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Translating Social Motivation into Action: Contributions of Need for Approval to Children's Social Engagement

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Abstract

This research examined how children's need for approval (NFA) from peers predicted social behavior (prosocial behavior, aggression, social helplessness) and peer responses (acceptance, victimization, exclusion). Children ($N = 526$, M age = 7.95, $SD = .33$) reported on need for approval and teachers reported on social engagement. Approach NFA (motivation to gain approval) predicted more positive engagement and less conflictual engagement and disengagement. Conversely, avoidance NFA (motivation to avoid disapproval) predicted less positive engagement and more conflictual engagement and disengagement. Some results differed by gender. This study suggests that social motivation contributes to children's peer relationships, providing a specific target for interventions to optimize social health.

Keywords

peer relations; social behavior; approach-avoidance; social motivation

During elementary school, children become socialized into a world outside the home as the peer group becomes a highly salient context for development. Given that successful peer relationships promote healthy development (Ladd, 1999), it is important to understand how children are motivated within the context of these relationships. One factor that may motivate children is their need for approval (NFA), as reflected in being liked by peers. Understanding how a NFA motivates children to interact with peers may inform efforts to foster positive peer relationships and prevent negative social outcomes. The present study explored how NFA contributed to children's engagement with peers.

Need for Approval as a Motivational Construct

Both classic (McClelland, Atkinson, Clark, & Lowell, 1953) and contemporary (Dweck & Leggett, 1988; Elliot & Thrash, 2002; Gray, 1994) theories of motivation suggest that individual differences in behavior are regulated by two systems: an approach system, sensitive to reward or success, and an avoidance system, sensitive to punishment or failure. Approach-avoidance dispositions are manifested across many domains, including temperament, personality, affect, and coping (Gable, Reis, & Elliot, 2003). Consistent with this framework, individual differences in NFA have been conceptualized as approach and

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avoidance dimensions (Berger, Levin, Jacobsen, & Millham, 1977; Harter, Stocker, & Robinson, 1996; Rudolph, Caldwell, & Conley, 2005). Approach-oriented NFA reflects the motivation to elicit social rewards in the form of positive judgments that enhance self-worth (feeling proud of oneself in the face of social approval). Avoidance-oriented NFA reflects the motivation to avoid eliciting social punishment in the form of negative judgments that diminish self-worth (feeling ashamed of oneself in the face of social disapproval). In adults, social approach motives are associated with satisfaction in social relationships whereas social avoidance motives are associated with loneliness and negative processing of social information (Gable, 2006; Strachman & Gable, 2008), implying that NFA may have important consequences for interpersonal relationships.

Developmental theories of the self provide a basis for understanding why NFA motivates children within an interpersonal context. Mead's (1934) symbolic interactionist theory suggests that the appraisals of significant others, in this case peers, are integrated into one's self-concept. This process occurs as children begin to base their self-worth on the actual or perceived appraisals of their peers (Harter, 1998). Whereas a global sense of self-worth reflects a generalized evaluation of the self, contingent self-worth arises when a child's sense of self is dependent on their competence in a given domain (Harter, 1986). Social approval may be especially motivating because of the intense affective responses resulting from social events (Crocker & Wolfe, 2001). Prior research supports the idea that global and contingent self-worth represent distinct but associated constructs (Rudolph et al., 2005), suggesting that children's NFA reflects a specific type of contingent self-worth in which feelings about the self depend on whether children receive social approval or disapproval.

Approach-Avoidance Dispositions and Social Goals

In recent years, researchers have investigated how approach-avoidance dispositions are translated into specific social goals. Drawing from theories of achievement motivation (Dweck & Leggett, 1988; Elliot & Church, 1997; McClelland et al., 1953), which suggest that individuals can be motivated by a desire to achieve success or to avoid failure, a distinction is made between social approach and avoidance goals (Elliot, Gable, & Mapes, 2006; Rudolph, Abaied, Flynn, Sugimura, & Agoston, 2011; Ryan & Shim, 2008). Social approach goals involve mastery, or a focus on developing relationships and learning new social skills (e.g., learning how to be a good friend), and performance-approach, or a focus on demonstrating competence and receiving positive social judgments (e.g., being seen as popular). Social performance-avoidance goals involve avoiding demonstrating a lack of competence and receiving negative social judgments (e.g., avoiding being viewed as a "loser").

Within an achievement context, approach motivation is linked to mastery and performance-approach goals, whereas avoidance motivation is linked to performance-avoidance goals (Elliot & Thrash, 2002). A similar pattern emerges within a social context (Gable, 2006). To validate the two dimensions of NFA, we sought to replicate this pattern. Because being liked by peers is relevant to both developing strong relationships and demonstrating one's competence, we anticipated that approach NFA would be associated with both types of

social approach goals (mastery and performance-approach). In contrast, we anticipated that avoidance NFA would be associated with social performance-avoidance goals.

Contributions of Need for Approval to Social Relationships

Our primary goal was to examine how approach-avoidance motivation, as reflected in NFA, contributed to patterns of peer interactions. Providing a broad framework of social engagement, Caspi, Elder, and Bem (1988a,b) proposed three orientations guiding children's interactions with their social worlds: (1) moving toward the world, reflected in positive engagement; (2) moving against the world, reflected in conflictual engagement; and (3) moving away from the world, reflected in disengagement. More recent conceptualizations of conflictual engagement distinguish overt, direct versus relational, indirect forms (Crick & Grotpeter, 1995; Ostrov, 2010). Each of these orientations also may characterize peer responses oriented toward, against (directly or indirectly), or away from the child.

Predicting positive engagement

Positive engagement was conceptualized as prosocial behavior and peer acceptance. Prosocial behavior is generally defined as voluntary acts intended to help or benefit others (Eisenberg & Miller, 1987). We specifically examined children's engagement in inclusive and empathic behavior toward peers. Peer acceptance was operationalized through teacher ratings, which map onto sociometric-based peer preference (Andrade et al., 2005; Bellmore, Jiang, & Juvonen, 2010; Dishion, Ha, & Véronneau, 2012). Approach NFA may motivate children to act in prosocial ways, because helping others serves to fulfill their goal of obtaining positive appraisals, and therefore bolster their peer acceptance. Conversely, avoidance NFA may decrease children's tendency to approach peers due to a fear of being rebuked; an over-concern with disapproval and consequent avoidant behavior also may undermine their peer acceptance (Rubin, Coplan, & Bowker, 2009).

Predicting conflictual engagement

Conflictual engagement was conceptualized as overt/relational aggression and overt/relational victimization. Overt aggression involves direct behaviors intended to harm through threats or acts of physical damage, whereas relational aggression involves indirect behaviors intended to harm through manipulation of relationships (Crick & Grotpeter, 1995; Ostrov, 2010). In parallel, peers may orient themselves directly or indirectly against other children through overt or relational victimization.

We anticipated that approach NFA would suppress both overt and relational aggression. Aggressive youth often are viewed unfavorably by peers and suffer high levels of peer rejection (Asher & Coie, 1990), whereas nonaggressive children tend to be high in peer preference (Rubin, Bukowski, & Parker, 2006). Engaging in aggressive acts thus interferes with one's ability to elicit positive feedback from peers, thereby thwarting the goal of children with high approach NFA. Children with high approach NFA would therefore be motivated to avoid engaging in aggressive behaviors that might jeopardize their relationships. Similarly, peers may be less likely to victimize children with an approach NFA because of their positive social orientation.

We anticipated that avoidance NFA also would inhibit overtly aggressive behavior because engaging in such acts could elicit negative appraisals from peers. Consistent with this idea, children with heightened concerns about peer evaluation tend to suppress overtly aggressive behavior (Rudolph & Conley, 2005). The link between avoidance NFA and relational aggression is more complicated. On the one hand, relational aggression could have a similar consequence of eliciting negative peer judgments, thereby motivating children with heightened avoidance NFA to suppress such behaviors. On the other hand, Bosson, Johnson, Niederhoffer, and Swann (2006) found that sharing negative attitudes about a third party established group boundaries and boosted self-esteem in adults. This and other research suggests that relational aggression can promote in-group cohesiveness when ganging up on a common victim (Dunbar, 2004); children with avoidance NFA might view this as a way to deflect negative attention from themselves. Because relational aggression is more indirect and ambiguous regarding its origins, children high in avoidance motivation may seek to buffer themselves against negative judgments from some peers by forming partnerships with other peers through relational aggression. Thus, we hypothesized that avoidance NFA would predict heightened relational aggression over time.

Avoidance NFA could either dampen or heighten children's risk for overt victimization. Because children high in avoidance motivation seek to avoid social situations that result in negative judgments, they may "fly under the radar" and be less accessible for direct interactions. They also would be unlikely to retaliate against aggressive advances, thereby not providing bullies with the intense reaction they desire. Indeed, heightened social performance-avoidance goals, thought to be linked to avoidance NFA, are associated with a tendency to endorse conflict-reduction goals in socially provocative hypothetical scenarios and with teacher reports of more ignoring and less retaliation in response to peer harassment (Rudolph et al., 2011). In contrast to showing high levels of emotional arousal and seeking revenge on bullies, such responses are linked to less victimization over time (Kochenderfer-Ladd, 2004; Mahady Wilton, Craig, & Pepler, 2000). Alternatively, it is possible that social disengagement in children with avoidance NFA marks them as easy targets for victimization and leaves them vulnerable to unprotected attacks, consistent with the presence of "passive victims" (Olweus, 1994), thereby heightening their risk for victimization. Consistent with this idea, social withdrawal does predict increasing victimization over time (Rubin et al., 2009). We therefore considered both alternatives as plausible. Given our expectation that avoidance NFA would promote more relational aggression, we expected that peers may retaliate in kind, resulting in heightened exposure to relational victimization.

Predicting disengagement

Disengagement was conceptualized as socially helpless behavior and peer exclusion. Social helplessness reflects children's lack of effort and persistence in the face of social challenge; peer exclusion reflects being left out of peers' activities (Gazelle & Rudolph, 2004). Approach NFA likely suppresses socially helpless behavior, which would distance children from peers and decrease their likelihood of eliciting positive appraisals. Children with high approach NFA also are less likely to be excluded because they seek to nurture their relationships through positive interactions and would likely be sought out by peers. Conversely, children with high avoidance NFA may withdraw from challenging social

situations to avoid eliciting negative appraisals (Johnson, LaVoie, Spenceri, & Mahoney-Wernli, 2001); withdrawn children also are seen as less desirable interaction partners (Rubin & Coplan, 2010) and thus are more likely to be excluded by peers.

Study Overview

This study used a prospective design to examine the contribution of NFA to positive engagement, conflictual engagement, and disengagement from 2nd to 3rd grade. This is a critical developmental period when social experiences with peers start to shape self-concept (Harter, 1998), resulting in increasing salience of need for approval and ensuring implications for patterns of social engagement. To validate the idea that NFA maps onto social goals, we examined the association between approach and avoidance NFA and approach and avoidance goals. We also examined gender differences in the contribution of NFA to social engagement. Girls and boys differ in several relevant peer processes, with girls more interdependent and mastery-oriented, and boys more independent and agentic (Cross & Madson, 1997). Girls also are more prosocial (Holmgren, Eisenberg, & Fabes, 1998) and sometimes use more relational aggression (although this is not entirely consistent; Card, Stucky, Sawalani, & Little, 2008), whereas boys use more overt aggression (Crick & Grotpeter, 1995; Galen & Underwood, 1997). Given differences in the gender norms for social motivation and behavior (Rose & Rudolph, 2006), NFA may have different implications for girls and boys.

To summarize (Figure 1), we hypothesized: (1) approach NFA would predict more positive engagement (prosocial behavior and peer acceptance), less conflictual engagement (overt/relational aggression and overt/relational victimization), and less disengagement (socially helpless behavior and exclusion); and (2) avoidance NFA would predict less positive engagement, less *direct* conflictual engagement (overt aggression and victimization; although perhaps more overt victimization), more *indirect* conflictual engagement (relational aggression and victimization), and more disengagement. We also examined gender as a potential moderator of these effects.

Method

Participants and Procedures

Participants were 526 2nd graders (279 girls, 247 boys; M age = 7.95, SD = .33; 67.1% White, 32.9% minority; 33.8% subsidized school lunch) and their teachers (N = 37). Parents provided written consent and children provided oral assent. Consent forms were distributed to 724 children; 576 (80%) received consent, with no significant differences between participants and nonparticipants in age, $t(723) = .63$, ns , gender, $\chi^2(1) = .15$, ns , ethnicity, $\chi^2(1) = .59$, ns , or lunch status, $\chi^2(1) = .35$, ns .

Data were collected during annual assessments in the winter of 2nd (Wave 1; W_1) and 3rd (Wave 2; W_2) grades. Longitudinal data were available for 526 (91%) participants. Children with and without data at both waves did not significantly differ in age, $t(574) = 1.92$, ns , gender, $\chi^2(1) = .47$, ns , ethnicity, $\chi^2(1) = 1.04$, ns , lunch status, $\chi^2(1) = .23$, ns , or most of the key study variables, $ts(574) = 1.76$, ns . Children without (vs. with) longitudinal data had

higher W_1 approach NFA, $t(574) = 2.06, p < .05$, and overt aggression, $t(574) = 3.06, p < .01$, and lower prosocial behavior, $t(574) = -2.20, p < .05$. Research staff administered questionnaires aloud to small groups during two classroom sessions. Teachers completed questionnaires and returned them to a locked box. Children received small gifts, and teachers and classrooms received monetary compensation.

Measures

Table 1 presents descriptive and psychometric data. For self-report measures, children checked one of five boxes indicating how true each item was for them. For teacher-report measures, teachers rated how true each item was on a 5-point scale, except peer acceptance, which was rated on a 7-point scale.

Need for approval—Children completed the Need for Approval Questionnaire (Rudolph et al., 2005). The approach subscale assessed the extent to which peer approval and acceptance augment a child's sense of self-worth (4 items; e.g., "Being liked by other kids makes me feel better about myself."). The avoidance subscale assessed the extent to which peer disapproval and rejection weaken a child's sense of self-worth (4 items; e.g., "I feel like I am a bad person when other kids don't like me."). Scores were computed as the mean of the items on each subscale. Prior research has established convergent and discriminant validity (Rudolph et al., 2005).

To confirm the two-dimensional structure of NFA, a maximum likelihood confirmatory factor analysis was conducted using AMOS 7.0 (Arbuckle, 2006). Two latent variables—approach and avoidance—were created using the four items on each subscale as indicators. Good model fit is reflected in χ^2/df ratios less than 2.5 or 3 (Kline, 1998), Comparative Fit Index (CFI) and Incremental Fit Index (IFI) values above .90 (Kline, 1998), and Root Mean Square Error of Approximation (RMSEA) values of .05 to .08 (Browne & Cudeck, 1993). This model provided a good fit, $\chi^2(21, N = 526) = 37.41, p < .05, \chi^2/df = 1.78, CFI = .98, IFI = .98, RMSEA = .04$. The two latent variables were modestly positively correlated ($\Phi = .13, p < .05$). This model fit significantly better, $\chi^2(1) = 430.77, p < .001$, than a one-factor model in which all eight indicators loaded onto a single latent variable, $\chi^2(21, N = 526) = 468.17, p < .001, \chi^2/df = 22.29, CFI = .54, IFI = .55, RMSEA = .20$.

Social goals—Children completed a measure of social goals (Rudolph et al., 2011) based on Dweck's (Dweck & Leggett, 1988) social-cognitive theory of motivation and applications to the social context (Erdley, Loomis, Cain, Duman-Hines, & Dweck, 1997; Ryan & Shim, 2008). Children received the prompt: "When I am around other kids..." Items tapped mastery goals, which involve developing social competence and learning about relationships (8 items; e.g., "I like to learn new skills for getting along with other kids."), performance-approach goals, which involve demonstrating social competence by gaining positive social judgments (6 items; e.g., "My goal is to show other kids how much everyone likes me."), and performance-avoidance goals, which involve demonstrating social competence by avoiding negative social judgments (7 items; e.g., "I try to avoid doing things that make me look bad to other kids."). Scores were computed as the mean of the items on

each subscale. Construct validity has been established through associations with multiple indexes of social adjustment (Rudolph et al., 2011).

Social Behavior

Positive and conflictual engagement—Teachers completed the Children’s Social Behavior Scale (Crick, 1996). The prosocial behavior subscale assessed how much children engage in inclusive and empathic behavior toward peers (3 items; e.g., “This child is friendly to most kids, even those s/he does not like very much.”). The overt aggression subscale assessed how much children engage in direct, physical aggression (4 items; e.g., “This child hits, kicks, or punches peers.”). The relational aggression subscale assessed how much children engage in indirect manipulation of peer relationships (5 items; e.g., “This child spreads rumors or gossips about some peers.”). Scores were computed as the mean of the items on each subscale. Prior research has established the reliability and validity of teacher ratings of prosocial behavior, overt aggression, and relational aggression (Crick, 1996; Ladd & Profilet, 1996).

Disengagement—Teachers completed a measure of socially helpless behavior, reflected in children’s tendency to show low initiative and persistence in peer relationships (12 items; e.g., “This child is easily discouraged in his/her attempts to get along with other children.”). Scores were computed as the mean of the items. Reliability and validity have been established (Gazelle & Rudolph, 2004).

Peer Responses

Positive engagement—Teachers rated the item “How popular is this child with his/her peers?” Teacher reports of social status correspond with peer reports (Bellmore et al., 2010; Dishion et al., 2012) and have well-established validity (Andrade et al., 2005; Rudolph & Clark, 2001). Moreover, teacher reports of popularity correspond to peer nominations of preference (Andrade et al., 2005); thus, we viewed these ratings as an assessment of acceptance (i.e., liking) rather than perceived peer popularity (Cillessen & Rose, 2005).

Conflictual engagement—Teachers completed a revised version (Rudolph, Troop-Gordon, Hessel, & Schmidt, 2011) of the Social Experiences Questionnaire (Crick & Grotpeter, 1996). The overt victimization subscale assessed the extent to which children are exposed to physical harm or threat (11 items; e.g., “How often does this child get hit, punched, or slapped by another kid?”). The relational victimization subscale assessed the extent to which children are exposed to harm through manipulation of peer relationships (10 items; e.g., “How often does another kid try to keep others from liking this child by saying mean things about him/her?”). Scores were computed as the mean of the items on each subscale. Teacher reports of victimization correspond with child and peer reports (Putallaz et al., 2007).

Disengagement—Teachers completed a measure (Gazelle & Rudolph, 2004) of peer exclusion (5 items; e.g., “Peers refuse to let this child play with them.”). Scores were computed as the mean of the items. Teacher assessment of peer exclusion has been

validated, including through convergence with peer and observer reports (Gazelle & Ladd, 2003).

Results

Descriptive Analyses

A multivariate analysis of variance was conducted with gender as the between-subjects factor and wave as the within-subjects factor. This analysis revealed a significant multivariate main effect of gender, $F(13, 511) = 19.13, p < .001$, a significant multivariate main effect of wave, $F(13, 511) = 13.45, p < .001$, and a nonsignificant Gender \times Wave interaction, $F(13, 511) = 0.65, ns$. Univariate tests revealed a significant main effect of gender for mastery goals, $F(1, 523) = 4.25, p < .05$, prosocial behavior, $F(1, 523) = 13.60, p < .001$, relational aggression, $F(1, 523) = 17.59, p < .001$, and relational victimization, $F(1, 523) = 6.56, p < .05$, reflecting higher scores for girls, as well as a significant main effect of gender for overt aggression, $F(1, 523) = 28.56, p < .001$, and overt victimization $F(1, 523) = 29.11, p < .001$, reflecting higher scores for boys. A significant main effect of wave was found for avoidance NFA, $F(1, 523) = 18.72, p < .001$, mastery goals, $F(1, 523) = 4.81, p < .01$, performance-approach goals, $F(1, 523) = 108.68, p < .001$, and popularity, $F(1, 523) = 5.80, p < .05$, reflecting higher scores at W_1 than W_2 . A significant main effect of wave also was found for social helplessness, $F(1, 523) = 15.46, p < .001$, overt victimization, $F(1, 523) = 4.30, p < .05$, and peer exclusion, $F(1, 523) = 9.76, p < .01$, reflecting higher scores at W_2 than W_1 .

Construct Validity of Need for Approval—Associations with Social Goals

Three hierarchical multiple regressions examined whether the two dimensions of NFA mapped onto approach-avoidance goals. Approach and avoidance NFA were entered simultaneously to examine unique effects. Given the positive intercorrelations among social goals (Elliot et al., 2006; Ryan & Shim, 2008), the models adjusted for the alternate goals at the first step. As expected, approach NFA predicted mastery ($\beta = .29, t = 7.26, p < .001$) and performance-approach ($\beta = .25, t = 5.90, p < .001$) but not performance-avoidance ($\beta = .08, t = 1.94, ns$) goals. Also as expected, avoidance NFA predicted performance-avoidance ($\beta = .16, t = 4.23, p < .001$) but not mastery ($\beta = -.07, t = -1.84, ns$) or performance-approach ($\beta = .02, t = .58, ns$) goals.

Overview of Central Analyses

Hierarchical multiple regression analyses were conducted to examine the independent and interactive contributions of W_1 NFA and gender to W_2 social behavior (prosocial behavior, aggression, and social helplessness) and peer responses (acceptance, victimization, and exclusion). The two dimensions of NFA were entered together to examine unique effects. The first step included prior (W_1) levels of social outcomes, the second step included the mean-centered main effects of W_1 approach and avoidance NFA and gender, and the third step included the two-way interactions (approach NFA \times gender and avoidance NFA \times gender). The approach NFA \times avoidance NFA interaction term was nonsignificant in all analyses and was not included in the final models. Significant interactions with gender were decomposed to examine the extent to which NFA predicted each outcome in girls and boys.

Because main effects of gender replicated those from descriptive analyses, they are not reviewed.

Predicting teacher-rated social behavior—The first set of analyses (Table 2) yielded significant overall effects for prosocial behavior $F(6, 519) = 11.37, p < .001, R^2 = .11$, overt aggression, $F(6, 519) = 34.40, p < .001, R^2 = .28$, relational aggression, $F(6, 519) = 23.51, p < .001, R^2 = .21$, and social helplessness, $F(6, 519) = 11.58, p < .001, R^2 = .11$.

Results revealed a significant negative main effect of approach NFA on social helplessness and a significant positive main effect of avoidance NFA on relational aggression. As expected, approach NFA predicted less social helplessness, and avoidance NFA predicted more relational aggression. Avoidance NFA made a marginally significant contribution to the prediction of social helplessness.

A significant approach NFA \times gender interaction was found for overt aggression. Decomposition of this interaction (Figure 2) revealed that approach NFA predicted less overt aggression in boys ($\beta = -0.16, t(243) = -2.87, p < .01$) but not girls ($\beta = 0.06, t(275) = 1.22, ns$), suggesting that having an approach motivation protected boys against overt aggression. Girls exhibited low levels of overt aggression regardless of their approach NFA.

Predicting teacher-rated peer responses—The second set of analyses (Table 2) yielded significant overall effects for acceptance, $F(6, 519) = 32.82, p < .001, R^2 = .27$, overt victimization, $F(6, 519) = 12.37, p < .001, R^2 = .12$, relational victimization, $F(6, 519) = 10.76, p < .001, R^2 = .10$, and exclusion, $F(6, 519) = 19.23, p < .001, R^2 = .17$.

Results revealed a significant negative main effect of approach NFA on exclusion and a significant positive main effect of avoidance NFA on overt and relational victimization and exclusion. Specifically, approach NFA predicted less peer exclusion whereas avoidance NFA predicted more overt victimization, relational victimization, and exclusion.

A significant approach NFA \times gender interaction was found for acceptance, overt victimization, relational victimization, and exclusion. Decomposition of these interactions (Figures 3a–d) revealed similar patterns. Specifically, approach NFA significantly predicted (a) more acceptance in boys ($\beta = 0.14, t(243) = 2.61, p < .01$) but not girls ($\beta = -0.07, t(275) = -1.25, ns$); (b) less overt victimization in boys ($\beta = -0.15, t(243) = -2.42, p < .05$) but not girls ($\beta = 0.07, t(275) = 1.12, ns$), (c) less relational victimization in boys ($\beta = -0.15, t(243) = -2.49, p < .05$) but not in girls ($\beta = 0.06, t(275) = 1.06, ns$), and (d) less exclusion in boys ($\beta = -0.23, t(243) = -4.05, p < .001$) but not girls ($\beta = 0.04, t(275) = 0.75, ns$). Thus, in boys, approach NFA predicted more acceptance and less victimization and exclusion, whereas girls' levels of acceptance, victimization, and exclusion were similar regardless of their approach NFA.

A significant avoidance NFA \times gender interaction was found for acceptance. Decomposition of this interaction (Figure 4) revealed that avoidance NFA significantly predicted less acceptance in girls ($\beta = -0.11, t(275) = -2.02, p < .05$) but not boys ($\beta = 0.06, t(246) = 1.02, ns$), suggesting that having an avoidance motivation suppressed girls' acceptance. Boys' level of acceptance was similar regardless of their avoidance NFA.

Discussion

Children's motivation to cultivate constructive peer relationships is likely a complex process. Whereas some children are inclined to move toward peers, others are inclined to move against or away from peers (Caspi et al., 1988a,b); peers also may be inclined to move toward, against, or away from children. This study examined how NFA operates as a motivating force for children's patterns of social engagement. Approach NFA, reflecting a focus on social reward in the form of positive appraisals, may motivate children to direct themselves toward social situations to elicit positive feedback. An approach orientation may be beneficial as it encourages children to adhere to social norms and to adopt social goals that promote harmony with peers. Conversely, avoidance NFA, reflecting a focus on social punishment in the form of negative appraisals, may motivate children to direct themselves away from social situations to avoid eliciting negative feedback. An avoidance orientation may be disadvantageous as it causes children to focus on evading social interactions and to adopt social goals that promote avoiding displays of incompetence.

Motivational Implications of Need for Approval

Drawing from classic (McClelland et al., 1953) and contemporary (Dweck & Leggett, 1988; Elliot & Church, 1997; Elliot & Thrash, 2002) theories of motivation, we conceptualized NFA as an underlying motivational orientation that guides specific goals within a social context. To test this perspective, we examined whether the two dimensions of NFA mapped onto social approach and avoidance goals. As anticipated, approach NFA predicted more approach goals, whereas avoidance NFA predicted more avoidance goals. These results parallel prior research on achievement (Elliot & Thrash, 2002) and social (Elliot et al., 2006) motivation. In future research, it would be fruitful to examine whether social goals mediate between general motivational orientations and social adjustment. That is, approach and avoidance motivation as reflected in NFA may be instantiated in the form of concrete social goals, which then serve as proximal guides for specific behavioral manifestations of social adjustment.

It also will be useful to consider how NFA intersects with related motivational constructs. At a broad level, the approach and avoidance dimensions map onto Gray's (1994) personality framework of the behavioral activation (BAS) and behavioral inhibition (BIS) systems. Indeed, research suggests that composites of social approach and avoidance motivation (which included the NFA subscales) differentiate between self-report measures of BAS and BIS (Rudolph, Troop-Gordon, & Llewellyn, 2013). Thus, sensitivity to *social* reward (approval) versus punishment (disapproval) appears to parallel *general* appetitive versus aversive motivational predispositions but differs in its specific focus on the social context. Within the social context, NFA shares common conceptual roots with other theories of approach and avoidance motivation. For example, it has been argued that some withdrawn (inhibited, shy) children experience conflicting social approach-avoidance motivations, driven by a fear of negative evaluation and social anxiety, whereas other withdrawn (unsociable, disinterested) children suffer from a low social approach motivation (Rubin et al., 2009). However, the construct of NFA builds on these conceptualizations in that social

approval and disapproval are internalized as core components of the child's developing self-concept such that self-worth is enhanced or depleted contingent on the judgments of peers.

Social Implications of Need for Approval

We expected that NFA would contribute to children's social engagement both in terms of their own behavior and the responses of their peers; strong support for this prediction was found.

Social consequences of approach motivation—Approach NFA predicted moving toward peers, and peers responded in kind. Specifically, approach predicted more positive engagement (acceptance in boys), less conflictual engagement (overt aggression and overt/relational victimization in boys), and less disengagement (social helplessness across the sample and exclusion in boys). As children seek out positive appraisals to enhance their self-worth, it makes sense that they would not treat peers poorly or shy away from them, and would therefore be more well-liked. Unexpectedly, children with a high approach motivation did not show more prosocial behavior. Our measure, which focused on explicit including and inviting, may not adequately capture the full range of prosocial behavior, such as sharing, taking turns, helping others, or cooperating. Thus, future research will need to include a more comprehensive assessment of prosocial behavior to understand possible positive behavioral consequences of approach.

Several interactions revealed that approach NFA had specific advantages for boys but not girls. For boys, high approach suppressed aversive behavior (overt aggression), bolstered their acceptance, and protected them from victimization and exclusion. In contrast, girls showed relatively low levels of overt aggression, overt victimization, and exclusion regardless of their NFA; moreover, high approach did not protect girls from exposure to relational victimization. This pattern suggests that whereas boys' social outcomes benefit from an approach orientation, girls' social outcomes, both positive (more acceptance, less overt victimization and exclusion) and negative (more relational victimization) were less sensitive to their approach orientation. As reflected in the following section, it may be that a need to avoid disapproval, rather than a need to gain approval, is the prime motivational force for girls. It also may be that factors other than individual tendencies toward approach contribute to girls' engagement within the peer group. For example, perhaps externally reinforced gender norms (e.g., to engage in more prosocial behavior and less overt aggression) serve as guides for girls' social engagement, whereas boys' patterns of engagement are driven more by individual differences in approach motivation. It will be important for future research to determine the relative influence of approach motivation and other factors to the development of girls' and boys' social engagement.

Although our findings supported the hypothesis that approach NFA suppresses conflictual engagement in boys, it is important to keep in mind that this pattern may apply only under certain conditions. Because the approach motivational system can be linked to anger (Carver & Harmon-Jones, 2009), particularly when goals are thwarted (Ortony, Clore, & Collins, 1988), approach NFA could in some cases predict conflictual engagement such as aggression. Indeed, a high social approach motivation predicts aggression in boys with poor

inhibitory control (Rudolph et al., 2013). Thus, it is important to recognize that an approach orientation can have social trade-offs depending on particular characteristics of children and their contexts.

Social consequences of avoidance motivation—Avoidance NFA predicted moving away from peers, and again peers responded in kind. Specifically, avoidance predicted less positive engagement (acceptance in girls) and more disengagement (social helplessness and exclusion across the sample). However, an avoidance orientation also predicted more direct and indirect conflictual engagement with peers (relational aggression, overt victimization, and relational victimization across the sample). Thus, children high in avoidance not only are excluded, they also interact with peers in less adaptive ways through relational aggression. Relational aggression may be viewed as a way to avoid negative peer appraisals by aligning oneself with a group against a victim (Dunbar, 2004), perhaps in an effort to deflect negative attention from oneself. Yet, this strategy may be ineffective as avoidance predicted lower levels of acceptance in girls. Children with high avoidance also were susceptible to both overt and relational victimization. An avoidance orientation could lead children to have fewer friends and to be less accepted and could undermine their emotion regulation and social skills, making them easier targets of bullying. Moreover, although perhaps avoidant children do not directly retaliate against bullies, a response that tends to perpetuate bullying (Kochenderfer-Ladd, 2004; Mahady Wilton et al., 2000), they may reinforce aggressors through signs of suffering (Mahady Wilton et al., 2000; Olweus, 1994).

A Developmental Perspective on Need for Approval

This research raises questions about the origins of NFA. This construct lies at the intersection of motivation and self-concept. On the one hand, several theories of motivation (e.g., Gray, 1994) focus on temperamental differences in sensitivity to reward (approach) versus punishment (avoidance). Moreover, research has identified specific neurological underpinnings of approach versus avoidance orientations (Amodio, Master, Yee, & Taylor, 2008). Indeed, the experience of being liked by others activates neural regions involved in reward motivation (Davey, Allen, Harrison, Dwyer, & Yucel, 2010), suggesting that NFA could emerge in part from individual differences in brain activation. On the other hand, theories of self-concept development propose that self-concept emerges from an internalization of the judgments of others (Harter, 1998; Mead, 1934). Thus, approach versus avoidance may reflect, in part, a response to children's prior experiences in the family, peer group, or other contexts. An interesting avenue for future research will be to investigate personal versus contextual roots of NFA.

Research also needs to explore the implications and malleability of NFA across development. This study was limited by its focus on a brief period during middle childhood, and thus it is unclear whether these effects would replicate over time and across developmental transitions. For example, a social avoidance motivation may be particularly detrimental during transitions (e.g., to middle school) that require active engagement with new peer groups. Moreover, future research would benefit from alternative analytic approaches that consider continuity versus discontinuity in individual trajectories of approach and avoidance over time. For instance, it will be interesting to examine whether

the social consequences of approach and avoidance motivation serve to perpetuate or redirect initial trajectories, and to determine the processes through which such shifts occur.

Limitations of the Research

Despite the novel conceptual and empirical contributions of this research, there are several limitations. First, we relied on teacher ratings of social engagement. There is a substantial precedent for using teacher report of similar constructs (e.g., Crick, 1996; Gazelle & Rudolph, 2004; Ryan & Shim, 2008), which show strong reliability, stability, validity, and convergence with peer reports (Bellmore et al., 2010; Crick, 1996; Ladd & Kochenderfer-Ladd, 2002). Moreover, the use of separate informants (child reports of NFA predicting teacher reports of social engagement) avoids measurement overlap and lends robustness to the findings. However, it will be important to supplement these findings by investigating whether children's social motivation also predicts peer nominations of social behavior and peer responses. In particular, although teacher reports of popularity are linked to peer nominations of preference (Andrade et al., 2005), our assessment was unable to adequately distinguish peer acceptance (liking) from perceived popularity (peer group consensus about who is popular), an important distinction in the peer relations literature (Cillessen & Rose, 2005).

Second, this research examined the implications of social motivation at a young age. Although responding to questionnaires assessing NFA and social goals requires some reflective ability, both prior research (Rudolph et al., 2011) and this study strongly support the reliability and validity of such measures in young children. Our administration procedure, which relied on small-group assessments with individual assistance, may have facilitated children's ability to understand the measures. Moreover, the findings were consistent with theoretical predictions and past research on the contribution of social motivation to adjustment in older youth (Erdley et al., 1997; Ryan & Shim, 2008) and adults (Elliot et al., 2006). Nevertheless, examining these associations at different ages would provide vital information about possible similarities and differences in the effects across developmental stages.

Third, the effect sizes were small although the findings were quite consistent with hypotheses. Moreover, the observed results are notable given the use of two different informants and the adjustment for earlier levels of the social outcomes. However, children's social engagement is likely multi-determined, stemming not only from approach and avoidance motivation but from others types of motivation (e.g., need to belong; need for support) as well as other personality dimensions (e.g., extraversion, neuroticism) and external forces (e.g., social norms, adult guidance). Understanding how these factors work together will be critical for developing a comprehensive understanding of children's social engagement across development.

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References

- Amodio DM, Master SL, Yee CM, Taylor SE. Neurocognitive components of the behavioral inhibition and activation systems: Implications for theories of self-regulation. *Psychophysiology*. 2008; 45:11–19. [PubMed: 17910730]
- Andrade BF, Waschbusch DA, King S, Thurston C, McNutt L, Terrio B. Teacher-classified peer social status: Preliminary validation and associations with behavior ratings. *Journal of Psychoeducational Assessment*. 2005; 23:279–290.
- Arbuckle, JL. AMOS 7.0 [Computer Software]. Small Waters Corp.; Chicago: 2006.
- Asher, SR.; Coie, JD. Peer rejection in childhood. Cambridge University Press; New York: 1990.
- Bellmore A, Jiang XL, Juvonen J. Utilizing peer nominations in middle school: A longitudinal comparison between complete classroom-based and random list methods. *Journal of Research on Adolescence*. 2010; 20:538–550.
- Berger SE, Levin P, Jacobsen LI, Millham J. Gain approval or avoid disapproval: Comparison of motive strengths in high need for approval scorers. *Journal of Personality*. 1977; 45:458–468.
- Bosson JK, Johnson AB, Niederhoffer K, Swann WB. Interpersonal chemistry through negativity: Bonding by sharing negative attitudes about others. *Personal Relationships*. 2006; 13:135–150.
- Browne, MW.; Cudeck, R. Alternative ways of assessing model fit. In: Bollen, KA.; Long, JS., editors. *Testing structural equation models*. Sage Publications; New York, NY: 1993.
- Card NA, Stucky BD, Sawalani GM, Little TD. Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*. 2008; 79:1185–1229. [PubMed: 18826521]
- Carver CS, Harmon-Jones E. Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*. 2009; 135:183–204. [PubMed: 19254075]
- Caspi A, Elder GH, Bem DJ. Moving against the world: Life-course patterns of explosive children. *Developmental Psychology*. 1988a; 23:308–313.
- Caspi A, Elder GH, Bem DJ. Moving away from the world: Life-course patterns of shy children. *Developmental Psychology*. 1988b; 24:824–831.
- Cillessen AHN, Rose RJ. Understanding popularity in the peer system. *Current Directions in Psychological Science*. 2005; 14:102–105.
- Crick NR. The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*. 1996; 67:2317–2327. [PubMed: 9022243]
- Crick NR, Grotpeter JK. Relational aggression, gender, and social-psychological adjustment. *Child Development*. 1995; 66:710–722. [PubMed: 7789197]
- 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-construals and gender. *Psychological Bulletin*. 1997; 122:5–37. [PubMed: 9204777]
- Davey CG, Allen NB, Harrison BJ, Dwyer DB, Yucel M. Being liked activates primary reward and midline self-related brain regions. *Human Brain Mapping*. 2010; 31:660–668. [PubMed: 19823984]
- Dishion TJ, Ha T, Véronneau M. An ecological analysis of the effects of deviant peer clustering on sexual promiscuity, problem behavior, and childbearing from early adolescence to adulthood: An enhancement of the life history framework. *Developmental Psychology*. 2012; 48:703–717. [PubMed: 22409765]
- Dunbar RIM. Gossip in evolutionary perspective. *Review of General Psychology*. 2004; 8:100–110.

- Dweck CS, Leggett EL. A social cognitive approach to motivation and personality. *Psychological Review*. 1988; 95:256–273.
- Eisenberg N, Miller PA. The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*. 1987; 101:91–119. [PubMed: 3562705]
- Elliot AJ, Church MA. A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*. 1997; 72:218–232.
- Elliot AJ, Gable SL, Mapes RR. Approach and avoidance motivation in the social domain. *Personality and Social Psychology Bulletin*. 2006; 32:378–391. [PubMed: 16455864]
- Elliot AJ, Thrash TM. Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*. 2002; 82:804–818. [PubMed: 12003479]
- Erdley CA, Loomis CC, Cain KM, Dumas-Hines F, Dweck CS. Relations among children's social goals, implicit personality theories, and responses to social failure. *Developmental Psychology*. 1997; 33:263–272. [PubMed: 9147835]
- Gable SL. Approach and avoidance social motives and goals. *Journal of Personality*. 2006; 74:175–222. [PubMed: 16451230]
- Gable SL, Reis HT, Elliot AJ. Evidence for bivariate systems: An empirical test of appetition and aversion across domains. *Journal of Research in Personality*. 2003; 37
- Galen BR, Underwood MK. A developmental investigation of social aggression among children. *Developmental Psychology*. 1997; 33:589–600. [PubMed: 9232374]
- Gazelle H, Ladd GW. Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development*. 2003; 74:257–278. [PubMed: 12625449]
- Gazelle H, Rudolph KD. Moving toward and away from the world: Social approach and avoidance trajectories in anxious solitary youth. *Child Development*. 2004; 75:829–849. [PubMed: 15144489]
- Gray, JA. Three fundamental emotion systems. In: Ekman, P.; Davidson, RJ., editors. *The nature of emotion: Fundamental questions*. Oxford University Press; New York: 1994. p. 243-247.
- Harter, S. Processes underlying the construction, maintenance, and enhancement of the self-concept in children. In: Suls, J.; Greenwald, AW., editors. *Psychological perspectives on the self*. Vol. 3. Erlbaum; Hillsdale, NJ: 1986. p. 136-182.
- Harter, S. The development of self-representations. In: Damon, W.; Eisenberg, N., editors. *Handbook of child psychology: Vol. 3. Social, emotional, and personality development*. 5th ed. Wiley; New York: 1998. p. 553-617.
- Harter S, Stocker C, Robinson NS. The perceived directionality of the link between approval and self-worth: The liabilities of a looking glass self-orientation among young adolescents. *Journal of Research on Adolescence*. 1996; 6:285–308.
- Holmgren RA, Eisenberg N, Fabes RA. The relations of children's situational empathy-related emotions to dispositional prosocial behavior. *International Journal of Behavioral Development*. 1998; 22:169–193.
- Johnson HD, LaVoie JC, Spenceri MC, Mahoney-Wernli M. Peer conflict avoidance: Associations with loneliness, social anxiety, and social avoidance. *Psychological Reports*. 2001; 88:227–235. [PubMed: 11293033]
- Kline, RB. Principles and practice of structural equation modeling. In: Kenny, DA., editor. *Methodology in the social sciences*. Guilford; New York, NY: 1998.
- Kochenderfer-Ladd B. Peer victimization: The role of emotions in adaptive and maladaptive coping. *Social Development*. 2004; 13:329–349.
- Ladd GW. Peer relationships and social competence during early and middle childhood. *Annual Review of Psychology*. 1999; 50:333–359.
- Ladd GW, Kochenderfer-Ladd B. Identifying victims of peer aggression from early to middle childhood: Analysis of cross-informant data for concordance, estimation of relational adjustment, prevalence of victimization, and characteristics of identified victims. *Psychological Assessment*. 2002; 14:74–96. [PubMed: 11911051]
- Ladd GW, Profilet SM. The Child Behavior Scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. *Developmental Psychology*. 1996; 32:1008–24.

- Mahady Wilton MM, Craig WM, Pepler DJ. Emotional regulation and display in classroom victims of bullying: Characteristic expressions of affect, coping styles and relevant contextual factors. *Social Development*. 2000; 9:2000.
- McClelland, DC.; Atkinson, JW.; Clark, RA.; Lowell, EL. *The achievement motive*. Appleton-Century-Crofts; New York: 1953.
- Mead, GH. *Mind, self, and society*. University of Chicago Press; Chicago: 1934.
- Olweus D. Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry & Allied Disciplines*. 1994; 35:1171–1190.
- Ortony, A.; Clore, GL.; Collins, A. *The cognitive structure of emotions*. Cambridge University Press; New York: 1988.
- Ostrov JM. Prospective associations between peer victimization and aggression. *Child Development*. 2010; 81:1670–1677. [PubMed: 21077855]
- Putallaz M, Grimes CL, Foster KJ, Kupersmidt JB, Coie JD, Dearing K. Overt and relational aggression and victimization: Multiple perspectives within the school setting. *Journal of School Psychology*. 2007; 45:523–547. [PubMed: 18836518]
- Rose AJ, Rudolph KD. A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*. 2006; 132:98–131. [PubMed: 16435959]
- Rubin, KH.; Bukowski, W.; Parker, JG. Peer interactions, relationships, and interactions. In: Damon, W.; Lerner, R.; Eisenberg, N., editors. *Handbook of child psychology: Social, emotional, and personality development*. 6th ed.. Vol. 3. Wiley; New York: 2006. p. 571-645.
- Rubin, KH.; Coplan, RJ. *The development of shyness and social withdrawal*. Guilford Press; New York: 2010.
- Rubin KH, Coplan RJ, Bowker JC. Social withdrawal in childhood. *Annual Review of Psychology*. 2009; 60:141–171.
- Rudolph KD, Abaied JL, Flynn M, Sugimura N, Agoston M. Developing relationships, being cool, and not looking like a loser: Social goal orientation predicts children's responses to peer aggression. *Child Development*. 2011; 82:1518–1530.
- Rudolph KD, Caldwell MS, Conley CS. Need for approval and children's well-being. *Child Development*. 2005; 76:309–323. [PubMed: 15784084]
- 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. Socioemotional costs and benefits of social-evaluative concerns: Do girls care too much? *Journal of Personality*. 2005; 73:115–137. [PubMed: 15660675]
- Rudolph KD, Troop-Gordon W, Hessel ET, Schmidt JD. A latent growth curve analysis of early and emerging peer victimization as predictors of mental health across elementary school. *Journal of Clinical Child and Adolescent Psychology*. 2011; 40:111–122. [PubMed: 21229448]
- Rudolph KD, Troop-Gordon W, Llewellyn N. Interactive contributions of self-regulation deficits and social motivation to psychopathology: Unraveling divergent pathways to aggressive behavior and depressive symptoms. *Development and Psychopathology*. 2013; 25:417–418.
- Ryan AM, Shim SS. An exploration of young adolescents' social achievement goals and social adjustment in middle school. *Journal of Educational Psychology*. 2008; 100:672–687.
- Strachman A, Gable SL. What you want (and do not want) affects what you see (and do not see): Avoidance social goals and social events. *Personality and Social Psychology Bulletin*. 2008; 32:1446–1458. [PubMed: 17030887]

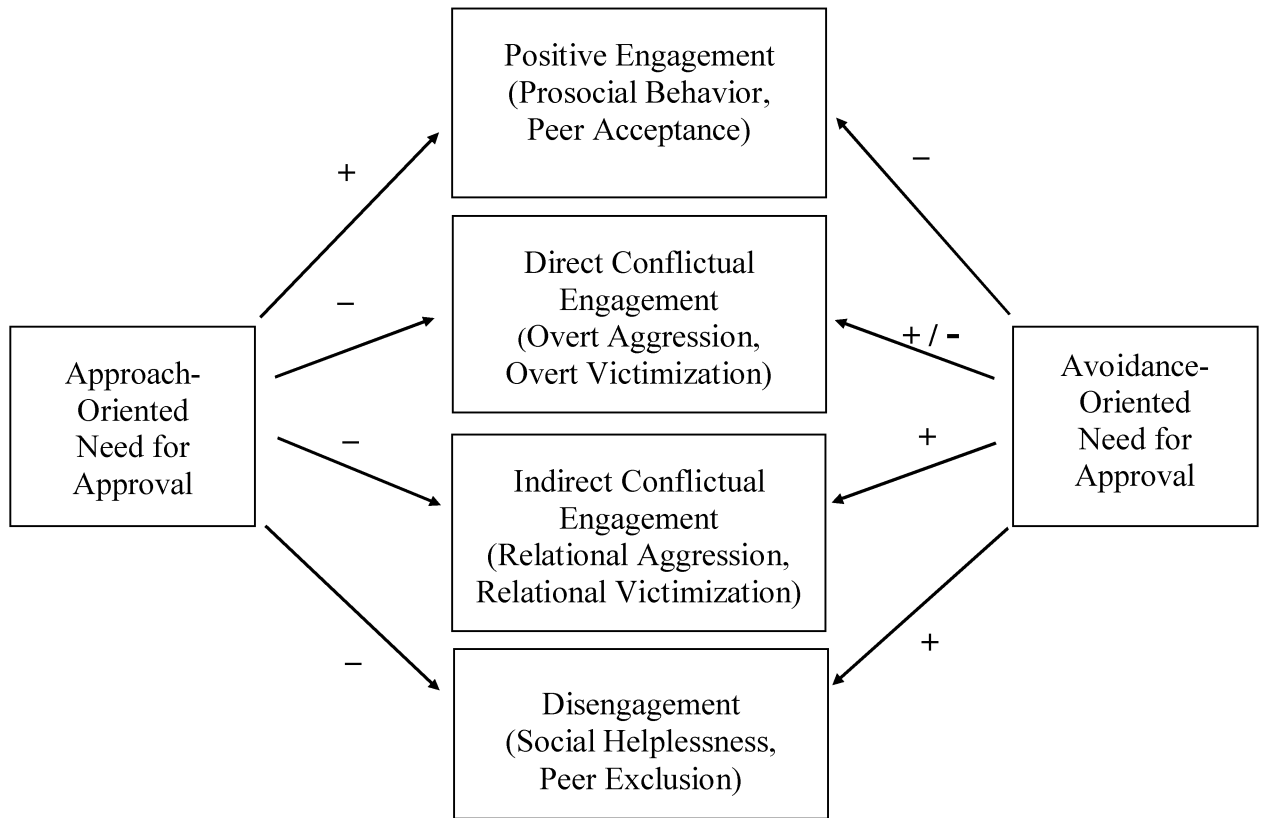


Figure 1.

Theoretical model of the contribution of need for approval to social engagement.

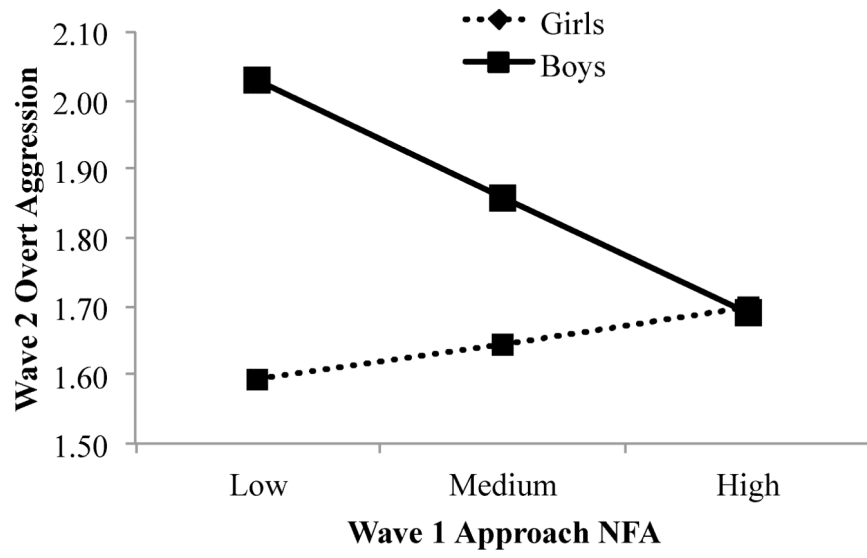
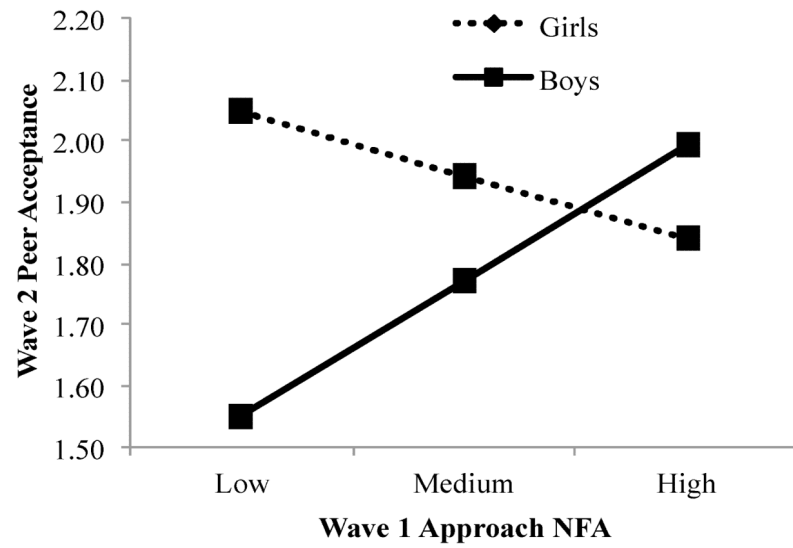
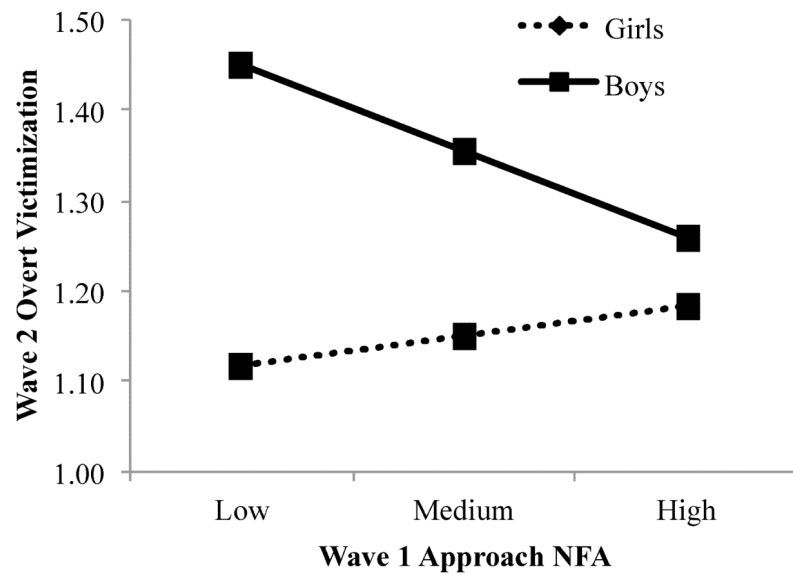


Figure 2.
W₁ Approach NFA × Gender interaction predicting W₂ overt aggression, adjusting for W₁ overt aggression.

(a)



(b)



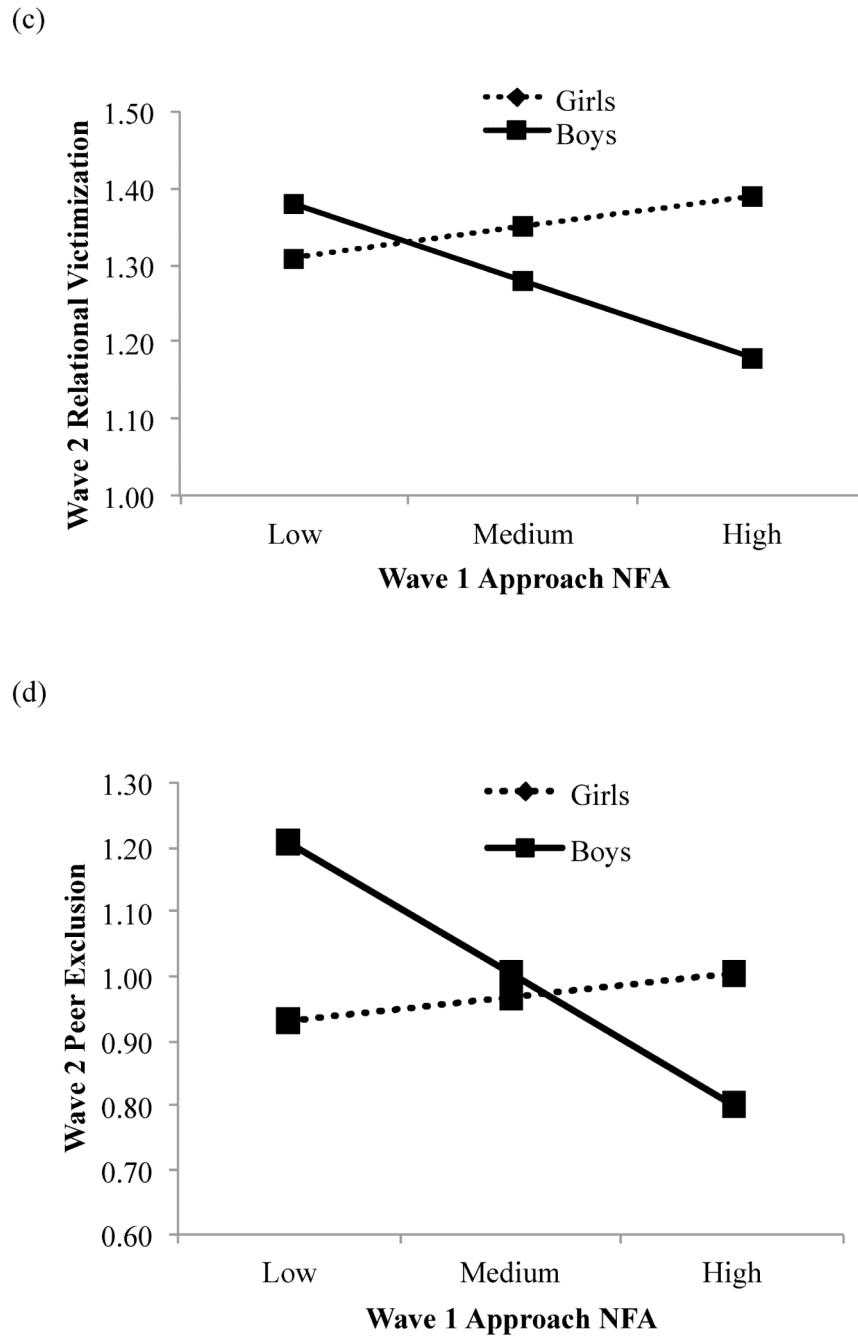


Figure 3.

W_1 Approach NFA \times Gender interaction predicting (a) W_2 peer acceptance, and (b) W_2 overt victimization. Analyses adjust for W_1 social outcomes.

W_1 Approach NFA \times Gender interaction predicting (c) W_2 relational victimization, and (d) W_2 peer exclusion. Analyses adjust for W_1 social outcomes.

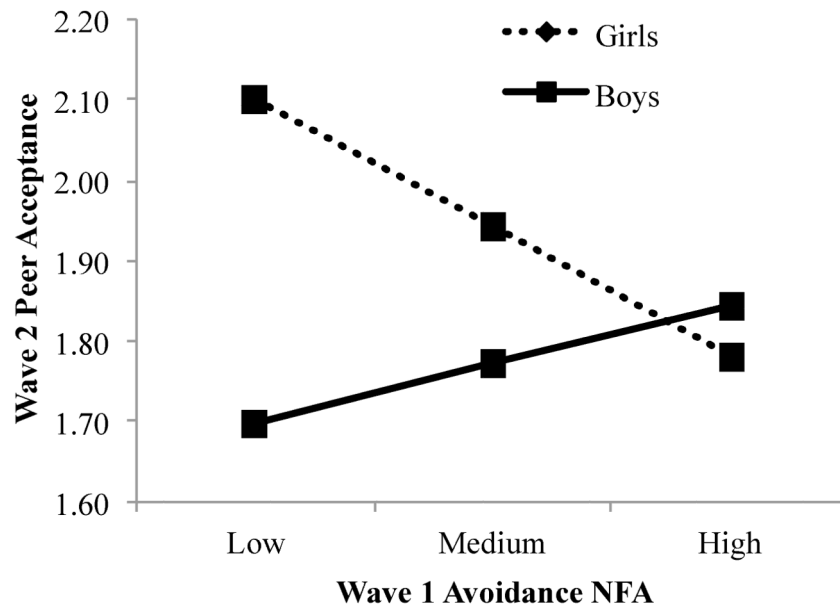


Figure 4.

W₁ Avoidance NFA × Gender interaction predicting W₂ peer acceptance, adjusting for W₁ peer acceptance.

Table 1

Descriptive Data

	Wave 1						Wave 2						Stability	
	Girls (n = 279)			Boys (n = 247)			Girls (n = 279)			Boys (n = 247)			Girls	Boys
	M	SD	α	M	SD	α	M	SD	α	M	SD	α	r	r
Approach NFA	3.68	1.01	.78	3.67	1.03	.77	3.81	.91	.80	3.68	1.01	.78	.33 ^{***}	.24 ^{***}
Avoidance NFA	2.38	1.07	.74	2.24	1.12	.77	2.13	1.01	.81	2.00	1.06	.83	.23 ^{***}	.29 ^{***}
Mastery	4.01	.79	.79	3.91	.90	.83	3.95 ^c	.83	.85	3.79 ^c	.94	.86	.41 ^{***}	.42 ^{***}
Performance-Approach	2.71	1.12	.80	2.79	1.15	.80	2.19	.93	.78	2.31	1.03	.81	.54 ^{***}	.41 ^{***}
Performance-Avoidance	3.45	1.10	.81	3.34	1.17	.82	3.32	1.02	.81	3.28	1.11	.83	.29 ^{***}	.26 ^{***}
Prosocial Behavior	3.15 ^c	.98	.85	2.93 ^c	.98	.85	3.22 ^d	1.02	.87	2.92 ^d	1.04	.89	.25 ^{***}	.36 ^{***}
Overt Aggression	1.29 ^d	.75	.96	1.62 ^d	.96	.95	1.34 ^d	.80	.96	1.72 ^d	1.06	.97	.52 ^{***}	.46 ^{***}
Relational Aggression	2.06 ^d	.95	.92	1.80 ^d	.78	.88	2.14 ^d	1.00	.93	1.86 ^d	.79	.89	.45 ^{***}	.38 ^{***}
Social Helplessness	1.67	.54	.86	1.71	.60	.87	1.78	.62	.88	1.84	.68	.90	.26 ^{**}	.35 ^{***}
Peer Acceptance	4.43	1.35	---	4.52	1.42	---	4.38	1.48	---	4.26	1.57	---	.46 ^{***}	.54 ^{***}
Overt Victimization	1.51 ^d	.50	.92	1.69 ^d	.62	.94	1.54 ^d	.51	.93	1.78 ^d	.65	.94	.25 ^{***}	.25 ^{***}
Relational Victimization	1.81 ^c	.66	.94	1.68 ^c	.65	.95	1.86 ^c	.70	.96	1.74 ^c	.68	.95	.22 ^{***}	.34 ^{***}
Peer Exclusion	1.52	.77	.96	1.51	.80	.96	1.63	.88	.96	1.66	.90	.96	.36 ^{***}	.42 ^{***}

Note. NFA = Need for approval.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

^a Gender difference $atp < .001$.

^b Gender difference $atp < .01$.

^c Gender difference $atp < .05$.

Table 2
Predicting Wave 2 Social Outcomes from Need for Approval, Gender, and Need for Approval x Gender Interactions (N = 526)

Predictors	W ₂ Prosocial Behavior		W ₂ Overt Aggression		W ₂ Relational Aggression		W ₂ Social Helplessness		
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	
Step 1									
W ₁ Outcome	.31	7.57	.50	13.35***	.44	11.13***	.31	7.42***	
Step 2									
W ₁ Approach NFA	-.01	-0.21	-.06	-1.52	.01	0.36	-.11	-2.55*	
W ₁ Avoidance NFA	-.01	-0.31	.04	1.16	.11	2.71**	.08	1.81^	
Gender (0=boys, 1=girls)	.12	2.75**	-.11	-2.94**	.08	2.10*	-.04	-0.86	
Step 3									
Approach NFA x Gender	-.09	-1.57	.17	3.10**	.07	1.26	.10	1.73	
Avoidance NFA x Gender	-.02	-0.34	.03	0.56	.03	0.49	.05	.84	

Predictors	W ₂ Prosocial Behavior		W ₂ Overt Aggression		W ₂ Relational Aggression		W ₂ Social Helplessness		
	B	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	
Step 1									
W ₁ Outcome	.50	13.26***	.27	6.50***	.28	6.61***	.39	9.60***	
Step 2									
W ₁ Approach NFA	.03	0.87	-.05	-1.16	-.04	-0.94	-.09	-2.20*	
W ₁ Avoidance NFA	-.03	-0.86	.09	2.20*	.14	3.38**	.08	2.04*	
Gender (0=boys, 1=girls)	.06	1.49	-.17	-4.06***	.05	1.20	-.02	-0.50	
Step 3									
Approach NFA x Gender	-.15	-2.82**	.16	2.62**	.15	2.41*	.19	3.38**	
Avoidance NFA x Gender	-.11	-2.03*	.06	0.96	-.00	-0.04	.03	.45	

Note. NFA = Need for approval. W₁ = Wave 1, W₂ = Wave 2.

^ *p* = .07.

* *p* < .05.

** *p* < .01.

*** *p* < .001.