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Are School Policies Focused on Sexual Orientation and Gender Identity Associated with Less Bullying? Teachers' Perspectives

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Abstract

Bullying is common in U.S. schools and is linked to emotional, behavioral, and academic risk for school-aged students. School policies and practices focused on sexual orientation and gender identity (SOGI) have been designed to reduce bullying and show promising results. Most studies have drawn from students' reports: We examined teachers' reports of bullying problems in their schools along with their assessments of school safety, combined with principals' reports of SOGI-focused policies and practices. Merging two independent sources of data from over 3,000 teachers (*California School Climate Survey*) and nearly 100 school principals (*School Health Profiles*) at the school level, we used multi-level models to understand bullying problems in schools. Our results show that SOGI-focused policies reported by principals do not have a strong independent association with teachers' reports of bullying problems in their schools. However, in schools with more SOGI-focused policies, the association between teachers' assessments of school safety and bullying problems is stronger. Recent developments in education law and policy in the United States and their relevance for student well-being are discussed.

School bullying has received significant public attention in recent years. There has been rising concern that experiences of bullying are linked to emotional, behavioral, and academic risk for school-aged youth (Hong & Espelage, 2012), as well as growing interest in school policies and practices that can reduce bullying in schools (Hatzenbeuhler & Keyes, 2013; Russell, Kosciw, Horn, & Saewyc, 2010). School policies and practices focused on sexual orientation and gender identity (SOGI) emerged in the last decades in response to the well-documented problem of bullying and lack of school safety for lesbian, gay, bisexual, transgender, queer and questioning (LGBTQ) students (Collier, Beusekom, Bos, & Sandfort, 2013; Russell et al., 2010). Research has identified SOGI-focused policies that are associated with lower rates of bullying (e.g., Kosciw, Greytak, Palmer, & Boesen, 2014; O'Shaughnessy, Russell, Heck, Calhoun, & Laub, 2004; Russell et al., 2010). Such policies and practices include enumerated school nondiscrimination and anti-bullying policies; the availability of health, psychological, and social services designed to address the unique

needs of LGBTQ students; teacher professional development to address SOGI issues; and the presence of safe spaces and school clubs such as gay-straight alliances (GSAs; see Russell et al., 2010 for a review of research on SOGI-focused policies and practices).

In addition to SOGI-focused policies and practices, the climate of safety in schools is an important factor related to bullying. Multiple studies document the strong association between students' perceptions of feeling unsafe and their bullying experiences at school (Berkowitz & Benbenishty, 2012; Glew, Fan, Katon, & Rivara, 2007; Srabstein & Piazza, 2008), and there is evidence that there is less bullying in schools characterized by safe school environments (Espelage, Low, & Jimerson, 2014; Hong & Espelage, 2012). Thus, as illustrated in the conceptual model in Figure 1, both the presence of policies and practices designed to reduce bullying (path A) as well as the safety climate of schools (path B) should be associated with lower bullying or fewer bullying problems in schools. Because SOGI-focused policies and practices are intended to create the broader context for positive school climates and less bullying, the association between school safety and bullying may be stronger in the absence of such policies and practices (illustrated by the moderating path, C).

In this study we used multi-level models to examine teachers' perceptions of bullying at school, taking into consideration their reports of the overall safety climate of schools along with differences across schools in SOGI-focused policies and practices reported by school principals. This approach is distinct for several reasons. First, most research on bullying, school safety, and SOGI-focused policies and practices in schools has relied on student-level data. Relatively little research has used administrative reports of school policies, or has considered teachers' perspectives of school bullying (Espelage et al., 2014; Yoon & Bauman, 2014). Because of their position within schools, teachers' roles extend beyond instruction and exist at the heart of everyday interactions among students. They are in a unique and typically overlooked position to provide a point of view regarding bullying in schools that takes into account their understanding of the climate of school safety and students' experiences (Troop-Gordon & Ladd, 2015). Second, an important finding that has emerged from studies of bullying and school safety is that not all schools are the same: Rates of bullying and school safety vary notably across schools (Russell & McGuire, 2008; Toomey, McGuire, & Russell, 2012). These differences across schools have been shown to be partly attributable to educational policies and practices designed to create safe and supportive school climates (Russell & McGuire, 2008; Toomey et al., 2012), yet few studies account for differences across schools in policies and practices.

In the following sections we first review what is known about SOGI-focused policies and practices. We then consider prior research on bullying and school safety, including a review of the small existing body of research that focuses explicitly on teachers and other school personnel, and their role in creating safe schools and reducing bullying. We presented analyses that strategically combined two independent state-wide databases from California, one from school principals and one from teachers, merged at the school level. These data allowed us to model teachers' perceptions of the school climate with respect to bullying, accounting for their perspectives on safety, as well as differences across schools in SOGI-focused policies and practices as reported by principals.

SOGI-Focused Policies and Practices

Several SOGI-focused policies and practices have been shown to promote school safety and reduce bullying. Some relevant studies have been conducted with samples of LGBT students, and others have shown the efficacy of SOGI-focused policies and practices in samples of general student populations.

First, at the most basic policy level, enumerated policies that prohibit discrimination and bullying based on sexual orientation and gender identity or expression have been linked with multiple positive outcomes for students. Students in schools with enumerated policies report stronger connections to school, more safety, and less bullying or harassment (O'Shaughnessy et al., 2004; Kosciw et al., 2014), and among LGBTQ youth, fewer suicide attempts (Goodenow, Szalacha, & Westheimer, 2006; Hatzenbuehler & Keyes, 2013). Such SOGI-focused policies create a policy context for other practices in schools that support school safety and reduce bullying (Black, Fedewa, & Gonzales, 2012; Russell & McGuire, 2008).

Second, with enumerated policies as a foundation, the availability of SOGI-focused information, resources, and curricula is another area of school policy and practice associated with positive school climates (Lipkin, 1999). A study of over 6,000 students in 17 California schools found that students who reported that they knew where to go for "information and support about sexual orientation, gender identity, or LGBT issues" reported hearing fewer LGBT-related slurs at school; independently, the proportion of students who reported knowing where to go for information and support was associated with rates of reported LGBT-related slurs across schools (Russell & McGuire, 2008). LGBTQ Students in a national study who reported having learned about LGBTQ issues at school reported: (a) fewer homophobic slurs; (b) less homophobic victimization; (c) more feelings of safety; and (d) more supportive conversations with teachers at school (Kosciw et al., 2014).

Yet most public school districts across the United States have not institutionalized policies and programs to address anti-LGBTQ bullying, nor to promote safety in school for LGBTQ youth (Rienzo, Button, Sheu, & Li, 2006). For example, the majority of LGBTQ students in the national study (89.9%) reported that they do not have access to comprehensive resources related to sexual orientation and gender identity at school (Kosciw et al., 2014). Further, according to nation-wide data from principals from the *School Health Profile* surveys (Demissie et al., 2013), the presence of SOGI-focused policies varies widely across U.S. states. The percentage of schools that facilitate access to providers who have experience providing health and social and psychological services to LGBTQ youth ranged from 29% to 63% across states, and the proportion of schools that provide materials about HIV, sexually transmitted disease, pregnancy prevention information relevant to LGBTQ youth ranges widely from 8% to 44% across states (Demissie et al., 2013). These studies document that access to resources and support regarding LGBTQ youth and issues greatly varies across schools and states, but is important for creating a climate of safety at schools and for preventing bullying.

Third, training for teachers on SOGI issues also has been identified as an important strategy to promote school safety and reduce bullying (Sawyer, Porter, Lehman, Anderson, & Anderson, 2006) and many schools offer SOGI-specific professional development opportunities to teachers and staff (e.g., Demissie et al., 2013). Such training is needed because school personnel have reported discomfort addressing SOGI issues in the classroom, and some even report a belief that harassment is caused or exacerbated by the victims themselves (Human Rights Watch, 2001). A state-wide study in Massachusetts showed that students reported a safer diversity climate in schools in which teachers were trained in LGBTQ youth violence and suicide prevention (Szalacha, 2003). Importantly, bullying intervention research shows that when teachers intervene in bullying, they model these skills for students and increase students' confidence to address bullying (Hirschstein, Edstrom, Frey, Snell & MacKenzie, 2007), and reduce the negative effects of a hostile school (Greytak, Kosciw, & Boesen, 2013; Russell, Seif, & Truong, 2001). A recent U.S. survey of LGBTQ secondary school students (Kosciw et al., 2014) found that students who reported a greater number of supportive school personnel also reported feeling more safe at school, less truancy, a greater sense of connectedness, and higher grade point averages.

Finally, the availability of safe spaces, including youth-led GSAs or similar student clubs, is linked with school safety and lower bullying for LGBTQ as well as heterosexual students. Students in schools with GSAs report fewer homophobic remarks, less harassment and bullying based on sexual orientation or gender identity, are less likely to miss school because of feeling unsafe, and are more likely to feel a sense of belonging to their school (e.g., Toomey & Russell, 2013; Kosciw et al., 2014). In a state-wide study in Massachusetts, Szalacha (2003) found that the presence of a GSA (not necessarily membership or participation in it) was a strong predictive factor in perceived school safety for LGBTQ as well as heterosexual students. Another study documented that the presence of a GSA reduced sexual prejudice among heterosexual students (Horn & Szalacha, 2009). Further, several studies have found associations between the presence of a GSA and lower engagement in health-risk behaviors such as smoking, drinking, or risky sexual behavior (e.g., Poteat, Sinclair, DiGiovanni, & Russell 2013), and mental health outcomes (e.g., depressive symptoms; Toomey, Ryan, Diaz, & Russell, 2011).

In summary, a number of SOGI-related policies and practices have been shown to be associated with student safety and well-being, and less bullying. Notably, most studies have treated these policies and practices separately: Few studies account for multiple SOGI-focused school policies and practices (for exceptions see Kosciw et al., 2014; O'Shaughnessy et al., 2004; Szalacha, 2003).

School Safety: Teachers' Perspectives

In recent years there has been a growing shift to move beyond a focus on the individual student to examine the climate of schools as a crucial factor for understanding student safety and well-being (Horn, Kosciw, & Russell, 2009; Szalacha, 2003). For example, in studying peer groups within schools, Poteat (2008) found that youth who were in homophobic peer groups were more likely to respond aggressively to personal victimization by calling another peer a homophobic epithet, whereas youth in less homophobic peer groups were less likely

to respond to victimization with aggression. Other studies have documented differences across schools in youths' experiences of school safety. Data from a national study showed that a substantial proportion of the statistical variability in perceptions of school safety was between schools (an intraclass correlation of 8%; Russell & McGuire, 2008). In a large sample of California high school students, over 10% of the variance in perceptions of safety for LGBTQ students was between schools (Russell & McGuire, 2008), and 13% – 18% of the variance in perceptions of safety for gender non-conforming students was between schools (Toomey et al., 2012). Compared to other studies of school-level variability in adolescent health and behavior data (e.g., Anderman, 2002; Murray & Blitstein, 2003), this variability in safety across schools is notable and nontrivial.

This attention to school-level differences underscores the relevance of studying teachers' perspectives regarding school climate and bullying, as well as administrative information about school policies and practices. Teachers generally tend to underestimate bullying in schools compared to students (e.g., Bradshaw, Sawyer, & O'Brennan, 2007); nevertheless, the evidence suggests that there is strong correspondence between teachers and students in assessments of bullying and school climate. A recent study (Espelage, Polanin, & Low, 2014) used multi-informant multilevel modeling and found an overlap between teachers, staff, and students in their perceptions of school environment: In schools where teachers perceived aggression problems, students reported greater bullying, victimization, and aggression. Other research has examined teachers' perceptions of the administrative climate of schools and found that when teachers believe that policies are effectively articulated and implemented, they may also perceive or observe lower levels of bullying in their schools. For example, in one study, teachers' perceptions of administrator commitment to bullying prevention was associated with less frequent bullying in schools (e.g., Low & Van Ryzin, 2014).

Teachers play an important role in promoting safety and reducing bullying in schools. Studies show that there are lower levels of bullying or a reduction in bullying behavior over time in elementary schools in which students perceive more support from teachers (Gage, Prykanowski, & Larson, 2014) or are more willing to report bullying to teachers (Cortes & Kochenderfer-Ladd, 2014). Similar results have been found among middle and high school-aged students (Turner, Reynolds, Lee, Subasic, & Bromhead, 2014). The role that teachers play in actively reducing bullying is influenced both by their perceptions of the problem of bullying in their schools (e.g., Holt & Keyes, 2004) as well as their perceptions of the overall school climate. For example, a recent study (Oldenburg et al., 2014) showed that higher victimization rates in classrooms are associated with a greater tendency among teachers to attribute the cause of the bullying to factors outside of their control and, consequently, to feel less confident about their abilities to intervene in bullying. Espelage and colleagues (2014) reported that staff and teachers' commitment to prevent bullying was associated with less bullying, fighting and peer victimization. Likewise, Low and Ryzin, (2014) examined school climate as a moderator of bullying prevention efforts over 1-year period and found a reduction in bullying in schools in which staff and teachers had clear commitment to bullying prevention and perceived a more positive psychosocial school climate. Thus, although teachers may perceive less bullying than students overall, there is evidence that

their perspectives on bullying are reliable and related to their perceptions of the school administration and climate.

Finally, there are other characteristics of teachers (Hold & Keyes, 2004) and of schools (Kasen, Berenson, Cohen, & Johnson, 2004) that may influence bullying problems or teachers' perspectives of them. Programs that focus directly on bullying prevention are generally effective in reducing bullying (Ttofi & Farrington, 2010). Further, teachers with more classroom experience and from racial/ethnic minority backgrounds may have more awareness of bullying (Gregory et al., 2010), and bullying may be more common in schools in disadvantaged communities (Gregory et al., 2010) and with low overall academic performance.

The Current Study

In the current study we examined differences across schools in SOGI-focused policies and practices as they relate to teachers' perceptions of bullying at school. We included teachers' perceptions of school safety, and examined whether a lack of safety in school is associated with more bullying in the absence of SOGI-focused policies and practices:

H_1: More SOGI-focused policies and practices will be associated with fewer bullying problems as reported by teachers across schools (Figure 1, path A).

H_2: Teachers' reports of school safety will be negatively associated with reports of bullying problems (path B).

H_3: The association between school safety and bullying problems will be stronger in the absence of SOGI-focused policies and practices (path C).

Methods

Sample

We merged two independent surveys with overlapping samples, one based on school principal reports and the other on reports from teachers. School-level data are based on principal reports from the 2010 California *School Health Profile* (SHP), developed by the Center for Disease Control and Prevention and collected in public schools across the United States biennially (Demissie et al., 2013). Teacher-level data came from the *California School Climate Survey* (CSCS), collected in the years following the SHP data, between 2011 and 2013. The CSCS is administered in all schools across California at least every two years, though teacher participation is voluntary, in conjunction with the *California Healthy Kids Survey* (CHKS), and in compliance with the No Child Left Behind Act (http://cscs.wested.org). In addition to these surveys we merged a third source of data: Administrative data regarding school academic and demographic characteristics that are publicly available from the California Department of Education (CDE).

Measures

Bullying problems—Teacher perceptions of bullying, our outcome, is assessed through responses to the CSCS question, "At this school, how much of a problem is harassment or

bullying among students?" The item is measured on a scale from 0 (*insignificant problem*) to 3 (*severe problem*).

SOGI-focused policies—The presence or absence of SOGI-focused policies within schools were reported in the SHP. Principals reported on five SOGI-focused policies (1 = policy is present, 0 = policy is not present) by answering the prompt: "Does your school…" (1) "prohibit harassment based on perceived or actual SOGI;" (2) "encourage staff to attend professional development on safe and supportive school environments;" (3) "identify safe spaces for LGBTQ youth;" (4) either "facilitate access to providers not on school property who have experience in providing health services, including HIV/STD testing and counseling, to LGBTQ youth" or "facilitate access to providers not on school property who have experience in providing social and psychological services to LGBTQ youth" (1 = positive response to either); and (5) "have a student-led club to create a safe school environment for all youth, regardless of SOGI." We created an index measure by taking the sum score of these items (0 = no SOGI-focused policies; 5 = all 5 policies; $M = 3.59$). Descriptive statistics for each item are reported in Table 2.

School safety—An index of school safety was created with teacher responses to 7 items from the CSCS ($\alpha = .87$): (1)"school is a safe place for students" (0 = *strongly agree*, 3 = *strongly disagree*); (2) "school is a safe place for staff" (0 = *strongly agree*, 3 = *strongly disagree*); (3) "How much of a problem at this school is physical fighting between students" (0 = *insignificant problem*, 3 = *significant problem*); (4) "How much of a problem at this school is gang-related activity" (0 = *insignificant problem*, 3 = *significant problem*); (5) "How much of a problem at this school is weapons possession (0 = *insignificant problem*, 3 = *significant problem*); (6) "How much of problem at this school is vandalism" (0 = *insignificant problem*, 3 = *significant problem*); and (7) "How much of a problem at this school is theft" (0 = *insignificant problem*, 3 = *significant problem*). The mean for this construct was calculated from the standardized z-score of each of the items, and the scale was reverse coded (lower scores reflect lower evaluations of safety).

Teacher and school characteristics—At the teacher level, we include data from the CSCS on teachers' race/ethnicity (1 = white, 0 = non-white) and the number of years they have worked at their respective schools (0 = less than 1 year, 1 = 1 to 2 years, 2 = 3 to 5 years, 3 = 6 to 10 years, 4 = over 10 years). At the school level we use data available from the CDE, including the percentage of students eligible for free and reduced meal programs (as a proxy for school socioeconomic status), and school Academic Performance Index (API), a measure of a school's academic performance based on statewide assessments that summarize student performance across multiple content areas into a single index that ranges from 200 to 1,000. Finally, we included principal reports from the SHP of the presence of a bullying prevention program ("Does your school have … a program to prevent bullying," 1 = yes, 0 = no).

Analytic Strategy

A total of 154 schools participated in both the SHP in 2010 and CHKS in 2011–2013; 96 had corresponding CSCS data with a total of 3,756 teachers within these schools (although

multiple imputation was used to account for missing data, sample sizes for descriptive statistics and models vary from the total sample size because of missing data across all variables). Enrollment within these schools ranged from 106 to 4,540 students (M = 1,814, SD = 659). In 53% of the schools, more than 50% of students are eligible for the free and reduced meal program. Nine percent (9%) of the teachers worked at their school less than one year, 28% worked between 1 to 5 years, 26% between 6 and 10 years, and 37% ten years or more. Most of the teachers in our sample identified as White (74%), with the next largest racial/ethnic group being Hispanic or Latino/a (11%). The racial composition of the analytic sample is representative of the full sample of teachers that completed the CSCS between 2011 and 2013.

Years worked and free and reduced lunch were reverse-coded to simplify interpretation, and continuous variables (years worked and school safety) were grand mean centered (M = 2.73 and M = −.15, respectively).

We iteratively fit multilevel models with the meologit command to account for the categorical nature of our outcome variable using Stata MP 13 (Rabe-Hesketh & Skrondal, 2012). Multilevel analyses were employed to account for the nested nature of the data, and to test for the associations between school-level SOGI-focused policies and teacher reported assessments of school safety with bullying problems (Raudenbush & Byrk, 2002). We first estimated an unconditional model to assess the amount of variance explained by differences between schools (the intraclass correlation – ICC). We next ran a conditional model including teacher-level indicators, (i.e., covariates accounting for teacher demographics and teachers' perceptions of school safety and implementation; Figure 1 path A), followed by a model including school-level indicators (i.e., items related to SOGI-focused policies; Figure 1 path B). Finally, we defined a model that included a cross-level interaction between the SOGI summary measure the school safety scale (Figure 1 path C). Only final models with significant interactions are presented below, though results for each model are presented in Table 3.

In order to identify whether individual SOGI-focused policies were most strongly linked to teachers' perceptions of bullying problems, in follow-up analyses we tested the full model with cross-level interaction for each SOGI-focused policy individually. Simple slopes analyses were conducted using the margins command in Stata to decompose the significant interaction effect (Preacher, Curran, & Bauer, 2006), with the slopes of school safety estimated for each level of SOGI-focused policies. Because the results do not differ substantively from logistic analyses, we illustrate and report the simple slopes from tests of a linear model for ease of interpretation.

Missing data were determined to be MAR and imputed using the multiple imputation procedure in Stata (mi imput); listwise deletion would have resulted in a loss of 46% of the sample (Acock, 2005; Allison, 2002; Rubin, 1996). Fifty (50) imputed datasets were created, seeded at 29,390 for replicability (Allison, 2001; McKnight, McKnight, Sidani, & Figueredo, 2007). Parameters were estimated using maximum likelihood estimation with robust standard errors.

Results

Results for each model and for the ICC of teacher perceptions of bullying problems are reported in Table 3. A majority of the variance in bullying problems (83%) is explained by between-teacher variation, yet a notable 17% of the variance in bullying problems is attributable to differences between schools. This is an important initial finding: Simply put, independent of the diversity of teachers' perspectives on bullying at their school, on average some schools have greater bullying problems than others.

The first hypothesis, tested with a conditional model with only level 2 indicators, was not supported: Principal reports of SOGI-focused policies were unrelated to teachers' perceptions of bullying problems ($OR = .99$, $p = .576$). Further, the presence of a bullying program was also unrelated to bullying problems ($OR = 1.00$, $p = .997$). Notably, neither report by principals – of SOGI-focused policies nor of the presence of bullying programs – were correlated with teachers' perceptions of bullying problems ($r = .04$ and $r = .01$, respectively; see Table 1).

Consistent with our second hypothesis tested with a conditional model with only level 1 indicators, school safety was associated with bullying problems. The main effect shows lower odds of reporting that bullying is a problem at higher levels of school safety ($OR = .14$, $p \leq .001$). Additionally, fewer years worked as a teacher was associated with higher odds that teachers perceived bullying as a problem ($OR = 1.11$, $p \leq .001$).

To test the third hypothesis we modeled the interaction between principal-reported SOGI-focused policies and teacher-reported school safety. The interaction between SOGI-focused policies and school safety was significant ($OR = 1.13$, $p = 0.010$; see Table 3). Additionally, schools with lower proportions of students eligible for free or reduced meal programs had higher odds that teachers reported bullying as a problem ($OR = 2.07$, $p = .042$); all other significant covariates from previous models remained significant. The interaction is illustrated in Figure 2: Consistent with our hypothesis, the association between safety and bullying problems is stronger in schools with no SOGI-focused policies. Further, compared to safe schools, unsafe schools had fewer bullying problems in the presence of all five SOGI-focused policies and practices. Simple slope tests revealed that the slopes for schools with no SOGI-focused polices ($b = -.73$, $p \leq .001$) and five SOGI-focused policies ($b = -.56$, $p \leq .001$) significantly differed from zero, Analyses of covariance between bullying problems and school safety reveal greater variance in the absence of SOGI-focused policies and practices ($F = 287.79$, $p \leq .001$).

Follow-up analyses of individual SOGI-focused policies showed that only the interaction between school safety and having a safe space for LGBTQ youth on campus was significant ($OR = 1.34$, $p = .041$). These results point to the importance of safe spaces in the context of school safety, but also suggest that the presence of multiple policies may have more influence than any single policy on its own.

Discussion

We capitalized on a unique opportunity to combine databases otherwise not typically used in research to address a pressing question about the role of SOGI-focused policies in association with bullying. We find that SOGI-focused school policies and practices do not have a robust independent influence on teachers' perspectives on bullying problems in schools. Yet the relationship between perceptions of school safety and bullying is moderated by SOGI-focused policies. Importantly, in schools that need it the most—those judged as least safe by teachers—reports of bullying are lower in the presence of more SOGI-focused policies.

An important preliminary finding was that teachers' perceptions of bullying vary substantially across schools (17% of the variance was at the school level). In educational research, variance between schools greater than 5% is an indication of distinct differences in school climate and culture (Anderman, 2002; Murray & Blitstein, 2003). In such cases, the role of school policies and practices are more likely to have potential to explain school-level variance.

We expected that SOGI-focused policies and programs would have a direct association with teachers' reports of school bullying, but found no strong effect. This result is disappointing, especially given the substantial variation between schools in teachers' reports of bullying. One possible explanation is that there may be other school characteristics, policies, or practices that play a stronger role in explaining differences across schools in teachers' perceptions of bullying (notably, the strongest school-level correlate was the proportion of students receiving free or reduced cost meal programs). Second, the results may be a product of shared method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) given that the teacher-reported measures were generally stronger in association with teachers' reports of bullying than the measures taken from administrative data or principals' reports. Further, several studies that focus only on individual student reports (not taking into account differences across schools) find robust links between SOGI-focused policies and lower reports of bullying (Black et al., 2012; Chesir-Teran & Hughes, 2009; Goodenow et al., 2006). Perhaps those associations are stronger because they take into account variability across students and their personal experiences of bullying: Visible SOGI-focused policies may be especially salient to students who are bullied. By contrast, our study relied on teachers' global assessment of school bullying which may not be as sensitive as individual students' reports (Bradshaw, Sawyer, & O'Brennan, 2007).

We conducted additional analyses of each SOGI-focused policy separately to identify potential differences across policies. The results showed that having safe spaces for LGBTQ students was associated with fewer reports by teachers of bullying problems when teachers judged schools to be unsafe, but the effect was not as strong as for the sum score of all five policies, suggesting that the combination of multiple policies has the strongest influence on bullying problems. Overall, our results are consistent with a solid body of research based on studies of students that shows that SOGI-focused policies and practices influence a number of positive outcomes, including bullying (Kosciw et al., 2014; O'Shaughnessy et al., 2004). Those studies indicate that SOGI-focused policies and practices matter not only for LGBTQ

students, but for all students in schools where they are implemented (e.g., Poteat et al., 2013; 2014).

Our study contributes to this body of research in several respects. The current study represents an important shift to expand emphasis beyond the nearly exclusive focus on students' experiences to include teachers' perspectives: We modeled the perspectives of over 3,700 teachers on bullying and school safety, linked to data on SOGI-focused policies and practices that were independently reported by school principals. Research on bullying and school safety has typically focused on the individual student level rather than the institutional or school climate level, and therefore efforts to improve student experiences logically focus on changing the perceptions, behaviors, or experiences of individual students. As a result of the focus on students, responsibility for personal safety may be placed on the individual student rather than on the school and its personnel – we may inadvertently "blame the victims" of unsafe school climates. Indeed, there are anecdotal reports consistent with this argument (Human Rights Watch, 2001). Student-focused strategies may divert attention from the responsibility of schools to ensure the safety of all students.

Our results may help illuminate contradictory and counter-intuitive findings from prior studies. In one study of California schools, students' reports of SOGI-focused policies were associated with more (rather than less) bullying (Russell & McGuire, 2008), and a second study of California students found that SOGI-focused policies were associated with less (rather than more) safety (Toomey et al., 2012). Those studies may have captured schools at different stages in the process of incorporating SOGI-focused or other school safety changes, and the results might be explained by the introduction of SOGI-focused policies or practices in schools that have greater problems with bullying to begin with. Our study, which is based on larger-scale data collected from independent sources but from the same schools, suggests that adopting multiple SOGI-focused programs and practices may be most beneficial to schools that are least safe, or where they are needed most. The best way to account for such complexities will be large-scale, multi-site studies that trace changes in school policies and teachers' perspectives and students' experiences across time.

Limitations

The SHP offers unique SOGI-focused school policy and practice data, but the CSCS includes no questions specific to SOGI-focused policies or practices, or to the experiences of LGBTQ students. Ideal would be to have SOGI-specific measures from teachers, including policies and practices as well as discriminatory or anti-LGBTQ bullying and indicators of the LGBTQ climate of schools. SOGI-focused policies and practices may have distinct relevance to LGBTQ students; indeed, much of the research on such programs and practices has been based on samples designed to reach LGBTQ students (e.g., Kosciw et al., 2014; Russell & McGuire, 2008; Toomey et al., 2012). Future studies could link administrative and policy information about schools with students' reports about their experiences of bullying; such studies should ideally include measures of anti-LGBTQ bullying as well as the LGBTQ identities of students.

Unique data sources were strategically combined, but each had limitations, a challenge that is typical in the analysis of secondary data (Russell & Matthews, 2011). First, the combined sample included 96 schools and over 3,700 teachers, but had only a 62% overlap between the principal (SHP) and teacher (CSCS) surveys. Technical reports note the low response rate among teachers (indeed, there were some schools with data for the SHP for which no teacher data are available even though the school participated in the CHKS; see Austin & Bailey, 2008). Thus, the design is novel and includes an unusually large sample of teachers, but represents only a small portion of public schools and teachers in California. A second limitation pertains to measures: We relied on a single-item measure of bullying problems in schools, and the scale that we used to measure school safety is based on available items in the survey and has not been validated in other studies. Third, the measures of SOGI-focused policies and practices reported by principals simply indicate the presence or absence of each policy or practice, and we have no further information on implementation of these policies and practices. Thus, we are unable to distinguish between schools in which policies are actively publicized, promoted, and/or enforced, and those that are simply adopted by a governing body and ignored. Additionally, we cannot rule out that principals in our study were more likely to report SOGI-focused policies and practices because of real or perceived bullying problems in schools.

We also noted that 4 of the 96 school principals reported that their school did not “prohibit harassment based on a student’s perceived or actual sexual orientation or gender identity,” yet California passed a state law more than a decade ago (AB537, The Student Safety and Violence Prevention Act of 2000) that establishes state-wide non-discrimination in education based on actual or perceived sexual orientation and gender identity or expression. Future studies might investigate the school safety climate in schools where principals’ indicated that their policies are out of compliance with state laws (in our case, we re-analyzed our data dropping those 4 schools to ensure that the associations we found were not due to those unusual cases; results were unchanged).

Finally, the data we use were collected between 2010 and 2013; although these remain relatively recent sources of data, the pace of social change with regard to SOGI issues has been dramatic, and it is likely that there have been changes in recent years in the numbers of SOGI-focused policies and practices in schools in California, as well as across the United States and other parts of the world. For example, the Fair, Accurate, Inclusive, and Respectful (FAIR) Education Act was passed as California law in 2011 and directs the inclusion of political, economic, and social contributions of LGBTQ people in educational textbooks and social studies curricula in California public schools. It is possible that even 5 years later more schools in California will have implemented SOGI-focused policies.

Conclusion

Efforts to reduce harassment and bullying in U.S. schools using systemic strategies began to take hold a decade ago. Two federal laws in the United States would have provided explicit protections to LGBTQ students in public schools: the Safe Schools Improvement Act (SSIA) introduced in 2007 (SSIA, 2007), and the Student Non-Discrimination Act (SNDA) introduced in 2011 (SNDA, 2011), though both died in committee (SSIA, 2013; SNDA,

2013). These federal policies would have the effect of establishing enumerated non-discrimination and anti-bullying policies for all students in the nation. Although our study and others (Russell & McGuire, 2008) shows that the influence of such broad policies may have only an indirect influence on bullying in schools, policies provide the context for implementation of other safe schools strategies that do directly influence school climate and student wellbeing. Our study, with others, shows that the structural conditions of schools matter to reduce bullying, and highlights the importance of efforts to ensure and implement an equitable learning environment for all students.

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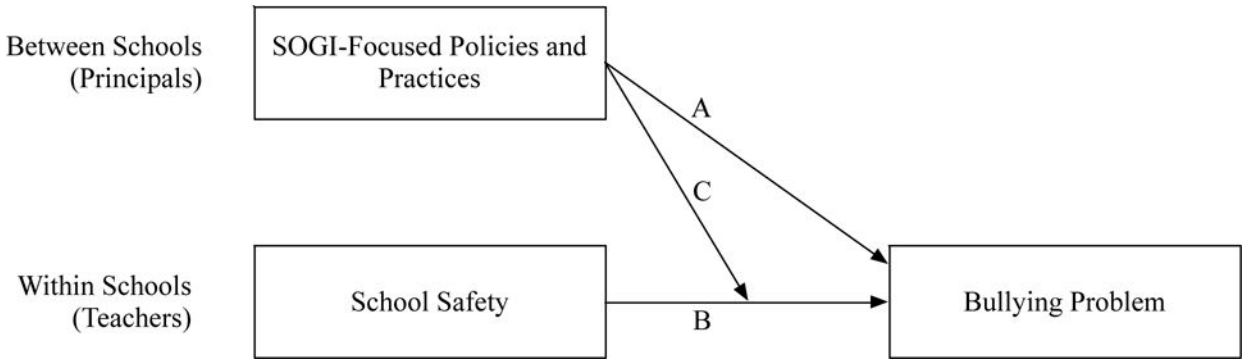

Figure 1.
Conceptual model illustrating moderation of school safety by SOGI-focused policies and practices.

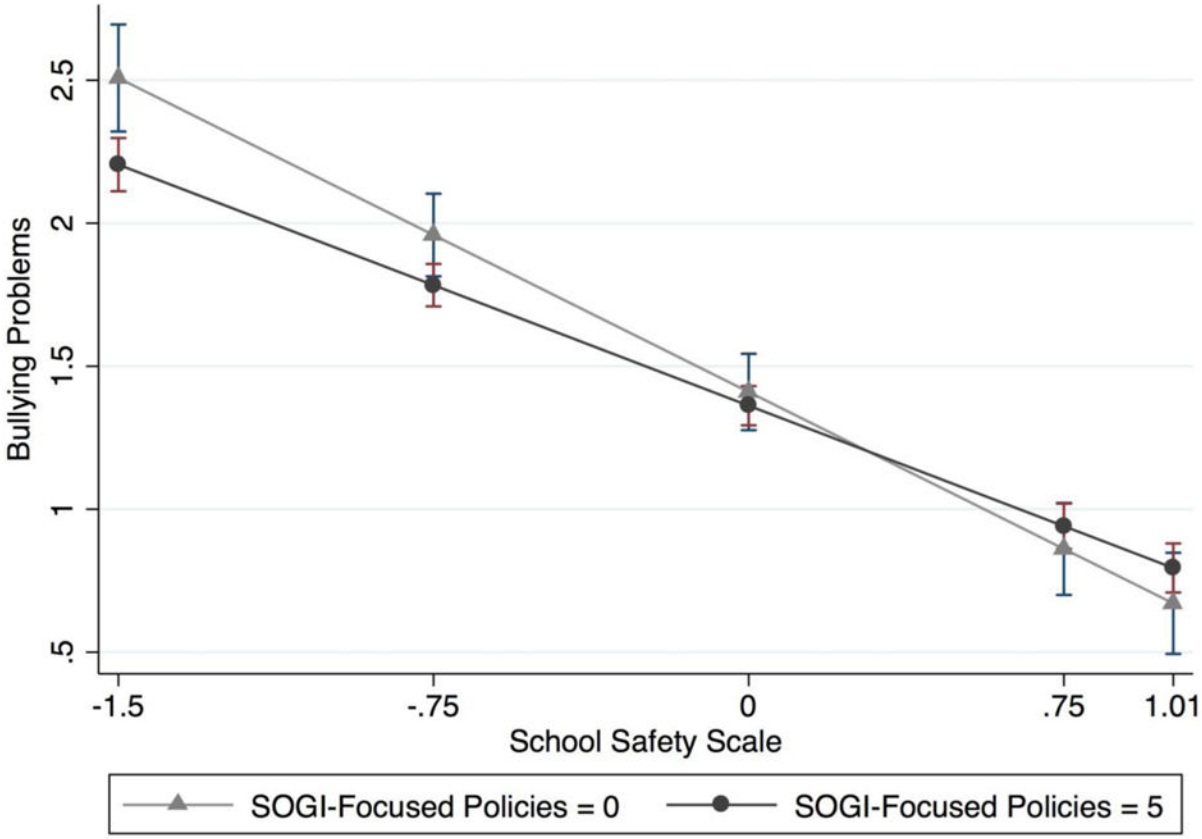

Figure 2.
Interaction between school safety scale and SOGI-focused policies

Table 1

Correlation matrix and descriptive statistics for items included in final analytic model

	Bullying Problems	Years Worked	Race (white)	Safety Scale	SOGI Policies	Bullying Policy	FRMP	API
Bullying Problems	1.000							
Years Worked	−0.050**	1.000						
Race (white)	−0.010	0.105***	1.000					
Safety Scale	−0.531***	−0.001	0.068***	1.000				
SOGI-Focused Policies	0.042*	−0.017	0.024	−0.064***	1.000			
Bullying Prevention Policy	0.011	0.072***	0.065***	0.078***	−0.027	1.000		
Free/reduced Meal Program (FRMP)	0.157***	−0.055**	−0.120***	−0.460***	−0.031	−0.020	1.000	
Academic Performance Index (API)	−0.218***	0.070***	0.124***	0.547***	−0.133***	0.197***	−0.789***	1.000
Mean / %	1.45	2.73	—	−.15	3.55	72.39%	45.39%	794.27
SD	.77	1.29	—	.77	1.31	—	—	82.10
n	3,408	3,418	3,398	3,445	3,756	3,756	2,417	3,634

Note. Bullying problems (0 = insignificant problem, 3 = severe problem); Safety scale, constructed with standardized z-scores and reverse coded (−3.16 = school is unsafe, 1.01 = school is safe); Bullying prevention policy is presented as percentage of principals that endorse that school has policy; Free/reduced meal program is presented as the average percentage of eligible students within schools; Academic Performance Index (API) measures schools' academic performance ranging from 200 (low) to 1,000 (high). Means, standard deviations, and *n*s are based on data prior to imputation to account for missing data. Therefore, sample sizes vary.

Table 2

Frequencies and percentages of SOGI-focused policies across schools, and teachers in those schools.

	Schools		Teachers	
	%	*k*	%	*n*
SOGI-Focused policies (summary)	—	96	—	3,404
LGBTQ prohibit harassment	95.83	92	97.09	3,404
LGBTQ professional development	67.02	63	71.76	3,201
LGBTQ safe space	67.00	57	69.28	3,311
LGBTQ health services	64.89	61	73.00	3,307
Student SOGI club	42.71	41	52.79	3,404
Bullying program	70.83	68	72.08	3,404

Note. k refers to the number of schools, and *n* to the total number of teachers within these schools, in which each respective policy is present. *n*s for individual items are based on data prior to imputation to account for missing data. Therefore, sample sizes vary.

Table 3

Multilevel model with ordinal outcome for teacher and school-level effects on teachers reports of bullying being a problem.

	Unconditional Model	Conditional Model with Level 1 Indicators	Conditional Model with Level 2 Indicators	Full Model with Interactions
	OR (SE)	OR (SE)	OR (SE)	OR (SE)
Teacher Level Indicators				
Years worked	—	1.11*** (.03)	1.11*** (.03)	1.12*** (.03)
Race / Ethnicity	—	1.09 (.09)	1.06 (.09)	1.06 (.09)
School safety scale	—	.14*** (.01)	.14*** (.01)	.09*** (.02)
School Level Indicators				
Free/reduced meal program	—	—	1.84 (.62)	2.07* (.73)
Academic Performance Index	—	—	1.00 (.00)	1.00 (.00)
Bullying program	—	—	.99 (.21)	1.00 (.21)
SOGI-Focused policies	—	—	0.96 (.06)	.97 (.06)
School safe × SOGI policies	—	—	—	1.13** (.05)
Residual variance	.83 (.16)	.56 (.11)	.52 (.12)	.48 (.11)
ICC	.17 (.03)	—	—	—

Note.

* $p \leq .050$,

** $p \leq .010$,

*** $p \leq .001$