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Beyond Situational Ambiguity in Peer Conflict: Unique and Combined Effects of Cues From an Antagonist and a Best Friend

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In accord with increasing recognition of the situation specificity of childhood social behaviors, individual and contextual differences in children's responses to potential peer conflict were examined (hostile attribution, behavioral strategies, and affective reactions; $N = 367$, 9–12 years, 197 girls). Situational cues from 2 sources, the antagonist and a witnessing best friend, were designed to suggest the antagonist's intentions. Multilevel modeling indicated that children's responses generally varied more according to cues from the antagonist than friend, but the latter also affected responses, especially when conflicting with other situational information. Cognitive and affective responses were also influenced by gender, social goals, friendship quality, and self-efficacy for peer interaction. Findings provide theoretical insight on the context of peer conflict.

Social cognition reflects and impacts children's social adjustment and behavior (for review, see Arsenio & Lemerise, 2004; Crick & Dodge, 1994; Gifford-Smith & Rabiner, 2004; Hartup, 2009), a consistent finding that has led to the development of skill-focused interventions for behavioral difficulties like aggression. However, many programs have limited effectiveness as acquired skills do not always generalize to everyday peer interactions (Gresham, Sugai, & Horner, 2001; Quinn, Kavale, Mathur, Rutherford, & Forness, 1999). In accord with theoretical accounts (Crick & Dodge, 1994; Lemerise & Arsenio, 2000), the context specificity of children's social cognition is increasingly acknowledged. For instance, children's social cognition depends on whether the antagonist is a friend, enemy, or ''neutral'' peer (e.g., Peets, Hodges, Kikas, & Salmivalli, 2007; see also Salmivalli & Peets, 2009) and early adolescents adjust goals for peer interaction according to specifics of the situation (e.g., victimization vs. friendly interaction; Ojanen, Aunola, & Salmivalli, 2007). These findings underline that children's social psychological and behavioral processes are affected not only by individual characteristics but also by situational context.

However, the context specificity of affective processes, along with the impact of situational cues from peers indirectly involved in the conflict, is still incompletely understood. Assessment of affective reactions to peer conflict (e.g., Burgess, Wojslawowicz, Rubin, Rose-Krasnor, & Booth-LaForce, 2006; Orobio de Castro, Merk, Koops, Veerman, & Bosch, 2005) has typically focused on angry reactions, although other emotions like embarrassment, fear, and sadness are also plausible and likely. For instance, anxious children may perceive ambiguous social interactions as rejection so feel embarrassed or sad. Existing research on the context specificity of responses to peer conflict has examined characteristics of the situation (e.g., conflict vs. group entry; Dodge, Laird, Lochman, Zelli, & Conduct Problems Prevention Research Group, 2002) or antagonist (e.g., disliked vs. liked; Peets, Hodges, & Salmivalli, 2008) but neglected the role of bystander peers. Management of peer conflict is a critical developmental task during middle childhood when coercion is common and disengagement is rare (see Laursen, Finkelstein, & Betts, 2001). Conflict seldom occurs without another peer present (Chaux, 2005), and information from peers serves as situational input to children's psychological and behavioral processes (Shoda, LeeTiernan, & Mischel, 2002). This study evaluated individual and contextual effects on children's cognitive and affective responses to peer conflict by considering the unique and combined effects of situational cues

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from two peers, the antagonist directly involved and a witnessing friend.

Context Specificity of Cognitive and Affective Processes in Peer Interaction

The core postulate of social information processing theory is that interpersonal behavior is influenced by the understanding and interpretation of social events (Lemerise & Arsenio, 2000). Broadly conceived, social information processing reflects the process of finding solutions to problematic social situations (D'Zurilla & Maydeu-Olivares, 1995). Specific steps of processing range from interpreting situational cues to enactment of behavioral strategies (see Crick & Dodge, 1994). Furthermore, cognition and affect operate in concert and both impact social adjustment and behavior (see Dodge et al., 2002; Mischel, 2009). Situational cues that evoke emotions can, in turn, impede systematic cue attention, bias interpretation, raise particular goals, reduce self-efficacy, and preclude effective behavioral enactment (Lemerise & Arsenio, 2000).

Since the conception of Crick and Dodge's (1994) seminal social information processing model, numerous studies have contributed to a now vast literature that establishes the model, and the interpretation of ambiguous situations, as a valid and useful heuristic for examining individual differences in peer interaction. Among other child characteristics, gender, friendship quality, communal (closeness) goals for peer interaction, and social self-efficacy are associated with social-cognitive and affective processes. For example, social goals are related to self-efficacy, intent attributions, and beliefs about the legitimacy of aggression (for review, see Erdley & Asher, 1999), and girls are more interpersonally oriented, less overtly aggressive, and perhaps more emotional than boys (Camodeca & Goosens, 2005; Card, Stucky, Sawalani, & Little, 2008; Quiggle, Garber, Panak, & Dodge, 1992). Due to their positive relations with adjustment and well-being (e.g., Wheeler & Ladd, 1982), friendship quality and self-efficacy likely indicate adaptive reactions to social interactions. For instance, children with higher social self-efficacy are well liked by their peers (Bukowski, Hoza, & Boivin, 1994), suggesting that they display adaptive peer interaction patterns and successfully resolve peer conflict. Despite the broad application of ambiguous situations, without the addition of situational detail, this method of assessment is also limited in its ability to translate to everyday peer interactions.

Although social context is a proposed moderating factor in the social information processing model (Crick & Dodge, 1994), the field ''has not yet articulated a strong theory of context,'' which may be required for an approach that is applicable to practice (Dodge, 2006, p. 810). Following the ''contextualization'' of other fields (e.g., personality may be viewed as an individual's distinct situation-specific pattern of reactions; see Mischel, 2009), the exploration of context is an important direction for the field of social cognition (Farmer & Xie, 2007; Fontaine, 2006). Individual child characteristics cannot explain all variability in children's reactions to everyday peer interactions. In other words, child characteristics do not alone dictate a child's response to a particular playground encounter. Rather, multiple contextual elements also influence children's reactions to peer conflict. While empirical research disentangling individual and context-specific effects has emerged relatively recently, it has quickly become apparent that contextual variation in children's social psychological and behavioral reactions is substantial. For instance, social information processing depends on multiple contextual factors including: emotional display of the antagonist (e.g., Lemerise, Fredstrom, Kelley, Bowersox, & Waford, 2006), situation type (e.g., Dodge et al., 2002; Sumrall, Ray, & Tidwell, 2000), race of the antagonist (McGlothlin & Killen, 2006), relationship with the antagonist (e.g., Peets et al., 2007, 2008; Salmivalli & Peets, 2009), type of provocation (e.g., relational vs. physical, Dirks, Treat, & Weersing, 2007; stealing vs. not sharing, Malti, Gasser, & Buchmann, 2009), and dyad characteristics (e.g., intra vs. interracial peer interactions; Killen, Kelly, Richardson, & Jampol, 2010).

Some social psychological processes are driven by children's individual characteristics, whereas others are largely a product of the specific social context. For instance, as much as 87% of the variability in hostile attribution is related to relationship with the antagonist (Peets et al., 2007), while less than half of the variability in self-efficacy beliefs is context specific (Peets et al., 2008). Less is known about children's affective processing of peer interactions. While anger seems to be impacted by certain elements of situational context (e.g., relationship with antagonist; Burgess et al., 2006), to the best of our knowledge, the degree of individual versus context-specific effects in anger and other affective reactions has not been specified. Given the relational nature of emotion, and its impact on cognitive processing (Lemerise & Arsenio, 2000), such investigation seems warranted.

While peer behaviors may be especially salient situational cues (Mischel, 2009), research on situational cues from peers *indirectly* involved, such as friends witnessing peer conflict, is practically nonexistent. Naturalistic observation of school playgrounds reveals that peers are present in 88% of bullying episodes (Hawkins, Pepler, & Craig, 2001), and peers indirectly involved can have various influences on bullying behavior (e.g., bystanders and reinforcers; see Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996). Similarly, children report the presence of another peer in 63% of peer conflicts and active involvement, most frequently supporting one side or the other, in 52% of incidents (Chaux, 2005). As peers frequently witness and become actively involved in conflicts, we believe that in addition to information from the antagonist directly involved, reactions from less involved peers also affect the way children construct meaning of and respond to conflict.

Friendship in Middle Childhood

Friends are very important to children's well-being and influence the way they behave and think in social situations (see Berndt, 1982; Buhrmester, 1990; Rodkin & Hodges, 2003). For example, friends share peer preferences (e.g., influence likability of and interaction with out-group members; Castelli, De Amicis, & Sherman, 2007) and often target the same victims (Card & Hodges, 2006), and children's level of aggression resembles that of their friends (e.g., Espelage, Holt, & Henkel, 2003). Although many children may be aggressive before affiliating with deviant peers, empirical examination of enhancement models of deviant behavior indicates that peers can exacerbate these tendencies (e.g., Van Lier, Wanner, & Vitaro, 2007). Studies of the mechanisms of friends' influence on aggression suggest that overt encouragement (e.g., Eldeleklioglu, 2007), subtle suggestions (e.g., Dishion, Eddy, Haas, Li, & Spracklen, 1997), and the simple presence of a peer (e.g., Jacquin, Harrison, & Alford, 2006) are related to aggression.

Very little research has examined whether friends can alter children's social information processing. Baron, Forde, and Kennedy (2007) predicted that the presence of a friend in hypothetical vignettes would increase the use of physical force, but it did not. However, this cross-sectional study was conducted with a specific subgroup, male adolescent dropouts, which may not generalize to broader preadolescent samples. Brendgen, Bowen, Normand, and Vitaro (1999) did find that having aggressive friends increased children's aggressive response generation after only 6 months. While prosocial friendships only benefited well-adjusted children, all preadolescents were negatively influenced by aggressive friends. These findings suggest that friendships impact a child's social information processing, although the mechanism of influence is unclear, as specific actions of friends have not been considered. To the best of our knowledge, this is the first study to consider the proximal influence of a friend's statements during hypothetical peer conflict.

Present Study

We sought to evaluate the relative degree of individual and contextual difference in children's cognitive (hostile attribution, as well as aggressive and prosocial behavioral strategies) and affective reactions to peer conflict. In the affective domain, we sought to augment existing knowledge of contextual effects on anger (e.g., Burgess et al., 2006) by assessing a broader variety of affective responses (fear, embarrassment, sadness, and anger).

In a repeated measures design, vignettes depicting hypothetical conflict situations were presented to children with two situational cues varied: (a) a statement or action by the antagonist that hints at their intent (antagonist cue [AC]) and (b) a comment from a best friend that suggests their interpretation of the antagonist's intent (friend cue [FC]). There were three levels (benign, ambiguous/no cue, and hostile) of each situational cue from the two peer sources (i.e., six cues, also examined in nine different combinations). We expected that situational cues from both sources would influence children's attributions of intent, affective reactions, and behavioral strategies according to the valence of the cue (benign or hostile), as compared to traditionally ambiguous (no cue) situations. As girls are generally more relational than boys (see Card et al., 2008), their cognitive and affective responses to peer conflict may be more impacted by cues from peers. In addition, we expected that children with higher friendship quality, communal goals, and social self-efficacy would display less emotion, hostile attribution, and aggression, as well as more prosocial strategies in response to peer conflict.

The current design enabled us to examine two nuanced aspects of context specificity. First, we examined the possibility that children differ in the way they adjust cognitive and affective reactions to conflict as a function of specific situational cues,

which, in turn, may be explained by individual characteristics. For instance, children exhibiting communal social goals may be sensitive to cues that threaten friendly peer interaction and thus especially likely to adjust their responses according to cues reflecting hostility. Second, this assessment was designed to provide insight on whether and how cognitive and affective reactions depend on the relative congruence of the two sources of situational information. For this, we examined combined effects of the cues from the antagonist and friend. When cues from the antagonist and friend conflict, it may be more difficult for children to interpret meaning, and more consideration may be given to the friend's perspective.

Method

Participants

The sample consisted of children attending fourth (N = 181) and fifth (N = 186) grades at two elementary schools in a large school district in the Southeastern United States The sample was equally split by gender (197 girls). The return rate of the parental consent was 75%. Small incentives were provided to the participants (e.g., stickers) and teachers (i.e., $10 gift certificates). Three children did not provide enough data and were excluded from the final sample (N = 367, age range = 9–12, M = 9.90, SD = 0.76). The ethnic composition of the sample was: Caucasian (45%), Hispanic (36%), African American (11%), Asian/Pacific Islander (1%), Native American/Alaskan Native (1%), and Other (1%).

Measures

Based on existing hypothetical ambiguous situations (Fast Track Project, 2002, 2003; Garner & Lemerise, 2007; Parker, 2002), the Contextualized Ambiguous Social Situations measure (CASS; see the Appendix) was developed as stimulus material with situational cues manipulated. An expert panel was used to evaluate the face validity of the adapted vignettes. The CASS measure contains nine vignettes that describe a peer interaction in which the protagonist experiences a negative event due to the actions of a same-sex peer antagonist. CASS contains three peer entry (i.e., attempts to join a group) and six peer provocation situations. While peer provocation may be more illustrative of negative peer interactions that can lead to conflict, three peer entry situations were also included in order to more generally assess negative peer interactions. Each vignette was read aloud to children in a group format, after which they answered the questions independently and silently. The stories were also printed on the survey page. The researcher read the next story when all students were finished. At the conclusion of the final vignette, students completed the remainder of the survey packet at their own pace.

Situational cues: FC and AC. In all scenarios, a ''best friend'' is present. The vignettes vary by: (a) a comment made by the best friend that hinted at their perception of the antagonist's intent (FC) and (b) an antagonist's comment or action that is a cue to their intent (AC). There are three levels (benign, ambiguous/no cue, and hostile) of each manipulated factor (FC and AC). Thus, the nine vignettes each represent a different combination of these two situational cues. Although ACs add information regarding the antagonist's intentions, some degree of ambiguity remains. Likewise, FCs are subtle suggestions of their perspective. To control for the effects of a particular story line, story lines were counterbalanced. In other words, particular cue combinations were randomly paired with different story lines across the sample. An example CASS vignette follows:

> Pretend that you and your best friend are walking to school together and you're wearing brand new shoes. You really like your new shoes and this is the 1st day you have worn them. Suddenly, you are bumped from behind by a girl named Whitney. You fall into a mud puddle and your new shoes get muddy.
>
> Friend Cue (FC):
> Hostile: ''Your best friend says 'Whitney can be a real bully.' ''
> Benign: ''Your best friend says 'Whitney was running too fast.' ''
> Ambiguous: No additional cue.
>
> Antagonist Cue (AC):
> Hostile: ''Whitney doesn't stop and keeps going to school.''
> Benign: ''Whitney reaches out a hand to help you up.''
> Ambiguous: No additional cue.

Affective responses. Following each vignette, children's affective reaction is assessed by four questions that ask children ''If this story happened to you, would you feel'': (a) sad (nine vignettes,

α = .84), (b) mad (α = .81), (c) embarrassed (α = .77), and (d) scared (α = .90) with a 5-point response scale ranging from 1 = *very slightly* to 5 = *extremely. The four emotions are presented in a different order for each of the nine vignettes.*

Cognitive responses. Children respond to one question that indicates the degree of hostile intention attributed to the antagonist (i.e., antagonist acted ''on purpose because she was trying to be mean'') on a 5-point scale ranging from 1 = *NO definitely not* to 5 = *YES definitely* (nine vignettes, α = .69). Four questions ask ''If this story happened to you, would you,'' followed by examples of: (a) physical aggression (α = .93), (b) verbal aggression (α = .90), (c) relational aggression (α = .86), and (d) prosocial behavior (α = .73). Children indicate whether they would perform each behavioral strategy on a 5-point scale ranging from 1 = *NO definitely not* to 5 = *YES definitely.* The order of behavioral strategies differs in each of the nine stories. Overt aggression is the average of physical and verbal aggression.

Communal goals. The Interpersonal Goals Inventory for Children (IGI–C; Ojanen, Gronroos, & Salmivalli, 2005) is a 33-item self-report measure of social goals in different blends of agency (e.g., self-assertion, status, peer influence) and communion (e.g., friendliness, warmth, closeness). Participants are asked to indicate the relative importance of various social outcomes when with peers (1 = *no, not at all*, 7 = *very important*). For the present study, vector score computation, employed in circumplex models (see Locke, 2003), was used to combine subscale scores into a main dimension of communal social goals. Cronbach's alpha for the six subscales used in computing the communal vector score are as follows: Communal (.75, four items), Separate (.68, six items), Submissive-Communal (.79, five items), Agentic-Communal (.68, four items), Agentic-Separate (.68, three items), and Submissive-Separate (.77, four items).

Friendship quality. The Friendship Qualities Scale (Bukowski et al., 1994) assesses a child's perception of five aspects of the quality of a friendship (i.e., companionship, conflict, help/aid, security, closeness). Children are asked to ''please think about your BEST friend'' and rate how true (1 = *not true* to 5 = *really true*) each statement is of their relationship. The 23-item scale had an internal reliability of .88 (Cronbach's alpha).

Social self-efficacy. The Problem-Solving Self-Efficacy scale (Wheeler & Ladd, 1982) assesses children's confidence in their social problem-solving ability. The 22-item scale (Cronbach's alpha = .91) contains both conflict and non-conflict-related skills. Children read each statement about a social skill and rate how easy it would be to perform (1 = *hard*, 4 = *easy*).

Analytic Strategy

Multilevel modeling (Mplus 5.2; Muthén & Muthén, 1998–2007) was used to separate the variance in the examined cognitive and affective variables into between- and within-subject differences. Due to some incomplete data (approximately 5% of participants for some measures), all analyses were conducted with the full information maximum likelihood estimator (see Muthén & Muthén, 1998–2007) enabling inclusion of all 367 participants by model-based data imputation.

The analyses were conducted as follows. First,we evaluated the effects of each situational cue on the cognitive and affective variables by estimating a null model where intraclass correlation coefficients (ICCs), inform how much variability in children's responses to conflict is due to child characteristics (i.e., between-subject differences) and how much is related to particular aspects of the situation (i.e., within-subject effects). Second, to specify the effects of each type of situational cue, two dummy variables were constructed to represent benign and hostile levels of the AC (i.e., averaged across FC levels) compared to ambiguous/no AC condition. Another two dummy variables were similarly formed to represent the benign and hostile variants of the FC (i.e., averaged across AC levels) compared to the ambiguous/no FC condition. The impact of each dummy variable on cognitive and affective responses was then examined at the within-subject level while controlling for between-subject variation. Third, individual differences in responses were examined at the between-subject level. Specifically, the effects of gender, friendship quality, social self-efficacy, and communal goals on children's cognitive and affective responses were estimated.

Fourth, potential between-subject differences in context-specific effects were examined by utilizing random slope analysis where the regression slopes (context-specific effects), initially estimated at the within-subject level, were allowed to vary freely among individual children at the between-subject level (see Muthén & Muthén, 1998–2007). The slopes were subsequently correlated with gender, communal goal orientation, friendship quality, and social self-efficacy to evaluate potential sources of individual variation in situation-specific effects. Fifth, to evaluate whether cognitive and affective

processes depend on specific combinations of situational cues from the two peers, the effects of eight dummy variables, each representing a different combination of the three levels of AC and FC compared to the ''cueless'' condition (i.e., no AC and no FC), were examined at the within-subject level.

Results

Descriptive Statistics

Means and standard deviations of the cognitive and affective variables according to each of the nine combinations of situational cues (3 AC × 3 FC) are reported in Table 1. As seen here, children altered their affective and cognitive responses according to the valence of the situational cues. For example, hostile attribution was greatest when the cue was hostile, followed by the absence of a cue, and least when the cue was benign.

Bivariate correlations among variables at the between- and within-subject levels, along with between-level means and standard deviations, are reported in Table 2. As reflected in the means, anger was the most common affective response to the social scenarios, followed by sadness, embarrassment, and fear. Interpretations of the correlations vary according to the level. For example, a positive between-level correlation (r = .58) between fear and sadness indicated children who reported more fear across situations also reported, on average, more sadness. The respective within-level correlation, in turn, suggested fear in response to a particular combination of situational cues, was related to sadness in the same situation, but to a much lesser degree (r = .15). This pattern of smaller within-level correlations, compared to between-level correlations, was generally seen across both cognitive and affective domains. For instance, while relational and overt aggression were highly related at the between-subject level (r = .92), the considerably smaller within-subject correlation (r = .29) suggested that while aggressive children are generally likely to display both overt and relational aggression, specific social situations are much less likely to simultaneously elicit both relationally and overtly aggressive strategies. At the within-subject level, both types of aggression were related to anger, and overt aggression was related to feeling embarrassed.

At the between-subject level, communal goals, friendship quality, and female gender were associated with increased emotion and prosocial responding, as well as less aggression. Social self-efficacy was associated with lower levels of emotion between subjects but had little association with cognitive processes. Although highly correlated, relational and overt aggression were differently related to affective responses. While both were related to anger, only relational aggression was also related to fear, and only overt aggression to a lack of sadness.

Individual and Contextual Variation in Children's Cognitive and Affective Responses

Multilevel modeling was used to evaluate the relative degree to which variance in children's cognitive and affective responses to conflict was due to individual versus situation-specific effects.

Table 1
Means and Standard Deviations (N = 367) of Affective and Cognitive Responses According to Combinations of Situational Cues

	Benign AC			No AC			Hostile AC		
	Benign FC	No FC	Hostile FC	Benign FC	No FC	Hostile FC	Benign FC	No FC	Hostile FC
Affective responses									
Sadness	2.24 (1.32)	2.19 (1.28)	2.28 (1.43)	2.35 (1.41)	2.34 (1.39)	2.46 (1.43)	2.56 (1.44)	2.62 (1.50)	2.54 (1.50)
Anger	2.68 (1.49)	2.58 (1.40)	2.95 (1.54)	2.99 (1.51)	3.27 (1.48)	3.40 (1.50)	3.58 (1.40)	3.75 (1.40)	3.78 (1.36)
Fear	1.42 (0.94)	1.47 (0.95)	1.40 (0.94)	1.41 (0.90)	1.44 (0.96)	1.38 (0.85)	1.48 (0.97)	1.43 (0.92)	1.46 (0.98)
Embarrassment	1.86 (1.26)	2.13 (1.45)	2.18 (1.46)	2.06 (1.42)	2.04 (1.39)	2.02 (1.37)	2.16 (1.38)	2.20 (1.47)	2.09 (1.41)
Cognitive responses									
Hostile attribution	2.33 (1.27)	2.35 (1.22)	2.80 (1.27)	2.92 (1.26)	3.38 (1.21)	3.54 (1.29)	3.75 (1.28)	4.11 (1.03)	4.20 (1.05)
Prosocial responding	3.49 (1.40)	3.42 (1.37)	3.45 (1.43)	3.50 (1.40)	3.50 (1.38)	3.63 (1.45)	3.52 (1.43)	3.56 (1.42)	3.32 (1.47)
Overt aggression	1.82 (1.12)	1.78 (1.15)	1.91 (1.17)	1.94 (1.14)	2.03 (1.27)	2.02 (1.19)	2.22 (1.29)	2.17 (1.25)	2.22 (1.27)
Relational aggression	1.77 (1.15)	1.77 (1.11)	1.91 (1.26)	1.87 (1.19)	1.94 (1.25)	1.97 (1.23)	2.09 (1.27)	2.07 (1.30)	2.11 (1.32)

Note. Variables measured on a 5-point scale. Values in parentheses are standard deviations. AC = antagonist cue; FC = friend cue.

Table 2
Between- and Within-Level Bivariate Correlations for the Study Variables, Below and Above the Diagonal, Respectively

	Affective responses				Cognitive responses				Between-subject variables				
	1	2	3	4	5	6	7	8	9	10	11	12	*M* (*SD*)
Affective responses													
1. Sadness		.18***	.15***	.14***	.12***	.00	.00	.02	–	–	–	–	2.37 (0.85)
2. Anger	.24***		.04	.12***	.44***	.05*	.28***	.14***	–	–	–	–	3.21 (0.81)
3. Fear	.58***	.11		.26***	.03	−.04*	.03	.03	–	–	–	–	1.43 (0.65)
4. Embarrassment	.72***	.29***	.72***		.06**	−.07***	.06**	.02	–	–	–	–	2.08 (0.73)
Cognitive responses													
5. Hostile attribution	−.06	.52***	−.03	.00		.04	.33***	.18***	–	–	–	–	3.26 (0.54)
6. Prosocial responding	.43***	.22**	.21***	.42***	.02		.02	.00	–	–	–	–	3.49 (0.68)
7. Overt aggression	−.24***	.54***	.02	−.11	.57***	−.14		.29***	–	–	–	–	2.01 (0.98)
8. Relational aggression	−.06	.55***	.14*	.05	.61***	.03	.92***		–	–	–	–	1.95 (0.77)
Between-subject variables													
9. Gender	.46***	.01	.13*	.37***	−.10	.15*	−.22***	−.16**		–	–	–	0.54 (0.50)
10. Communal goals	.27***	−.07	.02	.16**	−.16*	.24***	−.26***	−.22***	.27***		–	–	1.59 (2.61)
11. Friendship quality	.25***	−.09	.08	.21***	−.13	.29***	−.28***	−.19***	.30***	.30***		–	3.69 (0.67)
12. Social self-efficacy	−.26***	−.07	−.24***	−.29***	−.04	.00	.00	−.07	−.13**	−.02	.16**		2.96 (0.57)

An ICC reflects the relative proportion of variance due to between-subject differences (whereas the rest, 1.00 − ICC, is related to context-specific effects). Intraclass correlations were first calculated by considering individual and contextual variation among children's responses to all nine situations (combined AC and FC). To examine contextual variation specific to each type of situational cue, we grouped responses according to AC (averaged across FC) and then FC (averaged across AC). The ICC estimates and their corresponding 95% confidence intervals are reported in Table 3. The inclusion (or exclusion) of an ICC point estimate within other ICC confidence intervals enabled us to compare which cognitive and affective processes were most affected by situational cues, the relative effects of the two types of situational cues, and gender differences.

As reflected in Table 3, there was large variation (35%–88%) in the degree to which situational context affected cognitive and affective processes. Lack of overlap in ICC confidence intervals for cognitive responses suggested that all four were differentially affected by the situational cues. With respect to the overall situation-specific effects (AC and FC), hostile attribution was the most affected by context (88% of variance explained), followed by prosocial responses, then relational aggression, and lastly overt aggression. The amount of situation-specific variation in the affective processes was greatest for embarrassment and anger, followed by sadness, and lastly fear. It should be noted that the amount of variation explained by the specific cue type (see AC and FC columns in Table 3) was smaller than the overall within-person variation across all nine situations (see the ''all situations'' column in Table 3), likely due to the fact that the within-subject variance was partitioned into three (i.e., three levels of a cue type averaged across the three levels of the other cue type) rather than nine contextual manipulations. Situation-specific variation in hostile attribution, anger, sadness, and prosocial responding was relatively greater in response to the AC than the FC. For girls, anger, fear, embarrassment, and hostile attribution were more affected by situational cues than for boys.

Contextual Effects in Reactions to Peer Conflict: Cues From the Antagonist and a Best Friend

Context-specific effects on children's cognitive and affective responses were determined by examining dummy variables, each representing effects of a benign or hostile cue compared to the no-cue condition, modeled at the within-level (Figure 1). As expected, both hostile and benign cues from the antagonist and friend explained variance in cognitive and affective processes compared to no-cue ambiguous situations. Hostile cues from both the antagonist and friend *increased* anger, hostile

Table 3
Intraclass Correlation Coefficients Reflecting Individual (ICC) and Contextual (1.00 − ICC) Variation in Cognitive and Affective Responses

	Individual variation (all situations)			Friend cue (FC)			Antagonist cue (AC)		
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Affective responses									
Sadness	.36 [.32, .41]	.32 [.26, .39]	.26 [.21, .32]	.65 [.60, .70]	.62 [.54, .69]	.58 [.51, .65]	.50 [.44, .56]	.49 [.40, .58]	.40 [.31, .48]
Anger[a]	.29 [.25, .33]	.36 [.29, .42]	.28 [.23, .34]	.61 [.56, .66]	.63 [.55, .70]	.60 [.52, .66]	.34 [.27, .40]	.36 [.26, .45]	.32 [.23, .41]
Fear[a]	.49 [.45, .54]	.60 [.54, .67]	.42 [.36, .48]	.73 [.69, .77]	.80 [.75, .84]	.67 [.61, .73]	.71 [.67, .75]	.82 [.78, .86]	.62 [.55, .68]
Embarrassment[a]	.27 [.23, .31]	.34 [.28, .41]	.19 [.14, .24]	.49 [.42, .56]	.56 [.48, .64]	.37 [.28, .45]	.44 [.37, .50]	.52 [.44, .61]	.31 [.22, .40]
Cognitive responses									
Hostile attribution[a]	.12 [.10, .16]	.15 [.11, .21]	.10 [.06, .14]	.36 [.30, .34]	.43 [.34, .53]	.29 [.20, .38]	.07 [.01, .14]	.13 [.04, .23]	.02 [.00, .11]
Prosocial responding	.23 [.20, .27]	.22 [.17, .29]	.24 [.19, .29]	.52 [.46, .57]	.49 [.40, .57]	.53 [.45, .61]	.41 [.35, .48]	.42 [.33, .52]	.39 [.30, .48]
Overt aggression	.65 [.61, .68]	.63 [.58, .69]	.64 [.59, .69]	.83 [.81, .86]	.83 [.78, .86]	.83 [.79, .87]	.83 [.80, .86]	.81 [.77, .85]	.84 [.80, .87]
Relational aggression	.39 [.35, .44]	.41 [.35, .48]	.36 [.31, .42]	.62 [.57, .67]	.62 [.56, .69]	.60 [.53, .67]	.66 [.61, .70]	.67 [.60, .74]	.63 [.56, .69]

Note. ICC values represent the percentage of variance explained by individual (between-level) differences (values in brackets represent 95% confidence intervals). ''Individual variation (all situations)'' columns contain the joint effect of both situational cues (FC and AC). ''Total'' columns contain results for the entire sample (N = 367).
[a]Degree of individual variation (all situations) differs according to gender.

attribution, and overt aggression, while benign cues *reduced* anger and hostile attribution, compared to situations in which these cues were absent. In addition, a hostile AC increased embarrassment, sadness, and relational aggression, while a benign AC reduced sadness and aggression, in comparison to situations without an AC. With individual variation also included, effects of the situational cues on fear and prosocial responses did not reach statistical significance, suggesting that these responses were less affected by specific situational cues and more by individual differences. The hostile and benign cues differed in directionality of effects but were remarkably similar in magnitude. In other words, hostile cues had effect sizes similar to benign cues, but in the opposite direction. Supporting ICC findings, the size of the regression coefficients (see also R^2 estimates in Figure 1) suggested that the effects of the AC were generally stronger than the FC. For instance, a hostile AC affected most cognitive and affective responses but a hostile FC had fewer effects.

Individual Differences in Reactions to Conflict: Gender, Social Self-Efficacy, Friendship Quality, and Communal Goals

To examine individual differences in children's responses to conflict, gender, social self-efficacy, friendship quality, and communal goals were included in the model as correlated between-subject level predictors while controlling for the within-subject variance in children's responses, which were also allowed to correlate. The final between-subject model, $\chi^2(15) = 13.84$, *ns*, comparative fit index (CFI) = 1.00, root mean square error of approximation (RMSEA) = .00, is depicted in the upper section of Figure 1. A positive effect of gender (0 = boy, 1 = girl) indicated girls had higher levels of the variable. Girls reported more sadness and embarrassment than boys, who were more likely to respond aggressively to peer conflict. Communal goals were related to less aggression and higher levels of prosocial responding and sadness. Friendship quality was related to less overt aggression, more prosocial responding, and increased emotion (sadness, fear, and embarrassment). Finally, social self-efficacy was related to less relational aggression and less emotion (sadness, fear, and embarrassment).

Examining Individual Differences in Context-Specific Effects: Random Slope Analysis

To evaluate whether certain children would be more affected by the situational cues than others, context-specific (i.e., within-level) effects were defined as random slopes allowed to vary freely at the between-subject level. When significant variance in slope was encountered (i.e., effect of the situational cue varied according to child), correlations between the random slope and individual characteristics (gender, communal goals, friendship quality, and social self-efficacy) were examined (see Muthén & Muthén, 1998–2007). Specifically, we examined the context-specific

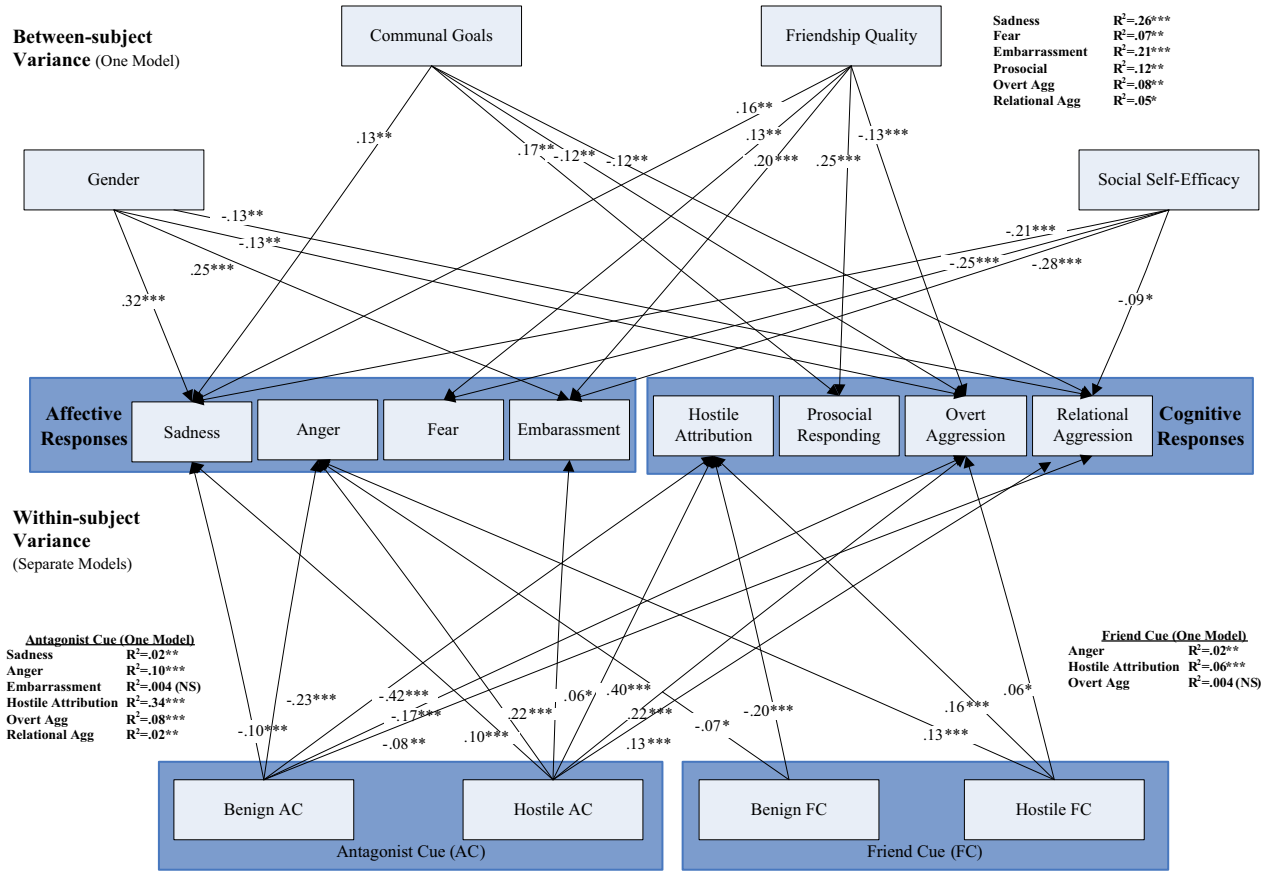

Figure 1. Multilevel model of standardized regression coefficients for between-subject predictors of, along with coefficients from within-subject models of contextual effects on, children's cognitive and affective responses (N = 367).
Note. At the between-subject level, R^2s refer to the variance explained by the *overall* between-level model. In the within-subject models, R^2s reflect the variance explained in each cognitive or affective response by *each* type (separate AC and FC models) of situational cue. The between-subject predictors were allowed to correlate, as were the cognitive and affective responses. Only significant paths were included in the models. AC = antagonist cue; FC = friend cue.
*p < .05. **p < .01. ***p < .001.

effects of hostile and benign cues (but not the ambiguous condition) on each of the cognitive and affective responses resulting in 32 potential variations in slope, 4 of which were significant. Due to the large number of tests conducted, this analysis was exploratory.

There were individual differences in the degree to which children adjusted their aggression and sadness in response to hostile cues. The context-specific effect of a hostile FC on relational aggression significantly varied among children, b = .14, z = 1.97, p < .05. Furthermore, the slope was negatively correlated to friendship quality, r = −.09, p < .01, suggesting that the lower the friendship quality, the greater the effect of a friend's hostile comment on children's relational aggression. Children also differed in the effect of the hostile AC on sadness, b = .66, z = 3.20, p < .01; relational aggression, b = .11, z = 2.34, p < .05; and overt aggression, b = .06, z = 1.98, p < .05. The varying effect of the hostile AC on sadness was related to gender, r = .07, p < .01; friendship quality, r = .09, p < .01; and communal goals, r = .36, p < .01, suggesting the hostile AC had a greater effect on sadness for girls and those with higher friendship quality and communal goals. The degree to which children adjusted their relational aggression in response to the hostile AC was negatively related to friendship quality, r = −.06, p < .01, suggesting that the lower the friendship quality, the greater the effect of a hostile AC on relational aggression. While the degree children adjusted their overt aggression in response to a hostile AC differed between children, the variation in this slope was not explained by any of the examined between-subject variables.

Beyond Unique Contextual Effects: Relative Correspondence of Situational Cues From the Antagonist and a Best Friend

Our final goal was to examine specific combinations of situational cues to explore the effects of both congruent and incongruent evidence from peers. To determine if synergistic effects were present, we examined within-subject effects of a single interaction term (AC × FC) constructed from two categorical variables (AC and FC), denoting the three levels (benign, ambiguous/no cue, hostile) of each cue type. As seen in Table 4, significant interaction effects were present for sadness, anger, hostile attribution, and aggression, but not for fear, embarrassment, or prosocial responding. To further explore interaction effects, post hoc analysis was conducted with the cognitive and affective variables affected by the interaction, or combination, of evidence from two peers. Specifically, to estimate the effects of specific cue combinations compared to the truly ambiguous situation, where both situational cues were absent, eight dummy variables (i.e., nine vignette–cue combinations minus the cueless condition) were constructed, and then modeled at the within-subject level.

Table 4 illustrates the effects, along with 95% confidence intervals, of different combinations of situational cues (AC and FC), including situations in which evidence from peers converges (i.e., benign–benign or hostile–hostile) and conflicts (i.e., benign–hostile), compared to the ambiguous situation. Significant differences in effects of specific cue combinations can be determined by the assessment of inclusion (or exclusion) of a specific regression coefficient estimate within the confidence interval of another cue combination. Comparison of regression coefficients and confidence intervals, suggested that the addition of an incongruent FC had a greater effect on children's responses than adding a congruent FC. For instance, reduction in hostile attribution resulting from adding a confirmatory benign FC to a benign AC, β = −.27, was similar to the reduction resultant from a benign AC alone, β = −.27. However, when a conflicting hostile FC was added to a benign AC, the reduction in hostile attribution is significantly smaller (β = −.15 is not included in the confidence interval [−.31, −.24] of the benign AC/no FC condition). This finding, where the incongruent regression coefficient, but not the congruent one, was significantly different from the condition without a FC, emerged for hostile attribution and anger, regardless of the valence of AC. This pattern of results suggested that while

Table 4
Standardized Regression Coefficients Reflecting Contextual Effects on Cognitive and Affective Responses at the Within-Subject Level in Different Combinations of Situational Cues From the Antagonist and a Best Friend.

Antagonist cue (AC)	Benign AC			No AC		Hostile AC			Interaction
Friend cue (FC)	Benign FC	No FC	Hostile FC	Benign FC	Hostile FC	Benign FC	No FC	Hostile FC	AC × FC
Cue congruency	Congruent		Incongruent			Incongruent		Congruent	
Affective responses									
Sadness	−.04* [−.08, −.01]	−.05** [−.08, −.02]	–	–	–	.05** [.02, .09]	.07*** [.03, .10]	.05** [.01, .09]	.10***
Anger	−.15*** [−.19, −.12]	−.18*** [−.22, −.14]	−.08*** [−.12, −.04]	−.07*** [−.11, −.04]	-	.07*** [.03, .10]	.10*** [.06, .14]	.11*** [.07, .15]	.26***
Cognitive responses									
Hostile attribution	−.27*** [−.32, −.24]	−.27*** [−.31, −.24]	−.15*** [−.18, −.12]	−.12*** [−.16, −.09]	-	.08*** [.04, .12]	.17*** [.14, .20]	.19*** [.16, .23]	.44***
Overt aggression	−.06*** [−.09, −.03]	−.09*** [−.12, −.05]	–	–	–	.11*** [.07, .14]	.09*** [.05, .12]	.11*** [.07, .14]	.16***
Relational aggression	–	−.04*** [−.07, −.01]	–	–	–	.06** [.02, .10]	.06** [.02, .10]	.07*** [.03, .10]	.09***

Note. $N = 367$. Values in cells are standardized regression coefficients (values in brackets represent 95% confidence intervals). Only significant paths were included in the model. The final column reflects the estimate of a significant interaction term (AC × FC). AC = antagonist cue; FC = friend cue.
*$p < .05$. **$p < .01$. ***$p < .001$.

the effects of the FC were generally smaller than those of the AC, the effects of the FC on children's responses were especially pronounced when conflicting with other available evidence.

Discussion

Despite the increasingly acknowledged impact of situational context on children's social cognition (e.g., Dodge, 2006; Farmer & Xie, 2007; Fontaine, 2006), the context specificity of affective processes, along with the impact of situational cues from peers indirectly involved in conflict, has yet to be considered. We examined the unique and combined effects of situational cues from two sources, the antagonist and a witnessing friend, on children's cognitive and affective responses to peer conflict. Contextual effects on children's responses varied according to domain of processing (cognitive vs. affective), child characteristics, source of the situational information (antagonist vs. friend), and unique combinations of situational cues from the two peers. The present findings are among the first to specify the unique and combined effects of contextual information from peers directly and indirectly involved in peer conflict, and have both theoretical and practical implications.

Responses to Peer Conflict: Individual and Context-Specific Effects

As expected, children altered their cognitive and affective responses according to the valence of situational cues. Comparison of individual and contextual variation in cognitive and affective processes revealed they were differentially affected by the situational cues. For instance, as much as 88% of the variation in hostile attribution was explained by contextual effects, similar to previous findings (Peets et al., 2007, 2008), whereas overt aggression was more driven by individual (65%) rather than contextual (35%) effects. The situational cues were meant to suggest the intention of the antagonist and, therefore, likely most relevant to hostile attribution. Coinciding with behavioral genetic findings regarding physical aggression (Brendgen et al., 2005), overt aggression is largely a product of child characteristics, reflecting social-cognitive deficits (see Crick & Dodge, 1994), such as biased interpretation of situational cues (Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). In the affective domain, anger and embarrassment were the most affected by the cue manipulation. Embarrassment may be particularly influenced by social context as it requires an audience and may result in perception management motives (Seidner, Stipek, & Feshbach, 1988). Anger was the emotion most associated with hostile attribution, which likely explains the greater observed context specificity.

As the distinction between relational and overt forms of aggression is more recent and not always measured, less is known about respective associations with affective reactions to peer conflict. Aligned with the existing literature, relational and overt aggression were highly correlated at the between-subject level (see Card et al., 2008) and both were related to experienced anger (e.g., Orobio de Castro et al., 2005). However, only relational aggression was related to fear and only overt aggression to a lack of sadness. Children who report fear may anticipate retaliation or negative evaluation (see Loudin, Loukas, & Robinson, 2003) if they opt for an overt method of retribution, so instead they select relational aggression. As overt aggression typically decreases with age and is highly discouraged by middle childhood (Arsenio, 2004; Murray-Close & Ostrov, 2009), only a subset of aggressive children continue to use overt aggression. These children may possess callous and unemotional traits (for review, see Frick & White, 2008), perhaps explaining the connection between overt aggression and a lack of sadness.

While context specificity was substantial, individual child characteristics also affected the way children responded to peer conflict. Aligned with previous research examining emotional response to peer conflict (Camodeca & Goosens, 2005; Quiggle et al., 1992), girls reported more affective responding, specifically embarrassment and sadness, and less aggression than boys. While some studies find that girls employ more relational, and less overt, aggression than boys (e.g., Crick & Grotpeter, 1995; Murray-Close & Ostrov, 2009), a recent meta-analysis revealed only trivial gender differences in relational aggression (Card et al., 2008). Our results add to the mixed findings regarding the use of relational aggression by girls. As girls are generally more relational (see Card et al., 2008), we expected girls to pay greater attention to situational cues than boys, resulting in greater situational variation in their responses. We found that situational variation was greater for girls than boys in half of the cognitive and affective processes: anger, fear, embarrassment, and hostile attribution. These and other results (Peets et al., 2007; Peets et al., 2008) suggest that boys and girls are fairly similar in how

their reactions to peer conflict reflect situational variation. However, our pattern of results provides preliminary evidence that girls may be more influenced by peer comments than boys.

Friendship quality and communal social goals were related to greater prosocial responding and less aggression, whereas self-efficacy for peer interaction had little impact on cognitive responses. Similarly, these child characteristics had differential effects on affective processes. Aligned with theoretical prediction of communal motivation being related to less concealment of emotion (Locke, 2000), friendship quality and communal goals were associated with increased emotion. Thus, children who place great importance on social relationships may be more upset by peer conflict. Conversely, perceived social competence, or self-efficacy, seemed to protect against emotional arousal in conflict situations.

Situational Cues Disentangled: Unique and Combined Effects of ACs and FCs

As expected, hostile situational cues increased, and benign cues decreased, hostile attribution, aggression, and affective reactions, relative to ambiguous situations without these situational cues. Attention to situational cues from both peer sources can aid in accurate interpretation and flexible management of peer conflict (see Dodge, Asher, & Parkhurst, 1989). While an antagonist can surely mislead peers during conflict, it is likely adaptive to consider information directly from the source of conflict. However, ignoring a friend's interests or perception may prevent successful coordination of multiple social goals (Dodge et al., 1989), such as avoiding further conflict with the antagonist, while also maintaining a friendship.

Given the frequency of peer conflicts and the likelihood of friends being involved (Chaux, 2005; Hawkins et al., 2001; Salmivalli et al., 1996), the impact of a friend's shared perspective on children's cognitive and affective responses has practical importance. The pattern of findings suggested that situational cues from a friend were not as influential as ACs, which may have been more obvious. However, the significant effects of FCs may be considered notable as the information came from a bystander not directly involved in the conflict. Friendships are associated with changes in responses to hypothetical vignettes after 6 months (Brendgen et al., 1999) but the specific mechanism of change is unclear. Longitudinal analysis could reveal that a small immediate effect of a friend's comment could have a cumulative and large impact on a child's social thought over time.

The advantage of a friend's perspective is likely dependent on characteristics of the friend, relationship, and situation. Friends can serve important protective functions for children experiencing social difficulties (e.g., bullying and victimization, Bollmer, Milich, Harris, & Maras, 2005). In addition to serving as prosocial models, the presence of a friend provides additional potential solutions to peer conflict (e.g., seeking social or instrumental support), and friends may possess information that could assist in accurate evaluation (e.g., observed a precursor event). On the other hand, a friend's influence is not always advantageous as peers' subtle reinforcement of deviant behavior results in increased antisocial behavior (e.g., Dishion et al., 1997), and deviant peers can spread aggression throughout a peer network (''social contagion''; see Levy & Nail, 1993). In addition, friends' own social motives in social situations may not be in the best interest of the child. For instance, relationally aggressive friends might manipulate others to do their aggressing for them, and friends invested in social status may support a popular antagonist over their own friend.

Context-specific effects differed according to individual child characteristics (random slope analysis), suggesting that certain children are more sensitive to situational cues and hence more likely to alter their reactions accordingly. Similar to findings that individual differences in contextual reactions appear in more traumatic social situations (i.e., victimization vs. friendly interaction; Ojanen et al., 2007), children differed in their adjustment of responses to hostile cues only, which may be more salient and noticed than benign cues (Dodge & Frame, 1982). This suggests that individual patterns of context-specific variability are mostly invoked in highly demanding, or stressful, situations (e.g., Rodriguez et al., 2005).

The effect of a hostile cue, from either a friend or antagonist, on relational aggression was greater for those who perceived their friendship as lower in quality. In lower quality or provisional friendships, a hostile comment from a friend may incite joining in social exclusion or convey pressure to share and act on the friend's interpretation (see Schad, Szwedo, Antonishak, Hare, & Allen, 2008). Furthermore, the mere presence, and perhaps imagined perspective, of a conditional friend, compared to a better friend, has a greater influence of the likelihood of relational aggression when the antagonist indicates hostility. Lastly, sad reactions to hostile ACs were

more influential for girls, and those with higher communal goals and friendship quality, suggesting children with a relational nature are more saddened by indications of hostile intentions from the antagonist.

Since actual peer conflicts contain multiple situational cues (Dodge et al., 1989) which may not always converge, we investigated combined effects of situational cues from two peer sources. Highlighting the multidimensionality and complexity of social interaction, a contradictory suggestion from a friend seemed to have a more pronounced effect than one that aligned with evidence from the antagonist. When incongruent cues are present, it may be difficult to interpret a conflict so children likely gave more deliberate consideration to a friend's comment in these situations. Perception research reveals that the power of a dominant cue is reduced when combined with a secondary cue that is incongruent, suggesting a weighted averaging strategy (e.g., Forgas, 1978). Averaging responses between two incongruent situational cues may be considered an adaptive and flexible strategy that can lead to satisfaction of multiple goals (see Dodge et al., 1989). In congruent situations, it is possible that ACs were sufficiently clear or powerful such that no incremental change was possible or necessary with the addition of a confirmatory FC.

Theoretical and Practical Implications, Limitations, and Directions for Future Research

In line with other recent work on the context specificity of childhood social development (Ojanen et al., 2007; Peets et al., 2007; Peets et al., 2008), the separation of the statistical variation in responses to conflicts into between- and within-subject levels enabled us to estimate effects in robust manner. Corroborating models of children's social affective processes (Lemerise & Arsenio, 2000), our findings suggest that children adjust anger, as well as less examined emotions like sadness and embarrassment, according to situational context. Furthermore, the degree of context specificity differed among specific cognitive and affective responses.

To the best of our knowledge, the present study is the first to compare situational cues from two peer sources and highlights differential effects on children's social psychological processes, depending on whether examined separately or simultaneously and whether they are congruent or incongruent. When the two sources of information conflicted, children placed greater reliance on the friend's perspective than when cues were congruent, highlighting the importance of childhood friendships for social adjustment (see Berndt, 1982; Buhrmester, 1990) and the potential for socially ''contagious'' aggression (see Levy & Nail, 1993). To advance understanding of social influence, future research should explore friendship dyads and related psychological mechanisms. For instance, within specific dyads (see Hubbard, Dodge, Cillessen, Coie, & Schwartz, 2001), a friend's comment could result in particular social goals, such as concealing emotion or protecting self-image (see Banerjee, Rieffe, Terwogt, Gerlein, & Voutsina, 2006).

Management of conflict is necessary for a peaceful peer interaction that might otherwise result in aggression (see Laursen et al., 2001). The study of social contextual effects has practical implications, as peers have the potential to reinforce a child's problem behavior and preclude behavioral change (Farmer & Xie, 2007). For instance, recent bully prevention programs include modules that address the role of bystanders (e.g., ''Steps to Respect''; Frey et al., 2005). Our findings highlight that bystander peers can *directly* affect children's cognitive and affective responses to peer conflict. Contextualized vignettes may better represent real-world peer conflict in which peers are frequently involved and share their perspectives, and children adjust their responses according to contextual information. By focusing on children's dispositional tendencies only, important functional nuances of social behavior may be missed (Dirks et al., 2007; Mischel, 2009).

The current study it is not without limitations. First, it cannot be determined whether the examined situational cues explain situational variance beyond other known contextual factors (e.g., relationship with antagonist). Future research is needed to examine ACs and FCs in conjunction with other previously studied contextual elements. For example, to examine loyalty and group identity, one could consider the effects of a friend's hostile comment about an antagonist who is either also a friend or an enemy (see developmental model of subjective group dynamics; Abrams, Rutland, Ferrell, & Pelletier, 2008). Second, hypothetical vignettes were used but are only an analogue to real-life peer conflict. While the ecological validity of vignettes was increased by adding situational detail, in actual conflicts, situational cues may be more subtle, including auditory, visual and affective indicators, and affective reactions may be more intense. However, the advantages of vignettes are the ability to control and compare various contextual elements of social interactions and

inquire about internal thoughts and feelings. Observational methods (i.e., seminaturalistic staged situations), peer reports (i.e., sociometric data), and visual presentation of peer conflict (i.e., computer simulation) would further increase confidence in conclusions if they were to replicate findings. Third, while we expanded exploration of affect to include fear reactions (''scared''), future research might consider a more direct reflection of anxiety (e.g., ''worried''). Fourth, as susceptibility to peer influence decreases with age (Steinberg & Monahan, 2007), older children may be better able to decipher situational cues and less swayed by unsubstantiated peer comments.

Despite limitations, the present study advances current understanding of the context specificity of childhood social development by highlighting complex effects likely involved in interpreting everyday social situations that are, by definition, ''ill defined'' (Dodge et al., 1989). Contextualized vignettes better represent real-world peer conflict, and an important direction in the continued exploration of situational context is examination of multiple contextual factors. Our findings, indicating interplay of individual differences and situational context, support a theoretical formulation of social information processing as multidimensional (see Dodge et al., 2002), and have implications for understanding everyday peer interactions.

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Appendix

CASS Vignette Topics

Story 1: After sharpening pencils, trip over antagonist's foot in aisle and drop pencils.

Story 2: While playing catch in gym, hit in back by ball thrown by antagonist.

Story 3: Asking to sit at a table during lunch and the antagonist says ''No.''

Story 4: Bumped from behind by antagonist on way to school, fall and get mud on new shoes.

Story 5: Antagonist takes the protagonist's turn to play a new computer game in the classroom.

Story 6: At a club meeting, say ''Hi'' to antagonist who does not return the greeting.

Story 7: Antagonist spills paint on the protagonist's artwork.

Story 8: Antagonist takes the spot in front of the protagonist in the line formed for recess.

Story 9: During recess, asking a group of peers to play and antagonist says ''No.''