

“That Really Hurt, Charlie!” Investigating the Role of Sympathy and Moral Respect in
Children’s Aggressive Behavior

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Abstract

We examined the role of sympathy and moral respect in children's overt aggression, and the subtypes of proactive and reactive aggression, in an ethnically diverse sample of 5-, 7-, and 10-year-olds ($N = 110$). Aggressive behaviors were measured through teacher reports and peer nominations. Sympathy was assessed through teacher reports. Children reported on their moral respect within an interview procedure where they were asked for their feelings of respect towards hypothetical peers who displayed morally relevant behaviors. Results revealed that sympathy and moral respect were both negatively related to overt aggression and to the proactive aggression subtype, but unrelated to the reactive aggression subtype. We discuss the implications of our findings in relation to developmental research on the affective antecedents of children's aggressive behavior.

Keywords: overt aggression, proactive aggression, reactive aggression, sympathy, moral respect

“That Really Hurt, Charlie!” Investigating the Role of Sympathy and Moral Respect in
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In an attempt to better understand the affective antecedents of aggressive behavior in children, developmental researchers have investigated emotions in everyday experiences of moral and social conflicts. This has been done because emotional experiences in the context of social interactions are considered integral in the development of children’s morally relevant behavior, such as aggression (Eisenberg, 2000; Hoffman, 2000; Malti, 2016; Malti & Latzko, 2012). Aggression has been defined as the intentional harming of another, physically or psychologically (Krahé, 2013), and comprises of many different behaviors such as hitting, teasing, and name-calling. Aggression is, by definition, related to moral emotions and cognitions as they belong to the same domain, such as (the violation of) ethical principles of physical and psychological integrity, justice, and care (Arsenio, 2014; Arsenio & Lemerise, 2004; Eisner & Malti, 2015). Despite these conceptual links, most of the existing research has been limited to examining relations between aggression and one main moral emotion: sympathy (e.g., Eisenberg, Eggum, & Di Giunta, 2010). Thus, this study is one of the first to investigate the role of moral respect (in conjunction with sympathy) in buffering overt aggression. Respect has been defined as the recognition and feeling of admiration or esteem toward another based on their good qualities (Li & Fischer, 2007), with moral respect being the admiration of another’s moral characteristics (i.e., virtues or behaviour). The bulk of the research has studied respect across multiple domains and contexts (e.g., achievement-based and status-based respect, etc.); however, we believe focusing on respect within the moral domain is particularly important because both historical and contemporary theorizing has put much emphasis on respect toward moral norms of justice, fairness, and caring (Kant, 1788; Drummond, 2006). In addition, feeling respect toward

others who appreciate and/or behave in accord with such moral norms is also likely to motivate the individual to emulate those characteristics/behaviors, which makes its investigation relevant to approaches that aim at enhancing these attributes in children.

Furthermore, we were also interested in examining if sympathy and moral respect are differentially linked to the proactive and reactive subtypes (i.e., goal-directed aggression and impulsive aggression, respectively) of overt aggression. This was done based on previous research suggesting that the affective correlates of aggression might depend on the *function* of, or *motives* behind, aggression (e.g., Hubbard, McAuliffe, Morrow, & Romano, 2010). For instance, some research suggests that there may be a lack of moral emotions in children who display the proactive compared to reactive subtypes of overt aggression (e.g., Arsenio, Adams, & Gold, 2009). This work is based on the idea that reactively aggressive children and non-aggressive children share the moral understanding that it is not right to harm someone on purpose (see Arsenio & Lemerise, 2001), and thus may be more likely than proactively aggressive children to be motivated by moral emotions to behave in accordance with their moral values (Arsenio et al., 2009).

We investigated these research questions in a sample of 5-, 7-, and 10-year-olds because previous research has shown developmental changes in our study variables. Specifically, dispositional sympathy appears to increase from early to middle childhood (Kienbaum, 2014), children's conceptualizations of respect become more differentiated (Malti & Peplak, 2016; Piaget, 1932; Shwalb & Shwalb, 2006), and overt aggression, particularly reactive overt aggression, decreases beyond early childhood (Eisner & Malti, 2015; Kochanska, Murray, & Harlan, 2000).

Relations between Sympathy, Moral Respect, and Overt Aggression

The first goal of this study was to examine the roles of sympathy and moral respect in the development of children's overt aggression. Sympathy, an other-oriented moral emotion, has been defined as the feeling of concern for another; however, unlike empathy, it does not involve feeling the same or similar emotions as the other (Eisenberg, Spinrad, & Morris, 2014). Conceptually, the relation between aggression and empathy has been highlighted as important because other-oriented emotions help children shift focus from the self to the other, such as the victim. This, in turn, likely prevents intentional harming of the other (Hoffmann, 2000). In fact, some researchers have argued that the lack of concern for others is a trademark symptom associated with aggression (Blair, 2008). Previous cross-sectional research has found sympathy to be negatively related to aggressive behavior (e.g., Dinolfo & Malti, 2013). Yet, as seen in recent meta-analytic reviews, the strength of the relation between sympathy and overt aggression has been low to moderate at best (e.g., van Noorden, Haselager, Cillessen, & Bukowski, 2014), suggesting that there may be other variables, including other types of other-oriented moral emotions, that may be linked to aggression.

Here, we thus examined the relation between another other-oriented emotion and overt aggression: moral respect. Respect has long been recognized as a central other-oriented emotion (see Kant, 1788; Malti & Latzko, 2012), and like sympathy, is other-oriented (i.e., directed toward others). Although some research views respect as a social/attitudinal construct rather than an emotion, we argue that it genuinely is an emotion. Firstly, it has long been conceptualized as a *feeling* of acceptance or valorization between two individuals (Li & Fischer, 2007; Piaget, 1941/1995). In addition, emotions in the moral domain have been conceptualized as complex, involving both affective and cognitive components (Malti & Ongley, 2014). More specifically, similar to guilt feelings, respect involves both a cognitive evaluation of another person's moral

quality, as well as an affective response toward these qualities (see Malti, 2016; Malti & Latzko, 2012). Lastly, previous work (e.g., Frei & Shaver, 2002) has found respect to be strongly correlated with other other-oriented emotions such as awe and admiration (Li & Fischer, 2007). This suggests that the spontaneous and positive feeling of respect is shared with similar affective responses. Thus, here we conceptualize respect to be affective in nature.

Surprisingly, little research has been conducted on the development of respect since the work of Piaget (1932); however, some studies suggest that children as young as 4 years of age are able to conceptualize respect, and predominantly understand it as a component of fostering positive peer relationships (i.e., behaving in a prosocial manner; see Shwalb & Shwalb, 2006). Furthermore, in middle childhood and beyond, children increasingly consider respect to be an emotion directed toward fairness-related behaviors (Malti & Peplak, 2016). In the present study, we focused on examining respect among peers, and in particular, respect in the moral domain (i.e., respect related to fairness behavior). We conceptualize moral respect as the appreciation and admiration of the (im)moral qualities of another, such as behaving fairly toward peers (i.e., morally) or harming another peer/behaving aggressively (i.e., immorally). Respect for others based on their moral qualities may decrease aggression these feelings of respect likely function as a compass to help children identify other's positive qualities and behave like the moral others they admire (Kuryluk, Cohen, & Audley-Piotrowski, 2011).

Few studies have examined the relation between moral respect and aggression in children; nevertheless, there is some evidence from adolescent samples that they may indeed be linked. For example, Leary, Brennan, and Briggs (2005) explored 14- to 18-year-old African American youth's respect in relation to their aggressive behavior. Respect was measured using items of trust, appreciation, and guidance. Results revealed that feeling respect towards society,

peers, and family members was negatively associated with aggression. The authors speculated that moral respect may motivate adolescents to emulate others' respected moral virtues (i.e., moral characteristics they admire or value), which are typically positive and rewarding in nature, and innately contrary to aggressive motivations and behaviors. Following this theorizing, lack of moral respect, or respecting aggressive ("immoral") qualities may actually exacerbate children's negative, antisocial behaviors. In one study by Flores-Gonzalez (2005), the researchers showed that respect for antisocial behavior led to more aggression and violent behaviours among Latino youth in high school. Based on these studies, it is reasonable to assume that moral respect, similar to sympathy, may be negatively associated with aggressive tendencies in children, and on the other end of the spectrum, respect towards aggressive behaviors may be positively related to aggression.

Relations Between Sympathy and Moral Respect with Proactive and Reactive Subtypes

The second goal of our study was to explore the roles of sympathy and moral respect in the proactive and reactive subtypes of overt aggression. Both subtypes involve intentionally harming another; however, they differ in terms of their goal orientation and emotional antecedents. Proactive aggression is described as "cold-blooded" and stimulus seeking, and involves goal-oriented behaviors (Arsenio et al., 2009). Reactive aggression, on the other hand, is typically characterised as the defensive harming of others in response to provocation (Dodge, Coie, & Lynam, 2006), and may be thought of as "hot-headed", impulsive behavior. While both types of aggression result in harming another, there is growing evidence that they differ in terms of their social-emotional correlates. For example, Arsenio and colleagues (2009) showed that proactively aggressive adolescents were more likely to anticipate feeling happy following acts of provoked and unprovoked aggression. In contrast, adolescents' reactive aggression was related to

greater ease in enacting aggression when provoked but not to the absence of anticipating feeling bad/guilty after aggressing. These findings suggest that proactively aggressive adolescents may anticipate lower moral emotions after victimizing others compared to adolescents who are reactively aggressive.

Conceptually, it is likely that low levels of sympathy and moral respect are linked to high levels of proactive overt aggression. This is because children displaying proactive aggressive behavior have been shown to have blunted affect and to follow instrumental goals (Eisner & Malti, 2015). As a result, their preoccupation with achieving a goal (e.g., coercion, stealing etc.) may override their sympathetic or respectful orientations. The rewarding results of aggression may also be perceived as more valuable than the negative consequences of harming others (Boldizar, Perry, & Perry, 1989). In contrast, children who display reactive aggression may exhibit less regulated emotions (Hubbard et al., 2010) and maladaptive social information processing, but may not differ in their other-oriented emotions compared to non-aggressive children (Arsenio et al., 2009).

The Present Study

In summary, the aims of the present study were threefold. First, we investigated the roles of sympathy and moral respect with overt aggression. Based on previous findings on the relation between sympathy and aggression, we hypothesized that children who display overt aggression would feel less sympathy and less moral respect compared to their non-aggressive counterparts (e.g., Dinolfo & Malti, 2013; Leary et al., 2005).

Second, we examined associations between sympathy and moral respect with children's proactive and reactive overt aggression. Based on previous related research suggesting a lack of moral-emotions in adolescents who display proactive compared to reactive aggression (e.g.,

Arsenio et al., 2009), we hypothesized negative links between sympathy and moral respect in children who display proactive aggression but not in children who display reactive aggression.

Third, we explored developmental differences in sympathy and moral respect with overt aggression, as well as proactive and reactive aggression. We focused on a sample of 5-, 7-, and 10-year-olds because of research showing developmental changes in the study variables (e.g., Kienbaum, 2014, Piaget, 1932, Eisner & Malti, 2015). Although no previous research has directly examined developmental differences in the relations between sympathy, moral respect, and aggressive behavior, we speculated that sympathy and moral respect would more strongly inhibit 7- and 11-year-olds' overt and proactive aggression compared to 5-year-olds. This is because of expected increases in other-oriented concern and speculated increases in children's recognition of others' moral qualities from early to late childhood. Because research indicates that with age, reactive aggression tends to decrease due to older children's increasing ability to regulate their emotions (Cole, 2014), our hypotheses regarding developmental associations with sympathy and moral respect were open-ended.

Lastly, we controlled for child gender and verbal intelligence in all analyses because previous research indicates gender and intelligence differences in our study variables (Arsenio et al., 2009). For example, it has been shown that boys exhibit more overt aggression (e.g., physical aggression) compared to girls (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007), and girls display higher levels of sympathy/empathy (Malti, Gummerum, Keller, & Buchmann, 2009). Further, previous work has found verbal intelligence to be negatively linked to overt forms of aggression (e.g., Dionne, Tremblay, Boivin, Laplante, & Pérusse, 2003), likely because children with larger vocabularies are more likely to use a verbal strategy to solve interpersonal problems.

Method

Participants

A sample of 110 children ages 5 ($n = 20$; $M_{\text{age}} = 5.47$ years; $SD = 0.31$, 60% girls), 7 ($n = 35$; $M_{\text{age}} = 7.58$ years; $SD = 0.30$, 46% girls), and 10 ($n = 55$; $M_{\text{age}} = 10.57$ years; $SD = 0.35$, 42% girls), and their teachers ($N = 12$; one teacher per classroom) from a local school in a major Canadian city participated in the current study. Participating students and their teachers were fluent in both spoken and written English and were therefore capable of completing all assessments. According to the socioeconomic status of the area in which the study took place, participants were primarily from middle socioeconomic backgrounds, and the sample was highly diverse according to population data regarding ethnic origin (Statistics Canada, 2013). Ethnic origin in the area ranges from European (45%); Caribbean (5%); Latin, Central, and South American (3%); African (4%) and Asian (43%) backgrounds.

Procedure

The study was approved by the Research Ethics Board. Data were collected in the fall semester, two months after the commencement of the school year in order to ensure familiarity among children, and among teachers and children. This study was an extension of a larger study examining children's social-emotional development and mental health; thus, all assessments were previously tested and validated in the laboratory (Malti & Peplak, 2016). Written informed consent from children's primary caregivers, as well as teachers, was obtained. Participating children were asked for oral assent prior to study commencement, were informed that participation was voluntary, and that they could discontinue at any time. Testers were graduate students who received extensive training in developmental assessment techniques.

Children were tested individually in separate rooms to ensure confidentiality. All interviews were audio-recorded for data transcription purposes. Students were tested on two

separate occasions due to time constraints; thus, each session lasted approximately 15 to 20 minutes (approximately 40 minutes in total). In the first session, children completed assessments of respect. In the second session, children completed peer nominations of aggression, and the verbal intelligence test (the Peabody Picture Vocabulary Test – Fourth Edition). Upon completion of their second session, children were debriefed and awarded an age-appropriate book for their participation. Teachers were asked to fill out a questionnaire on the social emotional and social behavioural development of the participating students in their class.

Measures

Overt Aggressive Behavior. Children's overt aggression was measured using a latent factor created from the correlation between children's proactive and reactive aggression (teacher reports and peer nominations; see descriptions below).

Proactive and Reactive Aggressive Behavior. Children's proactive and reactive aggressive behavior was assessed via teacher reports and peer nominations. There was some missing teacher-reported aggression data ($N = 11$) due to the lack of questionnaire completion in one classroom. Children were able to nominate up to three children from their classroom who best fit each description. In line with previous research suggesting reliability issues when using peer nominations with children in early childhood (Monks & Smith, 2010), only 7- and 10-year-olds completed peer nominations.

Proactive aggressive behavior. Proactive aggression was examined using three well-validated items from Little, Jones, Henrich, and Hawley (2003). An example item is "Who often starts fights to get what they want?" Minor changes in wording of items were made for the teacher reports. Teachers rated how true each item was for each student (1 = never true to 6 = always true). Cronbach's alpha was .90 for peer nominations, and .89 for teacher reports.

Reactive aggressive behavior. Reactive aggression was examined using three items from Little and colleagues (2003). An example item is: “Who often fights back when they are hurt by someone?” Minor changes in wording to the items were made for the teacher reports. Teachers rated how true each item was for each student (1 = never true to 6 = always true). Cronbach’s alpha was .94 for peer nominations, and .93 for teacher reports.

Sympathy. Teachers used the Teachers’ Reports of Children’s Sympathy scale (5 items) from Zhou, Valiente, and Eisenberg (2003) to rate their students’ sympathy. One sample item is: “This student often feels sorry for others who are less fortunate”. Teachers rated how true each item was for each student (1 = never true to 6 = always true). Cronbach’s α for children’s teacher-reported sympathy was .93. One teacher failed to complete the questionnaires for the participating students in their classroom; thus, there was some missing sympathy data ($n = 11$).

Moral respect. A semi-structured interview procedure combining open- and close-ended questions was developed based on previous related literature on the development of moral emotions and moral reasoning (Malti et al., 2009; Malti & Ongley, 2014). The procedure was piloted in a sample of 21 children and validated in a larger study that was conducted in the research laboratory ($N = 283$; Malti & Peplak, 2016). To examine children’s respect in varying contexts of morality (e.g., fairness and aggression), children were read two hypothetical stories of gender- and age-matched peers. One story depicted a moral behavior (i.e., fairness) of a peer, while the other story depicted aggressive, immoral behavior. Because we conceptualized morality and aggression as related, we considered the story depicting an aggressive behavior as part of the “moral respect” dimension (i.e., the dimension included low moral respect [aggressive behavior], and high moral respect [fair behavior]). We did not combine the scores from these stories because they were designed to represent different conceptual domains within morality and

thus were not expected to correlate highly ($r = .06, p = ns$). In other words, feeling respect for others based on equal division of resources (i.e., fairness) was not expected to be empirically associated with (not) physically harming another (i.e., aggression). However, previous related work (Zuffianò, Colasante, Peplak, & Malti, 2015) has documented that the respect stories within each domain have high reliability. The story reflecting a fair peer read: “When [protagonist] brought lollipops to school, he/she gave everyone an equal amount.” The physical aggression story read: [Protagonist] pushed one of his/her classmates on the school yard.” After being read each story, children were asked “How much respect do you feel towards [protagonist]” and used a 4-point Likert scale (from 1 = do not respect to 4 = respect) to report the intensity of their feelings of respect. To help children understand the scale, amount of respect felt was demonstrated using boxes of increasing size (e.g., a small box was pictured under “do not respect”, a noticeably larger box was pictured under “do not respect that much”, etc).

According to previous work examining the development of children’s cognitive conceptualizations of respect (i.e., “what does it mean to feel respect for someone?” Malti & Peplak, 2016; Shwalb & Shwalb, 2006), children as young as 4 years of age reported that they understood respect and provided a meaningful definition for the term, such as prosocial acts of sharing and helping. In the current study, if children stated that they did not know what respect means, a series of prompting stories were created; however, these prompts were very infrequently issued (i.e., in less than 5% of all cases) since children rarely reported that they did not understand respect. The prompting stories were validated in a pilot study done with $N = 10$ 5-year-olds. In the very rare cases where children were unable to verbalize their understanding of respect after completing the prompting stories, the interview would be discontinued (< 1%).

Control variables.

Peabody Picture Vocabulary Test – Fourth Edition (PPVT-IV). Children's verbal intelligence was tested using the widely used PPVT-IV (Dunn & Dunn, 2007). Children were to match a word (stated orally by the examiner) with the appropriate picture, out of four pictures displayed. Standardized scores were calculated.

Results

Descriptive Statistics

Table 1 displays the means and standard deviations of all study and control variables by age group (i.e., 5-, 7-, and 10-year-olds). Developmental differences in the study variables were examined by a series of one-way ANOVAs followed by LSD post-hoc tests to ensure the detection of real effects. To examine mean-level differences in proactive and reactive aggression, teacher and peer (unstandardized) values were examined separately. The findings revealed developmental differences in teacher-reported sympathy, $F(2, 96) = 4.73, p < .05$. Specifically, teachers reported higher levels of sympathy in 7- and 10-year-olds compared to 5-year-olds, $ps < .01$. For all further analyses, peer-nominated aggression and teacher-reported aggression scores were standardized and combined (see Gasser & Keller, 2008). This was justified since both teacher and peer variables were highly correlated for both proactive ($r = .42, p < .01$) and reactive aggression ($r = .53, p < .01$).

Table 2 displays correlations among study and control variables. As expected, both proactive and reactive aggression were positively correlated. Additionally, both proactive and reactive aggression were positively associated with gender, indicating that males were rated as more highly aggressive than females. Teacher-reported sympathy was negatively related to both proactive and reactive aggression, and positively correlated with age. Respect for fair others was negatively related to proactive and reactive aggression.

Relations of Sympathy and Moral Respect with Overt Aggression

To examine our hypothesis on the role of sympathy and moral respect on overt aggression, a regression analysis predicting a latent overt aggression variable was conducted using *Mplus* 7.11 (Muthén & Muthén, 2012; see Table 3). In order to capture overt aggression, we estimated a latent factor (Card & Little, 2007) measured by children's proactive and reactive overt aggression (combined teacher reports and peer nominations). Maximum likelihood with standard errors robust to non-normality was used to estimate parameters since both respect variables deviated from the normal distribution. In the first step, we included the control variables, i.e., (1) age (2) child gender, and (3) verbal IQ. At step 2, we entered the main independent variables (5) sympathy, (6) respect for fair peer, and (7) respect for aggressive peer. In line with Cohen, Cohen, West, and Aiken (2003), all continuous study variables were mean centered. In preliminary analyses, we also tested interactions between sympathy, moral respect, and aggression with age. However, none of these interaction terms were significant and were therefore removed from the final statistical analyses.

At step 1, results revealed a positive effect of gender on aggression, suggesting that males display higher levels of aggression than females. This step explained 16% of the variance, i.e., $R^2 = .16$. At step 2, we found a negative relation between children's sympathy and aggression. A similar effect was found with children's respect for fair others. This step predicted 32% of the variance, i.e., $\Delta R^2 = .32$.

Relations of Sympathy and Moral Respect with Proactive and Reactive Aggression

Next, to examine our hypothesis concerning the relation between sympathy and moral respect on the unique portion of both proactive and reactive aggression, two hierarchical regression analyses were conducted. The first model predicted proactive aggression while

controlling for reactive aggression, and the second model predicted reactive aggression while controlling for proactive aggression. The Variance Inflation Factor (VIF) was tested and results showed that, when predicting proactive aggression, VIF of reactive aggression was less than 2. Similar results were found when predicting reactive aggression, which suggests that multicollinearity was not an issue. In the first step of each model, we included the control variables, i.e., (1) age, (2) child gender, (3) verbal IQ, and (4) proactive/reactive aggressive behavior. We included reactive aggression at step 1 when predicting proactive aggression (and vice versa in the regression model predicting reactive aggression) in order to control for the shared variance between the overlapping aggression subtypes. As in the previous model, we then entered the main independent variables, (5) sympathy, (6) respect for fair others, and (7) respect for aggressive others, at step 2. As in the previous model, we tested interactions between sympathy, moral respect, and proactive aggression with age. However, none of these interaction terms were significant and were therefore removed from the final analyses.

As expected, in the first model predicting proactive aggression, we found a strong positive effect of reactive aggression at step 1 (see Table 4). Seventy-six percent of the variance was explained at this step ($R^2 = .76$). At step 2, both sympathy and respect for fair others was negatively related to children's proactive aggression, and 2% of the variance was explained at this step ($\Delta R^2 = .02$).

The findings for reactive aggression are displayed in Table 5. The same control variables and step procedures were used as in the model with proactive aggression as the dependent variable. As can be seen, proactive aggression was strongly and positively related to reactive aggression. In addition, we found a gender effect, indicating that boys were more reactively

aggressive than girls. Results at step 2 showed that neither sympathy nor respect was related to children's reactive aggression.

Discussion

This study aimed to investigate the role of sympathy and moral respect in children's overt aggression, as well as its proactive and reactive subtypes in an ethnically diverse sample of 5-, 7-, and 10-year-olds. Other-oriented emotions, such as sympathy and moral respect, have been conceptualized as important motivators in the promotion of positive, prosocial behavior and the reduction of antisocial behavior (Malti, 2016; see Ongley & Malti, 2014; Zuffianó et al., 2015). However, few studies have explored the role of multiple other-oriented emotions in aggression, and even fewer have compared the effect of these emotions in different subtypes of aggressive behaviors.

In line with our expectations, we found a negative effect of sympathy on overt aggression in an ethnically diverse sample of children. This finding corroborates previous research suggesting a negative relation between children's aggression and other-oriented concern (e.g., Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000; van Noorden et al., 2014). Sympathy may help children recognize the negative impact of aggression on others and help them to refrain from harming them (Arsenio, 2014; Malti & Ongley, 2014). Extending previous developmental research, we also found a negative relation between moral respect for fair others and overt aggression. This finding suggests that those children who display overt aggression may have difficulties appreciating others who engage in fair behaviors. Lacking moral respect may result in less emulation of fairness-related behaviors, and possibly more engagement in other, less moral behaviors. Furthermore, since aggression involves the intentional harming of another (Eisner & Malti, 2015), low levels of respect for fairness can be expected when the well-being of another is

disregarded. This may be driven, in part, by children's egocentric tendencies (see Antonowicz & Ross, 2005), as this likely leads to a focus on satisfying personal needs rather than considering the needs or states of others as well. Overall, these findings suggest that children who display overt aggression may indeed experience less other-oriented emotions, whether it is feeling concern for others' physical or emotional states, or appreciating others' moral qualities, such as behaving fairly toward peers. These differences in socioemotional responding may exacerbate aggressive behaviors because if one does not appreciate or recognize other-oriented tendencies, they are less likely to behave in concordance with moral norms of fairness and care.

Surprisingly, however, respect for aggressive others was not correlated with overt aggression. This finding may be explained by the fact that physical harm might be viewed as a serious transgression by most children. Indeed, research indicates that children as young as 3 years of age understand that it is wrong to transgress norms relating to physical integrity (e.g., harming others; Jambon & Smetana, 2014), and they likely may be more hesitant to report respecting those transgressions, thus making this context less sensitive to interindividual differences in responding. Further, it is possible that children who feel respect for aggressive peers may constitute an extreme end of the spectrum, which was not fully captured in this typical, non-clinical sample.

The second goal of this study was to examine the relations between children's sympathy and moral respect with the unique portion of both proactive and reactive aggression. This was done because of previous research emphasizing the importance of distinguishing different affective motives of proactive and reactive aggression (Arsenio et al., 2009). In line with our expectations, the results indicated that sympathy was negatively related to children's proactive aggression while controlling for reactive aggression. This finding extends previous related

findings that adolescents who show high levels of proactive aggression are more likely to focus on the instrumental gains of moral transgressions, rather the negative emotional consequences for others (Arsenio et al., 2009). Interestingly, our findings also revealed that children with elevated levels of proactive aggression displayed lower levels of respect for fair others. These effects were unique to proactive aggression, suggesting that proactively aggressive children may have some difficulties with responding emotionally to others' states or morally salient qualities. Deficits in the appreciation of fairness may result in a lack of motivation to emulate such behaviors, which may in turn lead these children to engage in other, likely negative, behaviors that they deem respect-worthy (e.g., dominance-related behaviors). It is somewhat surprising that children's respect for others who displayed aggressive behavior did not relate to their proactive aggression, but may again relate to the severity of consequences that are typically followed by physical harm. Future work with more vignettes that depict varying severity of aggression is needed to better understand how aggression, and its subtypes, relates to respect across different domains of morality.

In line with our theorizing, reactive aggression did not show associations with moral respect and sympathy. This finding supports the argument that reactive aggression may be predominantly driven by difficulties in emotion regulation (Hubbard et al., 2010), rather than the lack of other-oriented emotions of sympathy and moral respect. Nevertheless, some studies have also linked children's reactive aggression with lower levels of other-oriented concern (e.g., Mayberry & Espelage, 2007). In contrast to our study, however, these studies did not completely disentangle proactive from reactive aggression. Taken together, the present findings therefore lend support for the assumption that sympathy and moral respect are important for reducing more

strategic, pre-mediated aggression (i.e., proactive aggression) rather than impulsive, unplanned aggression (i.e., reactive aggression).

We also explored developmental differences in children's sympathy, moral respect, and aggressive behavior, as well as in the relations between these variables. The findings revealed that teacher-reported sympathy was higher in 7- and 10-year-olds compared to 5-year olds. This is in line with research suggesting increases in children's sympathy from 5 to 8 years of age (e.g., Kienbaum, 2014). Interestingly, we did not find any age-related differences in children's moral respect. Since our study is among the first to study the development of moral respect, we did not have any directed hypotheses regarding developmental differences. Nevertheless, early work by Piaget (1932) suggested that conceptualizations of respect shift from early to late childhood. Based on our findings, it could be that once children are able to appreciate others' moral qualities and characteristics based on their own values, their feelings of respect towards others may not fluctuate unless their values of those qualities and characteristics shift. Our findings also did not reveal age-related differences in aggressive behavior despite some previous work suggesting decreases in children' reactive aggression (Cole, 2014) and developmental increases in proactive aggression (e.g., Barker, Tremblay, Nagin, Vitaro, & Lacourse, 2006). Other research, however, suggests that proactive and reactive aggression peak in late childhood and decline thereafter (Fite, Colder, Lochman, & Wells, 2008). Inconsistencies in findings on the development of aggression may be due to informant, measurement, and sample differences. The findings did not reveal any differences in the developmental links between sympathy and moral respect and aggression, which may support the assumption that other-oriented emotions appear important for predicting aggression *throughout* childhood.

Although this study provided valuable insight into the links between children's sympathy and moral respect with overt aggression and its subtypes, several limitations need to be noted. First, regarding our sample, this study used a cross-sectional, correlational design, which prevented us from making any causal claims. Furthermore, our sample size was fairly modest which may have led to an absence of interaction effects; thus, it would be beneficial to further examine these research questions in a larger sample. Second, we only examined children's overt aggression. Future research should examine how these moral emotions are related to more covert forms of aggression in children. Third, children's moral respect was only assessed through two vignettes and it is likely that this measurement approach does not reflect the entirety of children's conceptualizations of moral respect toward peers. Finally, we examined children's dispositional sympathy using teacher reports. Although previous developmental research shows that teachers are able to accurately report on their students' emotional and behavioral tendencies (Williams & Kerfoot, 2005) it is possible that teachers may not have been able to recognize sympathy in children who may be less likely to express the emotion (e.g., very shy or inhibited children).

Despite these limitations, the present study made a valuable contribution to our understanding of the role of sympathy and moral respect in aggression and its proactive and reactive subtypes in childhood. Since aggression has been linked to negative psychosocial outcomes in children, examining the shared and unique social-emotional antecedents of proactive and reactive aggression can not only contribute to the differentiation of conceptual models on the moral-affective antecedents of aggression, but may eventually also inform the refinement of intervention strategies and practices aimed at decreasing aggression. Specifically, this study demonstrates the importance of considering positively valenced moral emotions such as respect

when designing intervention strategies aimed at decreasing aggression (specifically proactive aggression). Much of the recent developmental work has focused on promoting negatively valenced moral emotions, most prominently empathy/sympathy, in reducing and preventing aggression (Malti, Noam, Beelmann, & Sommer, 2016); however, teaching children to feel emotions that inherently signal reward and motivate children to behave in a positive way may provide an alternate outlet to discouraging harmful behaviour.

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Table 1

Means and Standard Deviations of Study Variables by Age Group

Variable	5-Year-Olds (<i>n</i> = 20)		7-Year-Olds (<i>n</i> = 35)		10-Year-Olds (<i>n</i> = 55)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
TR Proactive Aggression	1.77	0.97	1.62	0.74	1.39	0.73
TR Reactive Aggression	1.98	1.13	2.25	1.51	1.76	1.05
PN Proactive Aggression	-	-	0.10	0.15	0.09	0.17
PN Reactive Aggression	-	-	0.12	0.20	0.11	0.19
TR Sympathy	4.33	0.50	4.99	0.89	4.97	0.93
Respect for Fair Peer	3.85	0.67	3.91	0.37	3.89	0.32
Respect for Aggressive Peer	1.35	0.93	1.09	0.37	1.18	0.39
Verbal IQ	113.85	10.98	113.80	14.52	115.10	10.77

Note. TR = Teacher reported, PN = Peer-nominated. Teacher reported scores ranged from 1 to 6. Non-standardized peer nomination scores ranged from 0 to 1. Five-year-olds did not complete peer nominations. Respect scores ranged from 1 to 4. Standard scores were computed to measure children's verbal IQ.

Table 2

Correlation Matrix of Study and Control Variables

Variable	1	2	3	4	5	6	7	8
1. Proactive Aggression	-							
2. Reactive Aggression	.86**	-						
3. Teacher-Reported Sympathy	-.57**	-.54**	-					
4. Respect for Fair Peer	-.27**	-.25**	.13	-				
5. Respect for Aggressive Peer	.13	.15	-.16	.06	-			
6. Age	-.16	-.08	.22*	.01	-.06	-		
7. Child Gender	.28**	.34**	-.19	-.17	.14	.12	-	
8. Verbal IQ	.00	.07	-.08	-.30**	-.11	.07	.16	-

Note. Proactive and reactive aggression variables are combined teacher reported and peer-nominated variables. For gender, females were coded as 1, males were coded as 2.

* $p < .05$, ** $p < .01$.

Table 3

Hierarchical Regression Analyses Predicting Overt Aggression from Sympathy and Moral Respect

Independent Variables	ΔR^2	ΔF	df	b	β
Step 1	.16	5.97	3, 95		
Age				-.06	-.16 [†]
Child Gender				.56 ^{***}	.38 ^{***}
Verbal IQ				-.00	-.05
Step 2	.32	14.75	3, 92		
Child Age				-.01	-.01
Child Gender				.32 [*]	.22 ^{**}
Verbal IQ				-.01 [*]	-.15 [*]
Sympathy				-.44 ^{***}	-.52 ^{***}
Respect for Fair Peer				-.46 ^{**}	-.24 [*]
Respect for Aggressive Peer				.13	.09
Total R^2	.48 ^{***}				
N	98				

Note. [†] $p < .10$. ^{*} $p < .05$. ^{**} $p < .01$. ^{***} $p < .001$.

Table 4

Hierarchical Regression Analyses Predicting Proactive Aggression by Sympathy and Moral Respect Controlling for Reactive Aggression

Independent Variables	ΔR^2	ΔF	df	b	β
Step 1	.76	71.71	4, 94		
Age				-.04 [†]	-.09*
Child Gender				.02	.01
Verbal IQ				-.00	-.05
Reactive Aggression				.86***	.86***
Step 2	.02	3.04	3, 91		
Age				-.03	-.06
Child Gender				-.02	-.01
Verbal IQ				-.01 [†]	-.09 [†]
Reactive Aggression				.76***	.76***
Sympathy				-.13**	-.15**
Respect for Fair Peer				-.22*	-.10 [†]
Respect for Aggressive Peer				.02	.01
Total R^2	.78***				
N	98				

Note. [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5

Hierarchical Regression Analyses Predicting Reactive Aggression by Sympathy and Moral Respect Controlling for Proactive Aggression

Independent Variables	ΔR^2	ΔF	$df_{1,2}$	b	β
Step 1	.76	73.82	4, 94		
Age				.02	.04
Child Gender				.14*	.09*
Verbal IQ				.00	.05
Proactive Aggression				.84***	.85***
Step 2	.00	.52	3, 91		
Age				.02	.06
Child Gender				.17*	.10*
Verbal IQ				.00	.03
Proactive Aggression				.79***	.80***
Sympathy				-.06	-.07
Respect for Fair Peer				.02	-.01
Respect for Aggressive Peer				.04	.03
Total R^2	.76***				
N	98				

Note. * $p < .05$. *** $p < .001$.