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## Developing Relationships, Being Cool, and Not Looking Like a Loser: Social Goal Orientation Predicts Children's Responses to Peer Aggression

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### Abstract

Little is known about individual differences in how children respond to peer aggression. This research explored the contribution of social goal orientation, specifically development goals (improving social skills and relationships), demonstration-approach goals (gaining positive judgments), and demonstration-avoidance goals (minimizing negative judgments). Children ( $M$  age = 7.97,  $SD$  = .34) were followed from 2<sup>nd</sup> to 3<sup>rd</sup> grade. Validity of the social goal orientation construct was established through correlations with situation-specific goals and social adjustment. Development goals predicted adaptive responses (more effortful engagement, problem solving, advice seeking; fewer involuntary responses); demonstration goals predicted maladaptive responses (less effortful engagement, problem solving; more disengagement, retaliation). This study contributes to theoretical understanding of the process of peer aggression and interventions to promote optimal social health.

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On a day-to-day basis, many children face aggression by peers, ranging from mild attacks, such as verbal insults or teasing, to more severe bullying, such as chronic exclusion or physical assaults. Dealing effectively with these experiences is a key developmental task. Whereas successful negotiation of this task fosters positive adjustment, failure predicts maladjustment (Kochenderfer & Ladd, 1997; Kochenderfer-Ladd & Skinner, 2002; Salmivalli, Karhunen, & Lagerspetz, 1996). Thus, understanding individual differences in children's responses to peer aggression may assist in efforts to optimize children's social and mental health.

When children receive aggression from peers, some formulate plans for resolving the situation, such as discussing the problem, whereas others focus on assuaging their negative emotions, such as seeking emotional support. Yet others show dysregulated responses that involve little planful action, such as ruminating or striking back impulsively. Capturing these individual differences, researchers distinguish active (e.g., problem solving, support seeking), passive (e.g., ignoring), and aggressive (e.g., retaliation) responses. Whereas active responses deter future aggression, passive and aggressive responses perpetuate aggression (Kochenderfer & Ladd, 1997; Kochenderfer-Ladd & Pelletier, 2008; Salmivalli et al., 1996; Schwartz, Dodge, & Coie, 1993; Wilton, Craig, & Pepler, 2000). More generally, approach responses often predict better adjustment than avoidance responses, although these links depend on children's sex and victimization level (Kochenderfer-Ladd & Skinner, 2002).

Beyond these specific responses, a broader framework (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001) classifies responses to stress into four categories: (a) Effortful engagement, or planful responses directed toward the stressor or stress-related cognition and emotion (e.g., problem solving, emotion regulation); (b) Effortful disengagement, or planful responses directed away from the stressor or stress-related cognition and emotion (e.g., avoidance, denial); (c) Involuntary engagement, or automatic

responses involving excessive engagement with stressors (e.g., rumination, arousal); and (d) Involuntary disengagement, or automatic responses involving distancing oneself from stressors (e.g., inaction, emotional numbing). According to this perspective, involuntary responses are maladaptive and outside of children's control. Supporting this idea, effortful engagement typically predicts more optimal mental health than involuntary responses (Connor-Smith et al., 2000; Flynn & Rudolph, 2007).

Despite increasing attention to the consequences of children's responses to aggression, little is known about *why* some respond in thoughtful or adaptive ways whereas others respond in involuntary or maladaptive ways. This study tested the hypothesis that children's social goal orientation contributes to individual differences in these responses. Goals have been defined as "conditions or states of affairs that people are committed to pursuing through their own actions" (Parkhurst & Asher, 1985, p. 201) or "objectives that a person strives to attain or avoid" (Emmons, 1996, p. 314). Goals play a vital role in determining behavioral responses to social situations and general social adjustment (Erdley, Cain, Loomis, Dumas-Hines, & Dweck, 1997; Ojanen, Gronroos, & Salmivalli, 2005; Rose & Asher, 1999; Ryan & Shim, 2008).

Dweck and colleagues' (Dweck & Leggett, 1988; Molden & Dweck, 2006) framework of motivation distinguishes goals that focus on *developing* versus *demonstrating* competence. Applying this framework to the social context (Erdley et al., 1997; Ryan & Shim, 2008), development goals involve improving social skills and developing relationships (e.g., getting to know others better, learning how to be a good friend); demonstration-approach goals involve gaining positive social judgments and prestige (e.g., being viewed as important, having "cool" friends); and demonstration-avoidance goals involve minimizing negative social judgments (e.g., avoiding being viewed as foolish or a "loser"). The present study assessed these social achievement goals within the global context of children's peer relationships. Because these goals reflect a general orientation toward relationships, it was anticipated that they would guide children's behavior across a variety of situations, including their responses to peer aggression.

When confronted with aggression, children with development goals are likely to seek ways to understand the problem, improve their relationships, and learn from the situation. Because development goals are linked to positive self-perceptions of competence (Ryan & Shim, 2008), they may buffer children from excessive negative affect or arousal, allowing them to engage in thoughtful rather than involuntary responses. Children with demonstration-approach goals are less likely to engage in constructive efforts to resolve peer aggression. Instead, these goals may promote maladaptive approach behavior, such as retaliatory efforts aimed at re-establishing social prestige. Demonstration-approach goals also foster disengagement (e.g., helpless behavior) when faced with social challenge (Erdley et al., 1997). Children with these goals may, for example, deny that the aggression ever occurred. Finally, children with demonstration-avoidance goals are likely to seek ways to avoid attention or embarrassment. For example, these children may ignore teasing in an effort to pacify an aggressor. Moreover, because avoidance goals involve a concern about negative feedback, peer aggression is likely to create arousal that may trigger involuntary rather than planful responses (Compas et al., 2001).

Thus, we hypothesized that: (1) development goals would predict more effortful engagement, problem solving, and advice seeking, and fewer maladaptive (e.g., retaliation) and involuntary (e.g., rumination, inaction) responses; (2) demonstration-approach goals would predict more maladaptive (e.g., retaliation) and disengagement (e.g., avoidance, denial) responses and less effortful engagement, problem solving, and advice seeking; and (3) demonstration-avoidance goals would predict more pacifying (e.g., ignoring) or

disengagement (e.g., avoidance) responses and fewer responses that draw attention to oneself (e.g., retaliation).

Although many children face minor aggression from peers, some are recipients of more frequent or severe bullying. Because social goal orientation is particularly likely to predict children's responses in stressful contexts (Erdley et al., 1997), the adverse effect of maladaptive social goals may be amplified in high-victimized children. The effect of social goals also may differ for girls and boys. Girls emphasize mastery and relationship-development goals, whereas boys emphasize performance goals (Erdley et al., 1997; Jarvinen & Nicholls, 1996; Rose & Asher, 1999). Possessing gender-atypical goals may have either a protective effect (because children have more flexible goal repertoires) or an adverse effect (because children are viewed as deviant) on children's responses to aggression. Thus, we tested whether children's exposure to victimization and sex moderated the predicted associations.

Because social achievement goals have received scant attention and this study involved a younger sample than prior research, we also explored the construct validity of our new social goal measure. First, we examined the correspondence between social achievement goals and a more traditional conceptualization that considers specific social goals children pursue to achieve specific outcomes (Ojanen et al., 2005; Rose & Asher, 1999; Slaby & Guerra, 1988). Second, we examined the correspondence between social achievement goals and social adjustment. Based on theory and past research (Elliot, Gable, & Mapes, 2006; Ryan & Shim, 2006, 2008; Salmivalli, Ojanen, Hanpaa, & Peets, 2005), we expected that (1) development goals would be linked to more positive perceptions of social relationships, more prosocial behavior, and less aggression; (2) demonstration-approach goals would be linked to more negative perceptions of social relationships, less prosocial behavior, and more aggression; and (3) demonstration-avoidance goals would be linked to more negative perceptions of social relationships and less aggression. To address our central hypotheses, we used a multi-informant approach and prospective design to explore the contribution of social goal orientation to child- and teacher-reported responses to peer aggression concurrently and over time.

## Method

### Participants

Participants at Wave 1 ( $W_1$ ) were 373 children ( $M$  age = 7.97 years,  $SD = .34$ ; 203 girls, 170 boys) and their 2<sup>nd</sup> grade teachers. Consent forms were distributed to families of all eligible 2<sup>nd</sup> graders across several schools; children provided verbal assent. Of the eligible families, 76% provided written consent. Participants and nonparticipants at  $W_1$  did not significantly differ in sex,  $\chi^2(1) = .25$ ,  $ns$ , age,  $t(492) = .18$ ,  $ns$ , ethnicity (white vs. minority),  $\chi^2(1) = .00$ ,  $ns$ , or school lunch status (full pay vs. subsidized),  $\chi^2(1) = .16$ ,  $ns$ . The sample was somewhat diverse in ethnicity (74% White, 26% other) and socioeconomic status (35% received subsidized school lunches). Participants at Wave 2 ( $W_2$ ) were 346 children (93% of the original sample) and their 3<sup>rd</sup> grade teachers. Participants and nonparticipants at  $W_2$  did not significantly differ in sex,  $\chi^2(1) = .01$ ,  $ns$ , age,  $t(371) = 1.84$ ,  $ns$ , lunch status,  $\chi^2(1) = 2.43$ ,  $ns$ , or any of the study variables (child- and teacher-reported responses to peer aggression, social achievement goals, situation-specific social goals, peer victimization, perceptions of social relationships, and social behavior),  $ts = .04 - 1.52$ ,  $ns$ , with the exception of positive self-perceptions,  $t = 2.15$ ,  $p < .05$ ; a disproportionate number of nonparticipants were minorities,  $\chi^2(1) = 8.54$ ,  $p < .01$ .

## Procedure

Children participated in a two-wave longitudinal design in the winter of each year. Project staff administered questionnaires aloud to small groups (about 3 – 4 students) during two classroom sessions. The administration manual included definitions of words that children potentially may not understand; interviewers provided children with clarifications when questions arose, albeit rarely, during administration. Teacher questionnaires were distributed in the classrooms and returned to a locked box. Children received small gifts and teachers received monetary compensation; each participating classroom also received a monetary honorarium.

## Measures

As reflected in Table 1, the measures showed adequate internal consistency, and were moderately stable over time except for effortful disengagement and teacher advice seeking.

### Responses to Peer Aggression

**Self-report:** Children completed a revision of the Responses to Stress Questionnaire (Connor-Smith et al., 2000), modified to assess responses to peer aggression (when other kids are mean). Children checked a box indicating how often they engaged in each response on a 4-point scale. The original measure includes 57 items across 19 subscales that comprise four dimensions: (a) effortful engagement (e.g., problem solving, emotion regulation), (b) effortful disengagement (e.g., denial, avoidance), (c) involuntary engagement (e.g., rumination, emotional arousal), and (d) involuntary disengagement (e.g., involuntary avoidance, emotional numbing).

To make the measure suitable for young children, minor wording changes were made to shorten and clarify items, and an abbreviated version of the measure was constructed. Item-total correlations were examined by subscale in two samples (Connor-Smith et al., 2000; Flynn & Rudolph, 2007), and the two highest loading items on each subscale were retained. When items loaded differently across the samples, we selected items that were most relevant to responses to peer aggression or were from the sample closer in age to the current one. This process yielded a 38-item measure that retained the same dimensions: (a) effortful engagement (14 items; e.g., “I do something to try to fix the problem or take action to change things.”), (b) effortful disengagement (6 items; e.g., “I try to believe it never happened.”), (c) involuntary engagement (10 items; e.g., “I keep remembering what happened or can’t stop thinking about what might happen.”), and involuntary disengagement (8 items; e.g., “I just have to get away, I can’t stop myself.”). Because the effortful disengagement scale had only moderate internal consistency at  $W_1$ , three previously omitted items were included at  $W_2$ , yielding a 9-item scale. Following prior research (Connor-Smith et al., 2000; Flynn & Rudolph, 2007), proportion scores were computed as the score for each subscale divided by the total score. Confirmatory factor analyses during the original measure development supported the proposed distinctions between effortful engagement versus disengagement and involuntary engagement versus disengagement (Connor-Smith et al., 2000). Correlations with another well-validated measure of coping established strong convergent and discriminant validity (Connor-Smith et al., 2000).

**Teacher report:** Teachers completed a revision (Kochenderfer-Ladd & Pelletier, 2008) of the Self-Report Coping Scale (Causey & Dubow, 1992), modified to assess teacher-reported responses to peer aggression (when other kids are mean). Because we expected that teachers would not be able to report accurately on advice seeking from family members, these items were omitted. Teachers provided ratings indicating how often children engaged in each response on a 5-point scale.

To investigate the factor structure, the 24 items were subjected to a principal axis factor analysis. Because we expected the factors to be correlated (Kochenderfer-Ladd & Skinner, 2002), an oblimin rotation was used. This analysis yielded five factors with eigenvalues  $> 1$  that explained 71% of the variance. All of the items loaded  $> .55$  on their primary factors. Cross-loadings were low (average = .08). The factors mapped onto those from prior studies (Kochenderfer-Ladd & Pelletier, 2008; Kochenderfer-Ladd & Skinner, 2002): problem solving (7 items; e.g., “Change things to keep it from happening again.”), retaliation (6 items; e.g., “Hurt the kid back.”), passive (6 items; e.g., “Blame him/herself for doing something wrong.”), ignoring (3 items; e.g., “Act like nothing happened.”), and teacher advice seeking (2 items; e.g., “Ask the teacher what s/he should do.”). Because the passive subscale contained several items tapping subjective perceptions, we dropped it. Proportion scores were computed as the score for each subscale divided by the total score. Predictive validity of these subscales has been established (Kochenderfer-Ladd & Skinner, 2002). Moreover, validity of teacher reports of coping has been established through correlations with peer sociometrics (Eisenberg et al., 1993) and observer-rated behavioral responses to emotion-inducing situations (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994).

### Social Goals

**Social achievement goals:** Children completed a measure of social achievement goals. This measure was based on Dweck and colleagues’ (Dweck & Leggett, 1988; Molden & Dweck, 2006) social-cognitive theory of motivation and specific applications to the social context (Erdley et al., 1997; Ryan & Shim, 2008). A few items were adapted from a measure for college students (Ryan & Shim, 2006); others were drawn from a general pool of items (Ryan & Rudolph, 2005). Children received the prompt: “When I am around other kids...” They then checked a box indicating how true each of 22 items was on a 5-point scale. Items tapped the extent to which children endorsed development goals that involve developing social competence and learning about relationships, demonstration-approach goals that involve demonstrating social competence by gaining positive social judgments, and demonstration-avoidance goals that involve demonstrating social competence by avoiding negative social judgments.

To examine the factor structure (Appendix A), the 22 items were subjected to a principal axis factor analysis. Because we expected the factors to be correlated (Ryan & Shim, 2008), an oblimin rotation was used. This analysis yielded four factors with eigenvalues  $> 1$  that explained 51% of the variance. Because one factor contained only one item with its primary loading on that factor (“It is important to me that other kids at school say good things about me.”), this item and factor were dropped. The remaining factors corresponded to the three hypothesized dimensions: development (8 items), demonstration-approach (6 items), and demonstration-avoidance (7 items). All items loaded  $\geq .42$  on their primary factors. Cross-loadings were low (average = .06). Scores were computed as the mean of the items on each subscale.

**Situation-specific goals:** Children completed a revision of the Children’s Conflict Resolution Measure (Chung & Asher, 1996), which was modified in several ways. First, to accommodate time constraints, five of the original 12 vignettes were selected based on pilot psychometric data. Second, to accommodate the age of the children, scenarios were shortened and minor wording changes were made (e.g., reframing negatively worded items). Third, a subset of the goals was selected and a new goal (conflict reduction) was added that was relevant to responses to peer aggression. Children were presented with five vignettes depicting socially provocative situations (e.g., a classmate blocks the child’s way and tries to take their book), worded such that they place the child as the target of the provocation. Following each vignette, they were prompted: “What would your goal be? What would you

want to make happen?” They checked a box indicating how much they endorsed each goal on a 5-point scale: cooperative (trying to get along), conflict reduction (trying to keep the classmate from getting mad at the child), revenge (trying to get back at the classmate), control (trying to be in charge), and self-interest (trying to get their own needs met). The goals were randomly ordered across vignettes. Scores were computed as the mean of the ratings for each type of goal across the five vignettes.

**Peer Victimization**—Children completed a revision of the Social Experiences Questionnaire (Crick & Grotpeter, 1996). The original measure has 5-item subscales of overt (e.g., “How often do you get pushed or shoved by another kid?”) and relational (e.g., “How often do other kids leave you out on purpose when it’s time to play or do an activity?”) victimization; 11 items were added to tap other aspects of overt and relational victimization, yielding a 21-item measure. Children checked a box indicating how often they experienced each type of victimization on a 5-point scale. The two forms of victimization were strongly correlated,  $r(371) = .75, p < .001$ , and had similar moderational effects (average difference in coefficients = .01). Thus, scores were calculated as the mean of the items. Research suggests that self-reports of victimization provide valid information that corresponds to reports by peers (e.g.,  $r = .31$ ; Graham & Juvonen, 1998), teachers (e.g., average  $r = .30$  from 1<sup>st</sup> through 5<sup>th</sup> grade; Ladd & Kochenderfer-Ladd, 2002), and parents (Bollmer, Harris, & Milich, 2006); self-reports of victimization correspond with behavioral observations as early as kindergarten (e.g.,  $r = .27$ ; Kochenderfer & Ladd, 1997).

### Social Adjustment

**Perceptions of social relationships:** Children completed the Perceptions of Peers and Self Questionnaire (Caldwell, Rudolph, Troop-Gordon, & Kim, 2004), which assesses positive and negative social self appraisals (e.g., “I am a lot of fun to be with.” “It’s a waste of other kids’ time to be friends with me.”) and peer appraisals (e.g., “Other kids are pretty easy to get along with.” “Other kids can be pretty mean.”). Children checked a box indicating how true each statement was on a 4-point scale. Factor analyses yielded distinct positive and negative perceptions factors; thus, four scores were calculated as the mean of the relevant items: positive self-perceptions (7 items); positive peer perceptions (8 items), negative self-perceptions (7 items), and negative peer perceptions (6 items). This measure shows strong internal consistency, test-retest reliability, and convergent and predictive validity (Caldwell et al., 2004; Rudolph & Clark, 2001).

**Social behavior:** Teachers completed the Children’s Social Behavior Scale (Crick, 1996), which assesses prosocial behavior (3 items; e.g., “When this child notices that another kid has been left out of an activity or game, s/he invites the kid to join the group.”), overt aggression (4 items; e.g., “This child hits or kicks peers.”), and relational aggression (5 items; e.g., “This child spreads rumors or gossips about some peers.”). Teachers rated each item on a 5-point scale. A prosocial behavior score was calculated as the mean of the three items. Because findings were similar for overt and relational aggression, a single score was calculated as the mean of the nine items. This measure has well-established reliability and validity (Crick, 1996).

## Results

### Descriptive Analyses

A multivariate repeated-measures analysis of variance was conducted on the eight social goal subscales and the eight responses to aggression subscales with sex as a between-subjects factor and wave as a within-subjects factor. This analysis yielded significant multivariate main effects of sex,  $F(16, 317) = 2.50, p < .001$ , and wave,  $F(16, 317) = 60.25$ ,

$p < .001$ , and a nonsignificant sex  $\times$  wave interaction,  $F(16, 317) = .96, ns$ . To elucidate the sex differences, we examined the univariate effects of sex. Compared to boys, girls showed marginally significantly more development goals,  $F(1) = 3.67, p < .10$ , and effortful engagement,  $F(1) = 3.70, p < .10$ , as well as significantly more problem solving,  $F(1) = 17.25, p < .001$ , and advice seeking,  $F(1) = 17.45, p < .001$ . Compared to girls, boys showed significantly more revenge goals,  $F(1) = 6.15, p < .05$ , control goals,  $F(1) = 5.83, p < .05$ , self-interest goals,  $F(1) = 4.77, p < .05$ , involuntary engagement,  $F(1) = 4.73, p < .05$ , and retaliation,  $F(1) = 11.64, p < .01$ .

### Construct Validity

First, we conducted multiple regression analyses to examine the associations between social achievement goals and situation-specific social goals. The three achievement goal subscales were entered simultaneously to predict each type of situation-specific goal (see Table 2). Development goals significantly predicted more cooperative and conflict reduction goals and fewer revenge, control, and self-interest goals. Demonstration-approach goals significantly predicted fewer cooperative goals and more revenge, control, and self-interest goals. Demonstration-avoidance goals significantly predicted more conflict reduction goals. This logical pattern supports the validity of the social achievement goal measure; the moderate size of the associations suggests that these goal dimensions represent distinct but related constructs.

Second, we conducted multiple regression analyses to examine the associations between social achievement goals and social adjustment. The three achievement goal subscales were entered simultaneously to predict each type of social adjustment (see Table 2). Development goals significantly predicted more positive and, to a lesser extent, less negative self and peer perceptions, and more prosocial behavior. Demonstration-approach goals predicted more negative peer perceptions, less prosocial behavior, and more aggression. Demonstration-avoidance goals predicted more negative self and peer perceptions and less aggression. These results were consistent with expectations and with prior research in older age groups (Elliot et al., 2006; Erdley & Asher, 1996; Ryan & Shim, 2006, 2008; Salmivalli et al., 2005); thus, these findings provide construct validity for the social achievement goal measure, and suggest that social goals and social adjustment are similarly associated across development.

### Preliminary Analyses of the Moderating Effects of Victimization and Sex

Two sets of hierarchical multiple regression analyses were conducted to examine whether victimization and sex served as moderators. The first step included the mean-centered main effects of  $W_1$  goals (development, demonstration-approach, demonstration-avoidance) and  $W_1$  victimization or sex. The second step included three two-way interactions (each type of goal  $\times$  victimization or each type of goal  $\times$  sex). For each moderator, one set of analyses predicted concurrent ( $W_1$ ) responses to aggression, and a second set predicted subsequent ( $W_2$ ) responses to aggression, adjusting for earlier ( $W_1$ ) responses. Significant interactions were found for only 6.3% (3 of 48) of the victimization analyses and 12.5% (6 of 48) of the sex analyses. These small percentages suggest that the effects of social goals generally were not contingent on children's level of victimization or sex. Thus, subsequent analyses collapsed across victimization and sex. The few significant interactions are described in the discussion as a basis for future research addressing possible moderation. Victimization and sex were included as covariates to ensure that goals predicted responses to peer aggression after adjusting for their effects.

## Central Analyses

Hierarchical multiple regression analyses were conducted to examine the concurrent and prospective contribution of  $W_1$  social achievement goals to responses to peer aggression (see Table 3). Following prior research (Ryan & Shim, 2008), the three goals were entered together to examine unique effects. The statistics reflect  $\Delta F$  at the second step, after adjusting for victimization and sex (and, in the longitudinal models, for earlier responses to aggression). The concurrent models yielded significant effects for effortful engagement, effortful disengagement, involuntary engagement, involuntary disengagement, problem solving, ignoring, and retaliation,  $\Delta F$ s = 2.91 – 14.86,  $ps < .05$ . The longitudinal models yielded significant effects for effortful engagement, involuntary disengagement, and problem solving,  $\Delta F$ s = 3.44 – 5.54,  $ps < .05$ , and a marginal effect for teacher advice seeking,  $\Delta F = 2.52$ ,  $p < .10$ .

As reflected in Table 3, victimization predicted fewer adaptive and more maladaptive responses, particularly for concurrent analyses, and girls showed more adaptive and fewer maladaptive responses than did boys. Development goals predicted more effortful engagement and teacher advice seeking, and less involuntary engagement and disengagement concurrently and over time. Development goals also concurrently predicted more problem solving and less ignoring. Demonstration-approach goals predicted less effortful engagement and problem solving, and more involuntary disengagement concurrently and over time. Demonstration-approach goals also concurrently predicted more effortful disengagement and retaliation. Demonstration-avoidance goals predicted more ignoring and less retaliation concurrently and over time. Demonstration-avoidance goals also predicted more problem solving over time.

## Discussion

Learning how to respond effectively to peer aggression is a critical developmental task with long-term implications for children's emerging social life and relationships. This study supported the idea that children's social goal orientation shapes whether they respond in planful and adaptive or involuntary and maladaptive ways. The goals children set for their relationships can directly shape how they respond by increasing the value they place on achieving certain outcomes. For example, a child who values harmony and social growth is more likely to use responses that promote rather than disrupt relationships. Alternatively, social goals can be linked to characteristics that foster certain responses. For example, a child who values demonstrating their competence or avoiding embarrassment is more likely to experience negative arousal in the face of peer aggression, thereby undermining effective responses.

Consistent with these ideas, development goals, which focus on developing harmonious and high-quality relationships, fostered more adaptive and less maladaptive responses. Because success is reflected in learning and improving relationships, these goals foster positive approach-oriented responses to aggression aimed at addressing or learning from the experience or managing one's emotions. Peer aggression also likely poses less of a threat to children with development goals because they have high self-efficacy (Ryan & Shim, 2008) and their self-worth is less compromised by disapproval. Consequently, these goals may buffer children against excessive negative emotions in the face of peer aggression, thereby reducing uncontrolled responses.

Demonstration-approach goals, which focus on obtaining positive judgments and social prestige, fostered less adaptive and more maladaptive responses. Because success is reflected in gaining status and proving one's popularity, peer aggression likely threatens children's self-worth and heightens their arousal. This arousal may disrupt planful responses



and prompt involuntary and maladaptive responses. Consistent with prior research showing that a performance orientation fosters withdrawal (e.g., helplessness) in the face of challenge (Dweck, & Leggett, 1988; Erdley et al., 1997), demonstration-approach goals predicted effortful (intentional) and involuntary (unintentional) disengagement from stress. Demonstration-approach goals also were related to more retaliation. Retaliation may reflect a planful effort to demonstrate competence by re-establishing dominance. That is, children may strategically retaliate against their aggressors to regain status and respect. Or, retaliation may reflect an automatic response driven by dysregulated emotions (e.g., anger). For children with demonstration-approach goals, aggression threatens their sense of competence; this threat could foster negative arousal, thereby inhibiting planful action and triggering an impulsive response. Indeed, experiencing anger in response to peer aggression predicts retaliation (Kochenderfer-Ladd, 2004). Future research can clarify whether these goals are specifically linked to instrumental and/or reactive retaliation.

Demonstration-avoidance goals, which focus on avoiding negative judgments and embarrassment, fostered a tendency to pacify aggressors and draw attention away from oneself, as reflected in more ignoring and less retaliation. These goals also interacted with victimization to predict effortful engagement and involuntary disengagement concurrently, and to predict involuntary engagement over time. In each case, these goals were related (albeit nonsignificantly) with *maladaptive* responses in high-victimized children but were associated (marginally or significantly) with *adaptive* responses in low-victimized children. Thus, these goals apparently can have both costs and benefits that are contingent on children's level of victimization.

In sum, striving to *develop* one's social competence and relationships orients children toward efforts to solve peer problems, regulate emotions, and think positively when relationships go awry. Striving to *demonstrate* one's social competence undermines planful efforts and fosters uncontrolled and maladaptive responses such as attempted retaliation, or causes children to disengage in ways that interfere with problem resolution. Although these responses were assessed in the context of fairly mild aggression, how children respond to aggression influences whether it continues, escalates, or desists (Wilton et al., 2000). Thus, maladaptive responses in this context may contribute to the perpetuation or exacerbation of aggression.

These findings suggest that interventions should integrate efforts to shift children's priorities away from demonstrating their competence and toward developing their skills and relationships. Shifting these priorities may, in turn, require reshaping the implicit theories children hold about relationships. Whereas *incremental* theorists believe that developing social competence and relationships requires sustained effort, *entity* theorists believe that relationships are destined to succeed or fail (Rudolph, 2010). When children hold entity theories, they are more likely to endorse a performance (i.e., demonstration) than a mastery (i.e., development) orientation (Rudolph, 2010) and thus may be less inclined to try to resolve relationship problems. Because these implicit theories are at the core of children's social goal orientation, encouraging children to view their relationships as subject to change and improvement should be a key goal of intervention efforts. Moreover, the present study supports the potent influence of a general orientation toward relationships, suggesting that such interventions may be useful for dealing with a variety of peer difficulties beyond specific responses to peer aggression.

Consistent with prior research, girls showed more development goals (Erdley et al., 1997), effortful engagement, problem solving, and advice seeking (Causey & Dubow, 1992; Connor-Smith et al., 2000), whereas boys showed more revenge, control, and self-interest goals (Rose & Asher, 1999), involuntary engagement (Connor-Smith et al., 2000), and

retaliation (Kochenderfer-Ladd & Skinner, 2002). Yet, social goals contributed similarly to responses to aggression across sex, with a few exceptions. Development goals predicted more advice seeking (concurrently) and problem solving (prospectively) in boys but not girls; these effects were due to the fact that low levels of development goals suppressed these responses in boys but not girls. Demonstration-approach goals were concurrently associated with marginally more advice seeking in boys and less advice seeking in girls; these goals also prospectively predicted more involuntary disengagement and retaliation in girls but not boys due to a suppression of these responses in girls with low levels of demonstration-approach goals. Demonstration-avoidance goals prospectively predicted more problem solving in boys but not girls. Marginal demonstration-avoidance  $\times$  sex interactions also suggested that these goals were concurrently associated with more problem solving and less retaliation in boys but not girls.

This pattern suggests that boys benefit from adopting development and demonstration-avoidance goals, which enhance their problem solving and advice seeking, and suppress their retaliation. Girls, in contrast, showed high problem solving and advice seeking and low retaliation regardless of their development and demonstration-avoidance goals. Yet, demonstration-approach goals suppressed girls' advice seeking and enhanced their involuntary disengagement and retaliation. These findings must be viewed with caution but tentatively suggest that boys may benefit from encouragement to adopt development and demonstration-avoidance goals whereas girls may benefit from encouragement *not* to adopt demonstration-approach goals. Encouraging boys to adopt avoidance goals may seem counterintuitive, yet it appears that efforts to avoid embarrassment and peer censure can promote adaptive behavior. Indeed, research suggests that demonstration-avoidance goals suppress boys' aggressive behavior in middle school (Ryan & Shim, 2008). Further research is needed to clarify when demonstration-avoidance goals represent an asset or liability.

### Developmental Issues

Findings from this study and past research with older children reveal several similarities across development, including a parallel social goal structure, a comparable pattern of sex differences, and similar associations with social adjustment. Given these similarities, it is likely that children's goal orientation would have a similar effect on responses to aggression at later developmental stages, yet the potency of some goals could intensify over time. For example, demonstration-avoidance goals did not consistently confer costs, and even had some short-term benefits in boys and low-victimized children, but a persistent concern about avoiding negative judgments may constrain children's ability to develop close friendships over the long-term. Indeed, demonstration-avoidance goals predict heightened subsequent anxious solitary behavior and diminished perceived popularity in middle school (Ryan & Shim, 2008). Because both social goals and responses to aggression may crystallize over time, early efforts to reshape maladaptive goals and responses may be vital for effecting change.

### Alternate Predictors of Responses to Peer Aggression

Despite the key contribution of social goal orientation, children's responses to aggression are likely multi-determined. Thus, both research and intervention efforts need to consider complex interactions between personal and contextual factors that influence these responses. With regard to personal factors, children's temperament may affect how they respond to aggression. For example, children with high negative emotionality may experience more intense and prolonged emotional reactions, preventing the effective mobilization of coping resources; children with poor inhibitory control may have trouble constraining impulsive reactions. With regard to contextual factors (Espelage & Swearer, 2004; Guerra, Eron, Heusmann, Tolan, & Van Acker, 1997), classroom and school climates (Craig, Pepler, &

Blais, 2007; Kochenderfer-Ladd & Pelletier, 2008) and parent socialization (Abaied & Rudolph, 2010) may promote or dissuade various responses and influence their success. Peers also influence the process of aggression by actively or passively condoning such behavior (O'Connell, Pepler, & Craig, 1999) or providing support to deter bullying (Hodges, Boivin, Vitaro, & Bukowski, 1999). By identifying multiple determinants of children's responses, interventions can modify both personal and contextual factors that contribute to the onset and perpetuation of aggression.

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Table 1

Descriptive Statistics

Variable	W <sub>1</sub>		W <sub>2</sub>		Temporal Stability		
	M	SD	M	SD		$\alpha$	
Responses to Peer Aggression:							
Self Report							
Effortful engagement	.40	.06	.81	.38	.05	.84	.39***
Effortful disengagement	.17	.03	.61	.23	.04	.77	.09 <sup>^</sup>
Involuntary engagement	.24	.04	.74	.22	.04	.81	.35***
Involuntary disengagement	.19	.04	.72	.17	.03	.73	.28***
Responses to Peer Aggression:							
Teacher Report							
Problem solving	.25	.07	.93	.27	.07	.85	.39***
Teacher advice seeking	.09	.03	.73	.09	.03	.74	.07
Ignoring	.10	.04	.78	.10	.04	.79	.19***
Retaliation	.19	.08	.92	.18	.09	.93	.56***
Social Achievement Goals							
Development	3.95	.87	.81	3.82	.90	.85	.44***
Demonstration-approach	2.73	1.13	.78	2.24	1.01	.81	.47***
Demonstration-avoidance	3.32	1.14	.79	3.23	1.08	.83	.23***
Situation-Specific Goals							
Cooperative	3.73	1.26	.86	3.70	1.18	.88	.40***
Conflict reduction	3.58	1.27	.83	3.54	1.22	.89	.36***
Revenge	2.28	1.28	.86	2.19	1.20	.90	.40***
Control	1.98	1.26	.89	1.79	1.07	.91	.34***
Self-interest	3.14	1.23	.80	3.08	1.17	.83	.41***
Peer Victimization	2.19	.81	.92	2.05	.75	.93	.48***
Perceptions of Social Relationships							

Variable	W <sub>1</sub>			W <sub>2</sub>			Temporal Stability
	M	SD	$\alpha$	M	SD	$\alpha$	
Positive self-perceptions	3.07	.70	.80	3.07	.66	.83	.44 <sup>***</sup>
Positive peer perceptions	2.97	.66	.77	2.92	.66	.82	.27 <sup>***</sup>
Negative self-perceptions	2.03	.72	.75	1.86	.58	.70	.37 <sup>***</sup>
Negative peer perceptions	2.13	.75	.74	2.00	.66	.72	.34 <sup>***</sup>
Social Behavior							
Prosocial behavior	2.99	1.06	.91	3.12	1.04	.88	.34 <sup>***</sup>
Aggression	1.77	.82	.93	1.85	.86	.93	.53 <sup>***</sup>

<sup>^</sup>  $p < .10$ .

\*\*\*  $p < .001$ .

**Table 2**  
Social Achievement Goals Predicting Situation-Specific Goals and Social Adjustment

	Cooperative Goals		Conflict Reduction Goals		Revenge Goals		Control Goals		Self-Interest Goals	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Social Achievement Goals										
Development	.47***	.24	.28***	.20	-.26***	.17	-.28***	.21	-.12*	.16
Demonstration-approach	-.18***		.00		.37***		.41***		.40***	
Demonstration-avoidance	.04		.27***		-.01		-.06		.04	
Positive Self-Perceptions										
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Social Achievement Goals										
Development	.33***	.11	.46***	.23	-.18*	.04	-.12*	.07	.13*	.07
Demonstration-approach	.07		.00		.04		.15**		-.25***	.35***
Demonstration-avoidance	-.05		.04		.19**		.23***		.06	-.17**

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .



**Table 3**

Social Achievement Goals Predicting Responses to Peer Aggression

Predictors	Self Report						Teacher Report									
	Effortful Engagement		Effortful Disengagement		Involuntary Engagement		Involuntary Disengagement		Problem Solving		Teacher Advice Seeking		Ignoring		Retaliation	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Concurrent																
Step 1																
Victimization	-.18***	.04	-.09 <sup>^</sup>	.01	.16***	.04	.18**	.03	-.20***	.09	.01	.02	-.09 <sup>^</sup>	.01	.17**	.07
Sex	.10 <sup>^</sup>		-.01		-.09 <sup>^</sup>		-.04		.22***		.15***		-.02		-.18***	
Step 2																
Development	.31***	.10	.02	.03	-.24***	.05	-.23***	.06	.13*	.06	.10 <sup>b</sup>	.01	-.12*	.02	-.08	.10
Demonstration-approach	-.19***		.17**		.01		.14**		-.22***		-.02 <sup>b</sup>		-.04		.29***	
Demonstration-avoidance	-.07 <sup>a</sup>		.06		.05		-.01 <sup>a</sup>		.06		-.01		.14*		-.16**	
Longitudinal																
Step 1																
W <sub>1</sub> Responses to Aggression	.37***	.16	.10 <sup>^</sup>	.02	.33***	.13	.28***	.09	.35***	.18	.05	.04	.17*	.04	.54***	.32
Victimization	-.09 <sup>^</sup>		.05		.08		.01		-.11*		-.03		-.12*		.04	
Sex	.02		.11*		-.04		-.07		.12*		.19**		.00		-.07	
Step 2																
Development	.18**	.04	.00	.00	-.11 <sup>^</sup>	.01	-.17**	.04	.05 <sup>b</sup>	.03	.14*	.02	-.04	.01	-.06	.01
Demonstration-approach	-.13*		.01		.07		.16*** <sup>b</sup>		-.13*		-.08		-.03		.05 <sup>b</sup>	
Demonstration-avoidance	.00		.03		.00 <sup>a</sup>		-.01		.10 <sup>b</sup>		-.01		.11 <sup>^</sup>		-.08 <sup>^</sup>	

<sup>^</sup>  $p < .10$ .  
 \*  $p < .05$ .  
 \*\*  $p < .01$ .  
 \*\*\*  $p < .001$ .

<sup>a</sup> Significantly moderated by victimization,  $p < .05$ .

<sup>b</sup> Significantly moderated by sex,  $p < .05$ .

*Note.*  $\beta$ s represent standardized regression coefficients for each step of the regression.  $\Delta R^2$  represents variance accounted for by each step of the regression.

## Appendix A

### Factor Analysis of Social Achievement Goals

Item	Social Development Goals	Demonstration -approach Goals	Demonstration -avoidance Goals
I like to learn new skills for getting along with other kids.	.76	-.09	-.05
I feel successful when I learn something new about how to get along with other kids.	.69	.02	-.02
One of my goals is to get to know other kids better.	.65	.01	.01
I like it when I learn better ways of getting along with other kids.	.62	-.07	.00
I try to figure out what makes kids' friendships work.	.52	.06	.09
I try to figure out what makes a good friend.	.51	.06	-.02
One of my goals is that my friendships become even better over time.	.45	.07	.06
It is important to me to learn more about other kids and what they are like.	.42	.06	.18
I want to be friends with the "popular" kids.	-.04	.72	-.00
It is important to me to have "cool" friends.	-.03	.67	-.04
My goal is to show other kids how much everyone likes me.	.10	.66	-.03
It is important to me that other kids think I'm popular.	-.07	.61	-.02
One of my main goals is that a lot of kids like me.	.15	.58	-.01
I try to do things that make me look good to other kids.	.10	.42	.14
I try to avoid doing things that make me look bad to other kids.	-.03	-.05	.66
When I am around other kids, I don't want to be made fun of.	.07	-.16	.64
When I am around other kids, I mostly just try not to goof up.	.04	.05	.61
I try not to do anything that might make other kids tease me.	.17	-.02	.58
It is important to me that I don't embarrass myself around my friends.	-.01	-.01	.56
One of my main goals is to make sure other kids don't say anything bad about me.	.08	-.05	.54
My main goal is to make sure I don't look like a loser.	-.13	.24	.52