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Predicting the Development of Pro-bullying Bystander Behavior: A Short-term Longitudinal Analysis

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Abstract

Pro-bullying bystander behavior is a key socio-contextual factor underlying the perpetuation of bullying, yet investigators know relatively little as to what contributes to its development. The current study uses a short-term longitudinal design to identify child characteristics and relationship qualities that predict pro-bullying bystander behavior over the course of one school year. Participants were 484 children (239 girls; $M_{age} = 10.25$ years). Children completed self-report measures of pro-bullying bystander behavior, empathy, moral disengagement, and perceived norms for defending, and peer-report measures of peer victimization and popularity. Main effects of fall empathy and moral disengagement emerged in the prediction of spring pro-bullying bystander behavior, although the latter just for boys. At low levels of perceived norms for defending, high levels of popularity and, for girls, high levels of peer victimization predicted heightened pro-bullying bystander behavior. Thus, anti-bullying efforts may benefit from targeting these social-cognitive and relational processes predictive of pro-bullying bystander behavior and fostering group norms that mitigate these risks.

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Keywords

bullying; peer victimization; pro-bullying bystander behavior; defending norms; preadolescence; aggression

In light of accruing evidence that bullying is detrimental to children's socioemotional well-being and academic success (Juvonen, Wang, & Espinoza, 2011; Nansel et al., 2001; Rigby, 2003), deterring bullying has become a fundamental objective for many policy makers, school administrators, and educators. However, anti-bullying programming can be effective only if it targets the social processes that sustain, or discourage, students' bullying and peer victimization (Salmivalli, 1999). Accordingly, fostering children's defending behaviors (i.e., standing up to bullies on behalf of a peer; comforting victims of bullying) has been at the forefront of recent school-wide intervention efforts to reduce bullying (Salmivalli, Kärnä, & Poskiparta, 2011; van der Ploeg, Steglich, & Veenstra, 2016; Vannini et al., 2011).

Yet, the prevention of bullying likely requires both the promotion of defending behaviors and the reduction of bystander behaviors that motivate and reinforce bullying. When witnessing bullying, approximately 7–14% of children act as assistants, providing instrumental aid to the children bullying (e.g., joining in, catching the victim). Another 7–20% act as reinforcers, laughing at and encouraging the bullying (Goossens, Olthof, & Dekker, 2006; Pouwels, Lansu, & Cillessen, 2016; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). Consistent with previous research (Nocentini, Menesini, & Salmivalli, 2013; Thornberg & Jungert, 2013), and evidence that assisting and reinforcing behaviors strongly covary (Goossens et al., 2006; Thornberg & Jungert, 2014; Waasdorp & Bradshaw, 2018), we refer to these behaviors collectively as pro-bullying bystander behavior.

Pro-bullying bystander behavior is far from innocuous. Bullying is more frequent in classrooms in which pro-bullying bystander behavior is common (Nocentini et al., 2013; Salmivalli, Voeten, & Poskiparta, 2011; Thornberg & Wänström, 2018), and aggressive children are more likely to engage in bullying in these classrooms (Nocentini et al., 2013). Furthermore, when a large number of their classmates engage in pro-bullying bystander behavior, socially rejected and anxious children are at greater risk for being bullied (Kärnä, Voeten, Poskiparta, & Salmivalli, 2010). Yet despite evidence implicating pro-bullying bystander behavior in the perpetuation of bullying, little is known regarding its development. Accordingly, the current study utilized a short-term longitudinal design to identify predictors of engaging in pro-bullying bystander behavior during late childhood, a time when defending behaviors decrease, and, at least for some youth, pro-bullying bystander behaviors increase (Salmivalli & Voeten, 2004).

Characteristics of Children who Engage in Pro-bullying Bystander Behavior

Although theory on bystander role development has been slow to advance, Ettekal, Kochenderfer-Ladd, and Ladd (2015) proffer a comprehensive conceptual framework for understanding the person-level and relational processes believed to underlie children's behavior in bullying situations. Integrating social information processing theories (SIP;

Arsenio & Lemerise, 2004; Crick & Dodge, 1994), social cognitive theory of moral agency (Bandura, 1999), and theory of reasoned action (Ajzen & Fishbein, 1980), Ettekal et al. (2015) posit that bystander behavior is the culmination of emotional, moral, and cognitive processes in conjunction with perceptions of group norms and attitudes. More specifically, from an SIP perspective, bystander behaviors result from a confluence of cognitive processes including encoding and interpreting social cues, selecting goals, generating response options, and selecting and enacting a chosen behavioral strategy (Crick & Dodge, 1994). Furthermore, each of these processes are impacted by the nature and strength of the individual's emotional reaction to the event and by previous experiences (e.g., past victimization and rejection, positive social encounters) via stored memories, relational schemas, and social knowledge (Arsenio & Lemerise, 2004; Crick & Dodge, 1994). Thus, Ettekal et al. (2015) emphasize the role of empathy (emotional process), moral disengagement (moral process), and relational experiences (via cognitive processes) in the development of bystander behaviors.

Empathy

When applied to the experience of witnessing bullying, empathy may be a particularly potent emotional determinant of behavior. Empathic emotional responses may direct attention to the victim (see Troop-Gordon, Gordon, Schwandt, Horvath, & Ewing Lee, 2019) and elicit goals of defending (Meter & Card, 2015). In the absence of empathic arousal, children may maintain attention on the amusement and enjoyment communicated by the bully (Troop-Gordon et al., 2019), interpret bullying as a form of play (Meter & Card, 2015), and focus on goals related to joining in the bullying. Furthermore, children low in empathy may not be sensitive to any harm caused by their own or other's pro-bullying behaviors and, consequently, may engage in more pro-bullying bystander behavior over time. Cross-sectional studies support a concurrent link between low levels of empathy and greater pro-bullying bystander behavior (Demaray, Summers, Jenkins, & Becker, 2016; Pöyhönen & Salmivalli, 2008; Van Cleemput, Vandebosch, & Pabian, 2014), but whether empathy predicts pro-bullying bystander behavior longitudinally has yet to be tested.

Moral disengagement

The decision of how to behave when witnessing bullying is inherently a moral one. Thus, not surprisingly, moral disengagement is an oft-studied correlate of bystander behavior. Incorporated into children's latent knowledge structures are acquired rules for behavior, including judgements of morality. Although children largely view aggression as wrong (Boulton, Bucci, & Hawker, 1999; Menesini et al., 1997), for some, abiding by this moral dictate encumbers simultaneous pursuit of other valued goals (e.g., being friends with the bullies, protecting oneself from being bullied). When this occurs, an ability to rationalize actions that violate known, and internalized, moral values (i.e., moral disengagement) allows for violating moral standards. Thus, through the lens of social cognitive theory (Bandura, 1999), higher levels of moral disengagement may be a key contributor to children's participation in pro-bullying bystander behaviors. The cognitive tactics utilized in moral disengagement are multi-faceted and include, for example, minimizing the harm caused by the immoral act (e.g., assuming victims really do not mind being bullied because they enjoy the attention) or blaming the victim (e.g., believing victims act in ways that cause others to

bully them; Bandura, 1999). Because pro-bullying bystander behavior violates moral imperatives to help victims and may even contribute to the victims' pain, moral disengagement may play a significant role in the development of pro-bullying bystander behavior. However, as with empathy, evidence of this association is limited to concurrent associations (Bjärehed, Thornberg, Wänström, & Gini, in press; Desmet et al., 2016; Thornberg & Jungert, 2013); longitudinal tests of this link are needed.

Peer victimization

Pro-bullying bystander behavior can also have substantial social ramifications. Consequently, engagement in pro-bullying bystander behavior is likely influenced by the social goals children pursue and their expectations for a chosen course of action (Ettetal et al., 2015; Meter & Card, 2015). For example, some children may pursue goals of helping the victim, and others may pursue goals of maintaining one's own safety and status in the peer group. Similarly, some children may anticipate social rewards for engaging in defending behavior, while others may expect that defending behavior will make them a target of bullies' aggression. Such individual differences in goals and expectations are likely a function of the nature of children's relationships with peer group members. When witnessing bullying, children who have experienced high levels of peer victimization (i.e., being the frequent target of peers' aggression and exclusion) may focus on goals of self-protection (Thornberg et al., 2012; Meter & Card, 2015) and may view engaging in pro-bullying bystander behavior as a means of preventing becoming the target of the bullying. However, peer victimization is only weakly associated with pro-bullying bystander behavior concurrently, and the direction of these associations varies across studies (Demaray et al., 2016; Jenkins & Nickerson, 2017; Pouwels et al., 2016). The current study will aid in disentangling these conflicting findings by testing whether peer victimization is prospectively associated with pro-bullying bystander behaviors over time.

Popularity

Children's interpersonal goals and outcome expectations when witnessing bullying may also vary as a function of children's popularity (i.e., being seen as a leader and "cool" by one's peers). Popularity is a unique form of social status in that it allows youth to engage in agonistic behaviors, presumably with the objective of obtaining social resources (e.g., decision making power, visibility; Hawley, 2003; Pellegrini, Roseth, Van Ryzin, & Solberg, 2011) or protecting one's prominence in the social hierarchy, with the expectation that such behavior will elicit little social rebuke from peers (Cillessen & Rose, 2005). There is cross-sectional evidence that these agonistic behaviors also include engaging in pro-bullying bystander behavior (Pouwels et al., 2018; Pronk et al., 2017). Pro-bullying bystander behavior may serve multiple functions for popular youth, including signaling affiliation with the bullies who may be similarly popular (Sentse, Veenstra, Kiuru, & Salmivalli, 2014), maintaining a reputation for toughness (Adler & Adler, 1998), and protecting their popular status via distancing themselves from victimized peers (Hodges & Perry, 1999). In addition to these possible social goals, perceived social norms regarding bystander behavior may further influence associations between youth characteristics and the likelihood of engaging in pro-bullying behaviors.

Perceived Norms for Defending and Pro-bullying Bystander Behavior

Several prominent theories of behavioral intention and action (i.e., the Theory of Reasoned Action, The Focus Theory of Normative Conduct, Deviance Regulation Theory; Blanton & Burkley, 2008; Cialdini, Reno, & Kallgren, 1990; Fishbein & Ajzen, 2010) posit that perceptions of social norms are an important predictor of actual behavior. Normative perceptions are beliefs about a given behavior within a specific group (typically a peer group). Researchers have differentiated base-rate beliefs (i.e., perceptions as to how often a behavior occurs or how many people engage in a given behavior), referred to as “descriptive norms,” from acceptability beliefs (i.e., perceptions as to whether a behavior is viewed favorably or unfavorably by the group), referred to as “injunctive norms” (Deutsch & Gerrad, 1955). Perceived norms are theorized to exert an implicit pressure to partake in a given behavior and to guide individuals’ understanding that a given behavior is deemed acceptable by important referent groups (i.e., peers, friends). Indeed, researchers have theorized that perceptions of norms are more determinative of behavior than actual base rates of behaviors (see Rimal & Real, 2003). Supporting this premise, children, as well as adults, have consistently been shown to behave in ways that align with their perceived group norms (see Gaffney & Hogg, 2017; Silva & Fugas, 2016) and to avoid behaviors that are in direct violation of perceived norms (Cialdini et al., 1990). Specific to this investigation, Ettekal et al. (2015) propose that perceived group norms play a salient role in determining children’s behavior when witnessing bullying.

A number of studies have examined the association between perceived norms and children’s bystander behavior in bullying situations. The preponderance of this research has established links between perceived norms and engaging in defending behavior (Barhight, Hubbard, Grassetti, & Morrow, 2017; Kollerová, Yanagida, Mazzone, Soukup, & Strohmeier, 2018; Kubiszewski, Auzoult, Potard, & Lheureux, 2019; Pozzoli & Gini, 2010; Rigby & Johnson, 2006). Only a few studies, however, have specifically looked at perceived norms and children’s pro-bullying bystander behavior. Salmivalli and Voeten (2004) found that, in classrooms with lower perceived injunctive norms against bullying, children evidence higher levels of pro-bullying bystander behavior. In addition, Machackova and Pfetsch (2016) found that children’s pro-bullying responses to offline and cyberaggression correlate with their perceived norms for aggression. Thus, there is emerging evidence that perceived norms are correlated with children’s bullying and bystander behaviors, although evidence specific to pro-bullying bystander behaviors is still scant.

Above exerting a direct influence on behavior, perceived norms are theorized to moderate the effects of other predictors of that behavior (see Ajzen & Fishbein, 1980; Ettekal et al., 2015). While some norms may strengthen the association between personal characteristics and children’s behavior in bullying situations (see Berger & Caravita, 2016; Machachova & Pfetsch, 2016; Mensini, Palladino, & Nocentini, 2015), the opposite may also occur. For example, when perceived norms for engaging in a behavior are strong, other personal characteristics or relational experiences may play a smaller role in determining whether children engage in that behavior or exhibit behaviors contradictory to that norm. Specific to bullying, in one recent study of third-through fifth-graders, Peets, Poyhonen, Juvonen, and

Salmivalli (2015) found that only in classrooms where bullying was normative were low levels of empathy associated with lower levels of defending.

Drawing on these previous studies and Ettekal et al.'s (2015) conceptual framework, we examine children's perceived norms for defending as a potential moderator of individual-level risk factors for engaging in pro-bullying bystander behavior. We focus on perceived norms for defending, rather than perceived norms for pro-bullying bystander behavior, for two reasons. First, norms for defending are likely highly salient to youth (Kollerová et al., 2018; Salmivalli & Voeten, 2004), as these norms communicate strong disapproval of bullying behaviors and actions supportive of bullying. Therefore, we posit that when children perceive defending to be highly normative for their peer group they refrain from pro-bullying bystander regardless of other personal characteristics that would otherwise lead to pro-bullying behaviors. Consequently, individual-level characteristics and relational processes are expected to predict pro-bullying bystander behavior only when perceived norms for defending are low. Second, from an applied perspective, increasing perceived norms for defending may provide an efficacious and ethical way to reduce pro-bullying bystander behavior. For example, teachers and school psychologists can point out instances of defending behaviors to make them more salient, and explicit efforts to increase perceived norms for defending would fit well in interventions focused on promoting defending behaviors (e.g., Salmivalli et al., 2011). Reduce high levels of perceived norms for pro-bullying behavior may prove to be more difficult, as ignoring such behavior is unethical and pointing out low rates of pro-bullying bystander behavior may lead to rejection and ostracism of children who reinforce, assist, or otherwise aggress against peers.

The Current Study

The objective of the current study was to better understand the development of pro-bullying bystander behavior in a sample of 4th and 5th graders. Specifically tested was whether empathy, moral disengagement, peer victimization, and popularity in the fall predicted pro-bullying bystander behavior in the spring. The potential moderating role of perceived norms for defending was also examined.

We also took into account that the correlates of bullying roles often differ by gender (Cappadocia, Pepler, Cummings, & Craig, 2012; Nicekerson, & Mele-Taylor, 2014; Thornberg & Jungert, 2013). However, in comparison to other bullying roles, relatively less is known about gender differences in the correlates of pro-bullying bystander behaviors. In addition, there is a need to identify those factors that may account for why an increase in pro-bullying bystander behavior may be particularly strong among boys at this age (Salmivalli & Voeten, 2004). Therefore, potential gender differences in the predictive associations were explored.

Method

Participants

Participants included 484 children in 4th and 5th grade (239 girls; $M = 10$ years, 3 months, $SD_{age} = 8.42$ months) residing in five rural, predominantly low-income, communities in the

southeastern USA. All children attended public schools in which students remained with the same classmates throughout the day. A total of 25 classrooms participated. The number of participating children in each class ranged from 12 to 26 ($M = 19.68$). Participants were identified predominantly as Black (57.6%) or White (32.0%) with a small number identified as Native American/Alaskan (0.2%), Hispanic (4.8%), Asian (1.0%), Native Hawaiian/Pacific Islander (0.2%), mixed/other (3.7%), or unknown race/ethnicity (0.4%). The percentage of the student population eligible for reduced/free lunch at the five schools ranged from 60% – 95% ($M = 82.8%$).

After obtaining permission from school officials and all 4th and 5th grade teachers, research assistants visited the participating classrooms, explained the study using age-appropriate language, and distributed parental consent forms. Children received a small gift (e.g., a pencil) for returning their signed consent form, regardless of whether the permission form indicated that permission was or was not granted to participate in the study, and all classrooms received a pizza party for their participation. Parental consent was obtained for 86.7% of the children ($N = 489$; participation rates ranged from 62.5% to 100% across classrooms). Five children left the school district prior to the collection of any data and were not included in any part of the study.

Measures

Pro-bullying bystander behavior and bullying behavior—Children completed a 15-item self-report version of the Participant Role Questionnaire (PRQ; Salmivalli et al., 1996; Salmivalli & Voeten, 2004). Items wordings were simplified slightly to be more comprehensible to children with varying reading abilities. To simplify the text of the items further, two of the items testing defending behaviors were split into two separate items (i.e., creating two additional defending items), resulting in 17 items total. Children were first read an explanation of bullying from the original PRQ and were asked to imagine times when one of their classmates is bullied. They then indicated on a scale from 1 (*Never*) to 4 (*A lot*) how often they engaged in each of the described behaviors.

To measure pro-bullying bystander behavior, we utilized the three items from the assistant subscale (“join in the bullying,” “assist the bully,” and “help the bully, maybe by catching the victim”) and three items from the reinforcer subscale (“come around to watch the bullying,” “laugh at the bullying,” and “say encouraging things to the bully such as ‘show him/her’”). As was the case with previous factor analyses of the PRQ (Sutton & Smith, 1999), the assistant and reinforcer items did not form distinct factors, and the two subscales were significantly correlated ($r_s = .52$ and $.63$, $p_s < .001$, in the fall and spring, respectively). Therefore, scores on these six items were averaged to create a composite pro-bullying bystander behavior score ($\alpha = .69$ and $.77$ in the fall and spring, respectively). Confirmatory factor analyses supported factorial invariance of the pro-bullying bystander behavior subscale across administrations of the PRQ (i.e., both configural and weak invariance were confirmed).

Although three items from the bully subscale were included, these items did not evidence sufficient internal reliability ($\alpha_s < .60$ in the fall and spring). Therefore, only one item was included in the analyses to control for overlap between engaging in bullying and pro-

bullying bystander behavior. The item “start the bullying” was chosen as it most clearly indicates a behavior characteristic of bullying, as opposed to reinforcing or assisting someone else’s bullying.

Empathy—Children completed Bryant’s (1982) Index of Empathy for Children and Adolescents, a measure of general empathic responding to others. Children answered each item on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Consistent with previous research (de Wied et al., 2007), an exploratory factor analysis of the current data revealed that the measure is multidimensional, including a separate subscale of children’s sadness in response to other’s pain. As this subscale seemed most relevant to engaging in pro-bullying bystander behaviors (e.g., as opposed to such empathic responses as understanding why others cry at sad songs/shows or taking enjoyment in others opening gifts), it was included in analyses. To be consistent with previous use of this subscale (Polman, de Castro, Thomaes, & van Aken, 2009; Van der Graaff, Branje, De Wied, & Meeus, 2012), only the seven items that loaded consistently on this subscale in the de Wied et al. (2007) study were included. Example items include, “It makes me sad to see a girl who can’t find anyone to play with,” and “I get upset when I see a boy being hurt.” Items were averaged to create a composite empathy variable ($\alpha = .84$).

Moral disengagement—Children completed 30 of the 32 items from The Mechanisms of Moral Disengagement Scale (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Two of the original items referencing gangs and “getting high” were deemed inappropriate for this age group and were omitted. Children responded to each item on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Example items include, “Some people have to be treated roughly because they lack feelings that can be hurt” and “Slapping and shoving someone is just a way of joking.” Item scores were averaged to create a composite moral disengagement variable ($\alpha = .85$).

Peer victimization—Peer victimization was measured using two peer-report items derived from the Multi-Informant Peer Victimization Inventory (MPVI; Ladd & Kochenderfer-Ladd, 2002). The items selected measure physical (“get hit or pushed”) and relational (“get left out of things that kids are doing; kids don’t let him or her play with them”) victimization. For each item, children were given a list of all of the children in their classroom with parental permission to participate in the study and rated each one on a scale from 1 (*Never*) to 4 (*A lot*). Item-level scores were computed by averaging all ratings received for each item, and a composite peer victimization score was computed by averaging the two item-level scores ($r = .70, p < .001$).

Popularity—Popularity was measured using one peer-report item which defined popular as “being respected by other children, seen as being ‘cool,’ and [having] many kids want to be friends with [this child]” (Troop-Gordon & Ranney, 2014; Troop-Gordon, Viconti, & Kuntz, 2011). This definition is consistent with other assessments of popularity (Farmer, Estell, Bishop, O’Neal, & Cairns, 2003; Rose & Swenson, 2009; Ryan & Shim, 2008). Children were given a list of all of the children in their classroom with parental permission to

participate in the study and rated each one on a scale from 1 (*not at all*) to 3 (*a lot*). Popularity was computed by averaging all ratings received for this item.

Perceived norms for defending—A measure of perceived norms for defending was created for this study in order to assess children’s overall impressions of how typical defending is amongst their classmates. This strategy is consistent with much of the perceived norms research (e.g., Dvorak, Pearson, Neighbors, & Martens, 2015; Dvorak, Kramer, Stevenson, Sargent, & Kilwein, 2017). Specifically, children were asked to imagine that there were 20 children in their classroom and to think about how many of them would “help a child who was being bullied by offering support or trying to get the bullying to stop.” They were then given a list of numbers from 1 – 20 with an accompanying graphic of stick figures depicting that number of children. Children were asked to put an “X” next to the number of children in their class who would help a peer who was being bullied. This item is similar to those used in perceived norms research in which participants are asked to estimate the percentage of people who engage in a particular behavior. The current measure yielded similar data, but used age-appropriate wording and metrics, as well as graphical representations of numbers, to aid children’s comprehension of the item. Each child’s perceived norm for defending was the number they indicated with an “X.”

Procedures

Data were collected during the fall and spring of the 2017–2018 school year, as part of a short-term longitudinal evaluation of a novel activity to increase defending behavior and, in turn, reduce bullying, peer victimization, and related psychosocial problems. These data presented here were from the first of two cohorts participating in this research (data collection for Cohort Two is ongoing). At the onset of the study, the five participating schools were randomly assigned to either an intervention or control condition. Specifically, three of the schools were randomly assigned to partake in an intervention activity based on Deviance Regulation Theory (DRT; Blanton & Burkley, 2008). To provide a control condition that would parallel activities common in existing anti-bullying intervention programs (e.g., Palladino, Nocentini, & Menesini, 2016; Vannini et al., 2011), the other two schools partook in an intervention activity aimed at increasing empathy for victims. The activity, whether DRT-based or empathy-based, took approximately 45 minutes to complete, and children had only one intervention session with the research team during the entire school year. The fall data collection occurred approximately two weeks prior to the intervention activity, and spring data collection occurred approximately six months later. The available data were underpowered to provide a test of intervention efficacy; however, supplemental analyses were conducted to test for potential moderation by intervention condition.

All forms were group administered in the participants’ classrooms. An undergraduate or graduate research assistant read the instructions for each questionnaire and the questions aloud, and two or more research assistants provided additional help to participants as needed. The questionnaires took approximately 50 to 55 minutes to complete. Following the data collection sections and after the intervention activity, children and their teachers were thanked for their participation. This study was approved by the Institutional Review Board

of Auburn University, Protocol 17–092 MR 1703, Project Title, “Using Deviance Regulation Theory to Combat Bullying.”

Plan of Analysis

Following preliminary analysis of descriptive statistics and bivariate correlations, a multiple regression analysis was conducted to identify factors that predict pro-bullying bystander behavior, race, and fall levels of bullying behavior. The regression analyses were conducted using Mplus (Muthén & Muthén, 1998–2012), using robust maximum likelihood estimation to take into account non-normal distributions (Enders & Bandalos, 2001) and the complex option to take into account nesting within classrooms. Spring pro-bullying bystander behavior was regressed on fall levels of pro-bullying bystander behavior, empathy, moral disengagement, peer victimization, popularity, and perceived norms for defending. Also included were the interaction between perceived norms for defending and: (a) empathy, (b) moral disengagement, (c) peer victimization, and (d) popularity (i.e., four interactions total). As differences in pro-bullying behavior were found between White and non-White participating children, race (0 = White; 1 = non-White) was also controlled for in the regression. To examine potential gender differences, a multi-group analysis was employed, and Satorra-Bentler scaled chi-square difference tests were conducted to identify gender differences in the intercept for spring pro-bullying bystander behaviors and all regression coefficients. For all significant interactions, simple slopes were decomposed and plotted at -1 , 0 , and 1 *SD* (i.e., low, average, and high levels) of perceived norms for defending.

Results

Demographic Differences, Bivariate Correlations, and Missing Data Analyses

Descriptive data by gender and results of independent samples *t*-tests testing for gender differences are presented in Table 1. Girls reported more empathy than boys, and boys received higher peer victimization scores than girls. Significant racial differences ($ps < .05$) were found for fall pro-bullying bystander behavior ($M_{\text{white}} = 1.32$; $M_{\text{non-White}} = 1.50$), spring pro-bullying bystander behavior ($M_{\text{white}} = 1.21$; $M_{\text{non-White}} = 1.47$), bullying behavior ($M_{\text{white}} = 1.17$; $M_{\text{non-White}} = 1.35$), empathy ($M_{\text{white}} = 3.86$; $M_{\text{non-White}} = 3.55$), moral disengagement ($M_{\text{white}} = 1.98$; $M_{\text{non-White}} = 2.15$), peer victimization ($M_{\text{white}} = 1.45$; $M_{\text{non-White}} = 1.56$), and perceived norms for defending ($M_{\text{white}} = 10.36$; $M_{\text{non-White}} = 8.38$). Bivariate correlations are presented in Table 2. Pro-bullying bystander behavior correlated positively with bullying behavior and moral disengagement and, for boys, consistently with peer victimization. Interestingly, only spring levels of pro-bullying bystander behavior correlated significantly and negatively with perceived norms for defending, and for girls only, pro-bullying bystander behavior correlated significantly and negatively with empathy. Correlations among predictor variables ranged from small to moderate and were in expected directions.

Across all study variables, missing data were small (0.4% - 8.1%) and could be attributed to non-response by a small number of children and attrition over the course of the school year (6.2%). Independent samples *t*-tests indicated that children with complete data differed significantly from children with missing data only on peer victimization, $t(480) = -2.71, p$

= .007. Those children with missing data had higher peer victimization scores ($M = 1.63$, $SD = .40$) than those with no missing data ($M = 1.51$, $SD = .36$). All available data were used in the analyses (i.e., data from all 484 children) using full-information maximum likelihood (Enders & Bandalos, 2001).

Prediction of Spring Pro-bullying Bystander Behavior

To identify significant predictors of spring pro-bullying bystander behavior, a regression analysis was conducted that included all main effects and two-way interactions. A model in which the intercept and regression coefficients were constrained to be equal for boys and girls showed poor fit to the data, $\chi^2(13) = 38.20$, $p < .001$; CFI = .84, RMSEA = .09, SRMR = .022, and a model in which these parameters were freely estimated fit significantly better, $\chi^2(13) = 38.20$, $p < .001$. Parameters were sequentially freed to identify those for which there was a significant gender difference. A significant gender difference emerged in the regression coefficient for moral disengagement, $\chi^2(1) = 5.74$, $p = .02$, and the victimization \times perceived norms for defending interaction, $\chi^2(1) = 9.53$, $p = .002$. Thus, a final model was estimated allowing these two parameters to differ for boys and girls, and this model evidenced adequate fit, $\chi^2(11) = 23.58$, $p = .02$; CFI = .92, RMSEA = .07, SRMR = .021. The regression analysis accounted for 34.1%, $p < .001$, of the variance in spring pro-bullying bystander behavior for boys and 37.1%, $p < .001$, of the variance in spring pro-bullying bystander behavior for girls.

The unstandardized and standardized regression coefficients for boys and girls are presented in Table 3. Controlling for other individual and interpersonal characteristics, non-White race predicted heightened pro-bullying bystander behavior; bullying behavior did not. For both boys and girls, low levels of empathy predicted heightened pro-bullying bystander behavior. However, only for boys did high levels of moral disengagement predict heightened pro-bullying bystander behavior.

For boys, peer victimization also predicted heightened pro-bullying bystander behavior, but for girls, this main effect was further moderated by perceived norms for defending. Specifically, peer victimization was significantly predictive of higher levels of pro-bullying bystander behavior at low, $b = .50$, $t(471) = 2.61$, $p = .01$, and moderate, $b = .20$, $t(471) = 2.16$, $p = .03$, but not high, $b = -.10$, $t(471) = -.60$, $p = .50$, levels of perceived norms for defending. As can be seen in Figure 1a, when peer victimization was low, pro-bullying bystander behavior remained low regardless of perceived norms for defending. High levels of peer victimization, however, were predictive of higher levels of pro-bullying bystander behavior, but only when girls reported that defending was relatively infrequent in their classroom.

For boys and girls, the popularity \times perceived norms for defending interaction was significant. Popularity was significantly predictive of higher levels of pro-bullying bystander behavior at low, $b = .16$, $t(471) = 2.93$, $p = .004$ but not moderate, $b = .04$, $t(471) = .72$, $p = .47$, or high, $b = -.08$, $t(471) = -.78$, $p = .44$, levels of perceived norms for defending. As can be seen in Figure 1b, when popularity was low, pro-bullying bystander behavior remained relatively low regardless of perceived norms for defending. High levels of popularity,

however, were predictive of higher levels of pro-bullying bystander behavior but only when children reported that defending was infrequent in their classroom.

Supplemental Analysis: Checking for Moderation by Intervention Condition

To take into account potential effects of the intervention activity on the findings, a multi-group analysis was conducted to test for potential moderation by intervention condition. Specifically, four groups were formed: boys in the DRT condition, girls in the DRT condition, boys in the empathy condition, and girls in the empathy condition. A model in which all parameters were constrained to be equal across the four groups fit the data well, $\chi^2(39) = 50.487$, $p = .10$; CFI = .93, RMSEA = .05, SRMR = .027, and allowing all the parameters to be estimated freely across group did not improve model fit, $p = .10$. However, consistent with the focal analyses, allowing the regression coefficient for moral disengagement, $\chi^2(1) = 6.63$ $p = .01$, and for the peer victimization \times perceived norms for defending interaction, $\chi^2(1) = 7.59$ $p = .006$, to be freely estimated for boys and girls did improve the model fit. Thus, the pattern of findings suggested that condition did not moderate any of the study findings.

Discussion

Children often perceive peers who bully others as powerful and dominant and, consequently, often seek them out for friendships and affiliation (Hawley, Todd, & Card, 2007; Salmivalli, 2010). Engaging in pro-bullying bystander behavior may be one means through which children forge alliances with these influential peers, try to ascend the power structure of their classroom's social hierarchy, avoid victimization, and, consistent with social cognitive theory (Bandura, 1999), attempt to model the behavior of socially prominent peers. Yet, only a subset of children regularly engage in pro-bullying bystander behavior (Salmivalli et al., 1996; Sutton & Smith, 1999) or increase their pro-bullying bystander behavior over time (Salmivalli & Voeten, 2004). The current study identified a confluence of factors, both intrapersonal (i.e., low levels of empathy and high levels of moral disengagement) and interpersonal (popularity and peer victimization), that forecast heightened pro-bullying behavior, particularly in the absence of perceived positive group norms regarding defending bystander behavior (Ettetal et al., 2015; Meter & Card, 2015). Thus, anti-bullying efforts in schools need to address the complex set of emotional, moral, cognitive, and relational processes that facilitate pro-bullying bystander behavior.

Peer Victimization and Popularity: Interactive Effects with Perceived Norms for Defending

Popularity and peer victimization significantly predicted pro-bullying bystander behavior, but, as expected, and in line with the theory of reasoned action (Ajzen & Fishbein, 1980), these predictive relations often depended on children's perceived norms for defending. For boys and girls, only at low levels of perceived norms for defending was popularity predictive of heightened pro-bullying bystander behavior. Critical to popularity is exhibiting peer-valued characteristics (e.g., fashion, athleticism, delinquent behaviors), including aggression, which may be seen as a sign of maturity, power, and toughness (Adler & Adler, 1998; Vaillancourt & Hymel, 2006). Thus, popular youth may engage increasingly in pro-bullying bystander behavior to maintain their high social status and affiliations with other popular

youth. However, when popular children view defending as highly normative for their peer group, they may abstain from pro-bullying bystander due to the social risks associated with defying peer norms (see Peets et al., 2015, for a similar argument).

Similarly, for girls, peer victimization predicted heightened pro-bullying bystander behavior only at low levels of perceived norms for defending. That is, when girls believed defending to be normative in their peer group, they engaged in low levels of pro-bullying bystander behavior regardless of how frequently they had been the target of peer victimization. This may reflect girls' greater prosocial orientation (Rose & Rudolph, 2006) and empathic responses to other's distress (Landazabal, 2009). Moreover, the experience of peer victimization may correspondingly sensitize children to perceived norms for defending. However, for children who have a history of peer victimization, the anticipated cost of defending is likely the risk of continued, and even amplified, bullying from peers (Huising, Snijders, Van Duijn, & Veenstra, 2014). However, rather than merely remaining passive when witnessing bullying, peer-victimized children may engage in pro-bullying bystander behavior as a means of ingratiating themselves with aggressive peers and distancing themselves from other bullied classmates in an attempt to their risk of continued victimization. It is interesting to note that the moderating effect of perceived defending norms was only significant for girls. In contrast, boys who have been peer victimized may engage in pro-bullying bystander behavior regardless of perceived norms for defending in order to establish a reputation for being "tough" and unaffected by bullying behaviors (Adler & Adler, 1998; Vaillancourt & Hymel, 2006).

Empathy and Moral Disengagement

Findings from the current study also implicate empathy and moral disengagement as predictors in the development of pro-bullying bystander behavior, independent of perceived norms for defending behavior. A rather large literature supports a negative association between empathy and aggression (for reviews, see Lovett & Sheffield, 2007; Miller & Eisenberg, 1988), including a negative association between empathy and pro-bullying bystander behavior (Demaray et al., 2016; Pöyhönen & Salmivalli, 2008; Van Cleemput et al., 2014). The current study, however, was the first to document this association longitudinally. Empathic responses to another person's distress are believed to motivate altruistic responses and deter actions that may cause or prolong the distress (Eisenberg & Miller, 1987; Miller & Eisenberg, 1988). With regard to more specific SIP mechanisms (Aresnio & Lemerise, 2004; Crick & Dodge, 1994), low levels of empathy may allow for a redirection of attention away from cues of pain, facilitate benign interpretations of hostile actions, and reduce motivation toward prosocial goals. Over time, children low in empathy may increasingly engage in pro-bullying bystander behavior as a means of achieving other valued objectives (e.g., affiliating with aggressive peers, distancing themselves from rejected classmates, enhancing their social status).

In accordance with social cognitive theory (Bandura, 1999), moral disengagement also emerged as a significant predictor of pro-bullying bystander behavior, yet for boys only. Generally, boys engage in more moral disengagement, bullying, and pro-bullying bystander behavior than girls (e.g., Pouwels et al., 2016; Thornberg & Jungert, 2013), which is

consistent with boys' greater prioritization of competition over relational harmony and the resolution of conflicts during social interactions (see Rose & Rudolph, 2005, for a review). Thus, boys may rely on moral disengagement to justify engaging in behaviors that are gender-normative, but inconsistent with their moral values, including pro-bullying bystander behavior. Other studies have documented a similar gender difference between components of moral disengagement, such as distortion of consequences, and pro-bullying bystander behavior (Bjarehed et al., in press; Thornberg & Jungert, 2013). Future research should utilize a more nuanced view of gender identity beyond the dichotomous (i.e., girl/boy) assessment of the present study in order to fully identify the processes that contribute to pro-bullying bystander behavior and better meet the needs of gender-diverse and transgender children (Rafferty & Committee on Psychosocial Aspects of Child and Family Health, 2018).

Limitations and Future Directions

The current study fills an important gap in the literature by examining relatively understudied bystander behaviors, particularly pro-bullying bystander behaviors. Nonetheless, the findings need to be viewed in light of the study's methodological limitations and the need for theoretical advancement. Foremost, most of the study variables were assessed using self-report measures with the exception of peer victimization and popularity, suggesting shared method variance may account for some of the associations found. However, controlling for fall levels of pro-bullying bystander behavior and self-reported bullying behavior likely helped minimize the extent to which findings could be attributed solely to shared method source. A related limitation is the reliance on self-report measures to assess pro-bullying bystander behavior. While self-reports are increasingly being used to study bystander behavior in bullying situations (e.g., Demaray et al., 2016; Nickerson & Mele-Taylor, 2014; Thornberg & Jungert, 2013) and have been shown to significantly correlate with peer reports of bullying roles (Salmivalli et al., 2006), peer-reports of bystander behavior remain the gold standard due to their greater objectivity and utilization of multiple-reporters. Thus, future research should examine whether the current findings are replicated when multiple informants of pro-bullying bystander behavior are utilized.

Pro-bullying bystander behavior was also assessed over a relatively short timeframe and during a very specific developmental period, late childhood, when issues of social status and popularity become increasingly salient to children (Lafontana & Cillessen, 2010). Therefore, the current study cannot address whether the associations that emerged here would replicate over longer time periods or at other ages. In addition, long-term changes in pro-bullying bystander behavior may be attributable to a host of factors not included in the current study (e.g., shifts in friendship groups, increasing neurological sensitivity to peer feedback; Blakemore, 2008; Poulin & Chan, 2010). Furthermore, the current study focused on only perceived descriptive norms for defending, due to the prominent role of such perceptions on health and interpersonal behaviors. However, actual, rather than perceived, descriptive norms and injunctive norms for defending or perceived norms for other pro-bullying behaviors should be studied (see Machackova & Pfetsch, 2016; Pozzoli, Gini, & Vieno, 2012; Sentse et al., 2015, for examples). Furthermore, the current study focused exclusively on bystanding

behaviors that explicitly reinforce bullying. Passive bystander behaviors may also communicate approval of the bullying, although tacitly and possibly unintentionally. Understanding to what extent predictors of passive bystander behavior overlap with, or are unique from, those for explicit pro-bullying behavior would contribute substantially to theory and intervention development.

It should be noted that affective empathy (i.e., experiencing another's emotion) was included in this study; cognitive empathy (i.e., understanding another's emotions) was not. Empirical evidence and theory suggests that, while affective empathy inhibits aggression and promotes defending behaviors, cognitive empathy facilitates bullying (Caravita, di Blasio, & Salmivalli, 2009; Jolliffe & Farrington, 2006; Stavrinides, Georgiou, & Theofanous, 2010). Thus, future research should address whether cognitive empathy similarly underlies pro-bullying bystander behavior. Moreover, because the present study focused on empathy and moral disengagement as reported in 4th grade, we do not know how other factors known to support empathic responding and moral disengagement earlier in childhood. Consideration of parental socialization practices, discipline practices, and children's ego-resilience, temperament, or personality characteristics (Ehrler, Evans, & McGhee, 1999; Spinrad & Stifter, 2006; Taylor, Eisenberg, Spinrad, Eggum, & Sulik, 2013) may help us to identify children at-risk for low levels of empathic responding and high levels of moral disengagement.

Children in this study came from a rural, racially diverse, low income community in the Southeastern, U.S., a population rarely studied in the bullying literature. It is notable, therefore, that the descriptive statistics for all study variables were similar to those reported in previous research and, theoretically, the associations identified here should generalize to other populations. Future research should focus on longitudinal studies with diverse cultural groups and on how cultural and racial differences (e.g., parental socialization of coping with aggression, differences in peer group norms) impact children's bystander behavior and its consequences.

Implications for Intervention

Findings from this study reinforce the importance of preventative-intervention efforts focused on developing empathy within youth and on school climate factors, particularly perceived norms around defending victims (Sentse et al., 2014; van der Ploeg et al., 2016; Vannini et al., 2011). Enhancing empathy for victims is already a focus of many anti-bullying interventions (e.g., Garandea, Poskiparta, & Salmivalli, 2014; Menesini, Codecasa, Benelli, & Cowie, 2003; Vannini et al. 2011). Broader Social Emotional Learning initiatives that foster empathy earlier in childhood (Malti, Chaparro, Zuffianò, & Colasante, 2016) may have downstream positive effects on pro-bullying bystander behavior by emphasizing growth in empathic responses – consistent with the notions of a growth and belonging mindset, as opposed to a fixed mindset with respect to youth abilities (Yeager & Dweck, 2012). Further, intervention efficacy may be enhanced through explicit attention to increasing children's perceptions of defending as the normative response for their peer group. Consistent with this suggestion are the findings of Sentse et al. (2014) who, in their evaluation of the KiVa anti-bullying intervention, found that changes in perceived norms for

defending mediated the effects of intervention efficacy on changes in pro-bullying bystander behavior. Clinical research has demonstrated that shifting perceived norms by presenting data on actual norms and behaviors has significant preventative implications for changing risky or harmful behaviors (e.g., Miller & Prentice, 2016). Moreover, the results of the present study suggest that targeting children's perceived norms for defending may be particularly important for decreasing pro-bullying bystander behavior among popular children. With age, children become increasingly motivated to achieve popularity (LaFontana & Cillessen, 2010). However, by enhancing perceived norms for defending, pro-bullying bystander behavior may not be seen as an avenue for attaining popular status. At the same time reducing peer victimization should be seen not only as a worthy intervention outcome on its own, but also as a critical component of deterring peer group reinforcement for bullying behaviors.

Conclusion

In summary, the current study built upon recent theoretical work on bystander behavior (Ettetal et al., 2015) by utilizing longitudinal data to predict pro-bullying bystander behavior over the course of the school year. Thus, the current study provided a unique look at how emotional, moral, relational, and cognitive processes may contribute to pro-bullying bystander behavior. Whereas emotional and moral processes worked independently of children's perceived norms for defending, evidence was consistent with the proposition that children, at least implicitly, take into account the potential implications of their own standing among peers in relation to group norms when witnessing and responding to bullying of one of their peers. For educators and those working to advance anti-bullying interventions, an important implication of this research is that all of the factors investigated -- empathy, moral disengagement, peer victimization, popularity, and perceived norms for defending -- were predictive of pro-bullying bystander behavior. Therefore, efforts to prevent bullying in schools need to target the complex set of processes supportive of pro-bullying bystander behavior. In doing so, interventions will more effectively shift systemic reinforcement structures from those that promote and sustain bullying to those that actively deter the victimization of students.

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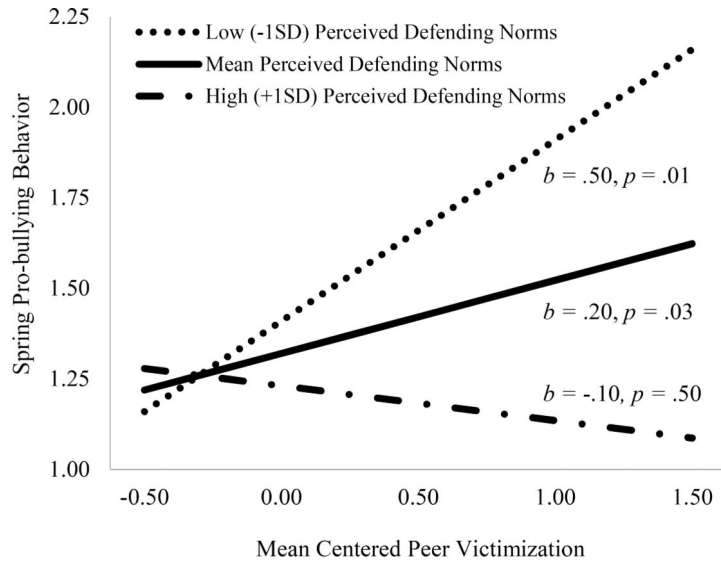
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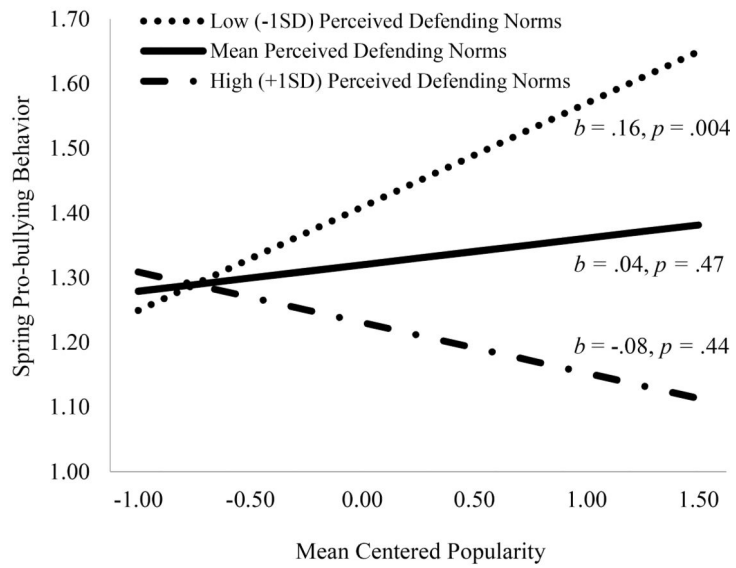
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(a) Peer victimization \times perceived norms for defending (girls only)



(b) Popularity \times perceived norms for defending

Figure 1. Interactions between perceived norms for defending and (a) peer victimization for girls and (b) popularity for boys and girls in the prediction of spring pro-bullying bystander behavior.

Table 1

Descriptive Statistics

	Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Fall pro-bullying bystanding	1.42	.57	1.47	.54
Spring pro-bullying bystanding	1.38	.56	1.39	.50
Bullying behavior	1.29	.65	1.29	.65
Empathy	3.47 ^a	.99	3.83	1.03
Moral disengagement	2.13	.57	2.07	.60
Peer victimization	1.59 ^a	.41	1.47	.31
Popularity	2.07	.37	2.07	.31
Perceived norms for defending	9.08	6.04	8.95	5.89

^aMeans differ for boys and girls at $p < .001$.

Table 2

Bivariate Correlations

Variable	1	2	3	4	5	6	7	8
1. Fall pro-bullying bystanding	---	.55***	.47***	-.26***	.31***	.11	.13	-.04
2. Spring pro-bullying bystanding	.37***	---	.39***	-.26***	.18**	.23***	.01	-.20***
3. Bullying behavior	.45***	.21**	---	-.20**	.22***	.28***	-.10	-.11
4. Empathy	-.09	-.08	.01	---	-.24***	-.05	-.06	.11
5. Moral disengagement	.35***	.32***	.17**	.06	---	.17***	-.10	.02
6. Peer victimization	.20**	.27***	.26***	-.11	.13*	---	-.38***	-.09
7. Popularity	-.02	-.03	-.13*	.04	*-.09	-.45***	---	.07
8. Perceived norms for defending	.00	-.18**	-.08	.18**	*-.01	-.11	-.02	---

Note. Correlations for boys are below the diagonal. Correlations for girls are above the diagonal.

p < .001.

**
p < .01.

*
p < .05.

Table 3

Unstandardized and Standardized Regression Coefficients Predicting Spring Pro-bullying Bystander Behavior

Predictor	Boys			Girls		
	<i>b</i>	se	b	<i>b</i>	se	b
Ethnicity	.10 [*]	.04	.08	.10 [*]	.04	.10
Fall pro-bullying bystanding	.36 ^{***}	.05	.35	.36 ^{***}	.05	.40
Bullying behavior	.06	.06	.07	.06	.06	.08
Empathy	-.04 [*]	.02	-.07	-.04 [*]	.02	-.08
Moral disengagement	.17 ^{***}	.06	.17	.02	.03	.03
Peer victimization	.20 [*]	.09	.14	.20 [*]	.09	.13
Popularity	.04	.06	.03	.04	.06	.03
Perceived norms for defending	-.02 ^{***}	.00	-.16	-.02 ^{***}	.00	-.19
Norms × empathy	.002	.00	.02	.002	.00	.02
Norms × moral disengagement	-.01	.01	-.03	-.01	.01	-.04
Norms × peer victimization	.01	.02	.03	-.05 [*]	.02	-.21
Norms × popularity	-.02 [*]	.01	-.08	-.02 [*]	.01	-.08

Note. Norms = perceived norms for defending.

p < .001.

**
p < .01.

*
p < .05.