Article

Experiences Versus Perceptions: Do Students Agree That They Have Been Bullied?

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Abstract

Each year, an estimated 30% of school children experience bullying by their classmates. While research has explored the prevalence of bullying, the causes of bullying, and the consequences of bullying, less attention has been focused on understanding how students define bullying experiences. Utilizing a school-based sample of students ranging from fifth to eighth grade, we examine the concordance between the experience of situations defined as "bullying" to the opinions of students as to whether they felt "bullied." On average, one third of students report a mismatch between their victimization experiences and their perceptions of being bullied. Logistic regression analyses suggest that the characteristics of students who do not label victimization experiences as bullying differ based on the bullying behavior specified. We examine the students most likely to label bullying and victimization differently and suggest how these findings can be incorporated by school administrators and researchers to better understand how students experience bullying.

Keywords

bullying, school-based victimization, adolescents, perceptions

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Introduction

Bullying is a national issue due in part to the very serious consequences of such behaviors (Calvete, Orue, Estévez, Villardón, & Padilla, 2010; Juvenon & Gross, 2008; Mesch, 2009; Patchin & Hinduja, 2010). Studies show that both bullies and victims can experience emotional distress, depression, low school commitment and performance, substance use, suicidal ideation and self-harm, and delinquency (Bonanno & Hymel, 2013; Burgess-Proctor, Patchin, & Hinduja, 2010; Dehue, Bolman, & Vollink, 2008; Hay, Meldrum, & Mann, 2010; Hinduja & Patchin, 2010; Raskauskas & Stoltz, 2007; Schneider, O'Donnell, Stueve, & Coulter, 2012). While much research has rightly concentrated on these consequences, as well as the prevalence and causes of bullying, less attention has focused on understanding the students' perspectives and whether their perceptions of bullying match the definitions of bullying used in research.

Although there is mixed consensus of what constitutes bullying, Olweus's (1993) definition is generally considered the best. This commonly used definition characterizes bullying as "aggressive behaviors that are repeated and involve a power imbalance favoring the perpetrator" (Olweus, 1993, p. 9). A more recent definition proposed by the U.S. Department of Education to address the lack of a uniform definition in research and schools shares the main components of the Olweus (1993) definition. This new definition classifies bullying as

> any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm. (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014, p. 7)

In the traditional bullying literature, scholars have generally endorsed these characteristics of bullying, but in practice, the measurement of these components in research has been inconsistent (Cascardi, Brown, Iannarone, & Cardona, 2014; Esbensen & Carson, 2009; Vivolo-Kantor, Martell, Holland, & Westby, 2014). Furthermore, cyberbullying scholars dispute these accepted features of bullying because they often do not apply in virtual bullying. For instance, a person may post a mean comment or scandalous picture just once, but being viewed by hundreds or thousands of people can make it harmful beyond intent. Cyberbullying studies show that the oft-cited criteria of repetition and power imbalance may not apply to the newest forms of indirect bullying (Wolak, Mitchell, & Finkelhor, 2007). Most importantly, the

few studies of students' perspectives show that children's descriptions of bullying tend to differ from adults' definitions (Boulton, Bucci, & Hawker, 1999; deLara, 2012) and rarely include the components of repetition and power imbalance (Cuadrado-Gordillo, 2012; Guerin & Hennessy, 2002; Vaillancourt et al., 2008).

A consistent definition of bullying that addresses student experiences with both traditional and cyberbullying is important; lack of agreement can affect identification of bullying and the subsequent response. Not surprisingly, student definitions of bullying affect the reporting of these behaviors. Ybarra, Boyd, Korchmaros, and Oppenheim (2012) demonstrated that student self-reports varied by the definition provided, which affected the prevalence of bullying. In turn, the reporting of these behaviors influences interventions. If students misclassify behaviors as bullying (or not), then prevention programs designed around these "adult" definitions of bullying are not necessarily targeting the behaviors experienced. Investigating whether researchers' definitions of bullying match student perceptions of bullying is vital. Our current study examines the level of agreement between experiences with traditionally defined bullying behaviors and student perceptions of having been bullied. Specifically, we determine whether correspondence between experiences and perceptions vary by type of bullying behavior (physical, relational, and cyber) and whether there are gender, race, and age differences.

Definitional Issues

The concept of bullying encompasses a range of behavior. While bullying is a broad concept, bullying researchers have identified several consistent categories. Bullying is typically divided into four separate typologies: physical, verbal, relational, and cyberbullying. Physical bullying is characterized by the use of physical force; examples of this include pushing, kicking, or hitting. Verbal bullying, the use of communication (oral or written) to cause harm, includes teasing, taunting, or threatening. Relational bullying is meant to damage a youth's reputation or relationships and includes excluding youth from social groups and spreading rumors. Cyberbullying is the newest type of bullying, and defining this behavior has been challenging (Thomas, Connor, & Scott, 2015). However, it is typically defined as the "willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices" (Hinduja & Patchin, 2010, p. 5).

There are also three definitional elements of bullying, which include intent to harm, repetition of bullying behavior, and a power imbalance between the bully and the victim. These themes are consistently mentioned by bullying scholars as vital in differentiating bullying from behaviors such

as peer victimization (Hunter, Boyle, & Warden, 2007). Peer victimization is classified as abuse among peers that occurs when a youth is the frequent target of peer aggression (Hunter et al., 2007). Bullying is different from peer victimization because in addition to repetition, the element of power imbalance is also involved. As illustrated above, it can be difficult to operationalize bullying in research and fully grasp the totality of the experience.

Student Perception of Bullying

When debating the definition and measurement of bullying, researchers often fail to consider the student perspective. Understanding the perspective of students is important because it may affect the reporting of bullying behavior. Previous studies have generally found that students do not place great emphasis on bullies' intent, the perceived or actual power imbalance, and particular types of bullying, such as social exclusion (Cuadrado-Gordillo, 2012; Guerin & Hennessy, 2002; Naylor, Cowie, Cossin, de Bettencourt, & Lemme, 2006; Vaillancourt et al., 2008). These studies have also demonstrated that the way researchers present bullying in surveys can affect the students' reports of bullying. Ybarra et al. (2012) found that listing behaviors without providing a definition or including the word bullying could lead to higher prevalence rates. Furthermore, there are a number of studies that have identified differences in students' definitions of bullying, stratified on age, gender, and race (Agatston, Kowalski, & Limber, 2007; Boulton et al., 1999; Connell, El Sayed, Reingle Gonzalez, & Schell-Busey, 2015; Holfeld & Grabe, 2012; Mishna, Saini, & Solomon, 2009; Monks & Smith, 2006; Smith, Cowie, Olafsson, & Liefooghe, 2002).

The age of students is an important and often cited demographic characteristic that can change student's perspective on bullying (Boulton et al., 1999; Monks & Smith, 2006; Smith et al., 2002). Generally, findings suggest that older students have more sophisticated definitions of bullying, recognizing the common themes of bullying such as repetition and power imbalances (Monks & Smith, 2006; Naylor et al., 2006). Also, older students are more likely able to identify nuanced forms of aggression, such as relational bullying, compared with younger students who only can identify aggressive and non-aggressive behaviors such as physical versus verbal bullying (Smith et al., 2002). However, younger children are more inclusive in the types of bullying behaviors that they include in their definitions; elementary school children are more likely to classify any kind of aggressive behavior as bullying (Monks & Smith, 2006).

Gender is also another noted demographic characteristic to consider when discussing students' perceptions of bullying. A significant amount of empirical

evidence suggests that female students consider cyberbullying to be a significant problem and potentially worse than traditional bullying (Agatston et al., 2007; Holfeld & Grabe, 2012; Mishna et al., 2009). Findings also consistently suggest that female students are more likely than males to identify verbal and relational types of negative behavior as bullying (Naylor et al., 2006). While both male and female students are likely to focus on direct forms of bullying, male students are much more likely to consider physical types of negative behavior as bullying compared with their female counterparts. Finally, female students are much more likely to include the victims' feelings in their definitions of bullying (Naylor et al., 2006).

Race effects are still unclear with regard to definitional differences and similarities. Connell et al. (2015) investigated ethnic differences regarding bullying behavior and victimization in a diverse sample of students. Self-reported bullying behaviors were most common among Black students, and peer victimization most commonly reported among White and Asian students. While this study did not investigate definitional issues, it illuminates how students of different ethnicities report their own bullying behaviors and their perceptions of their peers' behaviors.

Other factors known to affect students' experiences with bullying include students' commitment to conventional beliefs and school climate. Research on perceptions of bullying has demonstrated a connection between students' attitudes toward bullying and their involvement in bullying (Boulton et al., 1999; Cuadrado-Gordillo, 2012). For instance, Boulton et al. (1999) used 210 Swedish and English secondary school pupils and reported that anti-bullying beliefs significantly predicted lower levels of involvement in bullying. School climate refers to the "quality and character of school life" (Bosworth & Judkins, 2014, p. 301). Research on bullying in general has shown that a positive school climate acts as an important protective factor against bullying (Bosworth & Judkins, 2014; Connell et al., 2015; Cunningham, 2007; Olweus, 1993; Klein et al., 2012; Swearer et al., 2010), and studies have suggested that school climate may impact teachers' perceptions of bullying (Demaray et al., 2013). However, very little research has investigated whether school climate might also affect students' perceptions of bullying. Bradshaw, Sawyer, and O'Brennan (2007) examined differences in student and teacher perceptions of school climate and bullying but did not determine whether there was a relationship between those two variables. To improve on this past research, we include measures of both student beliefs and school climate.

In this study, we seek to understand the ways that students define victimization experiences as bullying. The current lack of consensus in how students perceive bullying has the potential to negatively affect programs and policies designed to combat bullying. Without a better understanding of the behaviors

that students consider bullying, programs and policies may not adequately address student experiences and are more likely to be ineffective. Most studies that have investigated this issue ask participants to define or identify bullying behaviors through surveys, interviews, cartoons, or vignettes. We investigate this issue in a unique way by examining the amount of correspondence between student self-reported experiences with certain victimization experiences and their perception that they have been bullied. Using a sample of fifth- to eighth-grade students, we determine how this correspondence between experiences and perceptions differs by demographic variables and type of behavior studied. Our research question and hypotheses are as follows:

Research Question 1: What are the predictors of a mismatch between students' experiences with bullying victimization and their perceptions of having been bullied?

Hypothesis 1: Gender, age, and race will influence the mismatch between students' experiences with any form of bullying victimization and their perceptions of having been bullied.

Hypothesis 2: Gender, age, and race will influence the mismatch between students' experiences with traditional physical bullying victimization and their perceptions of having been bullied.

Hypothesis 3: Gender, age, and race will influence the mismatch between students' experiences with relational bullying victimization and their perceptions of having been bullied.

Hypothesis 4: Gender, age, and race will influence the mismatch between students' experiences with cyberbullying victimization and their perceptions of having been bullied.

Method

Participants

Data for these analyses were originally collected as part of a statewide evaluation study, in the mid-Atlantic region of the United States, of social norms bullying prevention programs in schools over a period of 5 years. The surveys included in the current analysis come from 14 schools that participated in the research study between 2008 and 2011; these years are the focus of this study because questions related to cyberbullying were included in the survey instrument during this time. All data reported here were collected prior to the implementation of a bullying prevention project so that we could analyze

students' perceptions without concern about the program altering their views on bullying.

Schools participating in the project came from a cross-section of the state. Because the project lasted for 5 years, all schools in the state were invited to participate. Schools participated for 2 years. Extra resources were devoted to ensure that all regions of the state were represented throughout the course of the project and in each annual cohort. The current analysis includes data from schools in all regions of the state; this state is located in the mid-Atlantic and can be considered small and densely populated, which made it easy for the State Department of Education to ensure all regions were represented.

Anonymous online surveys were administered to students in Grades 5 to 8 in each of the participating schools 3 months into the school year (approximately mid-November). While all schools in the state were eligible to participate in the bullying prevention program and subsequent evaluation, the schools participating during these years comprised mainly of students in Grades 5 to 8 following traditional middle school state curriculum. Middle school students may be especially vulnerable to bullying and victimization, as research on trends in bullying suggest that they report higher levels than do high school students (Smith, Madsen, & Moody, 1999), making them an ideal population for this inquiry. These surveys contained a variety of constructs, including questions about school experiences, bullying and victimization experiences, avoidance behaviors, and weapon carrying. In addition, self-identified demographic characteristics were included. Students were asked about victimization *separately* from being asked about feeling bullied, allowing us to better unpack the relationship between victimization experiences and perceived bullying. A total of 4,372 students completed a survey, for an average participation rate of approximately 45%. Table 1 provides summary statistics of the sample, as well as comparison information for the school and state demographics. The sample demographics differ slightly from the school and state levels, with 46% of the sample identifying as male compared with 52% at the school level and 50% at the state level. In addition, our sample, while diverse, is 62% White, compared with 52% at the school level and 56% at the state level. The student sample was on average 12.4 years old ($SD = 1.10$) and in seventh grade.

Procedures

All surveys were administered in November, approximately 3 months into the school year. An active consent form process was utilized, as per state policy, where students returned signed parental/guardian consent forms to be eligible to participate in the survey. During the survey procedure, an assent process

Table 1. Demographic Characteristics of Sample, School, and State.

Demographic statistics	Sample $N = 4,372$	School level[a] $N = 8,805$	State[b] $N = 398,911.5$
% male	46	52	50
% White	62	52	56
Mean grade level	7	—	—
Mean age (years)	12.4 ($SD = 1.10$)	—	—

[a]School-level demographics were aggregated for the 14 participating schools.
[b]Numbers for all students enrolled in Grades 5 to 8.

was also used, so that students were free to decide not to participate in the survey or to stop without penalty at any time. Students were brought into a separate computer lab during school hours and were invited to take the survey, which took approximately 25 to 30 minutes, using an anonymous online link. All procedures were approved in advance by the university's Institutional Review Board (IRB) Office as well as the State Department of Education.

Rates of school participation ranged from 16.1% to 72% of the student population (with an average rate of participation of 48.8%). The sample population has slightly higher participation of females and White students, which is consistent with the fact that many minority communities are reluctant to participate in research given past victimization, before IRB protocols were commonplace (Freimuth et al., 2001; Katz et al., 2006). Schools were given a great deal of latitude with regard to incentivizing participation by their students, with the understanding that the administration would know better than the research team what would appeal to the student population. Some schools were more successful than others. Schools that allowed absent students to take the survey on alternative dates/class periods were the most successful in obtaining high rates of participation, as were those who used non-monetary incentives in the classroom, such as "free" homework passes (i.e., no penalty for a missed homework) and access to school resources (i.e., extra Internet time). Post hoc analyses indicated that despite less than 100% participation, most schools were able to collect surveys from a cross-section of students that was very similar to the school population in terms of gender, race, and grade (results available from authors).

Measures

Victimization. Students were asked about their school-based victimization experiences in the 3 months prior to survey administration. This section came

Table 2. Correspondence Between Victimization and Bullying Perceptions.

Victimization (N = 4,372)	Male % reporting/% felt bullied	Female % reporting/% felt bullied	White % reporting/% felt bullied	Non-White % reporting/% felt bullied	KR 20
Any victimization	69.6/59.7	71.2/58.3	71.3/88.8	70.8/89.9	0.8205
Traditional victimization	51.8/63.4	45.3/62.3	47.0/61.5	50.6/68.4	0.6308
Relational victimization	59.0/66.1	45.3/62.3	61.3/82.8	59.7/84.6	0.7482
Cyber victimization	17.9/64.1	30.1/64.6	26.0/34.7	22.2/31.3	0.7014
Ever felt bullied	46.7%	46.9%	49.9%	41.6%	—

Note. KR = Kuder–Richardson.

in the first third of the survey, after initial questions about their school experiences. The section was introduced with the following question: "In the last 3 months, have any of these things happened to you?" This was the first section of the survey to ask about any personal experiences; the preceding section only asked about opinions. These items include those most often used to measure bullying in surveys from previous bullying and delinquency research (Crick & Nelson, 2002; Olweus, 1994; Smith et al., 2002).

As seen in Table 2, 70.9% of students report having been victimized by at least one of these 12 behaviors in the past 3 months. To better understand the types of victimization that students most consider bullying, we include subanalyses of the types of victimization reported by students. This is a breakdown of the 12 types of victimization that, aggregated, form the *any victimization* variable. These include five items for *traditional victimization* (being hit, pushed, shoved, kicked, or tripped; being threatened with a beating; having things damaged on purpose; had some of your things stolen; having someone use force or a weapon to get something from you), four items for *relational victimization* (being teased in an unfriendly way; being excluded from a group on purpose; getting called hurtful names; having an unkind rumor spread about you), and three items for *cyber victimization* (having someone post unkind or hurtful things about you on the Internet; having someone call, text, or email mean things to you; and having someone instant message [IM] you to say unkind or hurtful things). These are also described in Table 2. Students were most likely to report relational victimization (60.5%), followed by traditional victimization (48.2%) and cyber victimization (24.6%).

Kuder–Richardson (KR) statistics were calculated for each index and are also listed in Table 2. These statistics are interpreted similarly to a Cronbach's alpha statistics such that the same levels of magnitude are traditionally applied, with reliability coefficients higher than .60 determined to be of meaningful strength (Bartko, 1976). As seen in Table 2, all indices reached traditional levels of reliability.

We do acknowledge, however, that the *Traditional Victimization* scale has reliability coefficients lower than generally preferred and we turn to principal components factor analysis to more thoroughly examine its utility as a scale, as has recently been suggested by medical and epidemiological research (Sijtsma, 2009; Tavakol & Dennick, 2011). Examination of the factor structure for these five items shows a robust one-factor solution (eigenvalue = 2.11) and factor loadings of .55 or higher for each behavior (being hit, pushed, shoved, kicked, or tripped = .71; being threatened with a beating = .72; having things damaged on purpose = .70; had some of your things stolen = .55; having someone use force or a weapon to get something from you = .55). For the sake of space, we do not report factor loadings for the scales with conventionally acceptable high levels of reliability but they are available from the authors.

Been bullied. Students were also asked, independently of questions relating to victimization in the past 3 months, whether they had felt bullied at school. This was the last question on the survey, before students were asked about their demographic characteristics. Students were not given a strict definition of bullying to get a sense of their personal perceptions. Students responded with either a yes or no. As seen in Table 2, 46.8% of students responded that they had felt bullied at school.

To understand the correspondence between student experiences and perceptions, we first examined the extent to which students who did report recent victimization *also* reported feeling bullied. Table 2 reports these results for the entire sample for each type of victimization. Approximately two thirds of students who report victimization also report that they were bullied, lending reliability to the ways in which researchers traditionally measure bullying experiences. What is interesting, however, is that a not insignificant percentage of students are being victimized but do not perceive such victimization as bullying. Our aim is to examine differences between students whose experiences matches their perceptions with those whose do not.

Dependent Variable

Mismatch. To create a variable that illustrated the mismatch between experiences and perceptions, students who reported *any* of the three types of

victimization (traditional, relational, or cyber victimization), but did *not* report feeling bullied at school, were coded as mismatched in their perceptions (1) versus those whose perceptions matched (0). Overall, 34.1% of the sample reported a mismatch between experiences and perceptions. To account for the fact that differences between experiences and perceptions may differ by type of bullying, we examine this mismatch for both any victimization as well as the three individual types of victimization (traditional, relational, and cyber).

Demographic information. Students self-reported their gender (0 = female and 1 = male). As noted in Table 1, 46% of the sample was male. Students also reported both their age and their grade. Due to high multi-collinearity between the two, only age is used in the models reported here. Racial characteristics are also investigated in these analyses. Race was coded as a dichotomous variable, with 0 = White and 1 = non-White; unfortunately, the small numbers of students who identified within each of the non-White racial/ethnic categories limit our analyses to this dichotomous measure.

Grades. To better control for a student's experience at school, we controlled for school grades in these analyses. Grades were self-reported by the students, who were able to choose from the following categories: Mostly A's, About Half A's and Half B's, Mostly B's, About Half B's and Half C's, Mostly C's, About Half C's and Half D's, Mostly D's or below. Responses were coded so that higher numbers indicate higher (better) grades. Prior research on the validity of the use of self-reported grades for certain academic outcomes (see Kuncel, Credé, & Thomas, 2005, for a detailed explanation) gives us confidence that self-reported grades should accurately reflect general student attainment.

Self-reported bullying behavior. To recognize the fact that an individual's behavior may impact their perceptions, we control for self-reported bullying behavior with an index. Students were asked if they had, in the previous 3 months, engaged in any of the traditional, relational, and cyberbullying behaviors (listed above in "Victimization" section). Students answered each question as yes/no and a self-reported bullying index was created. Table 3 shows the descriptive information for this scale; a total of 45% of students reported engaging in at least one bullying behavior, with students reporting an average of just over one behavior. A KR reliability statistic was calculated and deemed acceptable at .7953.

Conventional beliefs. Students were asked questions about their beliefs on conventional behaviors, including those pertaining to bullying. From these

Table 3. Scale Descriptives.

Scale	No. of items	Minimum	Maximum	*M* (*SD*)	KR 20
Self-Reported Bullying	10	0	10	1.19 (1.86)	0.7953
Conventional Beliefs	3	0	3	2.73 (0.71)	0.7798
Others' Victimization	12	0	12	5.04 (3.41)	0.8550
School Climate	13	1	13	9.68 (2.08)	0.5867

Note. KR = Kuder–Richardson.

questions, two scales were created. The first captures student opinions on the acceptability of three actions. Students were asked how wrong each of the following behaviors were: to purposely damage or destroy another's property, to hit or threaten to hit someone, and to steal someone else's property. Each question was coded as "not wrong" = 0 and "wrong" = 1. A *Conventional Beliefs* scale was created by summing these items, so that a score of 0 indicates that the student believes none of the behaviors are wrong and a score of 3 indicates that a student believes all of the behaviors are wrong. This scale has mean of 2.73 ($SD = 0.71$) and a KR 20 reliability coefficient of .7798. Additional descriptives are presented in Table 3. Students were also asked their opinion on the following statement: "sometimes you have to bully to get respect." Of the respondents, 16.8% responded *true* (1).

Perceptions of others' victimization. Students were asked about their perceptions of the victimization experiences of same aged peers. These were the same victimization experiences that students reported. Students were asked to answer whether or not their same aged peers experienced traditional, relational, and cyberbullying behaviors (listed above in "Victimization" section) in the previous 3 months. Eighty-seven percent of students reported that they believed their peers experienced some type of recent victimization, with a perception that, on average, peers were the victim of five types of victimization experiences. The KR statistic for this index is .8550. Additional descriptives are presented in Table 3.

School Characteristics

School climate. Students were asked to describe their school experience. A School Climate scale was adapted from the Newhouse Classroom Environment

Scale (Newhouse, 2001). Through the use of principal components analysis, 13 items were used to create the scale here. Students were asked to report whether each of the following items was "mostly true" or "mostly false": "I feel like I belong at this school"; "I wish I did not attend this school"; "this school is a pretty good school to go to"; "students really like this school"; "friendships are made in this school"; "groups of students do not get along together in this school"; "the teachers care about how students feel in this school"; "the teachers are more like friends than an authority"; "the teachers go out of their way to help the students"; "the teachers embarrass the students for not knowing the right answers"; "there are very few rules to follow"; "if a student breaks a rule in this school, they are disciplined"; and "the teachers will send a student out of class if he or she does not behave." Items were coded such that a "1" is indicative of a positive school experience response and a "0" is a negative experience. A summed scale was created, with a mean of 9.68 ($SD = 2.08$) and a KR statistic of .5867. Higher values indicate a more positive school climate. Additional descriptives are presented in Table 3.

We once again acknowledge that the reliability coefficient and turn to principal components factor analysis. The 13 items returned a three-factor solution (eigenvalues were 2.58, 1.36, and 1.20 respectively). Given the potential complexities of measuring school climate, a multidimensional construct is not without precedent (Newhouse, 2001). Eight items loaded on Factor 1 ("feel like I belong at this school" = .52; "I wish I did not attend this school" = –.57; "this school is a pretty good school to go to" = .61; "students really like this school" = .57; "groups of students do not get along together in this school" = –.36; "the teachers care about how students feel in this school" = .59; "the teachers go out of their way to help the students" = .55; "the teachers embarrass the students for not knowing the right answers" = –.45), three on Factor 2 ("friendships are made in this school" = –.37; "the teachers are more like friends than an authority" = .48; "there are very few rules to follow" = .41), and two on Factor 3 ("if a student breaks a rule in this school, they are disciplined" = .67; "the teachers will send a student out of class if he or she does not behave" = .66).

Along with taking direction from the epidemiological research (i.e., Sijtsma, 2009; Tavakol & Dennick, 2011), we also point to the use of similar measures in school climate scales, specifically the regularly used Trickett and Moos (1973; Moss & Trickett, 1974) scale. For methodological consistency as well as the ability to compare between studies, the entire scale seems appropriate for this research. Additional iterations of the school climate scale were analyzed (results available from the authors) and showed no substantive differences in results.

Analytic Technique

Due to the dichotomous nature of the dependent variable of interest, mismatch between experiences and perceptions, we utilize logistic regression models to understand the relationship between individual and school characteristics and perceptions. All analyses were carried out in STATA 15.0. In addition, we utilize the cluster command in STATA 15.0 to account for the fact that individual students are nested within schools. Because there were 14 schools included in this sample, we were concerned about school-level effects. Preliminary analyses of intraclass correlation coefficients (ICCs) revealed that between-school variation ranged from 0.01% to 0.07%, thus further use of multilevel models was not appropriate for the data. However, we acknowledge that school-level variation is an important component for our models. We estimated all models both while controlling for school placement and with a cluster command. Substantive results were the same; for clarity, we present the models here with cluster command for robust standard errors.

Results

Table 4 reports the results for the final models for all four types of victimization: any, traditional, relational, and cyber victimization. Several trends stand out with regard to the characteristics that best predict whether students perceive victimization as bullying. We describe each model separately.

In Model 1, we examine the odds of a mismatch between reports of having felt bullied and any type of victimization. Male students, $\beta = -.173$ (.06), $p < .01$; White students, $\beta = -.152$ (.06), $p < .01$; and students with higher grades, $\beta = -.072$ (.03), $p < .01$, reported a lower odds of perceiving a mismatch in experience and label. In addition, students with higher perceptions that their peers are being bullied, $\beta = -.049$ (.01), $p < .001$, also reported of lower odds of a mismatch.

For traditional and relational bullying behaviors, similar trends are noted. In Models 2 and 3, we see that only gender is a significant predictor of the odds of reporting a mismatch between experience and naming the experience "bullying," with males having lower odds of a mismatch between both traditional and relational victimizations and bullying identification.

In Model 4, we see several differences with regard to experiences of cyber victimization and perceptions of feeling bullied. Male students, $\beta = .269$ (.07), $p < .001$, reported higher odds of reporting a mismatch between experiences and naming them as bullying, as did students who believe that it is important to bully to get respect, $\beta = .270$ (.06), $p < .001$, and those who

Table 4. Logistic Regression of Mismatch of Experience and Bullying Perception ($N = 3,422$).

	Model 1: Any		Model 2: Traditional		Model 3: Relational		Model 4: Cyber	
	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR
Male	−.173 (.06)**	0.84	−.179 (.08)*	0.84	−.206 (.06)***	0.81	.269 (.07)***	1.31
White	−.152 (.06)**	0.86	.070 (.07)	1.07	−.020 (.08)	0.98	.139 (.10)	1.15
Age	−.041 (.03)	0.96	−.040 (.04)	0.96	−.026 (.04)	0.97	−.139 (.04)***	0.87
Grades	−.072 (.03)**	0.93	−.017 (.04)	0.98	−.069 (.04)	0.93	−.026 (.03)	0.97
Self-report bully	.021 (.02)	1.02	.002 (.01)	1.00	.014 (.02)	1.01	.001 (.03)	1.00
Conventional beliefs	−.014 (.06)	0.99	.035 (.05)	1.04	−.090 (.07)	0.91	.051 (.06)	1.05
"Bully to Respect"	.125 (.11)	1.13	.203 (.12)	1.22	.147 (.11)	1.16	.270 (.06)***	1.31
Others' victimization	−.049 (.01)***	0.95	−.011 (.01)	0.99	−.007 (.01)	0.99	.067 (.02)***	1.07
School climate	.017 (.03)	1.02	−.030 (.01)	1.00	.006 (.03)	1.01	−.049 (.02)**	0.95
Pseudo R^2	.0095		.0027		.0047		.0186	

Note. OR = odds ratio.
*$p < .05$. **$p < .01$. ***$p < .001$.

perceive their peers experience higher levels of victimization, $\beta = .067$ (.02), $p < .001$. Older students, $\beta = -.139$ (.04), $p < .001$, and those who report higher levels of positive school climate, $\beta = -.049$ (.02), $p < .01$, have lower odds of reporting a disjuncture between experiencing cyber victimization and naming it as bullying.

Discussion

Looking at our results, several interesting findings emerge. First, males are generally less likely to perceive a mismatch between an experience and labeling it as bullying for the more stereotypical bullying events. This could be because males are typically more likely to report experiencing traditional victimization, such as physical bullying (Nansel et al., 2001; Siann, Callaghan, Glissov, Lockhart, & Rawson, 1994). Such experiences are discussed so much that it may be easier for boys to recognize the behaviors for what they are. This changes with regard to cyberbullying; for these experiences, males report higher odds of a mismatch. This could be because boys are less likely to consider cyberbullying a problem when compared with girls (Agatston et al., 2007; Holfeld & Grabe, 2012; Mishna et al., 2009). In addition, boys could be less sensitized to the issues related to cyberbullying than girls, in part because they are less likely to engage in cyberbullying (Connell et al., 2014) or because the types of harms related to cyberbullying may be less damaging to boys than to girls. For example, girls' reputations can be more damaged after pornographic pictures of them have been shared or posted online.

Also striking is that being aware of others' victimization experiences (or at least perceiving that others are victimized) predicts the odds that students will report a mismatch for cyberbullying but not for other kinds of bullying. In fact, students who perceive that their peers are victimized report lower odds of a mismatch between experience and perception when all behaviors are included. This speaks to the importance of understanding the way students perceive different types of experiences. For cyberbullying, it could be that students are comparing their situations with others' experiences and, in doing so, have determined that their own situation does not reach the level of bullying. They are separating out their experiences from those of their peers. Another explanation could be that the perception that others are victimized leads to a normalization of cyberbullying. Students may think that if everyone experiences it, it must be acceptable. The dialogue around cyberbullying is still comparatively recent and students in this particular sample may not have been as primed to recognize cyberbullying as today.

We also point to the fact that for cyberbullying, students who report higher levels of school climate report lower odds of a mismatch; they are more likely to label their experiences as bullying. Research on bullying has shown that a positive school climate acts as an important protective factor against bullying (Bosworth & Judkins, 2014; Connell et al., 2015; Cunningham, 2007; Olweus, 1993; Klein et al., 2012; Swearer et al., 2010). Our findings indicate that school climate also appears to help students recognize cyberbullying as a form of bullying behavior. Generating a feeling of safety in school may allow students to recognize when they are not feeling safe, even when the bullying is virtual in nature. School climate did not have the same effect for traditional forms of bullying. This finding could be due to the recent attention given to cyberbullying in the media, which could sensitize students to the issue. Students who report higher levels of school climate may be in schools with stronger environmental prevention approaches that underscore the importance of good civic behavior both on and off the Internet, which could affect student perceptions of cyberbullying.

Certain characteristics also serve to decrease the odds of a mismatch between experiences and perceptions of being bullied for a variety of experiences, specifically having higher grades and being older. Older students have more social experience, and thus may be more likely to understand the nuances between intent and harm, compared with younger students (Boulton et al., 1999; Monks & Smith, 2006; Naylor et al., 2006). In addition, older students are exposed to more information about bullying and its harms, giving them more reasons to equate victimization with bullying. Students with higher grades may also be more aware of the nuances between intent and harm. It is also possible that students with higher grades are more likely to be teased or bullied, making them more sensitive to the experience and thus more likely to report all victimization as bullying.

Race significantly predicted a mismatch in limited cases. White students had lower odds, compared with non-White students, to report a mismatch between victimization and being bullied (for any type of victimization). This could be related to the fact that non-White students are more likely to experience victimization in general, so they may be more aware of the nuances in differentiating between the types of victimization experiences. Because they experience victimization more often, they may not even consider it bullying, but rather just a typical life experience.

Limitations

It is important to note that this study is not without its limitations. Of particular concern is the cross-sectional nature of these data, which does not allow

us to examine the relationship between a student's experience with victimization and whether that victimization was subsequently perceived as bullying. In addition, several students in the sample reported more than one type of victimization, making it difficult to parse out whether an individual student was more likely to perceive one type of behavior as bullying compared with another. And a mismatch between the experience of victimization and the perception of bullying is not necessarily indicative of an incorrect response to the behavior; surveys such as this cannot capture perpetrator intent.

In addition, methodological concerns, especially with regard to scale measurement, do exist. Despite our best efforts, both the traditional victimization and school climate scales returned low levels of reliability. Additional analyses through principal components analyses assuage some concerns for the Traditional Victimization scale, as does the face validity of the items included in the scale. While it does not stand to reason that experiencing one type of victimization would necessarily predict experiencing another type of victimization (as is the assumption made in reliability analyses), these five measures are frequently used in other measures of bullying and victimization and we believe offer a nuanced perspective of the types of victimization students may experience in schools. Our school climate measure offers more complexities, to be sure. Additional analyses were not as clear-cut as to its merits but to be consistent with previous research, we felt it was important to use measures that allow for the best comparisons across studies. Because our findings with regard to school climate, specifically that students who report higher levels of school climate have lower odds of reporting mismatches in understandings and experiences for cyberbullying, are in line with the research showing the importance of a supportive school climate as a protective factor, we hope that the reader will agree that this operationalization taps into the spirit of the construct of school climate.

Furthermore, our measure of victimization did not specifically include repetition or power imbalance, two factors in typical definitions of bullying. On one hand, then, it is possible that our measure resulted in an overestimation of bullying compared with studies using definitions that require repetition for the behavior to qualify as bullying (see Felix, Sharkey, Green, Furlong, & Tanigawa, 2011, for an expanded discussion of this phenomenon). As research on bullying and victimization experiences continues to emphasize, however, the student's perception is an important factor in defining bullying. If the students feel bullied after one incident, then their victimization should not be ignored by research or subsequent prevention policy. Furthermore, research has shown that school and student definitions rarely include a repetition component, and so policy based around such definitions may not address the behaviors that students experience (Blad, 2014). On the

other hand, though, it also may be that students in this study recognized the repetitive nature of bullying and that power imbalance is an issue in bullying, and so did not perceive their victimization as bullying because it was limited to one time or did not involve a power imbalance. Thus, it could be that students are correct in their perceptions of when victimization is bullying and when it is not; it is reasonable to concede that students would have a nuanced understanding of social strictures. If that is the case, our finding that only two thirds of victimization events are bullying is an important one to help better inform the measurement of bullying and victimization in student samples. More nuanced research, especially in the form of qualitative inquiry and focus groups, is necessary to ensure that research definitions and strategies stay abreast of changes in student perceptions and experiences.

Conclusion

Despite these limitations, we hope that these findings help contribute to our understanding of the nuances inherent in how bullying is defined, especially at the student level. Victimization and bullying are different behaviors but survey measures are often not nuanced enough to capture the differences. Without involving students in the measurement process more closely, researchers risk continuing to conflate the two issues and as such, limiting the ways in which we can inform policy and practice. Future research should replicate this study with measures of victimization that include perpetrator intent, repetition, and power imbalance to determine whether these additions alter the findings. It would also be useful for future research to examine whether the experience/perception mismatch has any impact on adjustment outcomes for students. It may be that students who identify as being bullied have poorer academic, emotional, and/or social outcomes than students who experience bullying but do not consider themselves to have been bullied.

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