggression Withdrawal	Global Self-Worth	Anxiety Symptoms	Depressive Symptoms	Prosocial Behavior	Aggression	Withdrawal
Positive Self-Appraisals	1							
Negative Self-Appraisals .32**	.32**	1						
Global Self-Worth	.08	43**						
Anxiety Symptoms	.04	.53**	54**					
Depressive Symptoms	22**	.43**	68	.66**	1			
Prosocial Behavior	.08	.00	.23**	21**	35**	1		
Aggression	08	.01	19*	.25**	.32**	68	1	
Withdrawal	26**	03	13	.03	.26**	38**	.24**	-

Table 2 Summary of Moderational Effects in the Structural Equation Models

Model	Sex	Age	Victimization
1: Path A varied	su	su	su
2. Path B varied	ns	su	ns
3. Path C varied	Girls: $\beta = .72^{**}$	ns	High Victimization: $\beta = .73^{**}$
	Boys: $\beta = .50^{**}$		Low Victimization: $\beta = .33^{**}$
4. Path D varied	Girls: $\beta = .11$	Younger: $\beta =31^*$	ns
	Boys: $\beta =29^+$	Older: $\beta = .21^+$	
$^{+}p = .05.$			
$_{p < .05.}^{*}$			
**			

p < .01.

Note: Model 1: Path between positive self-appraisals and emotional distress was allowed to vary. Model 2: Path between positive self-appraisals and social competence was allowed to vary. Model 3: Path between negative self-appraisals and emotional distress was allowed to vary. Model 4: Path between negative self-appraisals and social competence was allowed to vary. NS indicates that the difference in fit between the constrained and unconstrained models was nonsignificant. Betas represent standardized path coefficients when the path was allowed to vary.