# Young Children's Moral Judgments, Justifications, and Emotion Attributions in Peer Relationship Contexts

Judith G. Smetana and Courtney L. Ball University of Rochester

Children (n = 160, 4- to 9-year-olds;  $M_{age} = 6.23$  years, SD = 1.46) judged, justified, attributed emotions, and rated intent for hypothetical physical harm, psychological harm, and resource distribution transgressions against close friends, acquaintances, disliked peers, or bullies. Transgressions against bullies were judged more acceptable than against friends and disliked peers and less deserving of punishment than against acquaintances and disliked peers. Transgressions against friends were judged least intended and resulting in more negative emotions for transgressors; actors transgressing against disliked peers, as compared to bullies or acquaintances, were happy victimizers. Across relationships, children viewed moral transgressions as wrong independent of rules and authority, based primarily on welfare and fairness justifications. Peer context colors but does not fundamentally change moral evaluations.

Morality is inherently relational; by definition, moral acts and transgressions occur in interaction with others. For instance, social-cognitive domain theory (SCDT) defines morality as prescriptive judgments of right and wrong pertaining to others' welfare, fairness, and rights (Smetana, Jambon, & Ball, 2014; Turiel, 1983). Scholars from different perspectives have claimed that children's relationship histories and experiences influence their moral understanding (Dunn, 2014) and that children interpret and evaluate moral events differently in the context of varying interpersonal relationships (Lemerise & Arsenio, 2000). Nevertheless, surprisingly little research has considered how relationship contexts influence children's moral evaluations. The present study contributes to our understanding of moral development by examining children's moral judgments, justifications, and emotion and intent attributions in different peer relationships.

# Research on Early Moral Judgment Development

SCDT researchers typically assess young children's moral evaluations in hypothetical, prototypical situations involving third-party moral transgressions, described verbally and illustrated using pictures. Using these methods, researchers have found that by 3 years of age, children judge moral violations as wrong because they are harmful to others or unfair, not simply because they are prohibited (e.g., they are *rule and authority independent;* Ball, Smetana, & Sturge-Apple, 2016; Smetana & Braeges, 1990; Smetana et al., 2012). Numerous studies have employed these criteria (referred to as *criterion judgments*) as well as *justifications* regarding others' welfare and fairness to identify and assess distinctively moral evaluations in early and middle childhood (see Killen & Smetana, 2015).

Young children's moral evaluations are limited in several respects, though. Research has shown that children make distinctively moral judgments regarding physical harm at earlier ages than psychological harm, because the former is concrete and readily observable (Smetana et al., 2012), whereas the latter may have no direct, observable consequences, and therefore requires more advanced understanding of others' thoughts and feelings (Helwig, Zelazo, & Wilson, 2001; Jambon & Smetana, 2014). In particular, young children's understanding of psychological harm is impeded by their difficulty in coordinating moral evaluations with an understanding of intentions, actions, and outcomes (Jambon & Smetana, 2014; Killen, Mulvey,

We wish to thank the day-care, afterschool and summer programs for their cooperation with this research. We are also grateful to Marc Jambon for his help in developing and implementing the survey software program and our undergraduate research assistants, especially Emily Leonard, Emily Scarpulla, and Caprecia Singleton, for their help with this project.

Correspondence concerning this article should be addressed to Judith G. Smetana, Department of Clinical & Social Sciences in Psychology, University of Rochester, Meliora Hall, RC 270266, Rochester, NY 14627. Electronic mail may be sent to Judith. Smetana@rochester.edu.

<sup>© 2017</sup> The Authors

Child Development © 2017 Society for Research in Child Development, Inc. All rights reserved. 0009-3920/2017/xxxx-xxxx DOI: 10.1111/cdev.12846

Richardson, Jampol, & Woodward, 2011; Wainryb & Brehl, 2006; Zelazo, Helwig, & Lau, 1996). Furthermore, when their own interests are not at stake, even young children choose equal resource distributions (Kenward & Dahl, 2011; LoBue, Nishida, Chiong, DeLoache, & Haidt, 2011). With age, however, they become better able to coordinate and consider different concerns such as merit and effort (Baumard, Mascaro, & Chevallier, 2012; Rizzo & Killen, 2016).

Past SCDT research has examined situational or sociodemographic variations in developing moral judgments, with a few studies examining how children's judgments are affected by peer-group status (e.g., popular vs. rejected; Sanderson & Siegal, 1988), group membership (e.g., in-group vs. outgroup; Killen, Mulvey, & Hitti, 2013), and actors' roles (e.g., transgressors vs. victims; Wainryb, Brehl, & Matwin, 2005). Typically, though, the relationship between the transgressor and victim is left unspecified, or hypothetical actors are described as familiar or acquaintances (e.g., Helwig et al., 2001; Smetana, Schlagman, & Adams, 1993; Smetana et al., 2012; Wainryb et al., 2005). Despite the inherently relational nature of morality, little research has systematically studied the development of moral evaluations in different peer relationship contexts.

# Relationship Contexts in Early Moral and Social Development

Relationship scientists claim that the motives, emotions, and communications involved in different interpersonal relationships influence social cognition and behavior (Reis, Collins, & Berscheid, 2000). For instance, research on children's social information processing (SIP) has claimed that the affective valence of relationships influences how children process and interpret information, and in turn, how they ultimately act within those relationships (Arsenio & Lemerise, 2001, 2004; Peets, Hodges, Kikas, & Salmivalli, 2007). Thus, SIP researchers have examined how peer relationships affect different social-cognitive appraisals of situations, including the influence of hostile attributional biases, particularly on aggression (Hymel, 1986; Peets, Hodges, & Salmivalli, 2008; Peets, Hodges, & Salmivalli, 2013; Peets et al., 2007), children's hypothetical responses to provocation (Lemerise, Thorn, & Costello, 2016; Peets et al., 2007, 2008), and children's social goals and their own emotions when evaluating such responses (Lemerise et al., 2016). However, this research has not focused on moral judgments per se (but see Arsenio & Lemerise, 2001, 2004 for a theoretical integration of SIP and SCDT). Even within SIP, relatively few studies have focused on how hostile attributions differ in various peer contexts, although different peer relationships are characterized by markedly divergent affect—strongly positive for friends, weak or neutral for acquaintances, and strongly negative for disliked peers—and corresponding actor motivations and intentions.

Studies of children's moral judgment have compared children's conversations with siblings versus friends (Cutting & Dunn, 2006)-or evaluations ofharm in those relationships (Recchia, Wainryb, & Pasupathi, 2013), but few studies have focused specifically on the role of friendships. An exception is Slomkowski and Killen (1992), who found that preschool children judged it more permissible to transgress against (take a toy or tease) friends than nonfriends, based on the friends' interpersonal bonds. In addition, Costin and Jones (1992) found that 4- to 6-year-olds were more sympathetic to a hypothetical target child in need and proposed intervening more when the target was a friend rather than an acquaintance. These studies suggest that children evaluate friendships in a more positive light, even when morally transgressing against friends, and that children are particularly concerned with and responsive to harm suffered by friends.

Although moral judgments were not explicitly assessed, several recent studies have examined children's understanding of fairness in different relationships through their resource allocation decisions. Consistent with the aforementioned studies, Olson and Spelke (2008) found that 3<sup>1</sup>/<sub>2</sub>-yearolds were more likely to allocate resources equally to friend as compared to nonfriend puppet dyads. Comparing allocations to friends, nonfriends, and strangers, Moore (2009) found that 41/2- to 6-yearolds shared more (and equitably) regardless of personal cost to a friend than a nonfriend but that allocations to strangers depended on whether the decision was costly to themselves or not. Building on these findings, Paulus (2016) and Paulus and Moore (2014) found that 3- to 6-year-olds preferred to share with friends over nonfriends or strangers, even when friends had resources and nonfriends were needy. With age, children increasingly prioritized social relationships when allocating resources, privileging "rich" friends (those who already had resources) over others who had none. This research demonstrates differences in how children evaluate and respond to sharing and resource allocation inequities with friends relative to less familiar peers and suggests these distinctions may become more pronounced with age.

Surprisingly little is known about how typically developing children think about moral violations against enemies versus friends. Amities and enmities are common in childhood and are likely to lead to divergent attributions of intentions and transgressors' emotions. Most SIP studies, like studies of children's moral judgments, employ hypothetical characters. Some, however, have examined hostile intent attributions by known peers described in hypothetical situations (e.g., Peets, Hodges, & Salmivalli, 2011; Peets et al., 2007, 2013). These studies indicate that children attribute more hostile intent to known enemies than to known neutral peers (acquaintances) and friends. Not surprisingly, peer relationships characterized by chronic dislike and hostile attributions translate into increased aggressive behavior over time. Indeed, youth experience more anger and seek revenge more when harmed by a disliked transgressor than a friend (Peets et al., 2011, 2013). Furthermore, Lemerise et al. (2016) examined how relationships influence children's evaluations of goals in response to known peers' ambiguous provocations, as depicted in interviews. Children prioritized social-relational goals in response to friends' provocations but emphasized avoidance and instrumental goals for enemies. Revenge goals were not strongly endorsed overall but were emphasized more for enemies than for friends and acquaintances. Thus, the relationship context may change the meaning of events, particularly for ambiguous provocations.

Also, children's moral reasoning may differ when the victim is a personal enemy (i.e., disliked peer) who the transgressor dislikes for idiosyncratic reasons, or someone who may be disliked-or at least not befriended-by peers due to their repeated undesirable or harmful social behavior (e.g., a bully). Three-year-olds distinguish between helpful or harmful intentions and selectively avoid helping someone who harms another, including those who intend but fail to complete such harmful acts (Vaish, Carpenter, & Tomasello, 2010). In addition, young children judge antisocial others as deserving more punishment than neutral others (Kenward & Osth, 2015) and allocate more punishment with age to children described as engaging in bad behavior (Smith & Warneken, 2016).

Although not typically conceptualized in moral terms, bullying—both overt (hitting, kicking, taunting, name calling) and subtler forms (rumor spreading, social exclusion)—involves acts that are intended to harm another and therefore can be seen as moral violations (Arsenio & Lemerise, 2004). The definition of bullying suggests that children may view moral transgressions against bullies (who routinely engage in harmful behavior) as acceptable —even praiseworthy—and as less deserving of punishment than acting against others that one dislikes.

In contrast to disliked peers, bully-victim relationships vary in whether they are characterized by high levels of personal dislike (Salmivalli & Peets, 2009). Although bullying appears to be determined more by particular goals (like dominance) than by negative emotions (like anger), affective responses to bullies are generally negative, with the strength and valence of feelings varying according to children's personal victimization history. Bullies may have high status in the peer group and be seen as popular among their peers, but even then, bullies are not necessarily liked (Rodkin, Espelage, & Hanish, 2015). Thus, children may consider both bullies' peer-group reputation (including their history of victimizing others) and their personal dislike or negative affect toward the bully. Children may believe that bullies deserve "tit-for-tat" and judge transgressing against bullies as compared to others as more acceptable and less punishable.

Several studies have examined moral reasoning and emotion attributions among bullies and their victims (Gasser & Keller, 2009; Perren, Gutzwiller-Helfenfinger, Malti, & Hymel, 2012). However, we know of no studies examining whether children's moral judgments, justifications, and intent attributions differ when judging actors who are depicted as transgressing *against* disliked peers versus bullies, except for Lemerise et al.'s (2016) study, described previously, of emotion attributions for responses to provocations. Their results suggest that children will be more forgiving of transgressions against friends than enemies because they make different assumptions about their goals and their outcomes.

Research employing hypothetical situations has documented that prior to age 6 or 7, children often are "happy victimizers" and believe that hypothetical transgressors will feel happy after transgressing, due to the gains achieved from victimizing (Arsenio & Kramer, 1992; Krettenauer, Malti, & Sokol, 2008; Malti, Gasser, & Gutzwiller-Helfenfinger, 2010). One study found that children were more likely to be happy victimizers when they considered hypothetical others rather than themselves as the victimizer (Keller, Lourenço, Malti, & Saalbach, 2003). Children may attribute more positive emotions to hypothetical actors who transgress against enemies (both bullies and disliked peers) than against friends or acquaintances, even though, as others have found (Keller et al., 2003), they may still believe that the acts themselves are wrong.

Taken together, the previous findings suggest the importance of examining how peer relationships affect moral evaluations and emotion attributions. The nature of different peer relationships may color beliefs about the permissibility or severity of violations, whether harm or injustice was intended or transgressors deserve punishment for their offenses (Kenward & Östh, 2015; Smith & Warneken, 2016; Vaish et al., 2010) and appraisals of transgressors' emotions. Furthermore, developmental trends in moral concepts may have important implications for children's moral understanding in different peer relationships. For instance, younger children may have difficulty understanding friends' good intentions in situations of psychological harm (Jambon & Smetana, 2014) or why it is not justified to distribute unequally to bullies, who children may feel merit unequal treatment.

# The Present Study

Integrating insights from SIP research on the role of peer relationships in evaluations and attributions, the present study extended SCDT research on moral judgment development by examining 4- to 9year-olds' evaluations regarding hypothetical moral transgressions described within four peer relationship contexts: an actor transgressing against a friend, an acquaintance, a disliked peer, or a bully. Children rated transgressions involving physical harm, psychological harm, and unequal resource distribution. Consistent with past SCDT research, we examined the effects of relationship context and transgression type on moral judgments, justifications, and attributions to determine whether and how peer relationships influence different evaluations. For each type of harm, children judged and justified the acceptability of the act, evaluated criterion judgments (whether acts would be wrong independent of rules and authority), and rated how much punishment the transgressor deserved. Children also made attributions regarding the transgressor's and victim's emotions, and whether the act was intended to be harmful.

A novel feature of the present study was that we examined children's moral evaluations of situations in which the hypothetical transgressors' relationship with the victim varied from positive (friends), neutral (acquaintance), to negative (disliked peer and bully). Bullies are, by definition, habitual moral transgressors and thus may be seen in a more negative light. Therefore, we hypothesized that children would view moral transgressions against bullies as more acceptable, more intentional, and less deserving of punishment than transgressions against disliked peers, and in turn, based on both Slomkowski and Killen (1992) and research showing that mean behavior often occurs in close friendships (e.g., Grotpeter & Crick, 1996), against friends than acquaintances. We further expected that children would attribute more positive emotions (i.e., be happy victimizers) to actors transgressing against bullies and disliked peers than against friends and acquaintances.

Despite these hypothesized relationship effects, we still expected participants to view transgressions as fundamentally moral. We hypothesized that, regardless of the peer relationship shown, children would treat moral transgressions as more moral in their criterion judgments (e.g., as more wrong independent of rules and authority) and would justify the acceptability of moral transgressions primarily by reasoning about others' welfare or fairness. Furthermore, as moral transgressions are defined as having consequences for others' welfare or rights, we expected that, regardless of peer context, children would evaluate hypothetical victims as feeling bad or sad following a moral transgression (Arsenio & Kramer, 1992; Wainryb et al., 2005).

Most of the past research examining peer relationship effects on children's moral and intention judgments has focused either on the preschool years (Slomkowski & Killen, 1992) or on late childhood and early adolescence (Peets et al., 2007, 2011). Little research has focused on how evaluations differ from early to middle childhood (but see Jambon & Smetana, 2014 for an exception). We hypothesized that with age, children would view moral transgressions as increasingly moral (less acceptable, more punishable, and more rule and authority independent), based increasingly on moral justifications regarding others' welfare and fairness. Research has shown that happy victimizer responses (e.g., attributions of more positive emotions to transgressors) decline with age in middle childhood (Arsenio & Kramer, 1992). Across ages, children may believe that actors legitimately are happy victimizers when transgressing against those they dislike. Given this and the age range of our sample, we did not expect to find an overall decrease in happy victimizer responses with age here.

We also examined all interactions between age and relationship context (as well as type of moral harm). We did not test specific a priori hypotheses, given the dearth of past moral judgment research on relationship effects in the ages studied here. However, studies have shown that although physical bullying declines in middle to late childhood (Olweus, 1994), bullying increases overall at these ages (O'Connell, Pepler, & Craig, 1999) and peaks in middle school (Nansel et al., 2001). These findings led us to examine whether children view transgressing against bullies as more acceptable and less punishable based on interpersonal reasons as they grow older.

We further expected that evaluations for varying types of moral transgressions would differ. Consistent with past research with preschoolers (Smetana et al., 1993, 2012), we hypothesized that children would treat transgressions involving physical harm as more serious, punishable, intended, and resulting in victims' more negative emotions than would psychological harm and resource violations. We also expected that transgressions involving psychological and physical harm would be justified more in terms of others' welfare, whereas resource violations would be justified more in terms of fairness.

Finally, neither research on moral development (reviewed in Killen & Smetana, 2015; Smetana, Jambon et al., 2014) nor a meta-analysis of antipathic relationships (Card, 2010) has yielded consistent sex differences. A critical review of several areas of peer relationship processes, however, reported that girls are consistently more oriented than boys to social connections, relational goals, and friendship (Rose & Rudolph, 2006). This suggests that girls may be more sensitive to and therefore differentiate more among relationship contexts than boys. Given these mixed findings, though, sex differences were examined, but specific hypotheses were not tested.

#### Method

# Sample/Participants

participants were Study 160 children (M = 6.23 years, SD = 1.46, range = 3.92-9.25 years;85 males), including two children 3 years, 11months-old, thirty-eight 4-year-olds, thirty 5-yearolds, twenty-five 6-year-olds, thirty-nine 7-year-olds, twenty-four 8-year-olds, ten 9-year-olds, and two children who had just turned 10 years of age. The sample was 74% European American, 14% African American, 8% Asian American, 1% Pacific Islander, and 2% other or biracial; 4% were identified as Latino/a. Participants were from lower-middle to upper-middle class families and were recruited from day-care centers, afterschool programs, a school, and a summer camp program serving urban and

suburban children in a midsized U.S. city. Data were collected between 2014 and 2015.

Children (balanced by gender and age) were randomly assigned to one of four relationship conditions. This resulted in 40 children each in the friend and disliked peer conditions (18 and 19 female, respectively), 39 children (19 female) in the acquaintance condition, and 41 children (18 female) in the bully condition.

#### Design and Procedures

Trained researchers individually interviewed children in a quiet location in their program. Interviews took approximately 25-35 min and were completed in two sessions for many of the youngest children. Older participants were offered play breaks as needed. Interviews were interactive and were conducted on a touch screen tablet using online survey software (SurveyGizmo; Boulder, CO). Following scale training (described below), children were administered the vignettes, which were illustrated with pictures (see Supporting Information), and then children responded to questions by clicking on different rating responses. For half the interviews, a research assistant recorded children's justifications verbatim for later coding. For the other half, justification responses were audio recorded and then transcribed verbatim for later coding. Children were given an attractive sticker after completing each story.

To ensure that children understood and remembered the relationship depicted between story characters, relationship condition was treated as a between-subjects factor and was randomly assigned within child age and gender. Pictures also were used to depict the relationship context, and children were reminded of the story characters' relationship at frequent but standardized intervals throughout the interview. After warm-up questions to establish rapport with the child and training on the assessment scales (described below), the interview began:

Some people get along better with one another than others do. I have some people I see every day who I really like and am close friends with, but others who I do not know well or even who I do not like very much. The stories I am going to tell you today are all about two (boys or girls, matched to the child's sex) who are in the same class. . .

#### The close friends condition continued:

who really like each other and are close friends. Do you have anyone who you really like to play

# 6 Smetana and Ball

with and is one of your closest friends? Yes? [All children indicated that they had a close friend or understood what a close friend was.] That's great. Well, the kids in the stories that I am going to tell you are good friends like that.

# In the acquaintance condition, the story continued,

but they don't usually play together or sit together. Actually, they do not know each other well. Do you have anyone who you maybe know their name and see them around but don't know well? Yes? That's great. Well, the kids in the stories that I am going to tell you are classmates like that but are not friends.

(In a few instances, children indicated that they did not have acquaintances, and in these cases, additional detail was provided [e.g., "Okay, well I had a girl in my class who I didn't know very well. I didn't dislike her, but we didn't talk or play together, so I didn't know much about her except her name"]). The interviewer confirmed that the child understood before proceeding.

# The disliked peer condition continued,

and both have friends they like to play with, but they don't play together or sit together. In fact, the first boy/girl doesn't like and does not want the second boy/girl as a friend. Do you have anyone who has his/her own group of friends but you do not like him/her? Yes? [Although some children could not think of someone they disliked, or they insisted that they liked everyone, all children understood this condition.] Well, the kids in the stories I'm going to tell you are classmates like that where one of the kids does not like the other or want him/her as a friend.

# Finally, in the *bully condition*, the story continued,

but they don't play together or sit together. In fact, lots of kids don't want to play with or be friends with the second boy/girl because (s)he is mean to the kids in the class. [To indicate that the transgressor also disliked the bully, we prompted:] Do you have anyone who *you and other kids* in your class do not like because (s)he is mean? [All children indicated familiarity with bullies.] Exactly. Well the kids in the stories that I am going to tell you are classmates like that where one of the boys/girls is often mean to other kids.

The stories focused on three types of moral transgressions: physical harm (hitting or shoving), psychological harm (teasing or excluding from a game), and unfair resource distribution (giving a white crayon to color with while keeping all the colorful crayons or giving a child only one cookie instead of two, like everyone else). The stories are in the Appendix. The two characters' gender in each story (as depicted in the pictures and their names) was matched to the participants', as was the story characters' skin color (light or dark). To minimize effects of fatigue, half the children in each relationship condition (balanced by gender and age) were administered the first of each pair of stories (Set A), and the other half were administered the second set (Set B). The order of the three types of moral stories was counterbalanced.

# Interviews

# Scale Training and Manipulation Checks

Children were trained to use 3- and 5-point rating scales, which were illustrated with icons on the tablet (described next). Children had to demonstrate their understanding by clicking on the appropriate choice for each scale value before the interview proceeded. As a manipulation check, after the story was described, children were asked to identify the relationship between the two story characters. They were shown four pictures (one for each relationship condition) and could either state the relationship or select the appropriate picture. Nearly all children answered correctly, but for the very few who did not, the description of the story characters' relationship was repeated until they gave the correct response.

# Interview Questions

First, children used the rating scale to indicate how good or bad they thought it was for the actor to engage in the action, assessing *act acceptability*, and why, to obtain their open-ended *act acceptability justifications* (see Table 1). Next, they were asked, "What do you think should happen to (the transgressor? Should s/he not get in trouble, get in a little trouble, or get in a lot of trouble?" assessing *deserved punishment*.

The next two questions, which were counterbalanced, assessed criterion judgments. Participants were asked, "What if the teacher said it was OK for [actor] to [commit the act]. How good or bad would it be to [transgress] then?" and "If the school did not have a rule about [the act], then how good

#### Moral

*Others' welfare:* act causes physical or psychological harm, loss, negative affect, or affects others' well-being or welfare ("Because [victim] got hurt"; "It made her cry"; "She was mean").

*Fairness:* Act is seen as fair or unfair or is seen as causing inequality ("It's unfair"; "She gets to use the bright colors and Lilly only gets a white one"; "It wasn't his turn").

Necessary harm/good intentions: Appeal to transgressor's good intentions or perceived need to act ("Because she [transgressor] has to [exclude], because she doesn't want anyone else to get bullied"; "Because the friends shouldn't get hurt by the bully").

Personal/moral

The act causes harm or is wrong because it prevents victims from fulfilling personal desires or participating in desired activities ("Because he wanted to get on the swing and [actor] pushed her off"; "If someone's trying to have fun and you aren't letting them play, then they can't have fun").

#### Personal

*Personal preferences/desires:* Act reflects a personal choice or individual preference ("Because she likes it better"; "Because she likes to play with her friends").

*Inconsequential act:* The act or its consequences are unimportant or do not affect self or others ("It's no big deal"; "It's not like it's going to hurt her"; "He can just eat two cookies later").

#### Conventional

Punishment avoidance/authority prohibition: Act is wrong because the actor will get in trouble or authority or existing norm forbids the act ("He'll get in trouble"; "The teacher won't like it").

*Conventional act:* Appeal to politeness or rudeness, status differences, or specific cultural or local norms or expectations ("That's rude"; "She's older than you, so she knows better"; "That's just the way we do it here").

#### Interpersonal

Act is wrong/permissible due to the nature or consequences of the act for the relationship ("Because friends don't do that to each other"; "She won't want to be friends anymore").

#### Prudential/pragmatic

Prudential: Act has consequences for the actor's self's health, safety, or comfort ("She needs enough food to stay alive"; "She might be allergic").

*Pragmatic:* Act has practical consequences or could be handled more efficiently ("She might break her markers"; "The picture won't look pretty"; "She could have asked to take a turn instead of hitting").

*Retaliatory act:* Act is wrong because the actor may retaliate or acceptable because retaliation is deserved ("Because then he might hit you back"; "Because he hit him first").

Don't know/uncodable

Participant does not know, or the response is uncodable.

or bad do you think it would be to [transgress]?" assessing *authority* and *rule independence*, respectively.

These were followed by three questions administered in counterbalanced order regarding the characters' intentions and emotions: "Do you think (the transgressor): did not mean, kind of meant, or definitely meant to hurt them?" assessing *intentionality*, "How do you think [the transgressor] felt about [doing the act]?" assessing the *transgressor's emotion*, and "How do you think [the victim] felt about [having the act done to them]?" assessing the *victim's emotion*.

## Coding

Except for deserved punishment and intentionality judgments and acceptability justifications, all ratings were assessed on 5-point scales. For acceptability and rule and authority independence, scores ranged from -2 (very good) to +2 (very bad), with 0 (just ok) as the neutral value. The ratings were illustrated using a large green "thumbs up" or red "thumbs down" (for very good or very bad, respectively), with smaller colored thumbs up and down for the in-between values and an empty box depicting the neutral value. Deserved punishment and intentionality were rated on 3-point scales ranging from 1 (not get in trouble/did not mean to) to 3 (get in a lot of trouble/definitely meant to), illustrated with colored boxes empty or filled in different degrees and including a neutral value. Emotion scores ranged from -2 (very happy) to +2 (very bad/ sad), with 0 (just ok) as the midpoint, and they were depicted by faces with smiles and frowns of varying size.

The justification coding system, described in Table 1, was based on prior research (Jambon &

Smetana, 2014; Smetana, Campione-Barr, & Yell, 2003) and refined by the coauthors using a small proportion of responses. Responses were assigned a score of 1 if the category was used and a score of 0 if it was not. Up to three responses per participant were coded, although only 3% offered a third justification and relatively few (16%) offered a second justification. To obtain reliability, two coders coded 20% of the responses; kappa was .76. Except for the different moral justifications, which were analyzed separately, responses were superordinate categories collapsed into the described in Table 1 (e.g., moral, conventional, personal, prudential/pragmatic, and undifferentiated/uncodable).

#### Results

### Analytic Plan

Rather than divide age into discrete groups (i.e., younger vs. older children), we employed analysis of covariance (ANCOVA), which has been recommended as a more powerful test of the effect of a continuous independent variable on a dependent variable than splitting the sample into discrete groups (see Rutherford, 2001 for a full discussion). Although ANCOVA can be used to control for variations in participants' scores on the covariate (Whisman & McClelland, 2005), it is comparable to multiple regression analyses when the independent variable of interest is continuous and normally distributed, as was the case here. In the present study, age was centered at the mean, as recommended (Aiken & West, 1991), and treated as a covariate in Significant analyses. interactions (e.g., our Age  $\times$  Harm Type) were probed by estimating the unstandardized slope (b) for the effect of age within each harm condition and then conducted simple slopes analyses (Aiken & West, 1991) at +2/-2 SD from the mean (in order to capture the full range of ages in our sample).

First, we examined differences between the two sets of moral harm stories (shoving vs. hitting, teasing vs. excluding, and inequality in distributing crayons vs. snacks). Using ANCOVA, there were no main effects for stimulus set, and < 5% of the potential interactions with moral harm type, relationship condition, age, and gender were significant. Therefore, the two sets of moral transgressions were combined for further analyses.

In addition, responses regarding authority and rule independence were highly correlated, r (160) = .68, p < .001. As we did not expect

differences between these two criterion judgments, they were combined into a single composite variable for parsimony. Results for the combined variable did not differ from results obtained on the variables run separately.

Finally, we conducted separate 3 (moral harm type)  $\times$  2 (child gender)  $\times$  4 (relationship condition) repeated measures ANCOVAs, with moral harm as the repeated measure and age as the covariate, on all dependent variables. All higher order interactions, including those between age and the other independent variables, were tested.

### Moral Judgments

Age

As predicted, significant age main effects for judgments of acceptability and rule and authority independence, Fs(1, 142) = 11.13, 15.34, ps < .01,  $\eta_p^2 = .07$ , .10, showed that, with increasing age, children judged moral violations as more unacceptable and more independent of rules and authority (combined), rs = .25, .29, ps < .01. There were no other significant main effects for age, but significant interactions with age are discussed below.

# Child Gender

The main effect of child gender was not significant for any of the moral evaluations nor did it significantly moderate other effects.

# Relationship Condition

Main effects for relationship condition were found for ratings of acceptability, deserved punishment, intentionality, and transgressors' emotions, but, as expected, not for criterion judgments (rule and authority independence) or victims' emotions (see Table 2 for means, standard deviations, F values, and  $\eta_p^2$ ). For act acceptability judgments, post hoc tests indicated that, as hypothesized, children viewed transgressing against a bully as more acceptable (less wrong) than committing the same transgression against a friend or a disliked peer. They also viewed transgressing against acquaintances as more acceptable than against a disliked peer but not different than against a friend or bully. In other words, children judged that moral violations targeting disliked peers were the least acceptable, followed by friends and acquaintances, whereas harming a bully was considered the most acceptable though still wrong.

	Harm type			<i>F</i> value/ $\eta_p^2$		F value/ $\eta_p^2$			
	Phys harm	Psy harm	Resource	df(2, 288)	Friend	Acquaint	Disliked	Bully	df(1, 139)
Accept	1.59 (0.87) <sup>a</sup>	1.06 (1.09) <sup>b</sup>	1.23 (0.92) <sup>b</sup>	16.63**, .11	1.38 (0.59) <sup>a,b</sup>	1.22 (0.76) <sup>b,c</sup>	1.53 (0.56) <sup>a</sup>	1.04 (0.75) <sup>c</sup>	3.71*, .07
Punish	2.56 (0.67) <sup>a</sup>	2.08 (0.71) <sup>b</sup>	2.03 (0.72) <sup>b</sup>	32.83**, .19	2.13 (0.46) <sup>b,c</sup>	2.27 (0.46) <sup>a,b</sup>	2.44 (0.37) <sup>a</sup>	2.05 (0.44) <sup>c</sup>	6.31**, .12
Auth/ rule	0.85 (1.17) <sup>a</sup>	0.50 (1.17) <sup>b</sup>	0.49 (1.15) <sup>b</sup>	10.64**, .07	0.50 (1.16)	0.59 (0.87)	0.92 (0.77)	0.44 (1.07)	2.25+, .05
Tran emot	0.10 (1.44)	0.15 (1.34)	0.02 (1.40)	0.34, .00	0.50 (0.81) <sup>a</sup>	0.26 (0.93) <sup>b</sup>	-0.36 (1.22) <sup>c</sup>	-0.06 (1.00) <sup>b</sup>	6.00**, .12
Vict emot	1.62 (0.69) <sup>a,c</sup>	1.28 (0.88) <sup>b</sup>	1.46 (0.75) <sup>c</sup>	9.86**, .07	1.34 (0.54)	1.38 (0.54)	1.53 (0.50)	1.56 (0.49)	2.16 <sup>+</sup> , .04
Intention	2.22 (0.81) <sup>a</sup>	2.03 (0.81) <sup>b</sup>	1.97 (0.78) <sup>b</sup>	6.96**, .05	1.85 (0.52) <sup>b</sup>	2.03 (0.62) <sup>b</sup>	2.31 (0.56) <sup>a</sup>	2.08 (0.56)	4.07**, .08

 Table 2

 Means (SD) and F-values for Judgments by Harm Type and Relationship Condition

*Note.* Deserved punishment and intentions were coded on a 3-point scale where  $3 = deserved \ a \ lot/definitely meant to hurt, respectively. All other judgments were coded on a 5-point scale ranging from <math>-2$  (*very good/positive*) to +2 (*very bad*). Significant differences are indicated by superscript letters that differ. Phys = physical; Psy = psychological; Resource = unequal resource distribution; Acquaint = acquaintance; Accept = acceptability; Punish = deserved punishment; Auth/rule = authority/rule independence; Tran = transgressor; Vict = victim; Emot = emotion. \*p < .05. \*p < .05.

Children judged that harm was most intended when the victim was a disliked peer, less intended when the victim was a bully, and least intended when the victim was a friend or acquaintance. As expected, actors who transgressed against bullies were seen as less deserving of punishment than those who transgressed against acquaintances and disliked peers. Similarly, transgressions against a friend were seen as less deserving of punishment than the same acts committed against a disliked peer. When transgressors' intentions were interpreted relatively favorably, as was the case for acquaintances and bullies, ratings of deserved punishment did not differ. Finally, consistent with preattributed dictions. children more negative emotions to actors transgressing against friends than anyone else and to actors transgressing against bullies and acquaintances than disliked peers. Children attributed more positive emotions to transgressors acting against disliked peers than anyone else. Contrary to expectations, however, relationship condition did not interact significantly with participants' age, gender, and/or harm type.

# Types of Moral Harm

As expected, there were main effects for moral harm type for all judgments except transgressors' emotions (see Table 2 for means, standard deviations, *F* values, and  $\eta_p^2$ ). Bonferroni *t* tests indicated that, as expected, physical harm was judged more wrong, deserving of punishment, rule and authority independent, and intended than resource violations

or psychological harm. Children also attributed more negative emotions to victims who were physically harmed or allocated resources unfairly than psychologically harmed.

# Harm Type × Age

Main effects for moral harm type were moderated by age for judgments of deserved punishment and victims' emotions, Fs(2, 278) = 6.91, 4.92, ps < .01,  $\eta_p^2 = .05$ , .03. As shown in Figure 1, simple slopes analyses indicated that as children grew older, they judged that actors who physically harmed others deserved more punishment, b = .13, p < .001, and that their victims would experience more negative emotions, b = .10, p < .01. The slope for age, however, did not differ significantly from zero for either deserved punishment or victims' emotions for psychological harm, bs = .03, .00, or unequal distribution, bs = -.05, -.05.

# Acceptability Justifications

Consistent with past research, only justifications that were used 10% or more of the time were analyzed. This included welfare, fairness, personal/moral coordinations, interpersonal, and personal justifications (see Table 1 for the categories and Table 3 for means, standard deviations, *F* values, and  $\eta_p^2$ ). As in the analyses of judgments, separate 3 (moral harm type) × 2 (gender) × 4 (relationship condition) repeated measures ANCOVAs with moral harm type as the repeated measure and age



*Figure 1.* Age × Harm Type interactions for (a) deserved punishment and (b) victim's emotion. *Note.* Deserved punishment was rated on a 3-point scale (with 3 = a lot); victim's emotion was rated on a 5-point scale ranging from -2 to +2 (with +2 = very bad).

(mean centered) as the covariate were run on each of these categories.

#### Age, Gender, and Relationship Condition

As expected, effects of age were significant for welfare and marginally for fairness justifications, *F*s (1, 144) = 37.24, 3.56, *p*s < .01, .06,  $\eta_p^2$  = .21, .02. Use of both justifications increased with age, *r*s = .46, .17, *p*s < .01, .05. Main effects for child's gender were found only for welfare justifications, *F*(1, 144) = 5.48, *p* < .05,  $\eta_p^2$  = .04; girls (*M* = 0.48, *SD* = 0.28) reasoned more about others' welfare

than did boys (M = 0.39, SD = 0.27). A main effect for relationship condition was found only for personal justifications, F(3, 144) = 3.45, p < .05,  $\eta_p^2 = .07$ ; personal reasoning was greater in the friend than the bully condition (see Table 3). Age and gender moderated other study variables, as discussed below.

# Types of Moral Harm

As indicated in Table 3, main effects for moral harm type were found for all of the justifications analyzed. As hypothesized, Bonferroni *t*-tests

	Harm type			<i>F</i> value/ $\eta_p^2$	Relationship condition				<i>F</i> value/ $\eta_p^2$
	Phy harm	Psy harm	Resources	<i>df</i> (2, 288)	Friend	Acquaint	Disliked	Bully	$\frac{df(1, 144)}{df(1, 144)}$
Welfare	.68 (.47) <sup>a</sup>	.38 (.48) <sup>b</sup>	.24 (.43) <sup>c</sup>	40.07**, .22	.41 (.28)	.44 (.28)	.49 (.26)	.39 (.29)	1.57, .03
Fairness	.05 (.22) <sup>a</sup>	.03 (.17) <sup>a</sup>	.41 (.49) <sup>b</sup>	71.87**, .33	.14 (.20)	.17 (.19)	.22 (.21)	.12 (.18)	1.63, .03
Pers/moral	.03 (.17) <sup>a</sup>	.18 (.39)	.14 (.35) <sup>b</sup>	9.28**, .06	.16 (.21)	.12 (.18)	.10 (.15)	.09 (.15)	0.87, .02
Nec harm	.01 (.11)	.10 (.30)	.02 (14)	_	.02 (.07)	.00 (.00)	.00 (.00)	.15 (.22)	_
Conventional	.09 (.30)	.06 (.24)	.04 (.19)	_	.08 (.15)	.03 (.10)	.08 (.16)	.06 (.15)	_
Interpersonal	.09 (.29) <sup>a</sup>	.25 (.43) <sup>b</sup>	.17 (.38) <sup>c</sup>	7.67**, .05	.19 (.21)	.13 (.13)	.08 (.16)	.19 (.24)	0.71, .02
Personal	.07 (.25)	.16 (.37)	.13 (.37)	3.52*, .02	.20 (.26) <sup>a</sup>	.14 (.23)	.09 (.21)	.06 (.13) <sup>b</sup>	3.45*, .07
Prud/prag	.07 (.25)	.04 (.19)	.07 (.24)	_	.02 (.07)	.10 (.20)	.06 (.15)	.06 (.13)	_
Undiff/uncod	.04 (.19)	.07 (.25)	.05 (.22)	_	.04 (.13)	.03 (.10)	.03 (.12)	.03 (.12)	_

 Table 3

 Means (SD) for Acceptability Justifications by Harm Type and Relationship Condition

*Note.* Significant differences are indicated by superscript letters that differ. Phy = physical; Psy = psychological; Resources = resource distribution; Pers/moral = coordinated personal/moral; Nec = necessary; PrudPrag = prudential or pragmatic; Undiff/uncod = undifferentiated, uncodable, or don't know. \*p < .05. \*\*p < .01.

showed that others' welfare justifications were employed most for physical harm, less for psychological harm, and least for resource transgressions, whereas fairness justifications were utilized more for resource violations than for either type of harm. Personal/moral reasons (e.g., harm or unfairness resulting from denying personal desires) and personal reasons were used most for psychological harm, less for resource violations (for personal reasons), and least for physical harm.

# Harm Type $\times$ Age

Significant effects of harm type on fairness, interpersonal, and personal justifications were moderated by age, Fs(2, 288) = 4.76, 3.21, 4.56, ps < .01, .05, .01,  $\eta_p^2 = .03$ , .02, .03. With age, children increasingly applied principles of fairness, b = .07, p < .05, but focused less on interpersonal concerns, b = -.05, p < .05, when reasoning about unfair resource distribution (see Figure 2), but not when reasoning about physical or psychological harm (fairness: bs = .00, -.01, ns; interpersonal: bs = .01, .001, ns). Personal reasoning declined with age, but only for physical and psychological harm, bs = -.03, -.04, ps < .01.

# Harm Type $\times$ Relationship Condition $\times$ Gender

A significant three-way interaction for interpersonal justifications, F(6, 288) = 3.74, p < .01,  $\eta_p^2 = .07$ , qualified significant Moral Harm Type × Relationship Condition and Child Gender × Moral Harm Type interactions, Fs(2, 288) = 3.53, 3.07, ps < .01 .05,  $\eta_p^2 = .07$ , .02. When considering psychological harm, girls reasoned interpersonally more in the friend than the bully condition, F(1, 74) = 4.61, p < .01, Ms = 0.56, 0.05, whereas when considering unfair resource distributions, girls used interpersonal reasons more in the bully than the friend condition, F(1, 74) = 2.73, p < .05, Ms = 0.42, 0.06. Girls' reasoning regarding physical harm and boys' reasoning across harm types did not differ.

A significant Harm Type × Relationship Condition × Gender interaction for fairness justifications, F(6, 288) = 3.74, p < .01,  $\eta_p^2 = .07$ , showed that when justifying unequal resource distribution, boys reasoned about fairness more for disliked peers than for acquaintances or friends, F(6, 162) = 3.50, p < .01, Ms = 0.67, 0.25, 0.23, SDs = 0.48, 0.44, 0.43, but not for other types of harm. Girls' reasoning about fairness did not differ across harm types.

# Discussion

Although morality is inherently interpersonal, surprisingly little research has examined children's developing understanding of morality in the context of different peer relationships. The present study contributed significantly to the literature by examining 4- to 9-year-olds' third-party moral judgments, justifications, and emotion and intent attributions in response to hypothetical vignettes depicting actors transgressing against friends, acquaintances, disliked peers, and bullies. As hypothesized, the peer relationship context significantly influenced many (but not all) of the judgments examined here but had little effect on



*Figure 2.* Age  $\times$  Harm Type interactions for (a) fairness and (b) interpersonal justifications. *Note.* Justifications were analyzed in terms of percentage of total justifications provided.

children's justifications, which consistently varied by type of moral transgression. Finally, as discussed next, children's judgments and justifications showed increasing moral maturity with age.

# Effects of Peer Relationship Contexts on Children's Moral Evaluations

Peer relationships had significant but selective effects on moral judgments. As expected, the relationship context did not alter children's understanding of moral transgressions as fundamentally moral as assessed via criterion judgments and moral justifications. Across relationship contexts, children viewed moral transgressions as wrong independent of rules and authorities, and justified their wrongness primarily by appealing to the negative consequences for others' welfare and fairness. Thus, as expected, transgressions were generally seen as wrong based on moral criteria and reasons, regardless of the type of relationship depicted.

Nevertheless, the peer relationship context had significant effects on judgments of act acceptability and deserved punishment and attributions for intentions and transgressors' emotions. Although the existing moral development research has primarily focused on comparing moral evaluations about friends versus neutral peers (acquaintances or strangers) or siblings, we found that judgments varied most for affectively negative peer relationships. As expected, children generally viewed hypothetical transgressions against bullies as less deserving of moral condemnation (but not as personal issues) than transgressions depicted in other peer relationships. Particular effects (e.g., which context was differentiated from bullies), however, depended on the evaluation being considered. Children judged it to be more acceptable to transgress against bullies than other peers, except acquaintances. Accordingly, moral violations against bullies were seen as less deserving of punishment than against others, except friends, and age did not interact significantly with these judgments. Thus, with age, children did not become more likely to either condone or condemn acting against bullies.

Bullying has been defined as involving ongoing acts of proactive aggression, including both physical and psychological harm (Nansel et al., 2001; Olweus, 1994). Indeed, children's justifications sometimes suggested that they viewed bullying and transgressing as integrally linked (e.g., "Because you can't make fun of people. [Why not?] Because it's mean . . . If you make fun of people, it means you're a bully"). Children viewed it as more justified to transgress against habitual victimizers than those who are morally blameless. For instance, in considering the acceptability of distributing resources unequally, one child stated, "Because [the victim] is a bully. . . Because she isn't nice." Children may have seen bullies as getting what they deserved because they were mean to many. The findings for bullies are consistent with research on children's judgments of retaliation, where children (and particularly aggressive ones; Gasser, Malti, & Gutzwiller-Helfenfinger, 2012) view it as more morally justified to respond in kind to provoked than unprovoked moral transgressions (Smetana et al., 2003; Wainryb, Komolova, & Florsheim, 2010). Responding to bullying differs from situations of retaliation, however, in that here, the acts were not temporally linked to the bullies' previous moral provocations.

Several aspects of these findings deserve comment. First, it is worth noting that, on average, children did not view transgressing against bullies as positive or laudable; it was still considered unacceptable and deserving of some punishment, just less so than when transgressing against other peers. As one 8-year-old explained,

Because, yes, he is a bully, but he's still a human being. [So why would it be bad to leave a person out?] You have to think about how you would feel to be left out. [And how do you think you would feel?] I would feel sad. However, a small proportion of children justified transgressing against bullies as well intended and necessary to prevent greater harm to others (e.g., "But it's kind of good, too, because [the victim] is not her [violator's] friend and is a bully, and she doesn't want anyone else to get hurt ever again"). These necessary harm reasons were used primarily to justify the acceptability of teasing or excluding (e.g., for psychological harm). More typical were justifications such as, "Well, I think since [the victim] is a bully, he should still get a cookie. He just shouldn't get as good of a cookie."

In addition, an important finding was that judgments of bullies and disliked peers not only differed significantly but often diverged as much or more than other comparisons. For instance, children attributed more positive emotions to actors who transgressed against disliked peers than all others, including bullies. On average, children viewed hypothetical transgressors as "happy victimizers" (Arsenio & Kramer, 1992; Krettenauer et al., 2008) when acting against disliked peers, whereas they usually attributed neutral emotions to actors who transgressed against bullies and negative emotions to actors who victimized friends and acquaintances. Children also rated moral transgressions as less acceptable against disliked peers than others and more deserving of punishment than against bullies. Thus, children seemed to recognize that transgressing against disliked peers may feel good but that it is immoral and punishable. Results suggest that children expected actors to gain more emotional satisfaction from acting against peers they actively (and perhaps idiosyncratically) dislike than against bullies (Peets et al., 2007, 2008), even though their affect toward bullies also may be negative.

Children also may view being mean to a bully as asking for trouble, with the potential to become a victim of the bully's wrath. In turn, this could influence how participants would expect the transgressor to feel. As one child reasoned, "If she's [the victim] a bully, you don't have to make her a worse bully by just giving her one cookie. You can give her two big ones to make her more nice to you." Regardless of which interpretation is correct, our speculations are consistent with research showing that bullying occurs in specific relationship contexts, with selected victims (Salmivalli & Peets, 2009). Furthermore, when children in our study made judgments about transgressing against bullies, they seemed to identify and agree with the actor harming the bully.

Although children did not distinguish between how much punishment was deserved for transgressing against friends versus bullies, this appears to be for very different reasons. The findings for bullies are consistent with research indicating that young children selectively target antisocial or bad actors for greater punishment in third-party tasks (Kenward & Östh, 2015; Smith & Warneken, 2016). Children appear to believe that transgressing against bullies is more morally justified than toward others and thus that transgressors should be held less accountable for their actions than those who act out of anger or dislike.

On the other hand, hypothetical actors who transgressed against friends may have been seen as deserving less punishment because participants viewed the transgressions as less intentional and in terms that somewhat mitigated the harm caused. Children used more personal justifications and considered others' minds more for transgressions committed against friends than bullies. For instance, they reasoned that the transgressor was acting on personal knowledge of their friend's desires (e.g., "Maybe her friend thought that [the victim] only wanted one cookie or a small cookie. I think maybe she [victim] doesn't really like cookies that much").

Children also justified psychological harm based on interpersonal (e.g., friendship) concerns more for friends than bullies. This is consistent with research showing that children offered interpersonal justifications more for friends than nonfriends (Slomkowski & Killen, 1992) and that children are more motivated by social-relational goals when judging hypothetical responses to friends' than others' provocations (Lemerise et al., 2016). However, we also found that interpersonal justifications were used to support both the acceptability and unacceptability of psychological harm (e.g., "Because like sometimes, that can really ruin a friendship"), perhaps because psychological harm is more ambiguous and requires more interpretation than physical harm or unfair resource distribution (Ball et al., 2016; Helwig et al., 2001; Jambon & Smetana, 2014). Consistent with this, children appeared to have inferred more harmful consequences from psychological harm transgressions in bully than friend contexts. Unlike the aforementioned studies, however, children in our study did not distinguish between the acceptability of transgressing against acquaintances versus friends, although they attributed more negative emotions to transgressors acting against friends than anyone else. This suggests that children believe that actors will feel the greatest remorse when morally transgressing against those they like, but they did not necessarily excuse those transgressions.

More broadly, researchers typically assume that moral acts occurring between familiar peers or acquaintances provide a neutral or "baseline" condition for children's evaluations. In this regard, it is notable that young children had difficulty understanding our definition of an acquaintance, perhaps because teachers often stress that all classmates are their friends. It also may be because young children define friendships behaviorally, in terms of their playmates (Bigalow, Tesson, & Lewko, 1996). Although responses regarding acquaintances were not consistently distinguished from other peer relationships, results varied for different evaluations. The acquaintance condition was treated as relatively but not completely neutral, suggesting that researchers need to more carefully consider how peer relationships are depicted in research. Moreover, as moral judgments about acquaintances were most similar to those of friends, future studies should focus on comparing positively to negatively valenced relationships.

# Age, Gender, and Harm Type Differences in Moral Judgments and Justifications

A novel feature of our study was that, rather than divide children into discrete age groups, as is typically done in research on hypothetical moral judgments, we employed age as a covariate in our analyses. This provided a more sensitive test of age effects in our sample of 4- to 9-year-olds and also revealed some broad age trends in moral judgments and justifications.

With age, children increasingly judged moral violations as unacceptable and wrong independent of rules and authority, based on an increasing appreciation of how transgressions affect others' welfare and fairness. Consistent with past research indicating that young children understand physical harm at earlier ages than psychological harm or unfair resource distribution (Ball et al., 2016; Smetana et al., 1993, 2012), children in the present study evaluated physical harm as more wrong, deserving of punishment, rule and authority independent, intentional, and resulting in more negative emotional reactions for victims than other moral transgressions. Past research has focused mostly on preschool children, but a novel contribution of our study was that we found that judgments of physical harm continued to develop into middle childhood. Judgments that physical harm was more deserving of punishment and resulted in victims' more negative emotions increased with age. This may explain why personal reasoning about physical harm (but not other types of harm) declined with age. Physical harm is concrete and observable, making its negative consequences for others difficult to deny. Future research should examine whether these age trends in judgments of and justifications for physical harm are related to the declines in physical forms of bullying found at these ages (Olweus, 1994).

Consistent with past research on middle childhood (Jambon & Smetana, 2014; Wainryb & Brehl, 2006; Zelazo et al., 1996), we found that with age, children had a better understanding of psychological harm; they judged it as more wrong independent of rules and authority. Unexpectedly, we found few age-related differences in other evaluations, although children's justifications for psychological harm reflected considerable variability and complexity. Children primarily justified these transgressions with appeals to others' welfare, but they also gave more interpersonal reasons for psychological harm than for other types of transgressions and coordinated personal and moral concerns (e.g., personal/ moral justifications) by considering how denying personal choices causes harm or unfairness to the victim (Smetana, Wong, Ball, & Yau, 2014) more for these than for physical harm transgressions.

Children in the present study sometimes reasoned about unequal resource distribution as personal, relatively inconsequential, and as not causing much harm. As one child stated, "Because it's just a crayon, but [the transgressor] knew that [the victim] couldn't do anything with the white crayon." However, interpersonal reasoning for these events declined with age, whereas reasoning about fairness increased. Thus, as they grew older, children increasingly understood the moral dimensions of distributing resources unequally, even trivial ones like snacks and crayons. This is consistent with previous research showing that even preschool children prefer equal allocation of resources but that with age they are better able to balance merit, effort, and need (see Killen & Smetana, 2015). Like most previous studies, our resource distribution stories focused on the allocation of minor, "luxury" resources (cookies, crayons) rather than more necessary goods (Rizzo, Elenbaas, Cooley, & Killen, 2016). Age increases in fairness reasoning may have been greater if the resources being allocated had been depicted as more valuable or necessary.

Finally, in keeping with previous research on moral judgment development (Smetana, Jambon, et al., 2014), we found relatively few significant gender differences in children's evaluations. When evaluating psychological harm, however, girls reasoned interpersonally more for friends than bullies. Consistent with girls' than boys' greater orientation to relational goals and social connections (Rose & Rudolph, 2006), reasoning about friends primarily focused on relationship maintenance. However, when justifying unfair resource distribution, girls reasoned interpersonally (both why it was fair or unfair to deny resources) more for bullies than friends, based primarily on bullies' history of poor relationships with others. Given the complexity of these interactions, however, these gender differences must be replicated in further research.

# Limitations and Directions for Future Research

This study contributed novel information about moral judgments in the context of different peer relationships. In studying different types of moral transgressions, this study also bridged several increasingly distinct literatures on resource allocation, exclusion, and harmful transgressions. Despite these strengths, several limitations should be noted. First, the victim in the bully condition was described behaviorally and was not explicitly labeled as a bully. Although many children spontaneously called the actor a bully, we do not know if all children interpreted this condition in the same way. The manipulation check indicated that the bully had been mean to the target child and to others in the class, but the results for the bully and disliked peer condition might have been more similar if we had emphasized that the bully was also a personal enemy. This needs to be examined in future research to better understand the features that distinguish moral evaluations of bullies and disliked peers and to determine whether the evaluations of bullies obtained here were solely due to reputation effects. Further research should examine whether children view transgressions against bullies as a form of retaliation for their established pattern of hurtful behavior and whether these judgments are linked to specific patterns of social interactions toward bullies. If children view moral prohibitions against harm as more relaxed for bullies and then act on these judgments, their behaviors could aggravate bullying. These findings need further consideration in bullying prevention programs.

Furthermore, recent research has shown that children's evaluations of third-party hypothetical transgressions differ from those where children are directly involved in the transgressions. For instance, research on emotion attributions has shown closer connections to behavior when emotions are attributed to the self rather than to others (Malti & Krettenauer, 2013). In addition, evaluations regarding hypothetical peers place greater information processing demands on young as compared to older children (Brownell, Lemerise, Pelphrey, & Roisman, 2015). This suggests that our procedures may have underestimated younger children's moral competencies. Future research should examine how evaluations differ when children think about themselves versus others or about actual peers in different relationship contexts.

This study examined the effects of peer relationships on various dependent measures drawn from past SCDT research. Studying variables individually and cross-sectionally, as we did here, provides an appropriate first step in a novel line of research, but it would be fruitful in the future to examine interrelationships among these variables. Although intent attributions often mediate links between judgments and aggression in SIP research, intentions are typically measured in the context of ambiguous events. In contrast, the hypothetical transgressions studied here were clearly overt and, on average, interpreted as intentional. Thus, intent may be less central to variations in judgments than found in past SIP research, as the correlations among our study variables (shown in Supporting Information) suggest.

Finally, our finding that children largely condemned moral transgressions, even for children who act harmfully against others, is cause for hope regarding children's moral development. Further research is needed to determine whether the patterns observed here change with age from middle childhood to adolescence so that older children more strongly condemn acting against bullies, and whether individual differences in children's peer experiences influence their moral evaluations. More generally, a better understanding of both how moral evaluations generalize across peer relationship contexts as well as when, how, and for whom these evaluations vary would contribute to a much more nuanced and contextualized perspective on moral judgment development.

# References

- Aiken, L., & West, S. (1991). *Multiple regression: Testing* and interpreting interactions. Thousand Oaks, CA: Sage.
- Arsenio, W. F., & Kramer, R. (1992). Victimizers and their victims: Children's conceptions of the mixed emotional consequences of moral transgressions. *Child Development*, *63*, 915–927. https://doi.org/10.1111/j.1467-8624. 1992.tb01671.x

- Arsenio, W. F., & Lemerise, E. A. (2001). Varieties of childhood bullying: Values, emotion processes, and social competence. *Social Development*, 10, 59–73. https://doi.org/10.1111/1467-9507.00148
- Arsenio, W. F., & Lemerise, E. A. (2004). Aggression and moral development: Integrating social information processing and moral domain models. *Child Development*, 75, 987– 1002. https://doi.org/10.1111/j.1467-8624.2004.00720.x
- Ball, C., Smetana, J. G., & Sturge-Apple, M. (2016). Following my head and my heart: Integrating preschoolers' empathy, theory of mind, and moral judgments. *Child Development*. https://doi.org/10.1111/cdev.12605
- Baumard, N., Mascaro, O., & Chevallier, C. (2012). Preschoolers are able to take merit into account when distributing goods. *Developmental Psychology*, 48, 492– 498. https://doi.org/10.1037/a0026598
- Bigalow, B. J., Tesson, G., & Lewko, J. H. (1996). *Learning the rules: The anatomy of children's relationships*. New York, NY: Guilford.
- Brownell, C. A., Lemerise, E. A., Pelphrey, K. A., & Roisman, G. I. (2015). Measuring socioemotional development. In R. Lerner (Series Ed.) & M. Lamb (Vol. Ed.), *Handbook of child psychology and developmental science* (7th ed., pp. 11–56). Hoboken, NJ: Wiley.
- Card, N. A. (2010). Antipathetic relationships in child and adolescent development: A meta-analytic review and recommendations for an emerging area of study. *Developmental Psychology*, 46, 516–529. https://doi.org/10. 1037/a0017199
- Costin, S. E., & Jones, D. C. (1992). Friendship as a facilitator of emotional responsiveness and prosocial interventions among young children. *Developmental Psychology*, 28, 941–947. https://doi.org/10.1037/0012-1649.28.5.941
- Cutting, A., & Dunn, J. (2006). Conversations with siblings and with friends: Links between relationship quality and social understanding. *British Journal of Developmental Psychology*, 24, 73–87. https://doi.org/10. 1348/026151005X70337
- Dunn, J. (2014). Moral development in early childhood, and social interaction in the family. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 135–159). New York, NY: Psychology Press.
- Gasser, L., & Keller, M. (2009). Are the competent the morally good? Perspective taking and moral motivation of children involved in bullying. *Social Development*, *18*, 798–816. https://doi.org/10.1111/j.1467-9507.2008.00516.x
- Gasser, L., Malti, T., & Gutzwiller-Helfenfinger, E. (2012). Aggressive and nonaggressive children's moral judgments and moral emotion attributions in situations involving retaliation and unprovoked aggression. *Journal of Genetic Psychology*, 173, 417–439. https://doi.org/ 10.1080/00221325.2011.614650
- Grotpeter, J. K., & Crick, N. R. (1996). Relational aggression, overt aggression, and friendship. *Child Development*, 67, 2328–2338. https://doi.org/10.1111/j. 1467-8624.1996.tb01860.x
- Helwig, C. C., Zelazo, P., & Wilson, M. (2001). Children's judgments of psychological harm in normal and

noncanonical situations. *Child Development*, 72, 66–81. https://doi.org/10.1111/1467-8624.00266

- Hymel, S. (1986). Interpretation of peer behavior: Affective bias in childhood and adolescence. *Child Development*, 57, 431–445. https://doi.org/10.2307/1130599
- Jambon, M., & Smetana, J. G. (2014). Moral complexity in middle childhood: Children's evaluations of necessary harm. *Developmental Psychology*, 50, 22–33. https://doi. org/10.1037/a0032992
- Keller, M., Lourenço, O., Malti, T., & Saalbach, H. (2003). The multifaceted phenomenon of 'happy victimizers': A cross-cultural comparison of moral emotions. *British Journal of Developmental Psychology*, 21, 1–18. https:// doi.org/10.1348/026151003321164582
- Kenward, B., & Dahl, M. (2011). Preschoolers distribute scarce resources according to the moral valence of recipients' previous actions. *Developmental Psychology*, 47, 1054–1064. https://doi.org/10.1037/a0023869
- Kenward, B., & Östh, T. (2015). Five-year-olds punish antisocial adults. Aggressive Behavior, 41, 413–420. https://doi.org/10.1002/AB.21568
- Killen, M., Mulvey, K. L., & Hitti, A. (2013). Social exclusion in childhood: A developmental intergroup perspective. *Child Development*, 84, 772–790. https://doi. org/10.1111/cdev.12012
- Killen, M., Mulvey, K. L., Richardson, C., Jampol, N., & Woodward, A. (2011). The accidental transgressor: Morally-relevant theory of mind. *Cognition*, 119, 197– 215. https://doi.org/10.1016/j.cognition.2011.01.006
- Killen, M., & Smetana, J. G. (2015). Origins and development of morality. In M. Lamb (Ed.) & R. M. Lerner (Series Ed.), *Handbook of child psychology, Vol. 3, Social* and emotional development (7th ed., pp. 701–749). New York, NY: Wiley/Blackwell.
- Krettenauer, T., Malti, T., & Sokol, B. W. (2008). The development of moral emotion expectancies and the happy victimizer phenomenon: A critical review of theory and application. *International Journal of Developmental Science*, 2, 221–235. https://doi.org/10.3233/ DEV-2008-2303
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development*, 71, 107–118. https://doi.org/10.1111/1467-8624.00124
- Lemerise, E. A., Thorn, A., & Costello, J. M. (2016). Affective ties and social information processing. *Social Devel*opment. Advance online publication. https://doi.org/ 10.1111/sode.12207
- LoBue, V., Nishida, T., Chiong, C., DeLoache, J. S., & Haidt, J. (2011). When getting something good is bad: Even three-year olds react to inequality. *Social Development*, 20, 154–170. https://doi.org/10.1111/j.1467-9507. 2009.00560.x
- Malti, T., Gasser, L., & Gutzwiller-Helfenfinger, E. (2010). Children's interpretive understanding, moral judgments, and emotion attributions: Relations to social behaviour. *British Journal of Developmental Psychology*, 28, 275–292. https://doi.org/10.1002/ab.20289

- Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis. *Child Development*, *84*, 397–412. https://doi.org/10.1111/j.1467-8624.2012.01851.x
- Moore, C. (2009). Fairness in children's resource allocation depends on the recipient. *Psychological Science*, 20, 940–948. https://doi.org/10.1111/j.1467-9280.2009.02378.x
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, 285, 2094–2100. https://doi.org/10. 1001/jama.285.16.2094
- O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of Adolescence*, 22, 437–452. https://doi.org/10.1006/jado.1999.0238
- Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition*, 108, 222–231. https://doi.org/10.1016/j.cognition.2007.12.00
- Olweus, D. (1994). Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, 35, 1171–1190. https://doi.org/10.1111/j.1469-7610.1994.tb01229.x
- Paulus, M. (2016). Friendship trumps neediness: The impact of social relations and others' wealth on preschool children's sharing. *Journal of Experimental Child Psychology*, 146, 106–120. https://doi.org/10.1016/j.jec p.2016.02.001
- Paulus, M., & Moore, C. (2014). The development of recipient-dependent sharing behavior and sharing expectations in preschool children. *Developmental Psychology*, 50, 914–921. https://doi.org/10.1037/a0034169
- Peets, K., Hodges, E. V. E., Kikas, E., & Salmivalli, C. (2007). Hostile attributions and behavioral strategies in children: Does relationship type matter? *Developmental Psychology*, 43, 889–900. https://doi.org/10.1037/0012-1649.43.4.889
- Peets, K., Hodges, E. V., & Salmivalli, C. (2008). Affectcongruent social-cognitive evaluations and behaviors. *Child Development*, 79, 170–185. doi:10.1111/j.1467-8624. 2007.01118x
- Peets, K., Hodges, E. V., & Salmivalli, C. (2011). Actualization of social cognitions into aggressive behavior toward disliked targets. *Social Development*, 20, 233–250. https://doi.org/10.1111/j.1467-9507.2010.00581.x
- Peets, K., Hodges, E. V., & Salmivalli, C. (2013). Forgiveness and its determinants depending on the interpersonal context of hurt. *Journal of Experimental Psychology*, 114, 131–145. https://doi.org/10.1016/j.jecp.2012.05.009
- Perren, S., Gutzwiller-Helfenfinger, E., Malti, T., & Hymel, S. (2012). Moral reasoning and emotion attributions of adolescent bullies, victims, and bully-victims. *British Journal of Developmental Psychology*, 30, 511–530. https://doi.org/10.1111/j.2044-835X.2011.02059
- Recchia, H., Wainryb, C., & Pasupathi, M. (2013). "Two for Flinching": Children's and adolescents' narrative accounts of harming their friends and siblings. *Child*

#### 18 Smetana and Ball

Development, 84, 1459–1474. https://doi.org/10.1111/cdev.12059

- Reis, H. T., Collins, W. A., & Berscheid, E. (2000). The relationship context of human behavior and development. *Psychological Bulletin*, 126, 844–872. https://doi. org/10.1037//0033-2909.126.6.844
- Rizzo, M. T., Elenbaas, L., Cooley, S., & Killen, M. (2016). Children's recognition of fairness and others' welfare in a resource allocation task: Age related changes. *Developmental Psychology*, 52, 1307–1317. https://doi.org/10. 1037/dev0000134
- Rizzo, M. T., & Killen, M. (2016). Children's understanding of equity in the context of inequality. *British Journal* of Developmental Psychology, 34, 569–581. https://doi. org/10.1111/bjdp.12150
- Rodkin, P. C., Espelage, D. L., & Hanish, L. D. (2015). A relational framework for understanding bullying: Developmental antecedents and outcomes. *American Psychologist*, 70, 311. https://doi.org/10.1037/a0038658
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential tradeoffs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, 132, 173–191. https://doi.org/10.1037/0033-2909.132.1.98
- Rutherford, A. (2001). *Introducing ANOVA and ANCOVA:* A GLM approach. London, UK: Sage.
- Salmivalli, C., & Peets, K. (2009). Bullies, victims, and bully-victim relationships in middle childhood and early adolescence. In W. M. Bukowski, B. P. Laursen, & K. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 322–340). New York, NY: Guilford.
- Sanderson, J. A., & Siegal, M. (1988). Conceptions of moral and social rules in rejected and nonrejected preschoolers. *Journal of Clinical Child Psychology*, 17, 66– 72. https://doi.org/10.1207/s15374424jccp1701\_9
- Slomkowski, C., & Killen, M. (1992). Young children's conceptions of transgressions with friends and nonfriends. *International Journal of Behavioral Development*, 15, 247–258. https://doi.org/10.1177/016502549201500205
- Smetana, J., & Braeges, J. L. (1990). The development of toddlers' moral and conventional judgments. *Merrill-Palmer Quarterly*, 36, 329–346. https://doi.org/10.1037/ 0012-1649.25.4.499
- Smetana, J. G., Campione-Barr, N., & Yell, N. (2003). Children's moral and affective judgments regarding provocation and retaliation. *Merrill-Palmer Quarterly*, 49, 209–236. https://doi.org/10.1353/mpq.2003.0010
- Smetana, J. G., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 23–45). New York, NY: Psychology Press.
- Smetana, J., Rote, W., Jambon, M., Tasopoulos-Chan, M., Villalobos, M., & Comer, J. (2012). Developmental changes and individual differences in young children's moral judgments. *Child Development*, 83, 683–696. https://doi.org/10.1111/j.1467-8624.2011.01714

- Smetana, J. G., Schlagman, N., & Adams, P. (1993). Preschoolers' judgments about hypothetical and actual transgressions. *Child Development*, 64, 202–214. https://doi.org/10.2307/1131446
- Smetana, J. G., Wong, M., Ball, C., & Yau, J. (2014). American and Chinese children's evaluations of personal domain events and resistance to parental authority. *Child Development*, 85, 626–642. https://doi.org/10. 1111/cdev.12140
- Smith, C. E., & Warneken, F. (2016). Children's reasoning about distributive and retributive justice across development. *Developmental Psychology*, 52, 613–628. https://doi.org/10.1037/a0040069
- Turiel, E. (1983). The development of social knowledge: Morality and convention. New York, NY: Cambridge University Press.
- Vaish, A., Carpenter, M., & Tomasello, M. (2010). Young children selectively avoid helping people with harmful intentions. *Child Development*, 81, 1661–1669. https:// doi.org/10.1111/j.1467-8624.2010.01500.x
- Wainryb, C., & Brehl, B. (2006). I thought she knew that would hurt my feelings: Developing psychological knowledge and moral thinking. In R. Kail (Ed.), Advances in child development and behavior (pp. 131–171). New York, NY: Elsevier. https://doi.org/10.1016/ s0065-2407(06)80006-6
- Wainryb, C., Brehl, B. A., & Matwin, S. (2005). Being hurt and hurting others: Children's narrative accounts and moral judgments of their own interpersonal conflicts. *Monographs of the Society for Research in Child Development*, 70(Serial No. 3), https://doi.org/10.1111/ j.1540-5834.2005.00350.x
- Wainryb, C., Komolova, M., & Florsheim, P. (2010). How violent youth offenders and typically developing adolescents construct moral agency in narratives about doing harm. In K. C. McClean & M. Pasupathi (Eds.), *Narrative development in adolescence: Creating the storied self* (pp. 185–206). New York, NY: Springer.
- Whisman, M., & McClelland, G. (2005). Designing, testing, and interpreting interactions and moderator effects in family research. *Journal of Family Psychology*, 19, 111– 120. https://doi.org/10.1037/0893-3200.19.1.111
- Zelazo, P. D., Helwig, C. C., & Lau, A. (1996). Intention, act, and outcome in behavioral prediction and moral judgment. *Child Development*, 67, 2478–2492. https:// doi.org/10.2307/1131635

#### Appendix

# Social Events in Relationships Interview (SERI) Vignettes (Female Version)

#### Set A

### Physical Harm—Shoving

One day, Madison and Sarah both decided to go play on the swings. Sara was about to take a turn, but Madison shoved her so that she fell over, and Madison got on the swing.

### Psychological Harm—Teasing

One day, Jenna and Tina were playing a game together. Tina was winning the game, and Jenna made fun of Tina. They continued to play the game.

### Unequal Distribution—Crayons

One day, Ella and Lilly were working on a class project together, and they had a box of crayons and drawing paper to share. Ella had all of the colorful crayons, and Lilly asked Ella to share some with her. Ella handed her one crayon, the white one, and kept all of the colorful crayons for herself. Lilly finished her drawing.

### Set B

### Physical Harm—Hitting

One day, Madison and Sarah both decided to go play on the swings. Sarah was about to take a turn, but Madison hit her so that she fell over, and Madison got on the swing.

### Psychological Harm—Excluding

One day, Jenna and Tina were playing with two other kids. They began playing a game. Jenna told Tina that she couldn't play the game with them and had to sit out. Jenna played the game with the other kids, while Tina watched.

### Unequal Distribution—Snack

One day, at snack time the teacher asked Ella to hand out the cookies for snack. There were big and small cookies. Ella gave all of the other kids two big cookies, but when she got to Lilly, she only gave her one small cookie. Lilly ate her cookie.

# **Supporting Information**

Additional supporting information may be found in the online version of this article at the publisher's website:

**Figure S1.** SERI Transgression Illustrations **Table S1.** Correlations Among Judgments