

# IMPROVING SCHOOL CLIMATE FOR TRANSGENDER AND NONBINARY YOUTH

RESEARCH BRIEF

Over 20 years of GLSEN's Research has established that schools are not safe or welcoming spaces for LGBTQ youth, who face hostile school climates due to their sexual orientation, gender, and gender expression. Further, our research has historically shown that transgender and nonbinary students (i.e., students whose genders do not align with the sex they were assigned at birth) experience especially hostile climates compared to their cisgender lesbian, gay, bisexual, and queer (LGBQ) peers.1 In addition to documenting the hostile school climate experienced by LGBTQ students, the GLSEN Research Institute has also shown that LGBTQ-supportive school resources can help offset the negative effects of this hostile school climate and make schools safer and more affirming for all LGBTQ students.2 However, little is known about whether transgender and nonbinary students reap the same benefits of affirmative school supports as their LGBQ peers.

The purpose of this Research Brief is to illustrate the experiences of transgender and nonbinary students in K-12 schools by: 1) describing transgender and nonbinary students' experiences with hostile school climate, 2) examining transgender and nonbinary students' reports of access to school supports, and 3) whether and how these supports provide benefits specifically to this population of students. Further, we explore whether there are differences in both access to and benefits of these resources for transgender and nonbinary students and cisgender LGBQ students.

#### INDICATORS OF HOSTILE SCHOOL CLIMATE

As we have documented in our 2019 National School Climate Survey report, transgender and nonbinary students experience especially unsafe and hostile school climates. Compared to their cisgender LGBQ peers, transgender and nonbinary students:<sup>3</sup>

- Were more likely to have felt unsafe based on their gender (84.4% of transgender students and 52.4% of nonbinary students vs. 20.6% of cisgender students) and gender expression (69.5% of transgender students and 58.3% of nonbinary students vs. 22.0% cisgender students);
- Experienced much higher levels of victimization based on their gender and gender expression;

- More likely to report missing school because they felt unsafe or uncomfortable (43.6% of transgender students and 38.1% of nonbinary students vs. 24.9% of cisgender students);
- Reported lower levels of school belonging.

For each of these indicators, transgender students had more negative experiences than did nonbinary students.

Transgender and nonbinary students also experience discriminatory school policies and practices at higher rates than do their cisgender LGBQ peers, and in general, nonbinary students experience discrimination at a lower rate than do transgender students.<sup>4</sup> Over three quarters (77.3%) of transgender students and 69.1% of nonbinary students reported having been discriminated against, compared to 46.1% of cisgender students.

Certain forms of discrimination are more specific to the experiences of transgender and nonbinary students, such as being prevented from using the bathroom consistent with one's gender identity. Specifically, many transgender and nonbinary students were:

- Required to use the bathroom of their legal sex (58.1% of transgender students and 35.5% of nonbinary students);
- Required to use the locker room of their legal sex (55.5% of transgender students and 32.8% of nonbinary students);
- Prevented from using their chosen name and pronouns (44.5% of transgender students and 36.3% of nonbinary students); and
- Prevented from wearing clothing deemed "inappropriate" based on gender (20.5% of transgender students and 24.1% of nonbinary students).

We also found that transgender students reported more instances of being required to use the bathroom and locker room of their legal sex and being prevented from using their chosen name and pronouns than nonbinary students. However, transgender and nonbinary students reported similar rates of being prevented from wearing clothing deemed "inappropriate" based on gender.

#### ACCESS TO SUPPORTIVE SCHOOL RESOURCES

## **Supportive Student Clubs**

GSAs can provide LGBTQ students with a safe and affirming space within a school that may otherwise be unwelcoming or hostile, and may signal to all students that LGBTQ people are valued at school. These clubs may provide space for social support between LGBTQ students and allies or a space for activism to create positive change in their school.

- Six in ten transgender and nonbinary students (61.1%) reported that they had access to a GSA at their school; and
- · Of transgender and nonbinary students who had a GSA, 45.2% attended often or frequently, and 38.9% reported that they served as a leader or officer of their GSA.11

## **Supportive Student Personnel**

Teachers, principals, and other school staff who are supportive of LGBTQ people serve as another supportive resource for transgender and nonbinary students, as they provide a caring and affirming adult for youth who may be struggling with marginalization and an unsafe and unwelcoming school climate. Given that transgender and nonbinary students experience especially hostile school climates, having access to such supportive educators may be especially important for these students.

- Nearly all transgender and nonbinary students (98.1%) could identify at least one school staff member whom they believed was supportive of LGBTQ students, and 63.2% could identify six or more; and
- A little over 4 in 10 transgender and nonbinary students (41.6%) reported that their school administration was somewhat or very supportive of LGBTQ students.

## **Inclusive Curricular Resources**

Positive representations of LGBTQ people and topics may improve transgender and nonbinary students' school experiences by exposing them to positive representations of people who share their identity and by messaging to these students that their identities and experiences are important and valuable. Additionally, such representation

exposes all students to positive information about LGBTQ people and topics, which may lead to a more affirming student body and a more positive school climate.

• Only 17.2% of transgender and nonbinary students reported that they had been taught positive things about LGBTQ people, history, events or topics in any of their classes.

## **Inclusive and Supportive School Policies**

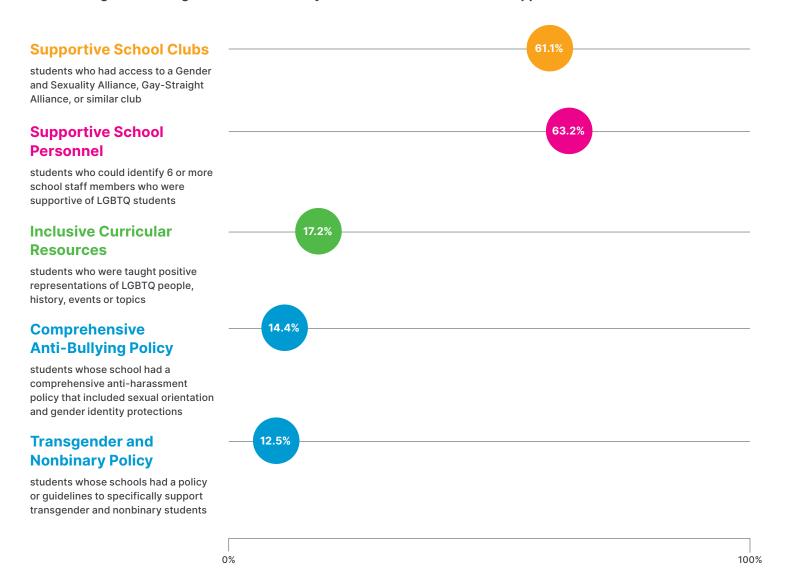
Comprehensive anti-bullying policies explicitly state protections from victimization based on sexual orientation and gender identity and expression, and may provide school staff with the guidance needed to appropriately respond and intervene when anti-LGBTQ language and harassment occurs in schools.

- Only 14.4% of transgender and nonbinary students reported that their school had a comprehensive anti-bullying school policy; and
- Over half (56.4%) of transgender and nonbinary students reported that their school had a generic anti-bullying policy that did not explicitly include protections based on either sexual orientation or gender identity and expression.

Some schools and districts have official policies or guidelines to specifically support transgender and nonbinary students, and 12.5% of transgender and nonbinary students reported that their school had such a policy.<sup>12</sup> These policies included various gender-related protections. According to transgender and nonbinary students with a transgender and nonbinary inclusive policy, the most common protections included in these policies addressed:

- Students' use of chosen name/pronoun (89.5%);
- Access to bathrooms corresponding to one's gender (70.3%);
- Student's ability to change official school records to reflect name or gender change (64.9%);
- Access to gender neutral bathrooms (64.4%); and
- Students' ability to participate in non-athletic extracurricular activities that match their gender identity (54.4%).13

Figure 1. Transgender and Nonbinary Students' Access to LGBTQ-Supportive School Resources



Do transgender and nonbinary students have the same access to LGBTQ-supportive school resources as their cisgender LGBQ peers?

Transgender and nonbinary students:

- Were more likely to attend their GSA than were cisgender LGBQ students;<sup>6</sup>
- Reported having fewer LGBTQ-supportive educators 7
- Were less likely to report having been taught positive content about LGBTQ people, history, events or topics;8 and
- Were slightly more likely to report that their school had a comprehensive anti-bullying policy.9

We also found that transgender and nonbinary students were more likely to report that their school had a transgender and nonbinary specific policy, 10 although this may be because they are more likely to seek out these policies and be aware of them.

#### BENEFITS OF SUPPORTIVE SCHOOL RESOURCES

# Supportive School Club: Presence of a GSA

Having a GSA at school may contribute to a less hostile climate for transgender and nonbinary students. Those transgender and nonbinary students who went to schools with a GSA reported:

- Somewhat lower likelihood of feeling unsafe about their gender and gender expression (Figures 3 & 4) and to miss school because they felt unsafe (see Figure 5);14
- Fewer negative comments about gender expression (54.6% with a GSA heard remarks often or frequently vs. 65.3% without a GSA) and negative remarks about transgender people (50.0% with a GSA heard remarks often or frequently vs. 61.0% without a GSA);15
- Greater intervention by teachers (9.0% with a GSA reported staff intervened most of the time or always vs. 5.1% without a GSA) and students (8.6% with a GSA reported other students intervened most of the time or always vs. 7.4% of students without a GSA) when negative gender remarks were made; and 16
- Less harassment and assault based on their gender (27.6% with a GSA reported high levels of victimization vs. 39.0% without a GSA) or gender expression (27.9% with a GSA reported high levels of victimization vs. 39.9% without a GSA).17

The support provided by GSAs at school may contribute to greater psychological connection to school, and improved well-being among transgender and nonbinary students. We found that having a GSA at school was related to:

- Greater school belonging (see Figure 2); 18
- Higher self-esteem;<sup>19</sup> and
- Lower levels of depression.<sup>20</sup>

## **Supportive School Club: GSA Participation**

The presence of a GSA at one's school may convey that the school is supportive of and safe for LGBTQ students, but it is also important to examine the possible benefits of actually participating in one's GSA. Among those who had access to a GSA, transgender and nonbinary students who attended their GSA more often:

- Were less likely to feel unsafe at school because of gender (69.6% who went to their GSA often or frequently vs. 74.8% who did not regularly attend a GSA).21
- Experienced less victimization based on their gender (29.7% who went to their GSA often or frequently reported high levels of victimization vs. 25.8% of students who attended less often) or gender expression (27.3% of students who went to their GSA often or frequently vs. 28.7% of students who did not regularly attend a GSA).<sup>22</sup>
- Had greater school belonging and self-esteem.<sup>23</sup>

## **Supportive School Personnel**

LGBTQ-supportive staff may have a positive impact on school climate for transgender and nonbinary students. Students with more supportive staff at school were less likely to feel unsafe at school because of their gender and gender expression and less likely to miss school because they felt unsafe (See Figures 3, 4 & 5).<sup>24</sup>

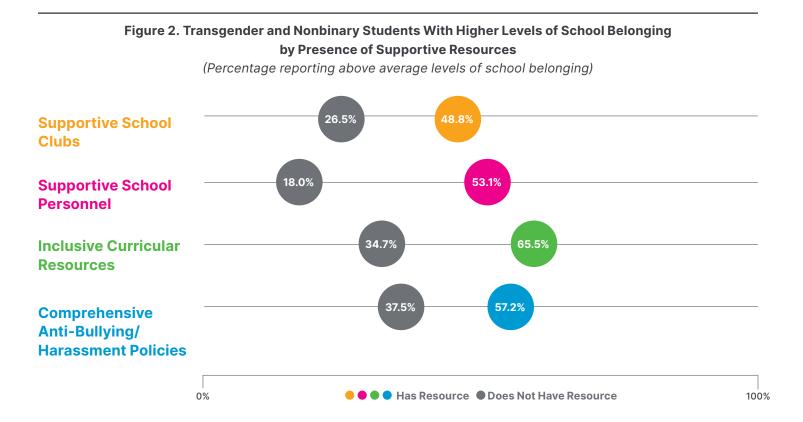
Supportive educators can also enhance transgender and nonbinary students' connection to school and their educational aspirations. Students who could identify more supportive staff reported:

- Greater levels of school belonging (see Figure 2).<sup>25</sup>
- · Higher levels of self-esteem and lower levels of depression.26
- Greater educational aspirations (91.9% with 6 or more supportive educators planned on continuing education after high school vs. 85.1% with 0-5 supportive educators).27

• Higher GPAs (3.14 average GPA among those with 6 or more supportive educators vs. 2.98 of those with 0-5 supportive educators).28

By intervening and appropriately responding to genderbased biased remarks and victimization, staff can make school environments safer and more welcoming for transgender and nonbinary students. Transgender and nonbinary students felt less unsafe in school regarding their gender or gender expression when:

- They had educators who intervened most of the time or always on negative gender-based remarks than those whose educators intervened never or only some of the time (75.7% vs. 87.3%);29 and
- They reported that staff intervention on LGBTQ-based harassment and assault was effective than those who reported intervention was not effective (81.7% vs. 91.3%).30



#### **Inclusive Curricular Resources**

Positive representations of LGBTQ people and topics in the curriculum can also have a positive impact on school climate for transgender and nonbinary students. Among the transgender and nonbinary students in our survey, attending a school that included positive representations of LGBTQ people and topics in the curriculum was related to:

- · Lower likelihood of feeling unsafe at school because of gender and gender expression, and missing fewer days of school because of feeling unsafe (see Figures 3, 4 & 5).<sup>31</sup>
- Fewer negative remarks about gender expression at school (46.2% with inclusive curriculum heard negative remarks about gender expression often or frequently vs. 61.4% of students without inclusive curriculum);32
- Fewer negative remarks about transgender people at school (38.9% of student with inclusive curriculum heard negative remarks about transgender people often or frequently vs. 57.5% of students without inclusive curriculum);33
- More frequent peer intervention on biased remarks about gender (16.0% of students with inclusive curriculum reported peer intervention most of the time or always vs. 6.6% of students without inclusive curriculum);34
- · Lower levels of harassment and assault based on gender (21.2% of students with inclusive curriculum experienced high levels of victimization vs. 34.3% of students without inclusive curriculum;35
- · Lower levels of harassment and assault based on gender expression (21.2% of students with inclusive curriculum experienced high levels of victimization vs. 35.0% of students without inclusive curriculum);36

Educators who include positive representations of LGBTQ people and topics in their teaching may be perceived by transgender and nonbinary students as allies to whom they can talk about LGBTQ-related issues and may help create an affirming educational environment in which transgender and nonbinary students are more engaged in academics. We found that in schools with inclusive curriculum, transgender and nonbinary students had:

- · Greater comfort in discussing LGBTQ issues with their teachers (64.1% with inclusive curriculum felt somewhat or very comfortable vs. 35.5% of students without inclusive curriculum);37
- Higher grade point averages (GPAs) (3.15 average GPA with an inclusive curriculum vs. 3.01 without an inclusive curriculum);38 and
- Higher educational aspirations (91.1% with inclusive curriculum planned on continuing education after graduation vs. 89.0% without inclusive curriculum).39

When LGBTQ students see themselves represented in the curriculum, they may feel a greater connection to school and improved well-being. We found that transgender and nonbinary students who reported inclusive curriculum had:

- Higher feelings of school belonging than those who did not receive inclusive curriculum (see Figure 2).40
- · Higher levels of self-esteem and lower levels of depression than students who did not receive inclusive curriculum.41

Figure 3. Transgender and Nonbinary Students Who Feel Unsafe at School Because of Gender by School Resources

(Percentage of those reporting feeling unsafe because of gender)

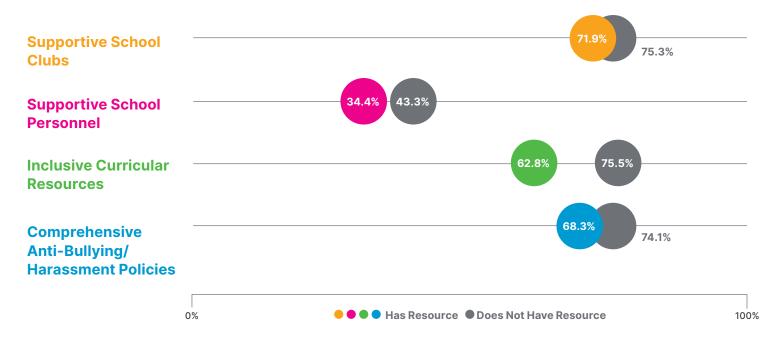
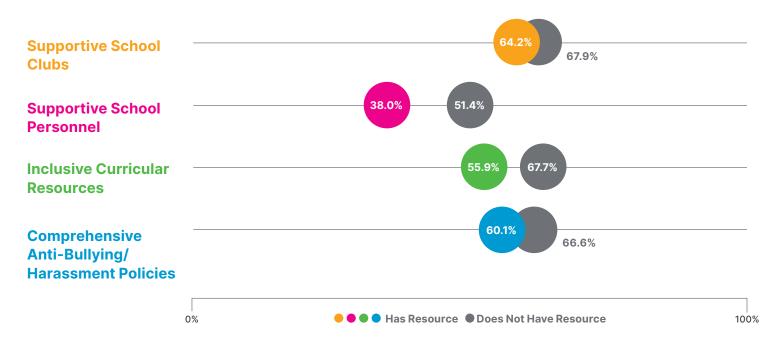


Figure 4. Transgender and Nonbinary Students Who Feel Unsafe at School Because of Gender Expression by School Resources

(Percentage of those reporting feeling unsafe because of gender)



# **Inclusive and Supportive School Policies: Anti-Bullying/Harassment Policies**

Comprehensive anti-bullying/harassment policies explicitly state protections from victimization and bias based on sexual orientation and gender identity, and thus, should protect transgender and nonbinary students from hearing gender-based biased language and experiencing gender-based victimization. We found that transgender and nonbinary students in schools with comprehensive policies:

- Were less likely to report feeling unsafe because of their gender and gender expression, and missed fewer days of school because they felt unsafe (see Figures 3, 4, & 5);42
- Were less likely to hear negative remarks about gender expression (49.6% of students with a comprehensive policy heard remarks often or frequently vs. 60.3% of students without a comprehensive policy) and about transgender people (45.9% of students with a comprehensive policy heard remarks often or frequently vs. 55.6% of students without a comprehensive policy);43
- Experienced less harassment and assault based on their gender (25.9% of students with a comprehensive policy reported high levels of victimization vs. 33.1% of students without a comprehensive policy) and gender expression (25.8% of students with a comprehensive policy reported high levels of victimization vs. 33.7% of students without a comprehensive policy);44 and
- · Had higher levels of school belonging (see Figure 2).45

# **Inclusive and Supportive School Policies: Transgender and Nonbinary**

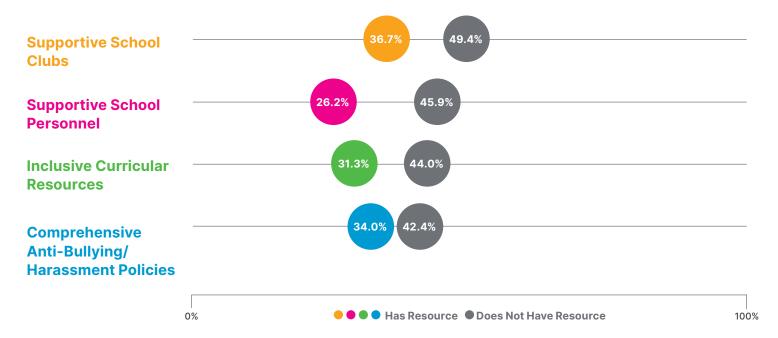
Official transgender and nonbinary student policies and guidelines help to reduce instances of genderbased school discrimination among transgender and nonbinary students. 46 Additionally, we found that transgender and nonbinary students in schools with such policies and guidelines were more engaged with their school community. We found that transgender and nonbinary students in schools with specific transgender/nonbinary policies:

- Were less likely to miss school due to feeling unsafe or uncomfortable (57.6% with a transgender and nonbinary policy missed school vs. 63.5% without a policy); and<sup>47</sup>
- Reported higher levels of school belonging.<sup>48</sup>

Further, the more comprehensive a policy was reported to be, i.e., the more specific protections identified), the more effective it appeared to be in creating a safe and affirming school climate for transgender and nonbinary students with regard to school belonging.49

Figure 5. Transgender and Nonbinary Students Who Missed School Due to Feeling Unsafe by Presence of Supportive Resources

(Percentage reporting any missed days of school)



# Do the benefits of supportive school resources differ for transgender and nonbinary students and cisgender LGBQ students?

#### **GSA Participation**

GSA participation is related to higher self-esteem for all LGBTQ students, 50 and the relationship is slightly stronger for transgender and nonbinary students.51

LGBTQ students who attend GSA meetings more frequently are less likely to feel unsafe regarding their gender,<sup>52</sup> and the relationship is stronger for transgender and nonbinary students.53

#### **Supportive School Personnel**

Having LGBTQ-supportive staff is related to missing fewer days of school because of feeling unsafe for all LGBTQ students,<sup>54</sup> and the effect is even stronger for transgender and nonbinary students.55

Transgender and nonbinary students were less likely than cisgender LGBQ students to report incidents of harassment and assault to school staff, 56 and were much less likely to report that staff intervention was effective.57

#### **LGBTQ Inclusive Curriculum**

LGBTQ inclusive curriculum is positively associated with LGBTQ students' feelings of attachment to school,58 and we found an even greater benefit for transgender and nonbinary students.59

Inclusive curriculum is also associated with greater feelings of safety at school for all LGBTQ students.60 The effects of inclusive curriculum on feelings of safety regarding gender and gender expression, and on missing school because of feeling unsafe, are stronger for transgender and nonbinary students.61

## **Inclusive and Supportive Policies**

Comprehensive policies are associated with lower levels of victimization based on gender expression for all LGBTQ students, 62 and the effect is stronger for transgender and nonbinary students.63

#### CONCLUSION

Supportive school resources help create safer and more affirming school climates and improve school experiences for transgender and nonbinary students, as they do for LGBTQ youth as a whole. In fact, our results show that in some instances, the positive benefits of these resources are even stronger for transgender and nonbinary students than they are for cisgender LGBQ youth. Considering that transgender and nonbinary students by and large face more hostile school climates in the U.S., educators, administrators, and policy makers must work perhaps even more diligently to ensure that these students have access to GSAs, LGBTQ-inclusive curriculum, comprehensive anti-bullying policies, and supportive school personnel at their schools.

#### **ABOUT THE RESEARCH**

Data for this brief comes from the 2019 National School Climate Survey (NSCS). The 2019 NSCS was conducted online from April through August 2019. To obtain a representative national sample of lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth, we conducted outreach through national, regional, and local organizations that provide services to or advocate on behalf of LGBTQ youth, and advertised and promoted on social media sites, such as Instagram, Facebook, and Snapchat.

The final sample consisted of a total of 16,713 LGBTQ secondary school students between the ages of 13 and 21. Of this full sample, 7,203 students identified as transgender or nonbinary.64 Students were from all 50 states, the District of Columbia, Puerto Rico, American Samoa, and Guam. Just over two-thirds of the full sample (69.2%) was White, two-fifths (41.6%) was cisgender female, and 40.4% identified as gay or lesbian. The average age of students in the sample was 15.5 years and they were in grades 6 to 12, with the largest numbers in grades 9, 10 and 11. For more information about the methods and sample, see the full 2019 NSCS report.

#### Suggested citation:

GLSEN (2021). Improving School Climate for Transgender and Nonbinary Youth (Research Brief). New York: GLSEN.

# **Endnotes**

- 1. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 2. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 3. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 4. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 5. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN
- To assess the relationship between GSA attendance and gender identity, an analysis of covariance (ANCOVA) was performed with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant: F(1, 9666) =332.89, p<.001,  $\eta_p^2$  = .03.
- To assess the relationship between the presence of supportive school personnel and gender identity, an analysis of covariance (ANCOVA) was performed with number of supportive staff members as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant: F(1, 15546) = 101.76, p<.001,  $\eta_p^2 = .007$ .
- To assess the relationship between being positively taught inclusive curriculum and gender identity, an analysis of covariance (ANCOVA) was performed with being taught positive LGBTQ inclusion as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant:  $F(1, 15633) = 48.86, p < .001, \eta_p^2 = .003$ . To assess the relationship between being negatively taught inclusive curriculum and gender identity, an analysis of covariance (ANCOVA) was performed with being taught negative LGBTQ inclusion as the dependent variable,

- gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant:  $F(1, 15627) = 24.87, p < .001, \eta_p^2 = .002.$
- To assess the relationship between the presence of a comprehensive school policy and gender identity, an analysis of covariance (ANCOVA) was performed with presence of a comprehensive policy as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant: F(1, 15647) = 6.14, p<.001,  $\eta_p^2 = .001$ .
- 10. Griffin, P., Lee, C., Waugh, J., & Beyerm C. (2004). Describing roles that gay-straight alliances play in schools: From individual support to school change. Journal of Gay & Lesbian Issues in Education, 1(3), 7-22. Portam C. M., Singer, E., Mehus, C. J., Gower, A. M., Saewyc, E., Fredkove, W., & Eisenberg, M. E., (2017), LGBTQ youth's views of Gay-Straight Alliances: Building community, providing gateways, and representing safety and support. Journal of School Health, 87(7), 489-497.
- 11. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 12. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 13. To test differences in feelings of safety by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as the dependent variables. The multivariate effect was significant: Pillai's trace = .02,  $F(3, 7134) = 39.66, p < .001, \eta_p^2 = .02$ . The univariate effect for feeling unsafe because of gender was significant:  $F(1, 7136) = 10.08, p < .01, \eta_p^2 = .001$ . The univariate effect for feeling unsafe because of gender expression was significant: F(1, 7136) = 10.04, p<.01,  $\eta_p^2 = .001$ . The univariate effect for missing school because of feeling unsafe was significant: F(1, 7136) = 115.94, p<.001,  $\eta_p^2 = .02$ .
- 14. To test differences in hearing biased remarks by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and frequency of hearing gender-based biased remarks as the dependent variables. The multivariate

- effect was significant: Pillai's trace = .02, F(2, 7175) = 64.21, p<.001,  $\eta_p^2$  = .02. The univariate effect for negative remarks about gender expression was significant: F(1, 7176) = 84.77, p<.001,  $\eta_p^2$  = .01. The univariate effect for negative remarks about transgender people was significant: F(1, 7176) = 98.07, p<.001,  $\eta_p^2 = .01$ .
- 15. To test differences in staff and student intervention on biased remarks by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and frequency of staff and student interventions as the dependent variables. The multivariate effect was significant: Pillai's trace = .02, F(2, 6051) = 64.80, p<.001,  $\eta_p^2 = .02$ . The univariate effect for staff intervention was significant: F(1, 6052) = 126.72, p<.001,  $\eta_p^2 = .02$ . The univariate effect for student intervention was significant: F(1, 6052) = 15.21, p<.001,  $\eta_p^2 = .003$ .
- 16. To test differences in gender-based victimization by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and frequency of harassment and assault based on gender and harassment and assault based on gender expression as the dependent variables. The multivariate effect was significant: Pillai's trace = .02,  $F(2, 6908) = 64.82, p < .001, \eta_p^2 = .02$ . The univariate effect for victimization based on gender was significant: F(1,6909) = 98.81, p<.001,  $\eta_p^2$  = .01. The univariate effect for victimization based on gender expression was significant:  $F(1, 6909) = 129.59, p < .001, \eta_p^2 = .02.$
- 17. To test differences in feelings of school belonging and psychological well-being by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .06, F(3, 7064) = 160.16, p<.001,  $\eta_p^2$  = .06. The univariate effect for school belonging was significant: F(1, 7066) = 480.27, p<.001,  $\eta_p^2$  = .06. The univariate effect for self-esteem was significant: F(1, 7066) = 118.63, p<.001,  $\eta_p^2 = .02$ . The univariate effect depression was significant: F(1, 7066) =138.22, p<.001,  $\eta_p^2$  = .02
- 18. To test differences in feelings of school belonging and psychological well-being by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .06, F(3, 7064) = 160.16, p<.001,  $\eta_p^2$  = .06. The univariate effect for school belonging was significant:  $F(1, 7066) = 480.27, p < .001, \eta_p^2 =$

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- 19. To test differences in feelings of school belonging and psychological well-being by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted, with GSA presence as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .06, F(3, 7064) = 160.16, p<.001,  $\eta_p^2$  = .06. The univariate effect for school belonging was significant:  $F(1, 7066) = 480.27, p < .001, \eta_p^2 =$ .06. The univariate effect for self-esteem was significant:  $F(1, 7066) = 118.63, p < .001, \eta_p^2 = .02$ . The univariate effect for depression was significant: F(1, 7066) = 138.22, p < .001, $\eta_p^2 = .02$
- 20. To test differences in feelings of safety by GSA attendance, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] as the independent variable, and feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as the dependent variables. The multivariate effect was significant: Pillai's trace = .003, F(3, 4350) = 4.81, p<.01,  $\eta_p^2$  = .003. The univariate effect for feeling unsafe because of gender was significant: F(1, 4352) = 14.138, p<.001,  $n_0^2=.003$ . The univariate effect for feeling unsafe because of gender expression and the univariate effect for missing school because of feeling unsafe were not significant.
- 21. To test differences in victimization by GSA attendance, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] the independent variable, and frequency of harassment and assault based on gender and harassment and assault based on gender expression as the dependent variables. The multivariate effect was significant: Pillai's trace = .002, F(2, 4231) = 4.36, p<.001,  $\eta_p^2$  = .002. The univariate effect for victimization based on gender was significant: F(1, 4232) = 8.08, p < .05,  $\eta_p^2 = .001$ . The univariate effect for victimization based on gender expression was significant: F(1, 4232) = 4.50, p < .05,  $\eta_p^2 = .001$ .
- 22. To test differences in feelings of school belonging and psychological well-being by presence of a GSA, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey,

- with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .002,  $F(3, 4303) = 3.37, p < .001, \eta_0^2 = .002$ . The univariate effect for school belonging was significant: F(1, 4305) = 6.74, p<.01,  $\eta_0^2$  = .002. The univariate effect for self-esteem was significant: F(1, 4305) = 7.53, p<.01,  $\eta_p^2 = .002$ . The univariate effect for depression was not significant.
- 23. The relationships between number of supportive staff, and feeling unsafe at school and missing school due to feeling unsafe were examined through Pearson correlations using data from the 2019 National School Climate Survey -Feeling unsafe regarding gender: r(7112) = -.10, p<.001; Feeling unsafe because of gender expression: r(7112) =-.14, p<001; Missing school because of feeling unsafe r(7131) = =-.25, p<.001.
- 24. The relationships between number of supportive staff school belonging and psychological well-being were examined through Pearson correlations using data from the 2019 National School Climate Survey - School belonging: r(7138) = .49, p<001; Self-esteem: r(7078) = .21, p<.001; Depression: r(7065)=-.26, p<.001.
- 25. The relationships between number of supportive staff school belonging and psychological well-being were examined through Pearson correlations using data from the 2019 National School Climate Survey - School belonging: r(7138) = .49, p<001; Self-esteem: r(7078) = .21, p<.001; Depression: r(7065) = -.26, p<.001.
- 26. To assess the relationship between number of supportive staff and educational aspirations, an analysis of covariance (ANCOVA) was performed using data from the 2019 National School Climate Survey with number of supportive staff as the dependent variable, educational aspirations as the independent variable, and student grade as a covariate. The main effect was significant: F(5, 7095) = 32.50, p<.001,  $\eta_p^2$  = .022. Post hoc comparisons were considered at p<.01. Those not planning to graduate high school had fewer supportive educators than those planning on any postsecondary education (vocational/ trade school, associate's degree, Bachelor's degree, graduate degree); those planning to graduate high school only had fewer supportive educators than those planning on an associate's degree, a Bachelor's degree, or a graduate degree; those planning on vocational school and those planning on an associate's degree both had fewer supportive educators than those planning on a Bachelor's degree or a graduate degree. No other significant differences were observed. Percentages are shown for illustrative purposes.

- 27. The relationship between number of supportive staff and GPA was examined through Pearson correlations conducted using data from the 2019 National School Climate Survey: r(7148) = .10, p<.001.
- 28. The relationships between frequency of school staff intervention and feeling unsafe because of gender or gender expression and missing school because of feeling unsafe were examined through Pearson correlations using data from the 2019 National School Climate Survey: Feeling unsafe because of gender or gender expression: r(5474) = -.08, p<.001; Missing school because of feeling unsafe: r(5481) = -.062, p < .001.
- 29. The relationships between feeling unsafe because of gender or gender expression and missing school because of feeling unsafe and effectiveness of school staff intervention were examined through Pearson correlations using data from the 2019 National School Climate Survey: Feeling unsafe because of gender or gender expression r(2560) = -.14, p<.001; Missing school because of feeling unsafe: r(2562) = -.24, p<.001.
- 30. To test differences in effectiveness of intervention by gender identity, an analysis of covariance (ANCOVA) was performed with effectiveness of staff response as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates using data from the 2019 National School Climate Survey. The main effect was significant: F(1, 4537) = 32.27, p < .001, $\eta_p^2 = .01.$
- 31. To test differences in feelings of safety by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted, with inclusive curriculum presence as the independent variable, and feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as the dependent variables. The multivariate effect was significant: Pillai's trace = .02, F(3, 7130) = 58.91, p<.001,  $\eta_p^2$  = .02. The univariate effect for feeling unsafe because of gender was significant: F(1, 7132) = 84.21, p<.001,  $\eta_p^2 =$ .01. The univariate effect for feeling unsafe because of gender expression was significant: F(1, 7132) = 63.54, p<.001,  $\eta_p^2$  = .01. The univariate effect for missing school because of feeling unsafe was significant: F(1, 7132) =100.87, p < .001,  $\eta_p^2 = .01$ .
- 32. To test differences in hearing biased remarks by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with inclusive curriculum presence as the independent variable, and frequency of hearing gender-based biased remarks as the dependent variables. The multivariate effect was

- significant: Pillai's trace = .03, F(2, 7172) = 109.01, p<.001,  $\eta_p^2$  = .03. The univariate effect for negative remarks about gender expression was significant: F(1, 7173) = 119.26, p<.001,  $\eta_p^2$  = .02. The univariate effect for negative remarks about transgender people was significant: F(1, 7173) =185.41, p < .001,  $n_p^2 = .03$ .
- 33. To test differences in hearing biased remarks by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with inclusive curriculum presence as the independent variable, and frequency of hearing gender-based biased remarks as the dependent variables. The multivariate effect was significant: Pillai's trace = .03, F(2, 7172) = 109.01, p<.001,  $\eta_p^2$  = .03. The univariate effect for negative remarks about gender expression was significant: F(1, 7173) = 119.26, p<.001,  $\eta_p^2$  = .02. The univariate effect for negative remarks about transgender people was significant: F(1, 7173) =185.41, p < .001,  $n_p^2 = .03$ .
- 34. To test differences in student intervention on biased remarks by presence of an inclusive curriculum, a one-way analysis of variance (ANOVA) was conducted using data from the 2019 National School Climate Survey, with inclusive curriculum presence as the independent variable, and frequency of student intervention as the dependent variable. The univariate effect for student intervention was significant: F(1, 66676) = 146.65, p<.001,  $\eta_p^2 = .02$ .
- 35. To test differences in gender-based victimization by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with inclusive curriculum presence as the independent variable, and frequency of harassment and assault based on gender and harassment and assault based on gender expression as the dependent variables. The multivariate effect was significant: Pillai's trace = .02, F(2, 6906) = 55.65, p<.001, = .02. The univariate effect for victimization based on gender was significant: F(1, 6907) = 106.27, p < .001,  $\eta_p^2 =$ .02. The univariate effect for victimization based on gender expression was significant: F(1, 6907) = 103.32, p < .001, $\eta_p^2 = .02.$
- 36. To test differences in gender-based victimization by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted using data from the 2019 National School Climate Survey, with inclusive curriculum presence as the independent variable, and frequency of harassment and assault based on gender and harassment and assault based on gender expression as the dependent variables. The multivariate effect was significant: Pillai's trace = .02, F(2, 6906) = 55.65, p<.001,

- $\eta_p^2$  = .02. The univariate effect for victimization based on gender was significant: F(1, 6907) = 106.27, p<.001,  $n_0^2 =$ .02. The univariate effect for victimization based on gender expression was significant:  $F(1, 6907) = 103.32, p < .001, \eta_p^2$ = .02.
- 37. To test differences in feeling comfortable talking to teachers about LGBTQ issues by presence of an inclusive curriculum, an analysis of variance (ANOVA) was conducted, with presence of an inclusive curriculum as the independent variable and feeling comfortable talking to teachers about LGBTQ issues as the dependent variable. The main effect with significant: F(1, 7155) = 465.10, p<.001,  $\eta_p^2$  = .06.
- 38. To test differences in academic achievement, an independent-samples t-test was conducted with presence of an inclusive curriculum as the independent variable and GPA as the dependent variable. The effect was significant: t(1887.49) = -2.86, p<.01, Cohen's d = .94.
- 39. To test differences in academic aspirations, an independent-samples t-test was conducted with presence of an inclusive curriculum as the independent variable and academic aspirations as the dependent variable. The effect was significant: t(1879.26) = -4.26, p<.001, Cohen's d = 1.30.
- 40. To test differences in school belonging and psychological well-being by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted, with inclusive curriculum presence as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .09, F(3)7061) = 242,92, p<.001,  $\eta_p^2$  = .09. The univariate effect for school belonging was significant: F(1, 7063) = 724.05, p<.001,  $\eta_p^2=.09$ . The univariate effect for self-esteem was significant: F(1, 7063) = 179.22, p<.001,  $\eta_p^2 = .03$ . The univariate effect for depression was significant: F(1, 7063) = 157.21, p<.001,  $\eta_p^2$  = .02.
- 41. To test differences in school being and psychological well-being by presence of an inclusive curriculum, a multivariate analysis of variance (MANOVA) was conducted, with inclusive curriculum presence as the independent variable, and school belonging, self-esteem, and depression as the dependent variables. The multivariate effect was significant: Pillai's trace = .09, F(3, 7061) = 242,92, p<.001,  $\eta_p^2$  = .09. The univariate effect for school belonging was significant: F(1, 7063) = 724.05, p<.001,  $\eta_p^2=.09$ . The univariate effect for self-esteem was significant: F(1, 7063) = 179.22, p<.001,  $\eta_p^2 = .03$ . The univariate effect for depression was significant: F(1, 7063) = 157.21, p<.001,  $\eta_p^2$  = .02.

- 42. To test differences in feelings of safety by presence of a comprehensive policy, a multivariate analysis of variance (MANOVA) was conducted, with comprehensive policy presence as the independent variable, and feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as the dependent variables. The multivariate effect was significant: Pillai's trace = .01, F(3, 7137) = 13.93, p<.001,  $\eta_p^2$  = .01. The univariate effect for feeling unsafe because of gender was significant: F(1, 7139) = 14.89, p < .001, $\eta_p^2$  = .002. The univariate effect for feeling unsafe because of gender expression was significant: F(1, 7139) = 16.36, p<.001,  $\eta_p^2=.002$ . The univariate effect for missing school because of feeling unsafe was significant:  $F(1, 7139) = 27.26, p < .001, \eta_p^2 = .004.$
- 43. To test differences in hearing biased remarks by presence of a comprehensive policy, a multivariate analysis of variance (MANOVA) was conducted, with comprehensive policy presence as the independent variable, and frequency of hearing gender-based biased remarks as the dependent variables. The multivariate effect was significant: Pillai's trace = .01, F(2, 7178) = 35.99, p<.001,  $\eta_p^2$ = .01. The univariate effect for negative remarks about gender expression was significant: F(1, 7179) = 58.86, p<.001,  $\eta_p^2$  = .01. The univariate effect for negative remarks about transgender people was significant: F(1, 7179) =43.09, p<.001,  $\eta_p^2$  = .01.
- 44. To test differences in gender-based victimization by presence of a comprehensive policy, a multivariate analysis of variance (MANOVA) was conducted, with comprehensive policy presence as the independent variable, and frequency of harassment and assault based on gender and harassment and assault based on gender expression as the dependent variables. The multivariate effect was significant: Pillai's trace = .003, F(2, 6911) = 11.20, p<.001,  $\eta_p^2$  = .003. The univariate effect for victimization based on gender was significant: F(1, 6912) =14.76, p<.001,  $\eta_p^2$  = .002. The univariate effect for victimization based on gender expression was significant:  $F(1, 6912) = 21.96, p < .001, \eta_p^2 = .003.$
- 45. To test differences in school belonging by presence of a comprehensive policy, an analysis of variance (ANOVA) was conducted, with comprehensive policy presence as the independent variable, and school belonging as the dependent variable. The effect was significant, F(1, 7173) =217.95, p<.001,  $\eta_p^2$  = .03.
- 46. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.

- 47. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 48. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 49. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 50. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: T he experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 51. To test the differential effects of GSA participation on school belonging and psychological well-being by gender identity, a two-way multiple analysis of covariance (MANCOVA) was performed, controlling for age and race/ ethnicity, with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] and gender identity as independent variables, and school belonging, self-esteem, and depression as dependent variables, and the interaction GSA participation X gender identity. The interaction term for self-esteem was significant:  $F(1, 9485) = 3.91, p < .05, \eta_p^2 = .000$ . The interaction terms for school belonging and depression were not significant.
- 52. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 53. To test the differential effects of GSA participation on feelings of safety by gender identity, a two-way multiple analysis of covariance (MANCOVA) was performed, controlling for age and race/ethnicity, with GSA attendance [high attendance (often or frequently) vs. low attendance (never, rarely, sometimes)] and gender identity as independent variables, and feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as dependent variables, and the interaction GSA participation X gender identity. The interaction term for feeling unsafe because of gender was significant: F(1, 9565) = 7.03, p < .01, $\eta_p^2$  = .01. The interaction terms for feeling unsafe because of gender expression and missing school because of feeling unsafe were not significant.

- 54. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 55. To test the differential effects of supportive school personnel on feelings of safety, a two-way analysis of covariance (ANCOVA) was performed, controlling for age and race/ethnicity, with number of supportive educators and gender identity as independent variables, missing school because of feeling unsafe as the dependent variable, and the interaction supportive personnel X gender identity. The interaction term was significant:  $F(1, 15509) = 12.95, p < .001, \eta_p^2 = .003.$
- 56. To test differences in reporting incidents of harassment and assault to school staff by gender identity, an analysis of covariance (ANCOVA) was performed with reporting incidents of harassment and assault as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant: F(1, 15631) = 389.36, p<.001,  $\eta_p^2=.02$ .
- 57. To test differences in effectiveness of intervention by gender identity, an analysis of covariance (ANCOVA) was performed with effectiveness of staff response as the dependent variable, gender identity as the independent variable, and age and race/ethnicity as covariates. The main effect was significant: F(1, 4537) = 32.27, p < .001, $\eta_p^2 = .01.$
- 58. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 59. To test the differential effects of inclusive curriculum on school belonging and psychological well-being by gender identity, a two-way multiple analysis of covariance (MANCOVA) was performed, controlling for age and race/ ethnicity, with inclusive curriculum presence and gender identity as independent variables, school belonging, self-esteem, and depression as dependent variables, and the interaction inclusive curriculum X gender identity. The interaction term for school belonging was significant: F(1, 15355) = 14.77, p < .001,  $\eta_p^2 = .001$ . The interaction terms for self-esteem and depression were not significant.
- 60. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 61. To test the differential effects of inclusive curriculum on feelings of safety by gender identity, a two-way multiple analysis of covariance (MANCOVA) was performed,

- controlling for age and race/ethnicity, with inclusive curriculum presence and gender identity as independent variables, feeling unsafe because of gender, feeling unsafe because of gender expression, and missing school because of feeling unsafe as dependent variables, and the interaction inclusive curriculum X gender identity. The interaction term for feeling unsafe because of gender was significant: F(1, 15484) = 45.41, p<.001,  $\eta_p^2 = .003$ . The interaction term for feeling unsafe because of gender expression was significant  $F(1, 15484) = 11.03, p < .01, \eta_p^2 =$ .001. The interaction term for missing school because of feeling unsafe was significant F(1, 15484) = 20.36, p < .001, $\eta_p^2 = .001.$
- 62. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's school. New York: GLSEN.
- 63. To test the differential effects of a comprehensive policy on victimization, a two-way multiple analysis of covariance (MANCOVA) was performed, controlling for age and race/ ethnicity, with comprehensive policy presence and gender identity as independent variable, victimization based on gender and victimization base on gender expression as dependent variables, and the interaction comprehensive policy X gender identity. The interaction term for feeling unsafe because of gender expression was significant: F(1,14955) = 4.53, p<.05,  $\eta_p^2$  = .000. The interaction term for feeling unsafe because of gender was not significant.
- 64. Gender was assessed via two items: an item assessing sex assigned at birth (i.e., male or female) and an item assessing gender identity (i.e., cisgender, transgender, nonbinary, genderqueer, male, female, and an additional write-in option). Based on responses to these two items, students' gender was categorized for these analyses as: Cisgender (including cisgender male, cisgender female, cisgender nonbinary/genderqueer, or unspecified male or female), Transgender (including transgender male, transgender female, transgender nonbinary/genderqueer, and transgender only), Nonbinary [including nonbinary, genderqueer, nonbinary/genderqueer male, nonbinary/ genderqueer female, or another nonbinary identity (i.e., those who wrote in identities such as "genderfluid," "agender," or "demigender")], and Questioning. There are students who identified as both nonbinary and transgender in the Transgender group; students in the Nonbinary group did not also identify as "transgender." Questioning students are not included in the analysis for this brief, but findings about questioning students can be found in the School Climate and Gender Section of the full 2019 National School Climate Survey Report.



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