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Safe Schools? Transgender Youth's School Experiences and Perceptions of School Climate

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Abstract

The magnitude of gender identity-related disparities in school-based outcomes is unknown because of a lack of representative studies that include measures of gender identity. By utilizing a representative sample generalizable to a broader population, this study elucidates the size of gender identity-related disparities, independent of sexual orientation, in school experiences associated with school connectedness and perceptions of school climate. Additionally, the inclusion of and comparison to results of a large non-representative sample allows for more direct comparisons to previous studies of the school experiences of transgender youth. The analyses in this study primarily draw on a sample of 31,896 youth representative of the middle and high school population in California who participated in the 2013–2015 California Student Survey (a subsample of the California Healthy Kids Survey, which includes the largest known sample of transgender youth). Over half the sample identified their sex as female (51.3%), and 398 identified as transgender (1.0%). The sample was racially and ethnically diverse: 30.7% identified as multiracial, 33.0% as White, 11.1% as Asian, 7.4% as Black, and 52.9% as Hispanic. Findings from multilevel analyses show that relative to non-transgender youth, transgender youth were more likely to be truant from school, to experience victimization and bias-based bullying, and to report more negative perceptions of school climate, though did not differ in self-reported grades.

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Conflict of Interest

The authors declare that they have no conflict of interest.

Ethical Approval

The study was approved by the Institutional Review Board at the University of Texas at Austin and have been performed in accordance with the ethical standards established by the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. For this type of study formal consent is not required.

Informed Consent

This study uses secondary data under license from WestEd. In accordance with Education Code 501938(b), and in accordance with school board policy, passive consent was used for administration of the surveys.

The findings have implications for improving school policies and practices to create safer and more supportive school climates for all youth.

Keywords

Gender identity; Truancy; Victimization; Bias-based bullying; Academic achievement

Introduction

The wellbeing of transgender youth has been the focus of considerable public attention, especially within school settings. Recent studies document large disparities in health behaviors for transgender youth compared to their non-transgender peers (Guss et al. 2017; Reisner et al. 2015; Reisner et al. 2015). Yet, transgender youth are currently under-represented in the education literature, especially as a group distinct from sexual minority youth—that is, youth who identify as lesbian, gay, and bisexual, who engage in same-sex behaviors, and/or who report same-sex attractions (McGuire et al. 2010; Russell and Fish 2016). Although existing research documents persistently hostile school climates for lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth as a group (e.g., Kosciw et al. 2016; Russell et al. 2012; Toomey and Russell 2016), little is known about the school experiences and perceptions of school climate unique to transgender youth (Saewyc and Homma 2017).

Studies consistently reveal disparities in academic and health outcomes associated with negative school climates for LGBTQ youth compared to their non-LGBTQ peers (Kosciw et al. 2016; McGuire et al. 2010). Discrimination and victimization in schools are associated with higher depression, self-harm, and suicidal ideation for LGBT youth compared to their non-LGBT peers (Almeida et al. 2009). The available evidence about transgender youth points to an alarmingly high prevalence of mental health disorders (Grossman et al. 2011; Olson-Kennedy 2016; Reisner et al. 2015; Russell and Fish 2016), substance use (Newcomb et al. 2014; Rowe et al. 2015), and self-harm (Mustanski et al. 2010; Olson et al. 2015). Two recent studies, based on data from the California Healthy Kids Survey and Biennial California Student Survey, found that transgender youth were more likely to have suicidal thoughts (Perez-Brumer et al. 2017) and engage in substance use (Day et al. 2017) than their non-transgender peers. Importantly, experiences of bullying and harassment substantially moderated the relationship between gender identity and both suicidality (Perez-Brumer et al. 2017) and substance use (Day et al. 2017). The research on transgender youth's school experiences, such as victimization and bias-based bullying, school absenteeism, and academic outcomes, may illuminate key mechanisms driving compromised health for transgender youth. Yet, available data is limited because most studies typically do not distinguish between sexual and gender minority youth.

To address this gap in the literature, this study examines disparities between transgender and non-transgender youth's school experiences and perceptions of school climate with data from a large and diverse sample of students in California, as well as a smaller subsample that is representative of California schools. This study includes the first known representative

sample to include a measure of gender identity among youth, offering insight into the school experiences of a diverse group of transgender youth.

Transgender Youth School Experiences

The National Crime Survey, a representative school-based sample, revealed that 22% of all youth aged 12 through 18 reported being bullied while at school (Lessne and Cidade 2015). A national study of LGBTQ youth (Kosciw et al. 2016) underscores that schools are particularly unsafe for transgender youth: 75% of transgender youth felt unsafe at school because of their gender expression, compared to 32% of cisgender males and 23% of cisgender females. Transgender youth also reported feeling unsafe in multiple spaces within schools, such as bathrooms, locker rooms, and gym/PE class (Kosciw et al. 2016). Additionally, compared to non-LGBTQ youth, LGBTQ youth were more than twice as likely to report missing school in the past month due to safety concerns (36.6% versus 14.7%) (Greytak et al. 2016); however, this study did not distinguish between LGB and transgender youth.

A growing body of research also documents that transgender youth experience pervasive victimization, bias-based harassment, and bullying based on their gender identity (e.g., Grossman et al. 2009; Kosciw et al. 2016; Kosciw et al. 2009; McGuire et al. 2010), even in schools that are rated as generally safe for gender-nonconforming youth by other peers (Toomey et al. 2012). These disparities in victimization are particularly concerning because youth who experience discriminatory bullying and victimization have higher rates of depression (Russell et al. 2011; Toomey et al. 2010), higher rates of absenteeism and truancy (Birkett et al. 2009), and lower academic achievement (e.g., lower grade point averages, less likely to plan to pursue postsecondary education) (Kosciw et al. 2016) compared with youth who have not experienced discriminatory bullying.

Most of what is currently known about school experiences among transgender youth is based on studies with small samples, qualitative studies, or surveys administered online. While these approaches offer valuable insights into the lives of transgender youth, there have been no studies that use typical school-based data collection approaches to assess representative samples of transgender youth in the U.S. (Saewyc and Homma 2017; Toomey and Russell 2016), which is needed to more accurately identify the magnitude of gender identity-related disparities and to generalize findings.

Negative School Experiences: Consequences and Protective Factors

Existing research has primarily focused on the deleterious consequences of bullying and harassment, regardless of gender identity, for school connectedness—a key indicator of school climate. School connectedness is related to meaningful engagement in activities and development of caring relationships in school (Greytak et al. 2009), higher academic achievement (Blum 2005), and protects against suicidal ideation among LGBT youth (Diaz et al. 2010; Whitaker et al. 2016).

LGBT youth who have experienced bias-based bullying have lower perceptions that adults care about them as individuals, and about their academic success (Diaz et al. 2010), than

those who have not experienced bias-based bullying. In a qualitative study conducted by McGuire et al. (2010), transgender youth reiterate that peer harassment is pervasive for transgender students. However, transgender youth in schools where teachers and school personnel intervened reported lower rates of victimization. Youth also recounted feeling greater school connection and safety when teachers and officials actively took measures to prevent bullying situations and implemented policies inclusive of LGBT youth (McGuire et al. 2010).

Although little research has been conducted with a focus specifically on transgender youth, the available literature identifies aspects of school climate, such as having supportive relationships at school, that buffer against the negative associations between school victimization, academic achievement, and health. To date, no known studies have investigated school climate from the perspective of transgender youth independent from LGB youth using a representative sample that includes a measure of gender identity. Assessing disparities in perceptions of school climate based on gender identity is critical for identifying potential mechanisms for improving school climates for all youth.

Current Study

The available evidence suggests that transgender youth are at greater risk for experiencing hostile school climates relative to their non-transgender peers. However, knowledge about the size of disparities is limited by the lack of representative datasets that include items assessing sexual orientation and gender identity. This study uses a large school-based sample and a smaller weighted representative subsample to address two research questions. First, what are the size of gender identity-related disparities in school experiences (i.e., absenteeism, victimization and harassment, and academic success) and perceptions of school climate (Research Question 1)? This is the first study, to our knowledge, of transgender youth in school contexts generalizable to a broader population. This study also examines specific reasons youth are truant from school, and distinguishes between sexual orientation and gender identity, further elucidating factors that thwart school connectedness for transgender youth.

Second, do results from a large non-representative sample differ substantially from a smaller representative (i.e., weighted) subsample (Research Question 2)? Descriptive data from the full sample are presented as a basis for comparison to prior studies of transgender youth's experiences at school (all of which have been based on non-representative samples, and which often conflate sexual orientation and gender identity). The full sample also serves as a point of comparison to the smaller subsample that is representative of the California student population. By comparing findings on school experiences of transgender and non-transgender youth, such as victimization and bias-based bullying, absenteeism, and academic success, this study allows for a more direct comparison to findings of previous studies.

Method

Sample

The sample for this study was derived from cross-sectional data from public schools that administered the 2013–2015 California Healthy Kids Survey (CHKS; n = 874,483), and a weighted subsample of the CHKS designed to be representative of the Californian student population in grades 7, 9, and 11 (the statewide California Student Survey [CSS]; n = 35,849). Conducted biennially, the CHKS is administered by WestEd with support from the California Department of Education to track health risks and resilience among youth in California (Austin et al. 2015a). Every survey cycle, WestEd randomly selects a smaller subset of schools, a priori, whose data are weighted to be representative of the student population of California (CSS).

In accordance with Education Code 501938(b), and with school board policy, passive consent was used for administration of the surveys. Parents or guardians were notified, in writing, at the beginning of the school year about the survey, and given the opportunity to review the survey and decline their child's participation. Completion of the survey takes about 50 minutes. Prior to administration of the survey, schools and staff are provided training to standardize implementation (WestEd, n.d.-a). Participation in the CHKS was voluntary, and rates of participation vary within and between schools, with some schools opting not to participate (WestEd, n.d.-b). Response rates for the CSS in 2013–2015 were 71%.

Exclusion Criteria

Based on recommendations from WestEd, youth whose response validity was questionable based on meeting two or more criteria related to inconsistent responses (e.g., responding that they never used a drug, but reporting drug use in the past 30 days), exaggerated drug use, using a fake drug, and answering dishonestly to all or most of the questions on the survey were excluded from analyses (Austin et al. 2015b). Excluded youth based on these criteria constituted 1.68% of the CHKS and 1.38% of the CSS sample. Additionally, youth in schools that did not administer the measure of sexual orientation and gender identity (SOGI) were excluded from analyses (6.15% of the CHKS sample [n = 52,908]; 11.03% of the CSS sample [n = 3,953]). The final analytic sample includes 806,918 youth from the CHKS and 31,896 youth from the CSS. Comparative analyses between youth included and excluded from the analytic sample reveal that youth in the excluded sample were more likely to identify as transgender, LGB, unsure, and White, and less likely to identify as Hispanic. These findings were observed in both the CSS and CHKS, except exclusion from the sample was unrelated to Hispanic identity in the CHKS.

Sample Characteristics

Table 1 provides sample demographics for both the CHKS and CSS stratified by gender identity. In the CHKS, the sample included 9,281 (1.2%) transgender youth. Regarding sexual orientation, 5.1% identified as LGB and 6.4% as unsure. Of the 9,281 youth who identified as transgender, 49.8% identified as LGB. Just over half the youth identified as female (50.2%), and the sample was racially and ethnically diverse: 35.9% identified as

multiracial, 26.4% White, 11.9% as Asian, 4.7% as Black/African American, 3.9% as American Indian/Alaska Native, 2.1% as Native Hawaiian/Pacific Islander, and 15.3% did not report their race; 50.9% of the youth identified as Hispanic. The age of participants ranged from 10 to 18 years; the mean age of the sample was 14.47 (SD = 1.81) years.

The weighted subsample (CSS) included 398 (1.0%) transgender youth. Regarding sexual orientation, 5.1% identified as LGB and 6.2% as unsure. Of the 398 youth who identified as transgender, 48.4% identified as LGB. Similar to the CHKS sample, 51.3% of the youth in the CSS identified as female. Regarding race and ethnicity: 30.7% identified as multiracial, 33.0% as White, 11.1% as Asian, 7.4% as Black/African American, 3.0% as American Indian/Alaska Native, 1.8% as Native Hawaiian/Pacific Islander, and 13.1% did not report their race; 52.9% of the representative subsample also identified as Hispanic. The mean age of the sample was 14.41 (SD = 1.73) years.

Measures

Gender Identity

Gender identity was assessed as a single item: “Which of the following best describes you? (Mark all that apply): (a) Heterosexual (straight); (b) Gay or Lesbian or Bisexual; (c) Transgender; (d) Not sure; (e) Decline to respond.” Cases were coded 1 if youth marked that they were transgender (0 = non-transgender; 1 = transgender). We use “non-transgender” to refer to youth who did not identify as transgender.

Truancy and Missing School

To assess truancy, responses to the question “During the past 12 months, about how many times did you skip school or cut classes?” (0 = 0 times; 6 = more than once a week) were dichotomized (0 = never truant; 1 = truant in the last 12 months). Youth were also asked to report on reasons for missing school: “In the past 30 days, did you miss school for any of the following reasons? (mark all that apply)” (0 = no; 1 = yes). Response categories included: “Felt very sad, hopeless, anxious, stressed, or angry” (missed school: depressed); “Didn’t feel safe at school” (missed school: unsafe); “Wanted to use alcohol or drugs” (missed school: alcohol/drugs); “Were suspended” (missed school: suspended). Dichotomous variables were created for each response category.

General Victimization

A single measure of victimization was constructed using youth reports on 9 items ($\alpha = .82$) related to physical and verbal assault and harassment on school property (Felix et al.2009; Felix and You 2011; Gilreath et al. 2014). Youth were asked, “During the past 12 months, how many times on school property have you” (0 = 0 times; 3 = 4 or more times): (1) “been pushed, shoved, slapped, hit, or kicked by someone who wasn’t just kidding around;” (2) “been afraid of being beaten up;” (3) “had mean rumors or lies spread;”(4) “had sexual jokes, comments, or gestures made to you;”(5) “been made fun of because of your looks or the way you talk;” (6) “had your property stolen or deliberately damaged, such as your car, clothing, or books;” (7) “been threatened or injured with a weapon (gun, knife, club, etc.);”

(8) “been threatened with harm or injury;” (9) “been made fun of, insulted, or called names.” Items were dichotomized and summed (0 = no victimization; 9 = high victimization).

Sexual Orientation and Gender-Based Bullying

Youth were asked their experiences of being harassed or bullied on school property during the past 12 months: (1) “because you are gay or lesbian, or someone thought you were” (homophobic bullying); and (2) “because of your gender” (gender-based bullying). The survey defined bullying as being “repeatedly shoved, hit, threatened, called mean names, teased in a way you didn’t like, or had other unpleasant things done to you. It is not bullying when students of about the same strength quarrel or fight.” Youth were given four response options ranging from “0 times” to “4 or more times.” Responses for homophobic bullying and gender-based bullying were dichotomized. Additionally, a single measure of sexual orientation and gender (SOG) bullying was created (0 = did not experience homophobic or gender-based bullying; 1 = experienced homophobic and/or gender-based bullying; tetrachoric correlation = .65).

Self-Reported Grades

Youth were asked, “During the past 12 months, how would you describe the grades you mostly received in school?” The item was reverse coded so responses ranged from lowest (0 = mostly F’s) to highest (7 = mostly A’s).

School Climate

A summary variable was created based on the average for each student across 14 items related to school climate ($\alpha = .89$). Specifically, the CHKS and CSS assess developmental supports within schools related to positive academic, social-emotional, and health related outcomes (Austin et al. 2016), such as: “At school, I help decide things like class activities or rules;” “At my school, there is a teacher or some other adult who always wants me to do my best;” “At my school, there is a teacher or some other adult who really cares about me;” and “I feel close to people at this school.” Because the items included in the measure of school climate were on different scales, each item was standardized using z-scores (ranging from −2.35 to 1.57).

Covariates

Demographic characteristics were accounted for through the inclusion of the following covariates: (1) age; (2) race and ethnicity; (3) sex (0 = female, 1 = male); (4) parental education (“What is the highest level of education your parents completed? [*Mark the educational level of the parent who went the furthest in school*]”) as a proxy for socioeconomic status, and (5) sexual orientation. For sexual orientation, each response was dichotomized to the item detailed above: “heterosexual” (0 = non-heterosexual; 1 = heterosexual); “LGB” (0 = non-LGB; 1 = LGB); “unsure” (0 = non-unsure; 1 = unsure). Youth could select multiple responses (e.g., youth who indicated they were heterosexual and LGB were coded as a 1 for both “heterosexual” and “LGB”).

Analytic Plan

To identify disparities in school experiences and perceptions of school climate between transgender youth compared to non-transgender youth, multilevel regressions and logistic regressions were estimated for continuous and dichotomous outcomes, respectively, using Stata 14 (StataCorp 2015). Complete case analyses resulted in a loss of up to 24% of the CHKS sample and 18% of the CSS sample. Multiple imputation using chained equations (10 iterations seeded at 53,421) was therefore used to account for missing data (Enders 2010). All variables in the models were included in the imputations. Unconditional models were tested to assess the bivariate associations between gender identity and school measures for the full sample (CHKS) and the representative weighted subsample (CSS). Subsequently, models were adjusted to account for demographic characteristics. Only results from the CSS are presented, except where there are notable divergences from the CHKS (see Table 2; table of results for CHKS multivariate analyses are available upon request).

Results

Descriptive Analyses

Bivariate comparisons between transgender and non-transgender youth for demographic characteristics and school experiences are presented in Table 1. In the representative subsample (CSS), transgender youth had 18 times higher odds of identifying as LGB, and 10 times higher odds of identifying as unsure, compared to non-transgender youth. Compared to their non-transgender peers, transgender youth were less likely to identify as Asian and more likely to identify as Black or African American. All bivariate comparisons based on gender identity were significant among the full unweighted sample (CHKS).

Regarding school experiences, bivariate analyses reveal similar patterns in the CHKS and CSS samples. Compared to non-transgender youth, transgender youth had: (1) nearly two times higher odds of being truant from school, missing school because they felt depressed, or missing school because they were suspended; and (2) six times greater odds of missing school because they felt unsafe or to engage in substance use. Transgender youth also experienced more general victimization than non-transgender youth. Models for homophobic bullying and gender-based bullying independently, and with the combined measure of SOG-bullying, were tested to examine the risk of bias-based bullying relative to youth's gender identity. Transgender youth had six times greater odds of experiencing gender-based bullying, eight times greater odds of experiencing homophobic bullying, and six times greater odds of experiencing gender-based and/or homophobic bullying (i.e. SOG-bullying). Transgender youth also had lower self-reported grades and more negative perceptions of school climate than non-transgender youth.

Multivariate Analyses

The substantive findings from the CSS largely remain unchanged in multivariate analyses accounting for demographic characteristics (see Table 2). Specifically, compared to non-transgender youth, transgender youth had higher odds of school absenteeism: truancy (*AOR* = 1.53, 95% CI[1.21–1.93]), feeling unsafe (*AOR* = 3.33, 95% CI[1.91–5.80]), and skipping school to use alcohol or drugs (*AOR* = 3.23, 95% CI [1.90–5.51]). Transgender youth did

not differ from their non-transgender peers in school absenteeism related to feeling depressed or because they were suspended (notably, gender identity was significantly associated with these outcomes in the full unweighted sample). Transgender youth experienced more general victimization ($b = .86$, $p < .001$), and had over three times higher odds of experiencing gender-based bullying (*AOR* = 3.71, 95% CI [2.42–5.68]) and two times higher odds of homophobic bullying (*AOR* = 2.27, 95% CI [1.22–4.25]), compared to non-transgender youth. Regarding the combined measure of gender-based and homophobic bullying, transgender youth had over 2 times higher odds of experiencing SOG-bullying (*AOR* = 2.34, 95% CI [1.35–4.07]). Further, compared to non-transgender youth, transgender youth perceived school climate more negatively ($b = -.20$, $p < .001$), though transgender and non-transgender youth did not differ in self-reported grades ($b = -.06$, $p = .574$). In the full unweighted sample, compared to non-transgender youth, transgender youth had lower self-reported grades.

Bivariate results showed gender identity-related disparities in missing school because of feeling depressed or being suspended, and self-reported grades. Post hoc analyses were conducted to identify whether these null findings were accounted for by demographic factors related to race and ethnicity, and/or sexual orientation. These analyses were motivated by gaining insight into which demographic factors above and beyond gender identity are predictive of disparities related to absenteeism and academic success. The results from these analyses (available upon request) showed that when sexual orientation was included in the models, there was no association between gender identity and the outcomes. Specifically, LGB youth were more likely to miss school because of suspension or feeling depressed, and had lower self-reported grades, relative to non-LGB youth. Gender identity was associated with the outcomes when age, sex, race/ethnicity, and parental education (but not sexual orientation) were included in the models. Sexual orientation, and not race and ethnicity, seems to be a more proximal predictor of missing school because of depression and suspension, and lower self-reported grades.

Excluded Analyses

Preliminary analyses included an examination of four subcomponents of school climate: (1) school connectedness; (2) having caring relationships with adults at school; (3) opportunities for meaningful participation; and (4) teachers having high expectations of students. Gender identity was significantly associated with each of these outcomes with the exception of meaningful participation. The summary variable of school climate was included in final analyses for parsimony, as the intent of the study was not a nuanced examination of school climate specifically.

Discussion

Transgender youth often encounter hostile school experiences. Previous research underscores that transgender youth are more likely to experience victimization and harassment (e.g., Kosciw et al. 2016) and miss school because of feeling unsafe (Greytak et al. 2016) than their non-transgender peers. However, much of what is known about school experiences of transgender youth is based on non-representative samples, and therefore is

not generalizable to broader populations, and/or on samples that conflate sexual orientation and gender identity (i.e., include LGBT youth as a monolithic group). With more attention to enumerated school policies inclusive of gender minority youth there is pressing need for clarity about the unique school experiences of transgender youth.

By utilizing the largest known sample (CHKS) and the first representative sample (CSS) of youth to include a measure of gender identity, this study allows for a more direct comparison to previous studies and underscores the size of gender identity-related disparities generalizable to a broader population. Specifically, the findings show that compared to their non-transgender peers, transgender youth were more likely to: (1) be truant and miss school due to a variety of reasons (i.e., feeling depressed, feeling unsafe, to engage in substance use, and because they were suspended); (2) experience general and sexual orientation and gender-based victimization; (3) have lower grades; and (4) perceive school climates less positively. The pattern of findings was consistent between the large unweighted sample and the smaller representative subsample in bivariate analyses.

These findings underscore the magnitude of gender identity-related disparities in school absenteeism: Compared to non-transgender youth, transgender youth had over three times greater odds of missing school because they felt unsafe and because of engaging in substance use. Furthermore, findings in this study highlight previously underreported explanations for reasons why transgender youth miss school. Individually, each of the factors related to school absenteeism presents an opportunity for the development of school-based interventions aimed at improving school environments and connection for transgender youth. For example, the presence of GSAs is associated with higher school connectedness among LGBT youth (Toomey and Russell 2011). Furthermore, Greytak and colleagues' (2013) found that student clubs (e.g., Gay-Straight Alliances [GSAs]), supportive educators, LGBT-inclusive curricula, and comprehensive anti-bullying/anti-harassment policies improved school climate among transgender youth. Further research is needed to identify mechanisms to improve school climate for all youth, such as providing professional development for teachers on issues relevant to gender identity and expression, and implementing curriculum that is inclusive of diverse sexual orientations and gender identities.

Multivariate analyses of the representative subsample showed that transgender youth did not differ from non-transgender youth in missing school due to feeling depressed or because they were suspended, or in self-reported grades, although there were statistically significant bivariate differences in these school experiences. Additionally, transgender youth in the full unweighted sample (CHKS) significantly differed from non-transgender youth in these outcomes in multivariate analyses. While findings were generally consistent between the CHKS and the representative subsample, there may be school-level factors not accounted for in the study (e.g., schools with more issues related to school safety may be overrepresented in the CHKS) that help explain the differences between the two samples in findings related to missing school because of feeling depressed or being suspended, and academic success.

Follow-up analyses with the representative sample showed that sexual orientation may have been a stronger predictor than gender identity for missing school because of feeling

depressed or being suspended, and self-reported grades. This finding emphasizes the need to also consider the intersection of youth identities, as other factors such as race, ethnicity, and sexual orientation often contribute to disparities in school experiences. Conclusions drawn from the findings of this study are limited because sexual orientation and gender identity were asked as a single item. Specifically, some youth who identify as both a sexual and gender minority may have only selected one or the other if, for example, they more strongly identified as transgender rather than as LGB. Inferences about how intersecting identities relate to disparities in school experiences from these data should therefore be interpreted with caution.

Descriptive results show that transgender youth in both samples were much more likely than non-transgender youth to report being LGB (nearly half of transgender youth reported being LGB, compared to <5% of non-transgender youth). Until recently, there has been little attention to the intersection of sexual and gender identities in studies of youth (indeed, in most research, LGB and transgender youth are combined as a global category). The inclusion of a measure of sexual orientation and gender identity in a representative sample makes this study unique. Future studies, both quantitative and qualitative, are needed to illuminate distinct school experiences based on sexual orientation diversity among transgender youth.

The findings in this study also provide further support for previous studies that highlight the pervasiveness of peer-based victimization and sexual orientation and gender-based bullying for transgender youth (Grossman et al. 2009; Kosciw et al. 2016; McGuire et al. 2010; Toomey et al. 2012; Wyss 2004). In this study, transgender youth had over two times greater odds of experiencing sexual orientation and gender-based bullying even after accounting for other demographic characteristics associated with bias-based bullying, including sexual orientation. Notably, in bivariate analyses transgender youth had higher odds of experiencing homophobic bullying compared to gender-based bullying. These findings underscore that transgender youth are generally at higher risk of bias-based bullying than their non-transgender peers, and are especially concerning given that victims of bullying and harassment are at higher risk for poorer mental health, school absenteeism, and lower academic success compared to youth who are not bullied (Kosciw et al. 2016; Russell et al. 2011). Thus, implementing policies and practices that specifically address victimization, including bias-based bullying and harassment based on youth's perceived or actual sexual orientation and gender, represents one mechanism through which school climates could be improved for all youth (Hatzenbuehler et al. 2015; Russell et al. 2010). Such policies and practices would specifically provide support for those youth most at risk for being the targets of victimization.

The findings in this study should be interpreted in the context of several limitations. This was a school-based sample, and therefore did not include youth who were not attending school. These results may underrepresent youth who have dropped out, or been kicked or pushed out of school, factors for which transgender youth are disproportionally at risk (Snapp et al. 2015). Further, the sample was limited to 7th, 9th, and 11th grade students in California. The school experiences reflected in this study may not be representative of youth experiences in schools throughout the U.S. For example, California tends to have

progressive education policies related to LGBTQ youth; nevertheless, it is a compelling site of study because it is a diverse state politically, socioeconomically, racially and ethnically, and in urbanicity and rurality. Representative data from other states are needed to assess similar association and compare magnitude of disparities across state contexts that differ in state-level policies.

The item documenting transgender identity also had notable limitations. Sexual and gender identity were not assessed independently, and students could mark multiple categories. Some youth only indicated a sexual orientation *or* a gender identity. Youth were not provided with a definition of transgender, which is a notable limitation (The GeniUSS Group, 2013). Further, it is unknown whether youth who do not identify as cisgender *or* as transgender (e.g., youth who may identify as genderqueer or gender-nonconforming) would answer such a question. Future studies should follow recommendations to employ a two-step method to assess both natal sex and gender identity, in addition to sexual orientation, to improve this measure (Reisner et al. 2014). Future research should also attend to youth who do not conform to historically traditional gender norms by considering gender expression as well as gender identity.

Conclusion

This study documents disparities in school experiences and perceptions of school climate between transgender and non-transgender youth. Transgender youth consistently reported higher levels of truancy and absenteeism, general victimization, sexual orientation and gender-based bullying, and had more negative perceptions of the climates of their schools, compared to their non-transgender peers. The disparities illuminated in this study underscore the need for additional scholarship to identify modifiable factors in schools to cultivate safer and more supportive school environments for all youth. Several states throughout the U.S. have policies enumerating protections for students based on sexual orientation; far fewer have policies that include protections based on gender identity and expression. The exclusion of gender identity from such policies is of particular concern given that federal guidance to extend Title IX protections to include transgender youth has been rescinded. As scholars, policy-makers, school administrators, and teachers strive to make schools a context in which youth can thrive academically and developmentally, it is critical to attend to persistent disparities and to better inform targeted approaches inclusive of youth for whom schools are hostile environments.

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Data Sharing Declaration The data that support the findings of this study were made available from WestEd. Restrictions apply to the availability of these data which were used under license for the current study. The manuscript's data will therefore not be deposited.

Biography

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Table 1

Sample characteristics for the representative subsample (CSS) and full sample (CHKS)

	CSS				CHKS			
	Transgender %/Mean (SE)	Non-transgender %/Mean (SE)	*OR* [95% CI]/*b* (s.e)	*n*	Transgender %/Mean (SD)	Non-transgender %/Mean (SD)	*OR* [95% CI]/*b* (s.e))	*n*
Gender identity	1.00%	99.00%	—	31,896	1.15%	98.85%	—	804,595
Sexual orientation								
Heterosexual	39.81%	80.36%	.15 [0.12–0.19] ***	31,896	42.43%	75.88%	.20 [0.19–0.21] ***	804,595
LGB	48.43%	4.70%	18.34 [11.96–28.13] ***	31,896	49.82%	4.59%	20.64 [19.77–21.55] ***	804,595
Unsure	31.81%	5.98%	9.79 [7.70–12.46] ***	31,896	36.48%	6.02%	2.33 [2.28–2.37] ***	804,595
Sex (male)	58.29%	48.64%	1.43 [1.14–1.78] **	31,709	61.86%	49.16%	1.67 [1.59–1.73] ***	777,015
Race/ethnicity				31,896				681,569
American Indian/Alaskan Native	4.94%	3.15%	1.52 [0.91–2.55]		5.48%	3.85%	1.43 [1.34–1.60] ***	
Asian	9.93%	11.78%	.56 [0.38–0.84] **		11.21%	11.96%	.87 [0.81–0.94] ***	
Black/African American	13.88%	7.92%	1.98 [1.36–2.87] ***		9.53%	4.60%	2.32 [2.16–2.48] ***	
Native Hawaiian/Pacific Islander	1.71%	1.89%	.64 [0.28–1.44]		3.10%	2.06%	1.53 [1.36–1.72] ***	
White	28.83%	28.65%	.94 [0.71–1.24]		26.22%	26.29%	.99 [0.94–1.04]	
Multiple races	30.82%	32.17%	1.02 [0.81–1.31]		34.32%	35.89%	.95 [0.91–0.99] *	
No race reported	9.89%	14.43%	.66 [0.45–0.96] *		10.14%	15.35%	.62 [0.58–0.67] ***	
Hispanic	54.60%	56.30%	.97 [0.76–1.23]	31,380	48.79%	51.85%	.94 [0.90–1.00]	777,572
Parental education				31,506				783,066
Did not finish high school	17.20%	13.74%	1.24 [0.91–1.70]		16.42%	14.33%	1.15 [1.09–1.22] ***	
High school graduate	14.48%	17.41%	.88 [0.66–1.20]		14.95%	16.20%	.88 [0.84–0.94] ***	
Some college	14.17%	13.88%	1.02 [0.76–1.40]		13.37%	12.36%	1.07 [1.01–1.13] *	
College graduate	35.18%	35.09%	.82 [0.64–1.05]		35.69%	36.84%	.85 [.82–.89] *	
Don’t know	18.98%	19.88t%	1.22 [0.92–1.63]		19.57%	20.27%	1.22 [1.16–1.27]	
Truant	53.29%	35.62%	1.82 [1.45–2.27] ***	31,672	53.01%	37.55%	1.84 [1.76–1.92] ***	787,914
Missed school								
Depressed	16.70%	8.81%	1.98 [1.42–2.76] ***	31,856	16.70%	8.93%	1.91 [1.81–2.02] ***	803,226

	CSS				CHKS			
	Transgender %/Mean (SE)	**Non-transgender %/Mean (SE)**	***OR* [95% CI]/*b* (s.e)**	***n***	**Transgender %/Mean (SD)**	**Non-transgender %/Mean (SD)**	***OR* [95% CI]/*b* (s.e))**	***n***
Felt unsafe	5.64%	1.11%	5.92 [3.58–9.81] ***	31,862	6.10%	1.40%	4.49 [4.11—4.91] ***	803,329
Alcohol/drugs	8.43%	1.33%	6.41 [4.12–9.97] ***	31,870	9.05%	1.45%	6.26 [5.80–6.75] ***	803,892
Suspended	3.33%	1.58%	2.23 [1.17–4.25] ***	31,870	3.75%	1.34%	2.94 [2.64–3.29] ***	803,911
General victimization	3.78 (3.16)	2.21 (2.35)	1.50 (.13) ***	31,363	3.68 (3.13)	2.11 (2.33)	1.59 (.02) ***	768,374
Homophobic bullying	42.48%	8.17%	7.91 [6.29–9.96] ***	30,995	39.13%	8.32%	7.25 [6.94–7.58] ***	756,013
Gender-based bullying	33.86%	7.11%	6.20 [4.87–7.89] ***	30,939	34.46%	7.47%	6.47 [6.18–6.77] ***	755,523
SOG-bullying	47.64%	12.45%	6.01 [4.52–7.99] ***	30,892	45.97%	12.65%	5.95 [5.70–6.20] ***	751,828
Self-reported grades	4.55 (2.05)	4.87 (1.77)	−.37 (.11) ***	31,676	4.50 (2.07)	4.91 (1.78)	−.41 (.02) ***	788,680
Perception of school climate	−.30 (.74)	.01 (.64)	−.30 (.05) ***	31,833	−.33 (.75)	−.002 (.64)	−.30 (.01) ***	793,231

Note. Heterosexual, LGB, and unsure were dichotomous variables; self-reported grades was a scale variable (0 = Mostly F's; 7 = Mostly A's); truant was a dichotomous variable (0 = never; 1 = 1 or more times); SOG-bullying was a dichotomous item of having been bullied because of perceived or actual sexual orientation (homophobic bullying) and/or gender (0 = Never; 1 = 1 or more times); general victimization was a 9-item summary variable (0 = no victimization; 9 = high victimization); perception of school climate was a standardized scale variable (−2.35 = most negative; 1.57 = most positive)

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Table 2

Multilevel regression and logistic regression results for disparities in school experiences and perceptions of school climate between transgender and non-transgender youth in the representative subsample (CSS)

	Truant		Missed school: Depressed		Missed school: Unsafe		Missed school: Alcohol/drugs		Missed school: Suspended	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Gender identity (transgender)	1.53***	[1.21–1.93]	1.22	[0.79–1.87]	3.33***	[1.91–5.80]	3.23***	[1.90–5.51]	1.51	[0.82–2.76]
Sexual orientation										
LGB	1.48***	[1.34–1.64]	2.85***	[2.50–3.24]	2.20***	[1.59–3.05]	3.03***	[2.20–4.19]	1.63**	[1.18–2.53]
Unsure	1.06	[0.95–1.18]	1.31**	[1.11–1.56]	1.52*	[1.04–2.23]	1.20	[0.79–1.83]	1.14	[0.75–1.71]
Age	1.31***	[1.28–1.34]	1.19***	[1.14–1.24]	1.04	[0.93–1.16]	1.41***	[1.25–1.59]	1.11	[0.98–1.26]
Sex (male)	.86***	[0.82–0.90]	.39***	[0.35–0.43]	.72**	[0.57–0.92]	1.36*	[1.07–1.73]	1.79***	[1.38–2.32]
Race/Ethnicity										
American Indian/Alaska Native	1.14	[0.98–1.31]	1.14	[0.88–1.47]	1.07	[0.62–1.87]	1.37	[0.84–2.25]	1.92*	[1.15–3.22]
Asian	.70***	[0.64–0.77]	.54***	[0.43–0.68]	.50*	[0.24–0.96]	.65	[0.36–1.17]	.53	[0.26–1.04]
Black/African American	1.00	[0.89–1.12]	.89	[0.71–1.12]	.97	[0.58–1.64]	1.74*	[1.00–3.02]	3.75***	[2.40–5.87]
Native Hawaiian/Pacific Islander	.90	[0.77–1.06]	.87	[0.67–1.13]	.97	[0.48–1.96]	1.00	[0.56–1.79]	1.18	[0.59–2.33]
Multiple (two or more races)	1.09*	[1.01–1.17]	1.13	[0.96–1.32]	.71	[0.48–1.06]	1.02	[0.71–1.48]	1.46	[0.98–2.17]
No race reported	.94	[0.86–1.03]	.78*	[0.64–0.95]	.42***	[0.26–0.67]	.70	[0.42–1.16]	1.15	[0.74–1.80]
Hispanic	1.15**	[1.07–1.22]	.93	[0.82–1.05]	1.07	[0.78–1.45]	1.60**	[1.14–1.16]	1.09	[0.80–1.52]
Parental education										
Did not finish high school	1.34***	[1.23–1.45]	1.26**	[1.10–1.44]	1.65*	[1.12–2.43]	1.68*	[1.15–2.46]	1.48*	[1.05–2.10]
High school graduate	1.17***	[1.08–1.25]	1.04	[0.91–1.21]	1.49*	[1.00–2.22]	1.06	[0.73–1.54]	1.36	[0.93–1.98]
Some college	1.22***	[1.13–1.31]	1.32***	[1.17–1.49]	1.17	[0.80–1.71]	1.38	[1.00–1.90]	1.30	[0.95–1.79]
Don’t know	1.07	[0.99–1.15]	1.02	[0.89–1.16]	1.26	[0.77–2.07]	1.35	[0.98–1.86]	1.45*	[1.02–2.04]

	General victimization	Homophobic bullying		Gender-based bullying		SOG-bullying		Self-reported grades	School climate
	b (SE)	OR	95% CI	OR	95% CI	OR	95% CI	b (SE)	b (SE)
Gender identity (transgender)	.86 (.13)***	2.27***	[1.22–4.25]	3.71***	[2.42–5.68]	2.34**	[1.35–4.07]	−.06 (.11)	−.20 (.04)***
Sexual orientation									

	General victimization	Homophobic bullying		Gender-based bullying		SOG-bullying		Self-reported grades	School climate
	b (SE)	OR	95% CI	OR	95% CI	OR	95% CI	b (SE)	b (SE)
LGB	1.22 (.06)***	13.01***	[11.33–14.93]	2.87***	[2.38–3.47]	7.85***	[6.89–8.94]	−.42 (.06)***	−.20 (.02)***
Unsure	.32 (.06)***	1.72***	[1.41–2.10]	1.81***	[1.52–2.15]	1.76***	[1.48–2.08]	−.06 (.05)	−.05 (.02)**
Age	−.16 (.01)***	.86***	[0.81–0.91]	.96	[0.91–1.01]	.91***	[0.87–0.95]	−.06 (.02)**	.01 (.00)*
Sex (male)	−.25 (.03)***	1.20***	[1.07–1.34]	.52***	[0.45–0.60]	.77***	[0.70–0.85]	−.40 (.02)***	.02 (.01)*
Race/Ethnicity									
American Indian/Alaska Native	.02 (.08)	.94	[0.74–1.91]	1.21	[0.88–1.66]	1.03	[0.81–1.31]	−.33 (.07)***	−.10 (.03)***
Asian	−.29 (.05)***	.75***	[0.64–0.89]	.77*	[0.61–0.97]	.72***	[0.60–0.85]	.65 (.05)***	−.03 (.02)*
Black/African American	.08 (.06)	1.08	[0.89–1.32]	1.06	[0.82–1.36]	1.04	[0.85–1.26]	−.62 (.07)***	−.09 (.02)***
Native Hawaiian/Pacific Islander	.33 (.09)***	1.39*	[1.01–1.91]	1.61***	[1.30–1.99]	1.57***	[1.26–1.95]	−.07 (.07)	−.07 (.03)**
Multiple (two or more races)	.14 (.04)***	1.07	[0.92–1.24]	1.03	[0.87–1.22]	1.03	[0.90–1.19]	−.25 (.04)***	−.04 (.01)***
No race reported	−.23 (.05)***	.77**	[0.63–0.94]	.76*	[0.61–0.95]	.78**	[0.66–0.92]	−.13 (.05)**	−.06 (.02)**
Hispanic	−.16 (.04)***	.95**	[0.83–1.09]	.86*	[0.76–0.99]	.87*	[0.78–0.98]	−.20 (.04)***	−.06 (.01)***
Parental education									
Did not finish high school	−.15 (.05)***	.99	[0.82–1.21]	.93	[0.77–1.12]	.98	[0.83–1.16]	−.72 (.05)***	−.18 (.02)***
High school graduate	−.02 (.05)	.94	[0.77–1.16]	1.04	[0.84–1.28]	1.00	[0.85–1.17]	−.53 (.05)***	−.13 (.01)***
Some college	.14 (.05)***	.94	[0.77–1.13]	1.06	[0.86–1.29]	1.01	[0.87–1.18]	−.35 (.05)***	−.08 (.01)***
Don’t know	−.32 (.05)***	.87	[0.71–1.06]	1.89	[0.72–1.11]	.87	[0.73–1.03]	−.79 (.05)***	−.18 (.01)***

SOG = sexual orientation and gender; transgender was a dichotomous variable (0 = non-transgender; 1 = transgender); LGB was a dichotomous variable (0 = non-LBG; 1 = LGB); unsure was a dichotomous variable (0 = not unsure; 1 = unsure); race was a categorical variable (referent = White); Hispanic was a dichotomous variable (0 = non-Hispanic; 1 = Hispanic); parental education was a categorical variable (referent = college graduate)

*$p \leq .05$

**$p \leq .01$

***$p \leq .001$