

Examining Variation in Adolescent Bystanders' Responses to Bullying

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Abstract. Latent class analysis was used to examine whether patterns of bystander responses varied as a function of both student- and school-level characteristics. Data from 18,863 high school students from 58 schools who “ever witnessed bullying” were used to identify five latent classes of bystander behavior. Three of the classes identified paralleled commonly used researcher-identified categories (*Passive* = 9.7%, *Defender* = 20.4%, and *Contributor* = 3.4%), whereas we also identified two patterns of bystander responses that had not been previously characterized (*Limited* = 64.8% and *Inconsistent* = 1.7%). Multilevel logistic regression models were then used to examine student- and school-level characteristics that differentiate those in the defender class from other bystander classes. Youth in the defender class were more likely to believe that other students intervene with bullying, and they felt a greater connection with school staff as compared to youth in all other bystander classes. Further, gender, normative beliefs about retaliation, and bullying involvement were associated with class membership. Findings indicated that defending bystander responses are relatively low and suggested that school-level contextual factors, youth perceptions of others' bystander behavior, and bullying involvement all inform our understanding of adolescent bystander behavior.

Given the relatively high rates of bullying in schools, it is not surprising that a substantial number of youth are exposed to bullying among their peers. A recent study of school-aged youth (grades 4–12) showed that across 10 years reports of witnessing bullying ranged from 42.7% to 66.4% (Waasdorp, Pas, Zablotsky, & Bradshaw, 2017). As many as 72% of high schoolers report having witnessed bullying (Bradshaw, Sawyer, & O'Brennan, 2007). In fact, high schoolers may experience more benefits of bystander-focused interventions as compared to younger children (Polanin, Espelage, & Pigott, 2012); this finding highlights the importance of examining bystander behaviors among high schoolers. However, youth bystanders to bullying do not always intervene or respond in a way that stops the bullying (e.g., Kärnä, Voeten, Poskiparta, & Salmivalli, 2010; Polanin et al., 2012; Salmivalli, Kaukiainen, & Voeten, 2005). The extant research on bystander behavior has used variable-centered approaches to categorize

who are passive; e.g., Pozzoli & Gini, 2010) or three groups (those who are passive, those who reinforce or aid the bully, and those who defend the victim; e.g., Pöyhönen, Juvonen, & Salmivalli, 2012). Research has suggested that there is heterogeneity amongst those who bully and those who are victims and even in the responses of victims to their victimization (e.g., Bradshaw, Waasdorp, & O'Brennan, 2013; Schultze-Krumbholz et al., 2015; Waasdorp & Bradshaw, 2011). As such, there is likely greater variation in bystander behaviors that has not been considered in prior research. The current study aimed to better understand the variation in different types of bystander responses to bullying by utilizing a person-centered approach called latent class analysis (LCA). A secondary aim of this study was to utilize multilevel logistic regression modeling to explore student- and school-level characteristics that are associated with the different patterns of bystander behaviors. The overarching goal of this study was to enhance the field's understanding of patterns

Authors' Notes. This work was funded in part by grants from the U.S. Department of Education, the William T. Grant Foundation, and the National Institute of Justice. The authors would like to thank the Maryland State Department of Education and Sheppard Pratt Health System for their support of this research through the Maryland Safe and Supportive Schools Project.

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of adolescent bystander behavior, which in turn may inform interventions aimed at preventing and more effectively addressing bullying.

Bystander Responses to Bullying

Salmivalli, Lagerspetz, Bjorkqvist, Österman, and Kaukianinen (1996) have led much of the research in the area of bystander responses to bullying. In one such study of Finnish middle school youth, they examined the various roles that youth play in bullying situations and identified four bystander roles: reinforcer (creates an audience for the bully), assistant (follows the bully), defender (supports the victim), and outsider (does nothing; Salmivalli et al., 1996). More recent research narrowed this set of four roles to three: assistor/reinforcer (now combined into one), defender, and outsider/passive responder (e.g., Pöyhönen et al., 2012). Other studies, such as one of Italian middle school youth by Pozzoli and Gini (2013), assessed bystander behavior as a dichotomy of defending the bullied and passive bystander behavior by using two discrete scales. Denny et al. (2015) also examined bystander behaviors among New Zealand high school students through two items: the first asked in how often students ignore the bullying, and the second asked how often students take action when witnessing bullying. However, no definition of what behaviors constitute 'ignoring' or 'taking action' were examined (Denny et al., 2015). Another large study of Canadian youth (grades 4–11) by Trach, Hymel, Waterhouse, and Neale (2010) assessed 16 bystander responses. Their factor analysis of the 16 items did not provide a clear factor structure. Nevertheless, they combined 7 of the 16 items to create three composite scales of talked to adult, talked to victim, and told bully to stop (nine items did not load).

Taken together, the extant studies have used several different approaches to measure bystander behavior, few of which have examined this behavior among U.S. youth. All of the studies we were able to identify used a type of variable-centered approach, whereby the researcher used some threshold (e.g., one standard deviation above the mean on the defender scale and categorizing them as a defender) to assign the bystander role or treated the variable as continuous. These variable-centered approaches are often based on scales with relatively few items (e.g., Denny et al., 2015). Furthermore, such approaches preclude exploration of variation in the patterns of bystander behavior.

In contrast, person-centered approaches, such as LCA, allow for exploration to the extent that the potential bystander responses cluster into particular patterns of responses/behaviors. LCA has been used in several prior studies to assess various aspects of aggression such as peer victimization (e.g., Bradshaw et al., 2013), bullying (e.g., Nylund, Bellmore, Nishina, & Graham, 2007; Wang, Iannotti, & Luk, 2012), and victims' responses to bullying (e.g., Waasdorp & Bradshaw, 2011). Given the complexity of bystander behavior, a person-centered approach may also prove to be instructive in understanding the heterogeneity in adolescents' responses to

witnessing bullying. Moreover, the use of different bystander intervention approaches may vary as a function of student- and school-level contextual characteristics, whereby certain perceptions of the school context (e.g., teacher connectedness) as well as factors at the school level (e.g., enrollment size) are more likely to contribute to a passive rather than active/defending bystander response. As such, it is important to understand the variability in bystander responses (Aim 1) as well as to examine student- and school-level factors that may be associated with the display of one pattern of bystander response over another (Aim 2). Such an approach may also help us determine whether a similar pattern of roles emerges in a U.S. sample (e.g., those identified by Salmivalli et al., 1996) as when a traditional variable-centered approach is used.

Student-Level Factors Predicting Bystander Behavior

There are certain individual characteristics that are likely associated with particular bystander responses, such as gender, age, and normative beliefs related to bullying and retaliation (e.g., Pozzoli & Gini, 2013). For example, high schoolers are less likely than middle schoolers to seek the help of adults in response to witnessing bullying, whereas younger students are more likely to report taking a positive action (e.g., helping the victim; Bradshaw et al., 2007; Trach et al., 2010; Waasdorp & Bradshaw, 2011). Adolescence is an important time for identity development, especially a social identity that would impact an individual's response to a bystander situation (e.g., Adams & Marshall, 1996; Hogg, 2016; Palmer, Rutland, & Cameron, 2015); yet few studies have examined bystander behaviors among high school youth. As such, it is important to examine these patterns among high schoolers, with particular interest paid to whether there are some differences between underclassmen (i.e., grades 9–10) and upperclassmen (i.e., grades 11–12), and explore the hypothesis that underclassmen show more positive bystander behaviors than upperclassman.

Another factor that may be related to responses to bullying is the student's gender. Research has shown that girls are more empathetic (e.g., Van der Graaff et al., 2014) and that empathy is related to prosocial responses like helping and intervening (e.g., Rudolph, Roesch, Greitemeyer, & Weiner, 2004). Further, studies of elementary and middle school youth have shown that girls are more likely to proactively respond to bullying behaviors than boys (Gini, Pozzoli, Borghi, & Franzoni, 2008; Pozzoli & Gini, 2010; Trach et al., 2010). However, additional research is needed to explore the hypothesis that these gender differences in bystander responses also occur among high school youth.

Retaliatory beliefs also have been linked with feelings of safety and belongingness in school, especially among high school youth (Bradshaw, Sawyer, & O'Brennan, 2009; Waasdorp, Pas, O'Brennan, & Bradshaw, 2011). For example, youth who witness bullying are at a greater risk for supporting aggressive retaliation (e.g., Waasdorp et al., 2011). If an individual believes that aggressive retaliation is acceptable, that

individual may be more likely to condone an aggressive response from a victim and therefore less likely to intervene when witnessing someone being bullied (Frey, Pearson, & Cohen, 2015); this finding suggests that altering these beliefs may be a key component of decreasing a climate of bullying (Frey et al., 2015). As a result, additional research exploring the association between bystander responses and attitudes supporting aggressive retaliation is needed.

Finally, bullying is a complex phenomenon, and often those who are bystanders may themselves be victims or bullies in a different situation/context (Frey, Newman, & Onyewuenyi, 2014). Being a victim or a bully will likely affect the way in which one intervenes when witnessing bullying (Huising, Snijders, Van Duijn, & Veenstra, 2014). It is, therefore, important to examine whether bully or victim status is associated with bystander responses. Specifically, we hypothesized that youth who were previously a victim of bullying would be more likely to be in a defender bystander class, whereas youth who had previously bullied would be less likely to be in this class.

School Contextual Factors Predicting Bystander Behavior

Another factor that is likely associated with bystander responses to bullying is a student's perceptions of the school and the norms within the school (Denny et al., 2015; Hymel, McClure, Miller, Shumka, & Trach, 2015; Salmivalli & Voeten, 2004). Perceptions of relationships with others in school are a significant contributor to school connectedness (e.g., Libbey, 2004), and increased levels of connectedness have been associated with school staff responses to bullying (O'Brennan, Waasdorp, & Bradshaw, 2014). It is therefore likely that connectedness is also associated with students' responses to bullying. Specifically, if youth feel connected to school staff, we hypothesize they will feel more comfortable going to adults at the school for support when they witness bullying, therefore utilizing more defending bystander responses (Hymel et al., 2015; Saarento, Garandeau, & Salmivalli, 2015; Salmivalli, 2014). Likewise, feeling more connected to their peers was expected to be associated with an increased likelihood of students utilizing more defending bystander responses.

With regard to norms, Sandstrom, Makover, and Bartini (2012) found that fourth and eighth graders who perceived that peers condone bullying behavior, such as assuming that others will not intervene in bullying situations, were less likely to defend and more likely to join in and contribute to the bullying. Less is known about these norms within the high school context, which is particularly problematic given that high school youth are less likely to report bullying behavior to an adult (Bradshaw et al., 2007; Waasdorp & Bradshaw, 2015). It is therefore likely that the perceived norm that other adults and students will intervene to stop bullying would influence bystanders' responses to bullying (Pozzoli & Gini, 2013). As such, we hypothesized that social norms regarding

positive responses to bullying would be associated with a greater likelihood of membership in a defending bystander class.

Current Study

The goal of the current study was to explore adolescent bystanders' responses to general peer bullying among a large U.S. sample of high school students with the intent of trying to understand variation in their responses. We were also interested in the association between the school context and patterns of bystander responses. Toward that end, we first explored the variability in bystanders' responses to bullying by using LCA (McCutcheon, 1987) to characterize common patterns of responses. Specifically, we applied LCA to group youth who shared a common pattern of bystander responses to witnessing bullying. Person-centered approaches are particularly appropriate for assessing "qualitatively different profiles of study variables that are not anchored on a linear or continuous scale" (Sturge-Apple, Davies, & Cummings, 2010, p. 1320), as is the case for different forms of responses to witnessing bullying.

A unique feature of the current study is that we modeled nine specific types of bystander responses in order to examine heterogeneity in individual behaviors rather than assigning individuals to one specific role using cut-off scores. Specifically, our primary aim was to identify discrete classes of adolescents who have similar bystander responses to bullying and whether these groupings paralleled commonly used researcher-identified categories. Notably, this study examined students' self-reported responses to any bullying they have witnessed rather than examining responses to a specific form of bullying witnessed. Although our LCAs were largely exploratory in nature, based on prior research summarized earlier (Olweus, 2001; Polanin et al., 2012; Salmivalli et al., 2005), we anticipated that at least three classes would emerge. Specifically, consistent with prior work by Salmivalli et al. (1996, 2005), we anticipated a passive-type class (e.g., those who ignore the bullying or watch the bullying but do nothing to stop it), a defending class (e.g., those who tell an adult about the bullying or try to make the bullying stop) and an assistor/reinforcer-type class (e.g., those who laugh or join in with the bullying). Given our interest in trying to better understand those who display a pattern of defending bystander responses, the second aim of the current study was to identify student- and school-level characteristics that might differentiate those in a defending class from those in other bystander response classes. Therefore, we explored the association between student- and school-level characteristics and membership in the various bystander response classes by utilizing multilevel modeling.

METHOD

The sample for this study was drawn from 27,698 students ($M_{age} = 15.94$, $SD = 1.34$), 49.2% male and 49.1%

White, across 58 high schools participating in a statewide study of school climate called the Maryland Safe and Supportive Schools Initiative (MDS3). For the current study, those who endorsed that they “*have never witnessed bullying*” were removed from the analyses, resulting in an analysis sample of 18,863 youth. To better understand the demographic characteristics of those who had never witnessed bullying, we conducted a series of logistic regressions. These analyses indicated that males (OR = 1.56, $p < .001$) were significantly more likely to report they had never witnessed bullying. Those in 10th grade (OR = .88, $p < .001$) were significantly less likely to report they had never witnessed bullying as compared to ninth graders; however, 11th (OR = 1.05, $p < .05$) and 12th (OR = 1.09, $p < .001$) graders were significantly more likely to report they had never witnessed bullying as compared to ninth graders.

With regard to race (Asian, Hispanic, Black, and Other with White as the reference group), Black (OR = 1.34, $p < .001$) and Other (OR = 1.11, $p < .05$) youth were significantly more likely to report they had never witnessed bullying as compared to White youth. With regard to the measures (retaliation beliefs, students and adults intervene, and student and teacher connectedness), those who ever witnessed bullying had higher average levels of retaliation as compared to those who had never witnessed bullying, $t(25,306) = 2.29$, $p < .001$. However, those who had ever witnessed bullying had lower agreement with the statement that adults, $t(26,179) = 19.6$, $p < .001$, or students, $t(26,133) = 33.7$, $p < .001$, try to stop bullying, as well as lower teacher, $t(25,616) = 12.8$, $p < .001$, and student, $t(25,614) = 26.5$, $p < .001$, connectedness as compared to those who had never witnessed bullying. Additional details on the full sample and the subsample of youth who had witnessed bullying, and thus were included in the current analysis of bystander behavior, (youth self-report via a survey) are provided in Table 1, along with school-level demographic data (state-provided archival data).

Procedure

Participation for both schools and youth in the MDS3 project was voluntary. Districts were approached for participation by the Maryland State Department of Education (MSDE). All schools recruited for participation in this study agreed to participate. The anonymous, online MDS3 School Climate Survey (Bradshaw, Waasdorp, Debnam, & Lindstrom Johnson, 2014) was developed by the Johns Hopkins Center for Youth Violence Prevention in collaboration with project partners. The self-report measure was administered using a waiver of active consent process for parents and youth assent; participation data provided by the schools indicate that participation rates exceeded 90% across the 58 schools. The survey was administered by school staff in a random selection of classrooms per school (mostly language arts) in the spring of 2013. On average, it took 18.9 min ($SD = 7.04$) to complete. The anonymous nonidentifiable data were obtained from the

Table 1. Student and School Demographic Characteristics

Student Characteristics ^a	Full Sample <i>N</i> = 27,698	Ever Witnessed Bullying <i>N</i> = 18,863
	<i>N</i> (%)	<i>N</i> (%)
Gender		
Male	13,619 (50.7)	8,475 (47.0)
Female	13,254 (49.3)	9,563 (53.0)
Race/ethnicity		
Black/African American	8,343 (31.1)	5,228 (29.0)
White/Caucasian	13,601 (50.6)	9,477 (52.5)
Hispanic	1,349 (5.0)	919 (5.1)
Asian/Pacific Islander	1,247 (4.6)	822 (4.6)
Other	2,329 (8.7)	1,590 (8.8)
Grade		
9th grade	7,789 (29.0)	5,561 (30.8)
10th grade	6,715 (25.0)	4,586 (25.4)
11th grade	6,475 (24.1)	4,162 (23.1)
12th grade	5,891 (21.9)	3,727 (20.7)
School characteristics (<i>N</i> = 58 schools)^b	<i>M</i> (<i>SD</i>)	
% Minority	45.9 (25.1)	—
% Suspension	22.3 (11.1)	—
School enrollment	1,325.3 (449.8)	—
Overall climate	2.59 (.1)	—

^aIndicates data provided from the participating sample of students through the self-report survey; ^bIndicates archival school-level data provided by the state department of education. Due to missing data, some values may not add up to the true full sample of students.

MSDE and approved for analysis by the institutional review boards at the researchers' institutions.

Measures

Measures were collected at both the individual level and the school level. First, the individual level variables are presented, followed by the school level.

Youth Demographic Characteristics

The MDS3 Survey (Bradshaw et al., 2014) included a series of demographic questions, whereby youth self-reported their age, gender, and race/ethnicity.

Bystander Behaviors and Bullying Experience

Participants were asked to indicate, in response to the question “What do you usually do if you see another student is being bullied?”, whether they would utilize any of nine bystander behaviors (i.e., *yes/no*): “watch the bullying but do nothing to stop it”; “join in on the bullying”; “stay out of the bullying”; “try to make the others stop bullying”; “ignore the bullying”; “laugh at the bullying”; “comfort the person being bullied”; “encourage the person being bullied to tell a teacher”; and/or “tell an adult about the bullying” (Olweus et al., 2007; Salmivalli & Voeten, 2004). Participants could also indicate they have never witnessed bullying or “other” and fill in a qualitative response; the “other” option was not utilized in the LCA models. As noted previously, participants who never witnessed bullying could indicate “I have never witnessed bullying” for the bystander response items and were removed prior to the LCA analyses (see Table 1 for details).

Exposure to Bullying

Participants read a definition of bullying: “A person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons. Bullying often occurs in situations where there is a power or status difference. Bullying includes actions like threatening, teasing, name-calling, ignoring, rumor spreading, sending hurtful e-mails and text messages, and leaving someone out on purpose” (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014; Olweus, 1993). Participants were then asked, “During the past 30 days (month), how often have you seen someone else being bullied?” (*yes/no*; witnessed bullying). Participants were also asked to respond to the items “During the past 30 days, how often have you been bullied?” (*victim*) and “How often have you bullied someone else?” (*bully*) using a 5-point scale (*several times a week, once a week, 2–3 times during the month, 1 time during the month, and not at all*). These items were based on the work of Olweus and were used to categorize youth into victim and/or bully status, using a threshold of 2–3 times or more during the month (e.g., Olweus, 1996; Solberg & Olweus, 2003).

Retaliatory Beliefs

Participants responded to a four-item measure of retaliation behaviors based on the Normative Beliefs About Aggression Scale (Huesmann, Guerra, Miller, & Zelli, 1992; i.e., “It’s okay to hit someone if they hit me first”; “I believe that revenge is a good thing”; “I believe it’s okay to hurt people who hurt you first”; “If people do something that makes me really mad, they deserve to be beaten up”; $\alpha = .82$) using a 4-point Likert scale from *almost always* (1) to *never* (4). The items were averaged such that a higher score indicated greater support for retaliation.

Perception of the School Context

We examined four dimensions of school context (Bradshaw et al., 2014), including perceptions of teacher connectedness (five items; e.g., “My teachers listen to me when

I have something to say”; “Students trust the teachers”; $\alpha = .86$) and student connectedness (five items; e.g., “Students help one another”; “Students respect one another”; $\alpha = .87$). See Bradshaw et al. (2014) for detailed descriptions of these two subscales. Similar to prior studies, two items were used to reflect “students’ perceptions of the schools’ bullying climate” (e.g., Lindstrom Johnson, Waasdorp, Debnam, & Bradshaw, 2013). Specifically, two items asked students’ perceptions of the likelihood that a staff member or fellow student would intervene in a bullying situation (e.g., “Adults [or students] at this school try to stop bullying”; Bradshaw et al., 2007; Olweus et al., 2007). Students responded using a 4-point Likert scale from *almost always* (1) to *never* (4). Items were reverse coded and averaged with higher values indicating a greater belief in adult (*Adults Intervene*) and student intervention (*Students Intervene*). These two items were significantly correlated ($r = .50, p < .001$).

School-Level Variables

A number of school-level demographic variables were included in the multilevel models to adjust for possible school-level associations with youth’s responses to bullying (Bradshaw et al., 2009; Espelage & Swearer, 2004). Specifically, we included free and reduced-price meals, the percentage of racial minority students (i.e., non-White students) attending the school, the total number of students enrolled in the school, and the percentage of out-of-school suspensions (calculated as the total number of suspension events divided by the student enrollment; see Bradshaw et al., 2009 for additional details on these variables). These school-level archival demographic data were obtained from the MSDE.

Data Analysis

To address the first research aim, we used LCA to identify classes of youth who share similar bystander behaviors, with nine bystander behavior items included in the model (see Table 2 for items). Individuals were assigned to a class for which their posterior probability was the highest. The posterior probabilities were used to evaluate the precision of classification, such that a higher posterior probability value for one class and lower values for the others indicates good classification (i.e., high separation of the classes). Multiple indexes were computed to assess different aspects of model fit (Loehlin, 1998; Muthén & Muthén, 1998–2012), specifically, Akaike information criterion (AIC), Bayesian information criterion (BIC; Schwarz, 1978), sample size–adjusted Bayesian information criterion (SSA-BIC; Sclove, 1987), and the sample size–adjusted Lo–Mendell–Rubin likelihood ratio test (SSA-LMR-LRT; Lo, Mendell, & Rubin, 2001). Models with the lowest AIC, BIC, and SSA-BIC values, or the point at which these indexes begin to level off, suggest the best fit. The SSA-LMR-LRT compares the estimated model to a model with one fewer class ($k-1$); thus, a nonsignificant p

Table 2. Frequency of Bystander Responses

Type of Bystander Response	<i>n</i> (%)
Watch the bullying but do nothing to stop it	2,595 (13.8)
Join in on the bullying	867 (4.6)
Stay out of the bullying	6,791 (36.0)
Try to make others stop bullying	6,250 (33.1)
Ignore the bullying	4,013 (21.3)
Laugh at the bullying	1,603 (8.5)
Comfort the person being bullied	4,934 (26.2)
Encourage the person being bullied to tell a teacher	3,454 (18.3)
Tell an adult about the bullying	3,250 (17.2)
Other	962 (5.1)

Note. *N* = 18,863 students

value suggests that the additional class does not result in a significant improvement in fit. Finally, the entropy was calculated, which indicates classification accuracy, such that entropy values greater than .80 reflect classes that are highly discriminating (Celeux & Soromenho, 1996; Nylund, Asparouhov, & Muthén, 2007). For models with the same or similar levels of goodness of fit, the more parsimonious model is favored (Loehlin, 1998; Muthén & Muthén, 1998–2012), with selection of the final model requiring consideration of substantive theory as well as statistical support (Nylund, Asparouhov, et al., 2007). When conducting the LCAs, we accounted for the clustering of students within schools using a Huber–White adjustment of the standard errors (Muthén & Muthén, 1998–2012). All LCAs were fit using Mplus 7.3 (Muthén & Muthén, 1998–2012), which adjusts for missing data using full information maximum-likelihood estimation.

To address our second research aim, we used three-level models to compare the different patterns of responses with a specific focus on understanding what characteristics differentiate those who defend or support a victim when they witness bullying from other patterns of responses. We included the following predictors in the model at Level 1: grade (with Grade 9 as the reference), gender (with female as the reference), retaliatory beliefs, and perceptions of the school (i.e., perception that others intervene, student and teacher connectedness). Student race/ethnicity (with White as the reference) was also included at Level 1 as a control variable, as we did not have any specific hypotheses regarding the respondents' race/ethnicity. We adjusted for classroom at Level 2 because youth completed the survey within a classroom setting, which may have resulted in some nonindependence of student survey responses; however, no additional information was collected at this level. As noted earlier, we included the school-level archival data regarding free and reduced-price meals, the percentage of students who were racial minority,

enrollment, and suspension rate as school-level control variables. The multilevel logistic regression models were fit using the Bernoulli modeling option due to the dichotomous outcomes of interest in the HLM software (Raudenbush & Bryk, 2002). All variables at Level 1 were tested for randomly varying slopes (Raudenbush & Bryk, 2002), but none showed significance and slopes were fixed. Then, nondichotomous variables were group-mean centered (Enders & Tofighi, 2007; Tofighi & Thoemmes, 2014). At Level 3, free and reduced-price meals, percentage racial minority, enrollment, and suspension rate were grand-mean centered to facilitate interpretation of the findings (Enders & Tofighi, 2007).

RESULTS

Approximately 8.3% of the students did not endorse any of the bystander responses, whereas 48.3% endorsed just one of the bystander responses, 18.7% endorsed two responses, 12.5% endorsed three responses, 7.0% endorsed four responses, and 5.1% endorsed five or more responses. On average, females endorsed more items than males ($M_{\text{females}} = 1.47$, $SD = 1.49$; $M_{\text{males}} = 1.12$, $SD = 1.53$), $t(26, 871) = 18.71$, $p < .001$. *Stay out of the bullying* received the highest percentage of endorsements (36.0%), followed by *try to make others stop bullying* (33.1%; see Table 2 for all other responses).

Latent Class Analysis

The fit indexes indicated that a five- or six-class solution would fit the data (see Table 3). More specifically, the SSA-LMR was significant until the seven-class solution, suggesting that there was not a statistically significant improvement in fit for the inclusion of an additional class, yet it was significant in both the five- and six-class solutions. The SSA-BIC, BIC, and AIC had meaningful decreases between the four- and the five-class solution but leveled off between the five- and six-class solutions. Finally, inspection of the six-class model showed a split in the largest class with other classes similar; this resulted in two classes with less than a .4 probability of endorsing any of the bystander responses, which in turn did not add any substantive justification for the six-class solution. Therefore, the more parsimonious five-class solution was selected as the final solution (SSA-BIC = 159,191.203, SSA-LMR-LRT = $p < .001$, entropy = .86). Average posterior probabilities for class membership ranged from .74 to .95, suggesting separate and distinctive classes.

Latent Class Descriptions

The majority of youth were in the limited involvement class (64.8%), where they had a low probability (<.3) of endorsing any of the bystander responses, and therefore, although they witnessed the bullying, they did not have a high probability of reporting any response (see Figure 1 for probability plot). The defender class comprised 20.4% of the sample; these youth had a high probability of endorsing

Table 3. Latent Class Analysis Fit Indexes

Number of Classes	AIC	BIC	SSA-BIC	SSA-LMR-LRT <i>p</i> Value	Entropy	Subgroup Prevalence (%)							
						1	2	3	4	5	6	7	
1 class	178,804.138	178,877.748	178,849.146	-----	-----	100							
2 classes	166,477.403	166,632.802	166,572.420	<.001	.84	85.2	14.8						
3 classes	162,223.278	162,460.465	162,368.304	<.001	.86	76.6	20.9	2.5					
4 classes	160,199.120	160,518.097	160,394.156	<.001	.82	77.3	13.4	6.5	2.8				
5 classes	158,946.159	159,346.924	159,191.203	<.001	.86	64.8	20.4	9.7	3.4	1.7			
6 classes	158,038.462	158,521.016	158,333.515	<.001	.74	45.8	30.5	11.9	6.0	4.6	1.2		
7 classes	157,728.453	158,292.796	158,073.516	.090	.75	44.1	12.7	11.4	11.1	10.1	9.1	1.5	

Note. Bolded line represents best fitting, most parsimonious model. AIC = Akaike information criterion (Schwarz, 1978); BIC = Bayesian information criterion (Schwarz, 1978); SSA-BIC = sample size-adjusted Bayesian information criterion SSA-LMR-LRT = sample size-adjusted Lo-Mendell-Rubin likelihood ratio test (Lo et al., 2001).

behaviors such as comforting the person being bullied and telling an adult about the bullying. The youth in the passive class (9.7%) had a high probably of endorsing staying out of the bullying and ignoring the bullying. The youth in the contributor class (3.4%) had a high probability of endorsing laughing, doing nothing, and joining in with the bullying. The final class included 1.7% of youth who displayed an inconsistent pattern of bystander responses, whereby each response had a .75 probability or higher of being endorsed (see Figure 1). See Table 4 for the breakdown of the classes by demographics (i.e., gender, grade, race) and overall significance.

See Table 5 for means, standard deviations, and percentages for individual level variables by latent class membership. We conducted an analysis of variance in which we examined whether the continuous perceptual outcome variables (i.e., retaliation, students intervene, adults intervene, teacher connectedness, school connectedness) varied by latent class membership. This indicated significant variation among the classes on reports of retaliation, $F = 258.5$ (4, 16,502), $p < .001$, $Cohen's d = .50$; students intervene, $F = 85.9$ (4, 16,979), $p < .001$, $d = .29$; adults intervene, $F = 107.2$ (4, 17,000), $p < .001$, $d = .35$; teacher connectedness, $F = 260.8$ (4, 16,691), $p < .001$, $d = .50$; and student connectedness,

Figure 1. Latent Class Analysis Profile Plot of Patterns of Bystander Behaviors

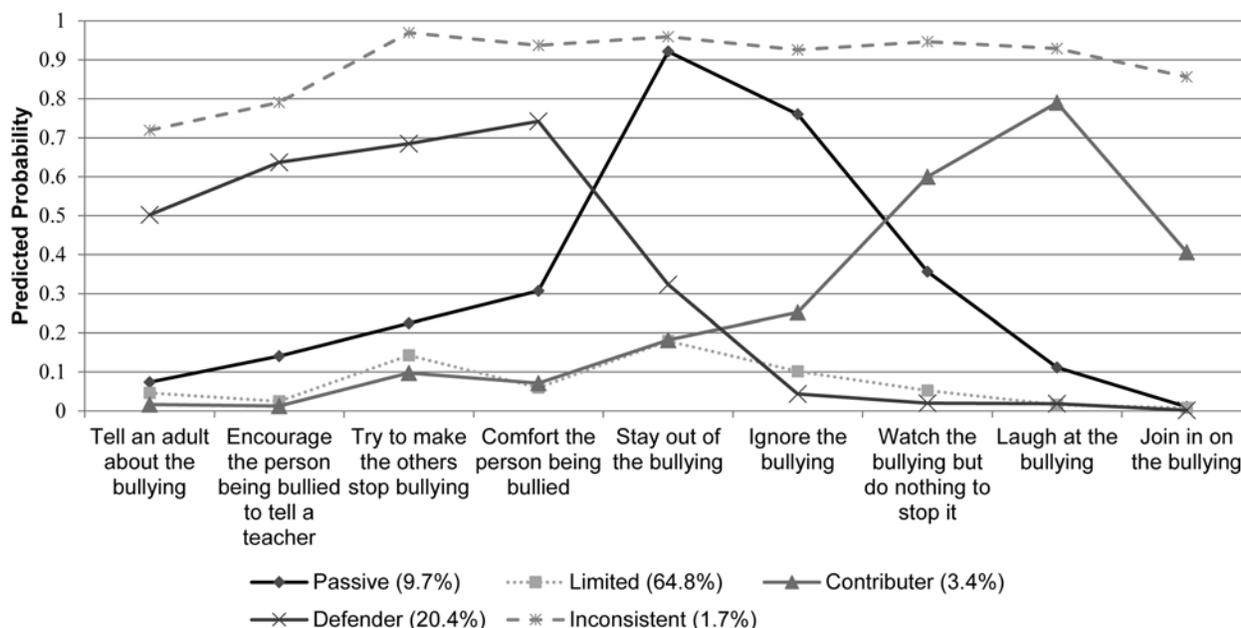


Table 4. Percentages of Grade, Race, and Gender by Class Membership

Participant Characteristics	Inconsistent	Passive	Contributor	Limited Involvement	Defenders	
Grade						$\chi^2 (12) = 48.1^{***}$
9th	22.6	31.7	26.9	29.5	33.0	
10th	26.9	28.5	27.7	25.5	25.3	
11th	24.6	21.8	22.6	23.8	22.4	
12th	25.9	18.0	22.8	21.2	19.3	
Race						$\chi^2 (16) = 160.9^{***}$
White	46.9	51.1	38.9	52.4	58.3	
Black	27.5	32.0	40.9	30.0	23.9	
Hispanic	5.2	5.4	3.7	5.1	4.6	
Asian	3.9	4.9	4.7	4.1	4.0	
Other	16.4	6.7	12.0	8.4	9.2	
Gender						$\chi^2 (4) = 718.3^{***}$
Female	27.5	58.1	31.9	48.7	70.2	
Male	72.5	41.9	68.1	51.3	29.8	

*** $p < .001$.

$F = 120.0 (4, 16,690)$, $p < .001$, $d = .35$. See Table 5 for the results of the post hoc Tukey tests.

Chi-square tests were utilized to examine the dichotomous variables by class membership. More youth in the inconsistent and contributor classes reported witnessing bullying in the past 30 days, whereas fewer youth in the limited involvement and defender classes reported witnessing bullying during this time frame, $\chi^2 (4) = 177.7$, $p < .001$. More youth in the inconsistent class reported being a victim of bullying as compared to all other classes, with the lowest percentage of those in the limited involvement class reporting being a victim, $\chi^2 (4) = 585.6$,

$p < .001$. Finally, higher percentages of those in the inconsistent and contributor classes reported being a bully, with the lowest percentage of self-reported bullies in the defender class, $\chi^2 (4) = 2,044.8$, $p < .001$. See Table 5 for all percentages.

Multilevel Logistic Regression Models

In order to better understand both individual and school characteristics of those in the defender bystander class as compared to those in more aggressive or passive classes, multilevel logistic regression models were fit. Specifically, we fit

Table 5. Means and Percentages by Latent Class Membership

Characteristics	Passive <i>M (SD)</i>	Contributor <i>M (SD)</i>	Inconsistent <i>M (SD)</i>	Limited Involvement <i>M (SD)</i>	Defender <i>M (SD)</i>
Retaliation beliefs	2.63 (0.75) ^a	3.34 (0.72)	3.14 (0.90)	2.65 (0.75) ^a	2.38 (0.76)
Students intervene	2.05 (0.79)	1.71 (0.90) ^b	1.87 (1.10) ^b	2.18 (0.84) ^a	2.31 (0.86) ^a
Adults intervene	2.60 (0.92)	2.14 (1.06) ^a	2.08 (1.19) ^a	2.71 (0.93) ^b	2.82 (0.92) ^b
Teacher connectedness	2.71 (0.60)	2.18 (0.80) ^a	2.02 (0.97)	2.74 (0.61) ^a	2.88 (0.60)
Student connectedness	2.34 (0.65)	2.02 (0.80) ^a	1.91 (0.93) ^a	2.47 (0.67) ^b	2.50 (0.67) ^b
Witnessed bullying ^c	82.0	87.6	88.9	72.0	72.3
Victim ^c	23.6	37.9	60.1	16.0	23.9
Bully ^c	14.3	65.7	64.7	12.7	7.5

Note. ^{a,b}Within rows, values with matching letters were not significantly different from each other according to Tukey's post hoc tests.

^cNumbers indicate percentages.

each model separately, contrasting it with the defender bystander class as the base class (see multilevel logistic regression results in Table 6).

Regarding the student-level predictors in the multi-level analyses, our results indicated that boys were significantly more likely to be in any bystander response class other than the defender class (see Table 6). White students

(compared to all other race/ethnic groups) were less likely to be in the contributor and limited involvement classes as compared to the defender class. Eleventh graders were more likely to be in the limited involvement class; upper-classmen (i.e., both 11th and 12th graders) were more likely to be in the inconsistent classes as compared to the defender class.

Table 6. Multilevel Models Examining Characteristics of Bystander Classes

Predictors	Passive ^a		Contributor		
	OR	95% CI	OR	95% CI	
School level ^b					
Free and reduced-price meals	0.99	(0.986, 1.000)	0.99**	(0.981, 0.997)	
% Minority students	1.01***	(1.004, 1.012)	1.01**	(1.003, 1.013)	
Enrollment	1.00	(0.988, 1.021)	0.99	(0.962, 1.014)	
Suspension rate (%)	1.00	(0.991, 1.010)	0.99	(0.984, 1.001)	
Individual level ^c					
Male	1.70***	(1.481, 1.941)	4.73***	(3.851, 5.798)	
10th grade ^d	1.16	(0.971, 1.393)	1.29	(0.957, 1.748)	
11th grade	1.02	(0.861, 1.211)	1.13	(0.847, 1.507)	
12th grade	0.93	(0.785, 1.111)	1.08	(0.820, 1.422)	
Black ^e	1.17	(0.996, 1.363)	2.26***	(1.668, 3.074)	
Hispanic	1.17	(0.900, 1.512)	1.05	(0.582, 1.879)	
Asian	1.73**	(1.167, 2.557)	0.87	(0.478, 1.575)	
Other	0.66***	(0.521, 0.841)	1.36	(0.903, 2.039)	
Retaliation beliefs	1.24***	(1.119, 1.384)	2.09***	(1.762, 2.490)	
Students intervene	0.79***	(0.719, 0.869)	0.75***	(0.617, 0.916)	
Adults intervene	0.94	(0.862, 1.021)	1.04	(0.892, 1.203)	
Teacher connectedness	0.86***	(0.726, 1.012)	0.37***	(0.303, 0.458)	
Student connectedness	0.95	(0.812, 1.119)	1.16	(0.906, 1.487)	
Witnessed bullying	1.60***	(1.372, 1.867)	1.51**	(1.117, 2.038)	
Victim	0.73**	(0.594, 0.908)	0.55***	(0.393, 0.775)	
Bully	1.90***	(1.446, 2.484)	19.36***	(14.608, 25.664)	
Unconditional τ	0.08		0.09		
Final τ	0.0300		0.0005		
Proportion variance explained	68.8%		99.4%		
		Limited Involvement		Inconsistent	
		OR	95% CI	OR	95% CI
School level					
Free and reduced-price meals	1.00	(0.993, 1.001)	0.99	(0.971, 1.005)	
% Minority students	1.00	(0.999, 1.004)	1.00	(0.996, 1.012)	
Enrollment	0.99	(0.978, 1.002)	1.00	(0.963, 1.047)	
Suspension rate (%)	1.00	(0.996, 1.007)	1.00	(0.980, 1.020)	
Individual level					
Male	2.26***	(2.065, 2.467)	5.69***	(4.051, 7.989)	

(Continued)

Table 6. (Continued)

	Passive ^a		Contributor	
	OR	95% CI	OR	95% CI
10th grade	1.12	(0.999, 1.245)	1.25	(0.849, 1.854)
11th grade	1.11*	(1.011, 1.230)	1.52*	(1.034, 2.222)
12th grade	1.12	(0.995, 1.270)	1.74*	(1.120, 2.710)
Black	1.15**	(1.043, 1.262)	1.26	(0.801, 1.994)
Hispanic	1.15	(0.978, 1.352)	1.37	(0.723, 2.582)
Asian	1.21	(0.936, 1.566)	0.62	(0.284, 1.333)
Other	0.89	(0.773, 1.023)	1.55	(0.962, 2.483)
Retaliation beliefs	1.29***	(1.213, 1.378)	1.41*	(1.032, 1.939)
Students intervene	0.82***	(0.778, 0.870)	1.23	(0.984, 1.548)
Adults intervene	0.98	(0.932, 1.041)	0.88	(0.678, 1.145)
Teacher connectedness	0.64***	(0.586, 0.706)	0.35***	(0.245, 0.486)
Student connectedness	1.22***	(1.111, 1.336)	1.11	(0.803, 1.525)
Witnessed bullying	0.99	(0.884, 1.101)	1.80***	(1.274, 2.533)
Victim	0.49***	(0.429, 0.554)	1.35	(0.941, 1.945)
Bully	1.79***	(1.495, 2.144)	14.75***	(10.357, 21.006)
Unconditional τ	0.02		0.03	
Final τ	0.003		0.001	
Proportion variance explained	84.1%		95%	

Note. CI = confidence interval.

^aThe defender class is the reference group for all analyses; ^bData provided from the participating sample of students through the self-report survey; ^cArchival school-level data provided by the state department of education; ^dNinth grade is the reference group for all grades;

^eWhite is the reference group for race/ethnicity.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Those who supported retaliatory beliefs were more likely to be in a nondefending class. Youth who perceived that other students would intervene when they witnessed bullying were less likely to be in the passive and contributor classes; however, perceiving that adults would intervene was not significantly associated with bystander class membership. Those with higher connectedness to staff had a decreased probability of being in a nondefending class. Those who had higher student connectedness had an increased probability of being in the limited involvement class as compared to the defender class.

The multilevel logistic regression analyses also indicated that youth who bully were significantly more likely to be in any bystander response class as compared to the defender class, with bullies being approximately 19 times more likely to be in the contributor class and approximately 14 times more likely to be in the inconsistent class as compared to the defender class (see Table 6). Those who were victims were less likely to be in the passive, contributor, and

limited involvement classes. Those who reported witnessing bullying in the past month had an increased probability of being in the passive, inconsistent, and contributor classes as compared to those in the defender class.

Regarding the school-level predictors in the multilevel model, those in schools with a higher percentage of minority students were slightly more likely to be in the contributor class as compared to the defender class. Those in schools with a higher percentage of students who receive free and reduced-price meals were slightly less likely to be in the contributor class as compared to the defender class (see Table 6). It is important to note that these school-level effects were all adjusted for the student-level predictors described earlier.

DISCUSSION

There is a growing interest in identifying youth who may either support or help terminate bullying behaviors, as

they play an important role in the efficacy of bystander-focused preventive interventions (Cowie, 2014; Hymel et al., 2015; Polanin et al., 2012; Salmivalli, 2014). Toward that end, we used a person-centered approach to identify patterns of bystander behaviors and the individual and contextual factors that are associated with those patterns of responses. As expected, the classes we identified generally paralleled the commonly used researcher-identified categories most often found in European studies (i.e., passive, defender, and contributor classes). However, we also identified two additional patterns of bystander responses that had not been previously characterized: the limited and inconsistent response classes. In fact, the largest proportion of youth in the current sample fell into the limited response class; these youth had the lowest probability of endorsing any of the bystander behaviors. This is similar to prior studies; for example, a longitudinal observational study of bystanders found that direct intervention occurred only 19% of the time, leaving a large majority of youth displaying a passive or limited response (Hawkins, Pepler, & Craig, 2001). Moreover, the most commonly endorsed bystander response was to stay out of the bullying. This could reflect a diffusion of responsibility, whereby individuals have the expectation that someone else will take action to stop the bullying as opposed to taking personal action (e.g., Gini, 2006; Olweus, 2001; Salmivalli, 2010). Some studies have shown that passive responses to witnessing bullying contribute to the persistence of bullying (e.g., Olweus, 2001; Salmivalli & Voeten, 2004). However, additional research is needed to examine this large proportion of youth's perceptions. For example, a descriptive study of bystander behavior showed that 43% of the students sampled reported that although they feel that they should help the victim, they do not; moreover, 24% reported that the bullying was "none of their business" (e.g., Charach, Pepler, & Ziegler, 1995). It is crucial that future studies examine the cognitive processes of witnesses to bullying to better understand and how these types of thoughts influence the eventual behavior choice.

Associations With Class Membership

With regard to demographic factors associated with LCA membership, gender appeared to be an important factor associated with bystander responses, which is consistent with prior studies (e.g., Gini et al., 2008; Salmivalli et al., 1996; Salmivalli & Voeten, 2004; Trach et al., 2010). In the present study, boys were significantly more likely to be in any bystander response category except the defender class, with a very high probability of being in the inconsistent class. This finding provides further support for the hypothesis that high school girls are more likely to display defending responses when witnessing bullying (e.g., Salmivalli, 1996; Trach et al., 2010), which may reflect their underlying tendency toward displaying greater empathy (Van der Graaff et al., 2014). It also suggests that boys are more likely to have an inconsistent pattern of responding; as such, different aspects of the specific

bullying situation (e.g., who the bully is, the number of people surrounding the situation, the form of bullying witnessed) may be more influential on boys' responses, whereas girls may not be as likely to vary their responses based on contextual factors. Future studies should further explore these possible gender differences in adolescent bystander behavior.

Finally, with regard to the individual-level covariates, normative beliefs about retaliation and aggression, as well as perceptions that others will intervene with bullying, were associated with bystander responses. Specifically, youth who endorsed retaliatory beliefs had an increased probability of being in a nondefending class. Furthermore, believing that other students also intervene with bullying was associated with defender responses. This suggests that normative beliefs about retaliation/aggression and perceptions of what peers do in response to bullying may influence youth's own responses when witnessing bullying. Similar to a study of grades 4–8 in the United States (Sandstrom et al., 2012), the perception that other peers will intervene is important for bystander responses in high school youth as well. Although there were significant associations between school-level covariates and the classes, the effects were rather small, and therefore readers should be cautious in the interpretation of those school-level effects.

Bystander Responses and Concurrent Victimization Experiences

Youth in the inconsistent class had the highest percentage reporting being a victim of bullying. This is similar to other person-centered analyses on victims' responses to bullying, where victims who displayed an inconsistent pattern of responses experienced more frequent bullying (Waasdorp & Bradshaw, 2011). Both the contributor and the inconsistent classes had a high percentage of reporting bullying others. Taken together, what might differentiate those in the contributor class from those in the inconsistent class is the victimization experience. Youth who have a history of being a victim of bullying appear to be more likely to defend victims; however, if they do so in an aggressive way, this could trigger the bully to redirect aggression toward those who defended the bully (Huising et al., 2014), in turn potentially contributing to a bully–victim cycle. The bully–victim subgroup has been found to be a qualitatively different group than all others involved in bullying, and future studies of this subgroup as it relates to bystander behavior are warranted. In fact, research suggests that bully–victims are at the greatest risk for social and emotional difficulties compared to youth who primarily bully or are primarily targets (O'Brennan, Bradshaw, & Sawyer, 2009; Waasdorp & Bradshaw, 2011). Further, the defender and passive classes had higher proportions of victims as compared to the limited involvement class, which had the lowest proportion of victims. It is important to keep in mind that those who are bystanders may also be bullies in a different situation and victims in others; thus, when researchers assign youth to only one role, this complexity can be obscured. The current findings suggest that youth's prior experiences with bullying will likely

influence how they respond as a witness. This finding could also have implications for interventions that focus on bystander behaviors; it may be advantageous for programs to appeal to youth who have prior victimization experiences, as they may be able to empathize with the experience of being bullied and feel more motivated or perhaps empowered to try to defend future targets of bullying.

The Limited Involvement Class

In the current study, there were three times as many youth in the limited involvement class as compared to the next largest group. Notably, there seem to be differences between those who are cognizant about being passive toward bullying (i.e., the passive class) and those who had limited involvement. Whereas youth in the limited involvement class may not have had as many recent experiences (with only 72% witnessing bullying in the past 30 days versus 82% of those in the passive class), the question asked what do you *usually* do, and those in the passive class may have been more comfortable admitting that they would probably do nothing versus those in the limited involvement class. Moreover, a similar proportion of those in the defender class (72.3%) reported witnessing bullying, further highlighting the difference between the limited involvement and passive classes.

Twemlow and Sacco (2013) theorized that the largest group of bystanders is confused and perhaps ambivalent (called confused-ambivalent), and this group of individuals is distinct from clearly passive youth who specifically report they would stay out of or ignore the bullying. This study provides further support for this in the limited involvement class. Twemlow and Sacco (2013) assert that those who are confused-ambivalent “do not identify with the bully and want to help the victim but lack the skills to effectively intervene. They are upset at the cruel discourse but feel powerless to help” (p. 293). Given that these youth were the largest proportion of this sample, this further suggests that this is the “ideal group in which to initially intervene” (p. 293). It is therefore important for researchers to better understand this group of youth. One related study used social network analysis and found that 90% of the children in the sample were defenders at least once (Huitsing et al., 2014); however, without using the social network methodology, these youth would have been considered uninvolved. Our person-centered approach with self-reported data revealed that the youth who displayed this pattern of behavior had a low probability of endorsing any responses. This finding may suggest that a large proportion of youth is uncertain and/or unwilling to identify as someone who “would not do anything,” yet they did not identify as someone who would actively help.

Although it is unknown if the limited involvement youth in the present study are confused or ambivalent, future studies of U.S.-based samples are needed to explore these subgroups more directly. Notably, the multilevel models suggest that those in the limited involvement class may be more socially connected and may participate less in aggressive peer

interactions (e.g., lower likelihood of being a bully), and this too could influence their bystander responses. It is therefore important to examine this limited involvement class in U.S. samples, although traditional bystander self-report measures analyzed using variable-centered methods may not identify this subgroup of students.

Measurement of Bystander Behaviors

Many of the behaviors included in bystander measures were created in Europe and applied in the United States using variable-centered methods; however, it could be that those measures may not capture a large proportion of the behaviors used by bystanders in the United States, especially in a high school sample. The large proportion of youth who did not endorse any of the responses may also reflect that the survey did not adequately cover the range of possible bystander behaviors in this large U.S.-based high school sample. It has been suggested by some researchers (Frey et al., 2015) that many bystander survey items are ambiguous, such as “try to make others stop the bullying.” A bystander could utilize a prosocial response to get others to stop the bullying (e.g., rallying other bystanders to tell the bully to stop) or use other bystanders to retaliate against the bully with a more aggressive response (Frey et al., 2015). Moreover, bystanders can “discourage the victims’ retaliation,” such as suggesting to the victim that responding in any way to the bully is worth a response. This could help the victim resist the urge to retaliate or seek revenge, thereby stemming the cycle of victimization (Frey et al., 2015). Research suggests this might occur more often when the victim is considered a friend or is in the same social network (Huitsing & Veenstra, 2012); the gender of the victim–bystander dyad may also play a role (Frey et al., 2015). Other possible responses not captured in this study are a bystander who aggressively defends a victim or one who retaliates on behalf of a victim (e.g., spreads a rumor in return). Notably, the defender class endorsed retaliation at relatively low levels, yet some studies suggest that bystander defense includes retaliation on behalf of peers (e.g., Frey et al., 2015; Hawkins et al., 2001; Huitsing & Veenstra, 2012); the lack of assessing any of the aforementioned contextual details may explain these findings. Qualitative studies or daily self-reports (Frey et al., 2015; Nishina & Juvonen, 2005) have been suggested as one way to capture bystander responses in more depth. Future studies could also focus on a broader range of possible responses and explore the extent to which the use of different bystander behaviors varies as a function of the bystander’s relationship to the victim. This may inform future studies of the full range of potential responses and how the use of specific responses varies as a function of the social or relational context.

Labeling of Classes

Our assignment of labels of the classes was informed both by prior literature as well as the defining features of a

class. What we labeled the defender class did include, similar to Salmivalli et al. (1996), behaviors that could provide support to a victim, such as telling an adult or providing comfort to the victim. The contributor class reflected the combination of reinforcing behaviors (e.g., laughing at the bullying) and assistant behaviors (i.e., joining in on the bullying; Salmivalli et al., 1996); prior research has also found that these two behaviors overlap and called this class assistor/reinforcer (e.g., Pöyhönen et al., 2012). It appears that these youth are assisting and reinforcing and thereby actively contributing to the bullying situation. The passive class is also reflected in prior research (e.g., outsider/passive responders; Pöyhönen et al., 2012). Although the term outsider has typically been used, there was a small proportion of those in the passive class who tried other behaviors that would not reflect maintaining an exclusively outsider role (e.g., watching the bullying but doing nothing to stop it, comforting the person being bullied). The current study therefore provides further support for these three patterns of behaviors among high school youth in the United States (Pöyhönen et al., 2012; Salmivalli, Voeten, & Poskiparta, 2011). However, the addition of limited involvement and inconsistent classes captures those bystanders who may not be identified when youth are assigned to one specific role. Notably, what we labeled the inconsistent class included youth who displayed a high involvement as a bystander, given they had a high probability of endorsing all of the bystander behaviors. These youth may be those who are more influenced by the contextual factors discussed and therefore may be most likely to react to bullying in different ways (e.g., if a friend is the victim, they defend; if a friend is the bully, they assist; if a friend is not involved, they are passive). Additional studies of these youth might reveal a stronger influence of peers or more exclusive friendships. Finally, the findings from the multilevel models underscore that those with similar patterns of bystander responses (i.e., those in the same class) have both individual characteristics and school contextual perceptions that are distinct from those in other classes.

Limitations

All data for the current study were cross-sectional from an online self-reporting measure; therefore, additional informants (e.g., peer, teacher) as well as longitudinal data would further inform our understanding of these findings. For example, observational data could connect what youth perceive they would do with actual behaviors, and data collected over time could uncover how youth bystander responses change across contexts. There are few studies examining the validity of the bystander measures, especially in a U.S.-based sample, despite their wide use. We assessed nine different bystander responses that were based on prior measures of bystander behaviors; as noted earlier, it is possible that youth have other responses that we did not capture or that the use of specific responses varies as a function of the relationship with the target. For example, in response to witnessing cyberbullying, youth may choose to block a hurtful post about a close friend;

however, we did not assess responses specific to cyberbullying or any particular form of bullying. In fact, there could be a plethora of factors related to bystander responses that were not assessed in the current study; for example, future studies could assess the type of bullying witnessed, how the type may influence the response choice, and if these associations vary by gender. Further, the number of bystanders, the bystander behavior of other witnesses, one's relationship with the bully and/or victim, peer norms, magnitude of fear for retaliation by the bully, the instrumental value of assisting the bully or defending the victim, location of the bullying episode, proximity of adults who could intervene, and the valence of one's relationship with teachers could all impact how a child responds to bullying. Future in-depth studies, possibly in naturalistic settings (e.g., observational data online or in school), could help examine these associations. The frequency with which youth utilize the different responses is another avenue for future research. For example, because youth who were in the inconsistent class witnessed bullying more frequently, they have more opportunities to utilize different responses. Future researchers could also have youth rate how likely they would be to engage in the behavior (on a continuous or ordinal scale) as opposed to the yes/no approach we used. This would allow for greater variability in responses. As noted earlier, when possible we used similar terms and concepts to label the classes (e.g., Salmivalli et al., 1996), but in some instances the previously used labels were not a perfect fit for our classes and did not reflect the heterogeneity in classes that we were able to model using the LCA approach; in fact, we believe the pattern of findings revealed through the exploratory use of LCA highlights one of the unique contributions of this article, over and above typical confirmatory approaches (e.g., factor analysis or other variable-centered approaches).

It is important to note that this study only examined high school youth. The developmental literature indicates that multiple factors likely to influence bystander response, such as levels of empathy, social perspective taking, or moral disengagement, vary during the transition from childhood to adolescence (e.g., Barlińska, Szuster, & Winiewski, 2013; Hymel, Rocke-Henderson, & Bonanno, 2005; Thornberg & Jungert, 2013); therefore, additional research is needed among elementary and middle school youth to better understand variation in bystander responses and determine the extent to which these findings generalize to younger youth. Finally, we modeled school contextual factors as individual level perceptions; however, group norms and behaviors of bystanders can even impact a victim's responses to bullying (Lindstrom Johnson et al., 2013). As such, future studies could examine the impact of the broader school climate at the school level and the associations with individual responses (e.g., general norms related to bullying, existence of school policies).

Implications for Research and Practice

An important finding of this study with regard to implications for interventions is related to connectedness to adults

at the school. We found that feeling less connected to adults differentiated those in the passive, contributor, limited involvement, and inconsistent class from those in the defender class. In a prior study of teacher connectedness and bullying, the more connected teachers were to their students, the more comfortable the student were intervening with bullying (O'Brennan et al., 2014). The current study advances prior research by suggesting that students who are more connected to adults at school may also be more likely to positively intervene on behalf of a victimized peer. For school psychologists, it is crucial to raise awareness of the importance of bystanders in the perpetuation of bullying. Specifically, the results of this study highlight that a large proportion of youth may witness bullying and not defend the victim; school psychologists should be cognizant of potential factors that might be associated with the type of response a student displays when witnessing bullying (e.g., if they have previously been a victim). Furthermore, school psychologists could challenge students' perceptions of what others would do when witnessing bullying, given that normative beliefs of what peers would do is likely to influence their behaviors.

CONCLUSION

Increasing defender responses to witnessing bullying appears to be a promising approach to stemming bullying (Cowie, 2014; Hymel et al., 2015; Salmivalli, 2014). Consistent with a systemic model of school violence, bystanders can impact bullying, as "the victim is the product of the bully's social action on behalf of a group of abdicating bystanders" (Twemlow & Sacco, 2013, p. 290); therefore, increasing positive bystander responses will likely decrease bullying. The results of the current study indicate that the majority of youth has a relatively low likelihood of demonstrating an active pattern of bystander behavior (be it positive or negative). These findings do not suggest that active bystander responses to witnessing bullying are the norm. In fact, the most frequently endorsed responses were to stay out of the bullying (36%) and to try to make others stop bullying (33.1%). These findings also suggest that it may be instructive to consider the variation in the types of behaviors displayed; as compared to the traditional dimensional approach to measuring bystander behavior among adolescents utilizing LCA, more variability is uncovered. Programming to increase positive bystander behavior would benefit from a better understanding of the characteristics and aspects of the school context that could be associated with the heterogeneity of responses that youth demonstrate. This study contributes to that literature, finding that youth perceptions of others' bystander behavior, connectedness, norms about retaliation, and individual characteristics, including gender, are all associated with bystander behavior.

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Date Received: December 12, 2016

Date Accepted: October 26, 2017

Associate Editor: Erin Dowdy ■

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