Kristin Nelson 3/23/25

5409 20th Street South

Fargo, ND 58104

District 46

NO on HB 1144

Chairman Beard and members of the Senate Education Committee:

I am writing you today to encourage you to vote **DO NOT PASS** on HB 1144. This bill overextends the state's authority and inserts our AG into the bathrooms of our public schools. **I do not** believe it is the **responsibility of the state** to ensure students are using the **correct restroom**. I would love to ask Rep. Tveit and the other members who sponsored this bill why they have a **weird obsession** with where students use the restroom. Surly, there must be **more pressing matters** that these representatives, this committee, and our state have to deal with.

This is so much of a non-issue that I guarantee each and every one of you on this committee and reading this testimony have used a restroom next to a transperson and have not known it. I recently saw a video of a non-binary person who was at an airport and workers shooed them out of each bathroom thinking they didn't belong there. Where is this person supposed to pee at? I am truly curious why lawmakers spend so much time worried about where people pee that they must bring a bill to a committee to get other lawmakers thinking of people peeing, and soon, a room of 50+ people are now thinking about where students are using the restroom. It's weird.

Only about 1.8% of high school students in this country identify as trans, and of those, 70% report avoiding bathrooms because they feel unsafe or uncomfortable. Trans people who are uncomfortable with public bathrooms report self-dehydration and "holding it" to avoid public restrooms, some have reported UTIs as a result (Crissman, H.P et. Al). This is a national study, however the point stands, that shaming people and stigmatizing them for their personal care routines creates unsafe and harmful environments for those people. This is against the types of environments we try to build in school, a place where everyone, no matter who they are should be encouraged to live as their true selves.

Facts matter, and here are the facts about regulating a teen's restroom habits as pulled from the Crissman study cited above. The study interviewed 904 youth ages 14-24 around the country about the bathroom debate.

1. Public facilities choice is a private decision.

    a. The study participants agreed that going to the bathroom is a private activity and should be no one's business.
2. Public facilities choice is a human right.
    a. Respondents thought trans people should be able to use whatever bathroom makes them comfortable.
3. Public facilities choice and the myth of the transgender perpetrator
    a. Study respondents understand restrictions on bathroom use by transgender individuals as propagated by inaccurate portrayals of transgender people. Youth pointed out that restricting bathroom use by transgender people is, in part, driven by a conflation of gender non-conformity with criminal sexual deviance, particularly pedophilia.
4. Public facilities choice and the safety of transgender people.
    a. The respondents feared that trans people who pass as their affirmed gender may face harassment and violence if forced to adhere to bathroom restrictions.

I would be remiss if I did not include the other side of the argument:

1. Public facilities restrictions: transgender identity as illegitimate:
    a. This group expressed a belief that sex and gender should always remain concordant, and that this relationship is inflexible.
2. Public facilities restrictions based on genital anatomy:
    a. Bathroom use by transgender people should be restricted and emphasized the importance of genital anatomy in determining which bathroom transgender people should be allowed to use. This rationale stemmed from a fear of individuals, specifically cisgender girls, being exposed to phalluses.
3. Public facilities restrictions and the risk of falsified perpetrators:
    a. These respondents talked about safety concerns and the right of transgender people to use restrooms aligned with their gender identity. Their concern though was that people could masquerade as transgender in order to legitimize their entering other genders' restrooms for nefarious purposes.

This study goes on to say that of the youth who participated, the majority of respondents support transgender people having the right to choose which bathroom they use without restriction. Findings suggest a large number of youth support transgender rights, and a large number would be willing to provide peer support to transgender youth. Those in the study who had concerns for trans people accessing the bathroom of their choice, was more out of fear that of "enabling natal male sexual predators to enter women's bathrooms

for nefarious purposes." Meaning, they fear that cis-males will enter bathrooms and commit sexual assault, they don't actually fear transgender people.

Another study by the NIH delves into the rate of sexual assault among transgender and non-binary teenagers in school. "Transgender and non-binary middle and high school youth experienced sexual assault at troubling rates well above those for non-transgender adolescents. Besides avoiding restrictive policies, schools should strongly consider designating "all-gender restrooms" along with additional adult supervision in locations where harassment is most likely to occur (Murchison, A. R., et al, 2019).

The studies referenced in this testimony will be attached at the end. After considering the data I hope the committee can see another **bill restricting the rights** of North Dakotans is wrong. This bill was submitted by the party of "**small government**" and "**don't tread on me**" and "**freedom**", so please keep that in mind when debating the **bathroom habits of teenagers**.

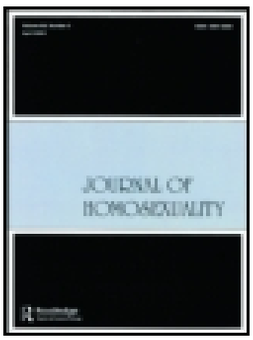
I would also urge you all to consider the **financial and practical implications** of this bill. Schools who already use these private restrooms would have to **spend tax dollars** to **remodel** them to fall in line with this bill. Will it fall to the **AG's office or DPI** do inspect the restrooms of all public schools to ensure that they pass muster? I cannot think of a better way to use **precious tax dollars** than that.

Your understanding of a trans person is not a prerequisite to their existence.

I implore all of you to vote **DO NOT PASS** on this bill.

Thank you.

Kristin Nelson (she/her)



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Youth Perspectives regarding the Regulating of Bathroom Use by Transgender Individuals

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ABSTRACT

Regulations regarding bathroom use by transgender people affect youth across the United States. This study examines youth opinions on bathroom use regulations. Data were obtained from MyVoice, a weekly text messaging survey of youth aged 14–24 years. Youth were recruited nationally at community events and online; Southeast Michigan was over-represented. Mixed methods analysis was performed using grounded theory methodology. The majority of respondents (n = 683) were white (71.4%) and had education beyond high school (56.5%). Most (79%) stated that bathroom use by transgender people should not be restricted, rationalizing: 1) bathroom use is private and should be a personal decision; 2) choosing bathrooms is a matter of equality, freedom, and human rights; 3) transgender people are not sexual perpetrators; and 4) forcing transgender people to use particular bathrooms puts them at risk. Contrary to the current policy in many schools, respondents do not support restrictions on bathroom use by transgender people.

KEYWORDS

Transgender; LGBT; bathroom; public policy; youth

Introduction

In recent years, many state legislatures and school boards in the United States have considered regulations regarding bathroom use by transgender people (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2016; Kralik, 2018; Sanders & Stryker, 2016). In 2016, two contrary efforts brought public bathroom use regulation to the national forefront; North Carolina passed House Bill 2, which required individuals to use the restroom that corresponds with the sex on their birth certificate, and the Obama administration released a letter to schools stating that "a school may not require transgender students to use facilities inconsistent with their gender identity" (Bishop, 2016; Kralik, 2018; Lhamon & Gupta, 2016). Under new administrations, these discrepant regulations were both rescinded in 2017, leaving the issue of which bathrooms

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transgender people should be allowed to use up for debate in state houses, municipalities, and schools across the country (Battle & Wheeler, 2017; Kralik, 2018).

The debate regarding public bathroom regulation in the U.S. is occurring in the context of a federal legal system with sparse protections for transgender individuals (Hart, 2014). The U.S. federal government has yet to codify any laws specifically detailing protection for transgender individuals from discrimination on the basis of gender identity. However, an increasing numbers of federal court rulings have concluded that federal discrimination laws, such as Title VII of the Civil Rights Act of 1964 which barred racially segregated public accommodations, forbade the use of federal funds for any discriminatory programs, and banned discrimination based on race, color, religion, sex and national origin, as well as Title IX of the Educational Amendments Act of 1972, should be interpreted as protecting transgender people against discrimination (Title VII of the Civil Rights Act of 1964 (1964)). Yet the issue remains debated as the Supreme Court and Congress have yet to take on discrimination on the basis of gender identity and the current administration's Department of Justice recently indicated that "sex" in the Civil Rights Act of 1964 referred to "biologic sex" and thus does not apply to discrimination against individuals based on gender identity. Without federal precedence, more than a dozen states and numerous municipalities have adopted laws officially protecting people from discrimination in public accommodations based on gender identity ("Transgender people and access to public accommodations," 2014). And rare legislation, such as California Assembly Bill 1266, has specifically addressed public accommodations in schools, legislating that California schools must allow transgender students to use sex-segregated facilities based on their gender identity (Pupil rights: sex-segregated school programs and activities, 2013).

It is estimated that at least 150,000 13–24 years olds in the U.S. (0.7%) identify as transgender (Herman, Flores, Brown, Wilson, & Conron, 2017), with new data from one multi-state survey suggesting an even higher prevalence, with 1.8% of 9th to 12th graders identifying as transgender (Johns et al., 2019). These findings suggest that youth are more likely to identify as transgender than current U.S. adults (Herman et al., 2017). Transgender youth experience high rates of violence and harassment in schools and are less likely to attend college than their cisgender peers (Crissman, Berger, Graham, & Dalton, 2017; James et al., 2016).

Many schools have instituted bathroom use regulations. While at the individual case level student plaintiffs have succeeded in gaining access to school bathrooms aligned with their gender identity through the courts, 60% of transgender youth in a national school climate survey reported being required by their school to use the restroom corresponding with their sex assigned at birth, and 70% of transgender students reported avoiding public

bathrooms because of feeling unsafe or uncomfortable (Kosciw et al., 2016). Transgender people who are uncomfortable with public bathroom options report self-dehydration and "holding it" to avoid public restrooms (Herman, 2013), with some evidence for higher rates of urinary tract infections in individuals who avoid using public restrooms (James et al., 2016).

The minority stress model describes the ways in which marginalized communities, including transgender people, are subject to stress as a result of alienation from social structures, norms and institutions (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Meyer, 2003). Aligned with minority stress theory perspective, gender minority youth who feel unsafe in public restrooms reported less psychological well-being (Weinhardt et al., 2017). Denial of public accommodations has been associated with emotional distress, adverse physical symptoms, and has even been associated with suicidality among transgender people (Reisner et al., 2015; Seelman, 2016). Legal rulings have also levied the minority stress theory, such as the case of Coy Mathis where the Colorado Civil Rights Division ultimately found that forbidding Coy, a transgender girl, from using the girls' bathroom at school created "an environment rife with harassment and inapposite to a nurturing school atmosphere" (Johnson, 2014).

However, the focus of the debate and media campaigns surrounding regulation of the use of public accommodations by transgender people has galvanized less attention for the implications for the wellbeing of transgender individuals, and has instead focused on fears regarding shielding and ensuring the safety of presumed cisgender women and girls in women's bathrooms (Madigan, 2016; Sanders & Stryker, 2016; Schilt & Westbrook, 2015; Stones, 2017). Specifically, the focus has been on what some have termed "penis panic" – the fear that individuals with natal penises will be allowed to "dress in sheep's clothing" and will have open reign to violate "vulnerable women" in women-only spaces (Schilt & Westbrook, 2015). Recent polling and studies suggest that many adults in the U.S. believe transgender people should not use the restroom aligned with their gender identity (Callahan & Zukowski, 2019; Parent & Silva, 2018; "Transgendered students and school bathrooms," 2014). While adult opinions of transgender youth appear more favorable, older and reported more socially conservative political views were associated with hesitance to allow transgender youth to use the restroom corresponding to their gender (Elischberger, Glazier, Hill, & Verduzco-Baker, 2016).

While transgender youth continue to face harassment at levels far beyond their cisgender peers, school environment surveys suggest schools are gradually becoming less hostile spaces for transgender youth (Kosciw et al., 2016). A small qualitative analysis of interviews with lesbian, gay, bisexual and transgender youth (n = 25) recently concluded that gender-neutral bathrooms are important in fostering a sense of safety and inclusivity, but the perspective of larger populations of youth remains unclear (Porta et al., 2017). We hypothesize that

in an era where a growing number of youth identify as transgender, many youth may not support restrictions on bathroom use by transgender people. If there is indeed peer support among youth for allowing transgender individuals to use bathrooms concordant with their gender identity, there may be profound positive implications for minority stress among upcoming generations of transgender youth (Bockting et al., 2013). Moreover, it may suggest that youth perspectives on bathroom use policies may differ from the narratives otherwise represented in debates regarding bathroom regulations.

Methods

We conducted a cross-sectional mixed methods study to collect demographic and qualitative data from youth across the U.S. Data were obtained from MyVoice, a weekly text messaging survey that solicits the opinions of youth on health and policy issues. MyVoice sampling and topic selection methods were previously described by Dejonckheere et al. (DeJonckheere et al., 2017). In brief, participants were recruited nationally at community events and online via Facebook and Instagram advertisements. Social media advertisements were created to target specific nationally representative demographic characteristics using weighted samples from the American Community Survey, with adjustments in recruitment advertisement targeting to meet benchmarks (DeJonckheere et al., 2017). Youth in Southeast Michigan were overrepresented. Eligible participants (14–24 years of age, fluent in English, with access to a phone with SMS capabilities) were assented or consented, and completed an online demographic questionnaire (n = 1010). The active MyVoice sample includes 906 youth who have responded to at least one text message survey from MyVoice.

MyVoice participants were asked via text message survey whether they had heard of the debate regarding bathroom use by transgender people: "There is a debate in some states about which bathroom transgender people are allowed to use. Have you heard about this?" (Yes/No). Participants who responded "No" received the following information, "What this means is that a person who was born a female but identifies as a male can only use female bathrooms and vice versa." Participants were then asked the following open-ended questions: "What do you think about this issue?" and "Is this important? Why?" Of the 906 active MyVoice participants, individuals were excluded from the analysis if they did not respond to any portion of the survey (n = 198) or did not respond to at least one of the two open-ended questions (n = 25), resulting in a sample size of n = 683 participants who responded to at least one of the two open-ended questions.

Open-ended responses were analyzed using qualitative content analysis, with a focused analysis of youth perspectives on which bathroom or

bathrooms they believe transgender people should be able to use and why (Hsieh & Shannon, 2005). This focus was established prior to data analysis to address the gap in knowledge surrounding youth opinions on policy options being debated nationally. Emergent themes, including groupings of beliefs about the bathroom types transgender people should use, and the rationale for opinions about bathroom use beliefs were identified. A codebook was codebook-created and iteratively refined by two researchers (HC, NK). The data were independently coded (HC, NK) with discrepancies discussed to reach consensus.

Descriptive statistics were used to calculate the percent of respondents expressing a particular view, using the number of respondents who expressed an opinion about the type of bathrooms transgender individuals should use as the denominator (n = 508), as not all of the 683 participants expressed an opinion regarding the type of bathroom transgender individuals should use. Some respondents (n = 36) identified two acceptable bathroom use options without a clear preference for one of the bathroom types; in this case, their response was coded under both of the bathroom use opinions they endorsed.

This study was approved by the University of Michigan IRB; a waiver of parental consent for participants under the age of 18 years was granted by the IRB.

Results

Among 906 eligible youth, the 683 participants (response rate 75.4%) had a mean age of 18.9 years (SD = 3.1 years), and half identified as non-transgender females (57.4%), labeled as ciswomen, henceforth (Table 1). Approximately 2.2% of participants identified as transgender, and another 1.5% identified as non-binary. The majority of respondents identified as White (71.4%), more than half had education or training beyond high school (56.5%), and the majority lived in the Midwest (69.8%). When the demographic characteristics of our survey respondents were compared to those of active MyVoice participants who did not respond, respondents were more likely to identify as non-transgender females or be from the Midwest compared to non-responders (data not shown).

Nearly all respondents (93%) were aware of the debate regarding bathroom use by transgender people. In open-ended responses, 74% (n = 508) expressed an opinion about policy regulating bathroom use by transgender people. Youth perspectives on bathrooms use policies were categorized as: 1) transgender people should be able to choose which bathroom they use; 2) bathroom use by transgender people should be restricted based on anatomy or sex assigned at birth; or 3) transgender people should use gender neutral or unisex bathrooms (Table 2).

Table 1. Respondent demographic characteristics (N = 683).

Demographic characteristic	n (%)
Age, mean (SD)	18.9 (3.1)
Gender, n (%)	**N = 681**
Male, non-transgender	247 (36.3)
Female, non-transgender	391 (57.4)
Transgender, female-to-male	14 (2.1)
Transgender, male-to-female	1 (<0.1)
Non-binary	10 (1.5)
Other	18 (2.6)
Race	**N = 681**
White	486 (71.4)
Black	54 (7.9)
Asian	65 (9.5)
Other (including multi-racial)	76 (11.2)
Hispanic	82 (12.0)
Education	**N = 681**
Less than high school	296 (43.5)
High school graduate	56 (8.2)
Some college or tech school	201 (29.5)
Associates or tech school graduate	19 (2.8)
Bachelors +	109 (16.0)
Region	**N = 679**
East	44 (6.5)
Midwest	474 (69.8)
South	98 (14.4)
West	63 (9.3)

Transgender people should be able to choose which bathroom they use (79%; n = 399)

The majority of respondents who expressed an opinion on bathroom use policies stated that transgender people should be able to use whichever bathroom they choose: *"I think transgender people should be allowed to use the bathroom of their choice, not what they are assigned at birth" (16 yo, White ciswoman, West)*. Respondents stated that people should be able to make bathroom use decisions based on their gender identity, or comfort using a particular restroom. Respondents made four main arguments for this position:

1) Public Facilities Choice as a Private Decision

Respondents described choosing a restroom as a private, personal decision: *"Going to the bathroom is a private activity and should be no one else's business" (18 yo, White transwoman, South)*. Individuals espousing privacy arguments also asserted that because an individual's bathroom use should not adversely impact others, an individual's right to privacy should be maintained in making bathroom use decisions: *"We should allow people who are trans go to their bathroom of choice it's not like it's going to affect anyone else" (17 yo, Black and White ciswoman, Midwest).*

Table 2. Youth perspectives on bathrooms use regulation and core rationales.

Transgender individuals should be able to choose which bathroom they use (79%)	
Bathroom use is private and should be a personal decision	*"People should be allowed to go into whatever bathroom they feel comfortable using.. It's no one's business what someone really has in their pants" (23 yo, White cisfemale, East).*
Choosing bathrooms is a matter of equality, freedom, and human rights	*"I believe that banning them [transgender people] from restrooms of their identity is just another way for people to keep their rights unequal to that of a cisgendered person" (16 yo, American Indian or Alaska Native and White cisfemale, Midwest).*
Transgender individuals are not sexual perpetrators	
Forcing transgender individuals to use particular bathrooms may put transgender individuals at risk	*"There's a huge misconception that transgender people are using a bathroom as 'predators'. This is inaccurate…" (22 yo, White cisfemale, Midwest).*
	"If they [transgender people] are forced to use a restroom of the gender which they do not present themselves as, that could put them in danger… I don't think trans people should have to fear violence when using the restroom" (19 yo White cisfemale, Midwest).
Transgender individuals should use bathrooms as restricted based on anatomy or natal sex (17%)	
Transgender identity is not a legitimate or acceptable identity Genital anatomy should be important in determining bathroom use There is a risk of perpetrators masquerading as transgender	*"If you are male, I mean if you were born male you use the male restroom. It's as simple as that. Because it's a ridiculous thing to have a conversation over. Males go to male bathroom. That's how that works. Real males. X,y chromosomes" (14 yo, White cismale, South).*
	"I think that people with penises should use the men's and people with vaginas should use the women's" (14 yo White cismale, Midwest).
	"It really doesn't bother me that a person who got a sex change wants to use the bathroom they got the parts for. But it also bothers me that a child molester or rapist could pretend to be a transgender and use that as an excuse to be around kids" (17 yo White cisfemale, South).
Transgender individuals should use gender neutral or unisex bathrooms (10%)	
	"We should have all gender neutral bathrooms" (18 yo White cismale, Midwest).

2) Public Facilities Choice as a Human Right

Other respondents used a framework of equality, freedom, and human rights as the rationale for their beliefs about bathroom use regulation: *"I think trans folks should be able to use whatever bathroom they would like. Because trans rights are human rights, and I think it is important and necessary to advocate for human rights and equity for marginalized groups." (21 yo, White cis-woman, Midwest).* Respondents recognized transgender people as a marginalized minority group, and perceived the regulation of their basic bodily functions (through bathroom use) as a violation of human rights.

Participants called for laws regulating bathroom use as discriminatory: *"Lawmakers are blowing up a non-issue to discriminate against minorities… I don't think our legislators should be encouraging hate and discrimination against a disadvantaged group" (20 yo, White cisman, Midwest).* Respondents drew parallels between the bathroom use debate and the civil rights

movement, suggesting that the debate is truly about valuing transgender people as people, and is not about bathrooms:

> *"I saw a post online that said 'it's not about bathrooms, just like it was never about drinking fountains.' That really resonated with me. Bathroom bills draw lines between first and second class people, and it's important to respect people's identities instead of spreading hate" (19 yo, White ciswoman, Midwest).*

3) Public Facilities Choice and the Myth of the Transgender Perpetrator

A group of respondents described legislation limiting bathroom use by transgender people as, *"based on the fallacy that transgender people are a danger to others" (23 yo, White cisman, West)*. These respondents understand restrictions on bathroom use by transgender individuals as propagated by inaccurate portrayals of transgender people: *"So called 'bathroom bills' are couched in the belief that trans people are sexual deviants or deceptive in some way, which is a harmful mischaracterization of trans people…" (20 yo, White ciswoman, Midwest).*

Specifically, youth pointed out that restricting bathroom use by transgender people is, in part, driven by a conflation of gender non-conformity with criminal sexual deviance, particularly pedophilia:

> *"I believe these bills are ineffective and offensive, they serve only to pander to transphobic ideologies and accomplish nothing regarding a non-existent threat (trans people aren't pedophiles) while simultaneously reaffirming bigoted beliefs…"(20 yo, White cisman, Midwest).*

Respondents emphasized that transgender people are not inherently, or disproportionately, sexual predators or pedophiles.

Others noted that assault or violence in a bathroom is illegal, and will remain illegal, regardless of the genders allowed in a particular bathroom:

> *"Many may argue that it [allowing transgender people in bathrooms aligned with their gender identity] lets people get away with sexual crimes, but sexual crimes are illegal no matter what gender or bathroom…" (15 yo, White ciswoman, Midwest).*

These respondents viewed restrictive bathroom policies as legitimizing fears steeped in transphobic mischaracterizations of transgender individuals and their behaviors, under the guise of improving public safety.

4) Public Facilities Choice and the Safety of Transgender People

In addition to transgender people not posing a threat to other bathroom users, respondents noted that forcing transgender people to use a particular bathroom may put transgender people in danger: *"Transgender people are most safe in the bathroom they identify with the most" (24 yo, White ciswoman, Midwest)*. One respondent explained: *"As a stealth transguy my safety depends on being able to use the men's bathroom" (23 yo, White transman, Midwest)*. These respondents argue

that, for example, a transgender individual who "passes" as their affirmed gender may be at increased risk of harassment or violence if they are forced by bathroom use restrictions to use the bathroom aligned with their sex assigned at birth. Respondents expressed concerns that transgender individuals may not be well accepted in bathrooms corresponding with their sex assigned at birth: *"…it is absurd to expect a trans man with a beard to use the women restroom" (23 yo, White cismale, West).*

This group concluded that restricting bathroom use may have negative implications for the well-being of transgender people, in terms of immediate physical safety, emotional and mental health, and marginalization and devaluing of the transgender community:

> *"Trans people are in greater danger in bathrooms than cispeople. They pose 0 threat. Forcing someone to use the bathroom opposite to their gender identity and expression would cause more shame, confusion and alarm. This is just another way to delegitimize an entire community for the narrow-mindedness of a few" (23 yo, Asian ciswoman, Midwest).*

Transgender people should use bathrooms as restricted based on anatomy or sex assigned at birth (18%; n = 92)

Some respondents stated that restroom use by transgender people should be restricted based on an individual's genital anatomy or sex assigned at birth. This group of respondents rationalized bathroom use restrictions with the following arguments:

1) Public Facilities Restrictions: Transgender identity as illegitimate

A cohort of respondents questioned the legitimacy of transgender identity – instead endorsing sex and gender as fixed and binary: *"People should use the bathroom that is on their birth certificate" (15 yo, White cisman, South).* Individuals explained these beliefs by describing transgender identity as diverging from what they saw as an obvious, strict, biologic binary of both sex and gender:

> *"If one has XY chromosomes, they are male. If one has XX chromosomes, they are female. Males need to use the male restroom, and females need to use the female restroom.. Also, it furthers the ignorance of facts by allowing men to believe they are women, and vice versa" (16 yo, White cisman, Midwest).*

This group of respondents expressed a belief that sex and gender should always remain concordant, and that this relationship is inflexible. Thus, transgender people using bathrooms corresponding with their gender identity was seen as unnatural, unacceptable, and pathologic: *"Transgender is a mental disorder and shouldn't be praised or accepted" (15 yo, White ciswoman, South).*

2) Public Facilities Restrictions Based on Genital Anatomy

Other respondents who felt bathroom use by transgender people should be restricted emphasized the importance of genital anatomy in determining which bathroom transgender people should be allowed to use.

Some respondents of this belief regarded gender affirming surgery on the genitals as a legitimate reason to allow transgender people to use the bathroom aligned with the gender they affirm:

> *"I don't think transgender people should use whichever bathroom they want to. I think they should be based on the reproductive organs the person has. Therefore, if a trans person had surgery to change their genitals they should use the bathroom that matches their genitals" (23 yo, White ciswoman, East).*

In part, respondents noted that this rationale stemmed from a fear of individuals, specifically cisgender girls, being exposed to phalluses: *"We need a male and female bathroom. That is it, plain and simple. Because a little girl should not have to be forced to see a penis in the bathroom in the name of 'tolerance'" (17 yo, White and Hispanic cisman, South).* Respondents described concerns about the potential for individuals to see genitals different from their own, using language that suggested genital viewing may be forced or inherent in bathroom use.

3) Public Facilities Restrictions and the Risk of Falsified Perpetrators

Some respondents raised concerns about the safety implications of codifying the right of transgender people to use restrooms aligned with their gender identity. These respondents did not express a concern that transgender people would act as perpetrators. Instead, they feared that non-transgender people could masquerade as transgender in order to legitimize their entering other genders' restrooms for a nefarious purpose: *"Sexual predators under a transgender facade can be very dangerous if they have free reign to use whatever restroom" (21 yo, White cisman, West).*

These individuals at times explicitly recognizing that their fears were not actually of transgender people. Instead, they expressed fears that the right for transgender people to use bathrooms aligned with their gender identity would create an avenue for increased bathroom violence by non-transgender perpetrators, particularly against young people and females:

> *"Honestly I have nothing against transgender people. But I think they should have a separate bathroom or go in family bathrooms. Not because of who they are but because of bad people in the world. With that law passed, any man can dress in women's clothes and go in a woman's bathroom and take advantage of anyone including young girls" (17 yo, White ciswoman, South).*

> *"I think transgender people should use the bathroom based off of their body part… I kind of don't care as long as no harm is caused to anyone, but I also don't really like the idea of using the bathroom with a man who wants to be a woman. So many rapists could play that off" (19 yo, Black ciswoman, Midwest).*

Transgender people should use gender neutral or unisex bathrooms (10%; n = 53)

A minority of respondents described gender neutral or unisex bathrooms as the preferred bathroom for proposed use by transgender persons, and more fundamentally challenged the need for the existence of gendered bathrooms. These respondents rationalized that gender neutral bathrooms were not only an ideal option for transgender people, but for all people: *"I think the issue would be solved if we got rid of separate gender bathrooms and just created universal bathrooms labeled "Bathroom" instead of "Men" and "Women" (21 yo, White ciswoman, Midwest)*. These respondents questioned the need for gendered restrooms, with some suggesting universal gender neutral restrooms.

Discussion

In this sample, nearly 8 in 10 youth stated that transgender people should be able to use the bathroom they feel most comfortable in. Youth justified protecting the ability of transgender people to choose the restroom they use with a narrative of privacy and minority rights. This relative peer acceptance aligns with trends suggesting school environments are gradually becoming less hostile spaces for transgender youth (Kosciw et al., 2016). These findings suggest that the majority youth perspective in this survey sample is in disagreement with the current bathroom use policies in many schools, and with legislation considered by many states in recent years to restrict bathroom use by transgender people (Kosciw et al., 2016; Kralik, 2018).

With an eye to civil rights implications, we recognize that the majority opinion should not be the lynchpin in determining the rights of a minority group. While the volume of peer youth support we describe here does not implicate the validity of human rights arguments for public restroom access, it may have significant implications for reducing minority stress associated with public bathroom exclusion. Whereas enacted and felt stigma, such as gendered bathroom exclusion, have been associated with psychological distress in the transgender population, peer support has been found to be protective (Bockting et al., 2013). Our findings suggest that there is significant peer youth support for transgender people using the bathroom concordant with their gender identity.

Moreover, given the lack of codified federal protections against transgender discrimination, and thus the current role for local and state legislation in determining public bathroom regulations, the opinion of the next wave of potential youth voters has significance, particularly as it appears to differ from the current opinion of U.S. adults (Callahan & Zukowski, 2019; "Transgendered students and school bathrooms," 2014).

A minority cohort of respondents in support of restrictions for bathroom use by transgender people expressed a strong essentialist belief in a fixed alignment of binary sex and gender (Callahan & Zukowski, 2019). These respondents referenced sex chromosomes and genitalia as the determinants of both sex and gender, asserting that deviance from this was pathologic. All major American medical societies disagree with this assertion, endorsing gender affirming treatment of transgender people and rejecting the notion that transgender identity is a mental illness (Coleman et al., 2012). It is unclear whether youth with essentialist beliefs lack education regarding gender and sex differences, but regardless of the etiology of these beliefs, respondent quotes indicate clear associated transphobia. Binary conceptions of gender have previously been associated with negative attitudes toward transgender people (Norton & Herek, 2013). While the transphobia associated with essentialist views of gender may be rooted in ingrained value systems, there is some evidence to suggest anti-prejudice interventions can reduce transphobia and increase support for transgender nondiscrimination laws (Broockman & Kalla, 2016). This raises the potential for anti-prejudice interventions as a mechanism to address the transphobic views of some youth.

While parental concerns for the safety of presumed cisgender women and children in bathrooms was a focal point during "bathroom bill" media coverage, safety in this context was mentioned by a minority of youth (Johnson, 2014; Madigan, 2016; Schilt & Westbrook, 2015). Interestingly, youth respondents expressed concerns not of transgender people specifically acting as sexual predators in bathrooms, but rather, a fear of enabling natal male sexual predators to enter women's bathrooms for nefarious purposes. Described by Schilt & Westbrook as "penis panic," this narrative suggests a fear of the perceived propensity of individuals assigned male sex at birth to commit assault, regardless of gender (Schilt & Westbrook, 2015). The National Task Force to End Sexual and Domestic Violence Against Women issued a consensus statement directly addressing this concern, stating: "Nondiscrimination laws do not allow men to go into women's restrooms–period… discriminating against transgender people does nothing to decrease the risk of sexual assault" ("National Consensus Statement of Anti-Sexual Assault and Domestic Violence Organizations in Support of Full and Equal Access for the Transgender Community," 2016). Youth proponents of allowing transgender individuals to use the bathroom corresponding with their gender identity echoed this argument. Regardless of the prevalence of these fears, and clear transphobia from some individuals with these concerns, ingrained fears of natal males (regardless of gender) as sexual predators signal a serious need to address societal factors that enable sexual assault, including toxic masculinity.

Some respondents in support of allowing transgender individuals to use the restroom most aligned with their gender noted that safety considerations for transgender people likely require more attention. These respondents recognized that transgender people may be at higher risk of physical violence, stigmatization, and harassment if their bathroom use is restricted. These concerns align with research that shows transgender students report significantly lower self-reported safety in bathroom facilities compared to cisgender students and high rates of assault while trying to use the restroom (Herman, 2013; Wernick, Kulick, & Chin, 2017).

Our findings are limited by response bias, and may represent incomplete participant perspectives despite the open-ended nature of responses. Though the sample of respondents represents a large population of youth, our findings are not nationally representative and may have excluded other minority viewpoints. Within the MyVoice cohort, individuals with little knowledge or opinions regarding issues affecting transgender people may have been less likely to respond. The opinions of youth in Southeast Michigan were overrepresented; this is likely due to community recruiting events were held in Southeast Michigan. Participants from Southeast Michigan may also have been more likely to recognize and engage with the host university. Southeast Michigan is politically Democratic-leaning; while the political leanings of the participants were not solicited, and youth tend to be more liberal than adults (Pew Research Center, 2018), if respondents were disproportionately of liberal ideology this may impact the generalizability of the results and suggest an over-estimation of broader youth support for transgender people using restrooms aligned with their gender identity (Norton & Herek, 2013).

Conclusion

In this sample of youth, the majority of respondents support transgender people having the right to choose which bathroom they use without restriction. Young people are more likely than U.S. adults to identify as transgender (Herman et al., 2017) and restrictive policies have been shown to have significant implications for the wellbeing of transgender youth (Johnson, 2014). As schools, states, and federal officials consider policies regarding bathroom use by transgender people, the voices of youth deserve to be heard; the next generation of voters may be more likely to support gender identity nondiscrimination laws for public accommodations than "bathroom bill" legislation enshrining strict bathroom segregation by natal sex.

Moreover, our findings indicating support among a large sample of youth for transgender rights, suggest a large number of youth may be willing and able to provide peer support to transgender youth. This has positive implications for potential reductions in minority stress, and psychologic distress, in the transgender population.

More work is needed to understand whether our finding are nationally representative, how youth opinions evolve as transgender people continue to become more visible in our society, and whether the rejection of "bathroom bills" by youth in this sample will predict a broader shift in public opinion regarding the regulation of gender.

Disclosure statement

The authors declare that they have no conflict of interest.

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Author Contributions

HC performed the data analysis, data interpretation, and initial manuscript preparation. CC performed data analysis, aided in interpretation of the data, and provided manuscript revisions. MM and TC aided in drafting survey items, interpretation of the data, revision of the manuscript, and conceptualization of the study design. MP aided in interpretation of data, aiding in study design, and contributed to manuscript revisions. All authors read and approved the final version of this manuscript before submission.

References

Battle, S., & Wheeler, T. E. (2017, February 22). *Dear colleague letter. departments of justice and education*. Retrieved from https://www.hlregulation.com/files/2017/02/colleague-201702-title-ix1-1.pdf

Bishop, D. J. (2016). *Public facilities privacy & security act, Pub. L. No. House Bill 2*. Retrieved from https://www.ncleg.net/Sessions/2015E2/Bills/House/PDF/H2v3.pdf

Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, *103*(5), 943–951. doi:10.2105/AJPH.2012.301141

Broockman, D., & Kalla, J. (2016). Durably reducing transphobia: A field experiment on door-to-door canvassing. *Science*, *352*(6282), 220–224. doi:10.1126/science.aad9713

Callahan, M. P., & Zukowski, K. T. (2019). Reactions to transgender women and men in public restrooms: Correlates and gender differences. *Journal of Homosexuality*, *66*(1), 117–138. doi:10.1080/00918369.2017.1395661

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., … Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, *13*(4), 165–232. doi:10.1080/15532739.2011.700873

Crissman, H. P., Berger, M. B., Graham, L. F., & Dalton, V. K. (2017). Transgender demographics: A household probability sample of US adults, 2014. *American Journal of Public Health*, *107*(2), 213–215. doi:10.2105/AJPH.2016.303571

DeJonckheere, M., Nichols, L. P., Moniz, M. H., Sonneville, K. R., Vydiswaran, V. V., Zhao, X., … Chang, T. (2017). MyVoice national text message survey of youth aged 14 to 24 years: Study protocol. *JMIR Research Protocols*, *6*(12), e247. doi:10.2196/resprot.8502

Elischberger, H. B., Glazier, J. J., Hill, E. D., & Verduzco-Baker, L. (2016). "Boys don't cry"—Or do they? Adult attitudes toward and beliefs about transgender youth. *Sex Roles*, *75*(5–6), 197–214. doi:10.1007/s11199-016-0609–y

Hart, L. (2014). with inadequate protection under the law, transgender students fight to access restrooms in public schools based on their gender identity. *Northern Kentucky Law Review*, *41*, 31.

Herman, J. L. (2013). Gendered restrooms and minority stress: The public regulation of gender and its impact on transgender people's lives. *Journal of Public Management & Social Policy*, *19*(1), 65.

Herman, J. L., Flores, A. R., Brown, T. N., Wilson, B. D., & Conron, K. J. (2017). Age of individuals who identify as transgender in the United States. *The Williams Institute*. Retrieved from https://williamsinstitute.law.ucla.edu/wp-content/uploads/TransAgeReport.pdf

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. doi:10.1177/1049732305276687

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender survey*. Washington, DC: National Center for Transgender Equality.

Johns, M. M., Lowry, R., Andrzejewski, J., Barrios, L. C., Demissie, Z., McManus, T., … Underwood, J. M. (2019). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students — 19 states and large urban school districts, 2017. *MMWR. Morbidity and Mortality Weekly Report*, *68*(3), 67–71. doi:10.15585/mmwr.mm6803a3

Johnson, J. (2014). Transgender youth in public schools: Why identity matters in the restroom. *William Mitchell Law Review*, *40*(5), 83. Article 4. Retrieved from https://open.mitchellhamline.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=2948&context=wmlr

Kosciw, J. G., Greytak, E. A., Bartkiewicz, M. J., Boesen, M. J., & Palmer, N. A. (2016). The 2015 national school climate survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools. *ERIC*. Retrieved from https://eric.ed.gov/?id=ED535177

Kralik, J. (2018). *"Bathroom bill" legislative tracking*. Retrieved from http://www.ncsl.org/research/education/-bathroom-bill-legislative-tracking635951130.aspx

Lhamon, C. E., & Gupta, V. (2016, May 13). *Dear colleague letter on transgender students. U.S. departments of education and justice*. Retrieved from https://www2.ed.gov/about/offices/list/ocr/letters/colleague-201605-title-ix-transgender.pdf

Madigan, T. (2016, May 11). What happened when a room full of Texas parents took on transgender bathrooms. *Washington Post*. Retrieved from https://www.washingtonpost.com/news/post-nation/wp/2016/05/11/transgender-students-rights-the-debate-becomes-loud-and-heated-in-texas/

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. doi:10.1037/0033-2909.129.5.674

National Consensus Statement of Anti-Sexual Assault and Domestic Violence Organizations in Support of Full and Equal Access for the Transgender Community. (2016, April 21). *National task force to end sexual and domestic violence against women*. National Task Force to End Sexual and Domestic Violence. Retrieved from http://www.4vawa.org/ntf-action-

alerts-and-news/2018/10/24/the-national-task-force-to-end-sexual-and-domestic-violence-condemns-trump-administrations-efforts-to-harm-the-transgender-community

Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, *68*(11–12), 738–753. doi:10.1007/s11199-011-0110–6

Parent, M. C., & Silva, K. (2018). Critical consciousness moderates the relationship between transphobia and "bathroom bill" voting. *Journal of Counseling Psychology*, *65*(4), 403–412. doi:10.1037/cou0000270

Pew Research Center. (2018). *Widegender gap, growing educational divide in voters' party identification* (p. 13). Retrieved from https://www.people-press.org/2018/03/20/wide-gender-gap-growing-educational-divide-in-voters-party-identification/

Porta, C. M., Gower, A. L., Mehus, C. J., Yu, X., Saewyc, E. M., & Eisenberg, M. E. (2017). "Kicked out": LGBTQ youths' bathroom experiences and preferences. *Journal of Adolescence*, *56*, 107–112. doi:10.1016/j.adolescence.2017.02.005

Pupil rights: sex-segregated school programs and activities. (2013). *Pub. L. No. Assembly bill 1266, § 221.5*. Retrieved from https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1266

Reisner, S. L., Hughto, J. M. W., Dunham, E. E., Heflin, K. J., Begenyi, J. B. G., Coffey-Esquivel, J., & Cahill, S. (2015). Legal protections in public accommodations settings: A critical public health issue for transgender and gender-nonconforming people. *The Milbank Quarterly*, *93*(3), 484–515. doi:10.1111/1468-0009.12127

Sanders, J., & Stryker, S. (2016). Stalled: Gender-neutral public bathrooms. *South Atlantic Quarterly*, *115*(4), 779–788. doi:10.1215/00382876–3656191

Schilt, K., & Westbrook, L. (2015). Bathroom battlegrounds and penis panics. *Contexts*, *14*(3), 26–31. doi:10.1177/1536504215596943

Seelman, K. L. (2016). Transgender adults' access to college bathrooms and housing and the relationship to suicidality. *Journal of Homosexuality*, *63*(10), 1378–1399. doi:10.1080/00918369.2016.1157998

Stones, R. J. (2017). Which gender is more concerned about transgender women in female bathrooms? *Gender Issues*, *34*(3), 275–291. doi:10.1007/s12147-016-9181–6

Title VII of the Civil Rights Act of 1964. (1964). Pub. L. No. 7152.

Transgender people and access to public accommodations. (2014, September). *National center for transgender equality*. Retrieved May 28, 2019 from https://transequality.org/know-your-rights/public-accommodations

Transgendered students and school bathrooms. (2014, March 19). *CBS news poll*. Retrieved from http://www.cbsnews.com/htdocs/pdf/CBSNewsPoll_Mar2014b_Transgender.pdf

Weinhardt, L. S., Stevens, P., Xie, H., Wesp, L. M., John, S. A., Apchemengich, I., … Lambrou, N. H. (2017). Transgender and gender nonconforming youths' public facilities use and psychological well-being: A mixed-method study. *Transgender Health*, *2*(1), 140–150. doi:10.1089/trgh.2017.0020

Wernick, L. J., Kulick, A., & Chin, M. (2017). gender identity disparities in bathroom safety and wellbeing among high school students. *Journal of Youth and Adolescence*, *46*(5), 917–930. doi:10.1007/s10964-017-0652–1

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School Restroom/Locker Rooms Restrictions and Sexual Assault Risk Among Transgender Youth

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Abstract

Background—Transgender and gender non-binary adolescents experience high rates of peer victimization, but the prevalence of sexual assault in this population has not been established. Some schools restrict transgender and non-binary students from using restrooms and locker rooms that match their gender identity, with unknown effects on sexual assault risk. We tested whether these restrictions were associated with the 12-month prevalence of sexual assault victimization.

Methods—Survey responses were analyzed from 3673 transgender and non-binary U.S. adolescents in grades 7 through 12 who participated in the cross-sectional 2017 LGBTQ Teen Study. We estimated the association between school restroom/locker room restrictions and past-

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CONTRIBUTORS' STATEMENT

Mr Murchison conceptualized and designed the study, coordinated data collection, carried out data analysis, drafted the initial manuscript, and revised the manuscript.

Dr Agénor provided input on the study design and analyses and reviewed and revised the manuscript.

Dr Reisner provided input on the study design and analyses and reviewed and revised the manuscript.

Dr Watson conceptualized and designed the study, coordinated and supervised data collection, and reviewed and revised the manuscript.

All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

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year sexual assault, adjusting for potential demographic, social, and behavioral confounders, using logistic regression. We also tested potential mediators.

Results—The 12-month prevalence of sexual assault was 26.5% among transgender boys, 27.0% among non-binary youth assigned female at birth, 18.5% among transgender girls, and 17.6% among non-binary youth assigned male at birth. Youth whose restroom/locker room use was restricted were more likely to experience sexual assault compared to those without restrictions, with risk ratios of 1.26 (95% CI: 1.02, 1.52) in transgender boys, 1.42 (95% CI: 1.10, 1.78) in non-binary youth assigned female at birth, and 2.49 (95% CI: 1.11, 4.28) in transgender girls. Restrictions were not associated with sexual assault among non-binary youth assigned male at birth.

Conclusions—Pediatricians should be aware that sexual assault is highly prevalent in transgender and non-binary youth, and that restrictive school restroom/locker room policies may be associated with risk.

Table of Contents Summary:

This study reports rates of sexual assault victimization, and its association with restrictive school restroom/locker room policies, in a transgender and gender non-binary adolescent sample.

INTRODUCTION

Adolescents (as well as children or adults) may identify as *transgender* when their gender identity—their internal sense of being male, female, or something else—does not match the sex they were assigned at birth. Someone whose gender identity falls outside of the traditional male and female “binary” may also identify as *non-binary*. Together, transgender and non-binary people are sometimes described as “gender minorities.”

Gender minority youth and adults are disproportionately likely to experience sexual violence. In the United States, the lifetime prevalence of sexual assault (i.e., unwanted sexual contact) among gender minorities is estimated at 47%,[1] Prior research with small samples of gender minority youth has found sexual assault rates of over 50% in some subpopulations, including transgender girls of color, transgender boys, and non-binary youth assigned a female sex at birth.[2,3] Transgender and non-binary people with a history of sexual violence are more likely to experience psychiatric distress,[4] engage in problematic substance use[5,6] and sexual risk behaviors, drop out of school,[7] and consider or attempt suicide.[4,5,7] In general, adolescents who have experienced sexual assault are at risk for major depression, post-traumatic stress disorder, substance use problems, eating disorders, and additional sexual violence.[8]

Little is known about risk factors for sexual assault in gender minority adolescents, but school policies and practices play an important role in other forms of victimization.[9,10] One potentially impactful policy is whether schools restrict transgender students from using restrooms or locker rooms that match their gender identity. A majority of transgender students report that school staff have placed limits on their restroom/locker room use.[11] In a focus group study, transgender boys reported fear and harassment when using girls’

restrooms. Using “unisex” facilities, often staff or nurse’s restrooms, likewise attracted “unwanted attention from peers and adults.”[12]

The literature suggests at least three reasons that restroom/locker room policies may be related to gender minority students’ risk of sexual assault. First, restrictions may cause students to use facilities that are less safe for them, and students may be assaulted while using them.[12] Second, restrictions may increase the likelihood of bias-related victimization in other locations, e.g. by increasing peer awareness student’s gender minority status,[12]. Third, restrictive policies may not cause victimization, but may be a marker of a hostile school or community climate for gender minority youth.[10] In each case, we would expect higher rates of sexual assault victimization in gender minority youth whose schools restrict their use of identity-congruent restrooms/locker rooms compared to those not facing restrictions. However, to date, the relationship between restroom/locker room policies and sexual assault victimization has not been examined.

Our first aim was to determine the 12-month prevalence of sexual assault in a large, geographically diverse sample of transgender and non-binary U.S. middle- and high-school youth. Our second aim was to determine whether having been prohibited by school staff from using identity-congruent restrooms/locker rooms is associated with sexual assault victimization in gender minority youth. Our third aim was to test four potential mediators of the restrictions-sexual assault association: perceived safety in restrooms/locker rooms, perceived safety elsewhere at school, sexual harassment victimization, and the proportion of classmates aware of the student’s gender minority status.

METHODS

Study population

We analyzed data from the LGBTQ Teen Study, an anonymous web-based survey of lesbian, gay, bisexual, transgender, and queer (LGBTQ) adolescents aged 13 to 17 years living in the United States and able to read English (N=17,112).[13] Youth were recruited through social media posts and were offered Human Rights Campaign-branded wristbands and entry into a $50 gift card drawing. Participants provided informed assent; parental permission was waived to avoid disclosure of the child’s LGBTQ identity. The study protocol was approved by the Institutional Review Board at the University of Connecticut.

Of 29,291 participants who began the survey, 8,985 screened ineligible and 3,006 were removed because they abandoned the survey before completing the first section. Probable mischievous (n=175) and duplicate (n=22) responses were manually identified and removed. The present analysis was limited to the 3,673 participants who were currently in grades 7 through 12 and reported a transgender and/or non-binary identity.

Measures

Restroom/locker room status.—The exposure of interest was being denied access to identity-congruent school restrooms and/or locker rooms by school staff. Participants were asked, “At school, do you use restrooms and locker rooms that match your gender identity?” (1=never, 5=always). Participants with responses other than “always” were provided a list of

5 possible reasons for not using identity-congruent facilities. Those who selected "Teachers or administrators told me I am not allowed to use them" (with or without other reasons) were classified as restricted. Any other response was classified as not restricted. Some students classified as restricted also reported additional reasons, such as feeling unsafe, and some students classified as non-restricted did not use identity-congruent facilities. In other words, the exposure of interest was the restriction imposed by school staff rather than actual facility use.

Sexual assault.—The binary outcome of interest was past-year sexual assault. Participants were asked, "During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)"[14] The response "0 times" was coded as 0. Any positive number of assaults was coded as 1.

Gender identity and sex assigned at birth.—Gender was assessed using a "two-step approach."[15] Participants provided their sex assigned at birth (male or female) and their current gender identity (male, female, trans male/trans boy, trans female/trans girl, non-binary, genderqueer/gender non-conforming, or write-in responses). "Non-binary," "genderqueer/gender non-conforming," and similar write-in responses (e.g., "gender fluid") were considered non-binary identities. Based on this information, participants were assigned to 1 of 4 categories: (1) *trans male*, i.e., male and/or trans male gender identity and female sex assigned at birth; (2) *trans female*, i.e., female and/or trans female gender identity and male sex assigned at birth; (3) *non-binary, AFAB*, i.e., non-binary gender identity and female sex assigned at birth; and (4) *non-binary, AMAB*, i.e., non-binary gender identity and male sex assigned at birth.

Covariates.—Our primary estimates of the association between restroom/locker room restrictions and sexual assault were adjusted for known risk factors for adolescent sexual assault victimization and gender minority peer victimization, as follows:

Alcohol use.: Participants were asked, "During your life, on how many days have you had at least one drink of alcohol?" (1=0 days, 7=100 or more days).[14]

Family connectedness.: Family connectedness was assessed using the mean of 3 items (sample: "How much do you feel…your family cares about your feelings?"; 1=strongly disagree, 5 = strongly agree). Items were selected, based on item-total correlation, from a 7-item scale previously used in research with LGBTQ adolescents.[16,17] Coefficient alpha was 0.83.

Teacher awareness of gender minority status ("outness").: Participants were asked, "For each of the following groups [teachers and adults at school], how many people currently do you think know that you are transgender?" (1=none, 5=all).

Caregiver education.: Participants were asked their relationship to "the one or two adults most responsible for raising you now" and the highest level of education that each had completed (1=High school/GED or less, 2=vocational/technical school or some college,

3=college completion, 4=postgraduate education). For youth with 2 caregivers, scores were averaged and (for Table 1 only) rounded to the nearest integer.

State same-sex marriage approval.: Attitudes towards sexual minorities and gender minorities are strongly correlated,[18] and same-sex marriage approval rates are predictive of health outcomes in LGBTQ populations.[19] In our sample, state-level approval was positively associated with family connectedness, outness to classmates and teachers, and perceived safety at school, and negatively associated with depression, sexual harassment, and restroom/locker room restrictions, supporting its validity as a proxy for lower levels of local anti-transgender stigma (see Supplemental Information). The proportion of state residents who approve of legal same-sex marriage was obtained from the 2016 Cooperative Congressional Election Study (CCES; N=64,600).[20]

Teacher LGBTQ attitudes.: Participants were asked, "How many of the teachers and staff at your school do you think are supportive of LGBTQ people?" (0=none of them, 3=all of them).

Presence of GSA.: Participants reported whether their school had a GSA, or gender/sexuality alliance (1=yes, 0=no).

Potential mediators.—Variables related to peer victimization were conceptualized as potential intermediates in the relationship between restroom/locker room restrictions and sexual assault risk.

Safety at school.: Participants responded to the question "When at school, how often do you feel safe…" for eight locations (sample: "In the cafeteria," 0=never, 4=always).[21] Safety in restrooms and locker rooms was defined as the mean of "in the bathroom" and "in the locker room" (alpha=0.89). Safety elsewhere in school was defined as the mean of the remaining six items (alpha=0.88).

Classmate awareness of gender minority status ("outness").: Participants were asked, "For each of the following groups [classmates at school], how many people currently do you think know that you are transgender?" (1=none, 5=all).

Sexual harassment.: Participants rated the past 12 month frequency (0=*0 times*, 5=*6+ times*) of experiencing five sexual harassment behaviors (sample: "Having someone flash or expose themselves to you").[22] Responses were summed. Coefficient alpha was 0.79.

Analysis

We first calculated the distribution of each covariate by gender group (i.e., gender identity and sex assigned at birth) and restroom/locker room restriction status. We then determined the prevalence of past 12-month sexual assault by gender and restroom/locker room restriction status. Next, we fit a logistic regression model for the probability of sexual assault, adjusting for potential confounders associated with adolescent sexual assault (i.e., alcohol use,[23] family connectedness,[24] and caregiver educational attainment[25]) and exposure to anti-transgender stigma and victimization (i.e., state same-sex marriage approval

rate[18,19] outness to teachers,[26] perceived teacher LGBTQ support, and presence/absence of GSA). The initial model also adjusted for age and race, but these were removed due to non-significance. Each model included interaction terms between restroom restrictions and gender group in order to estimate the effect of restroom/locker room restrictions separately for each group. We also tested interaction terms between assigned sex and each covariate; all were non-significant except for the interaction between assigned sex and outness to teachers, which was retained in the final model. Odds ratios from the model were converted to relative risks to aid interpretation.[27]

To assess potential mediators, we fit a separate natural effects model for each proposed mediator using the *Medflex* package for R.[28] The proportion mediated was calculated by dividing the natural indirect effect by the total effect on the log odds scale.

Missingness was low (1.7%) for sexual assault, but substantial for restroom/locker room status (9.6%) and certain covariates. Nearly all missingness was attributable to early survey termination rather than skipping of sensitive items, supporting the assumption that the data were missing at random and making multiple imputation appropriate.[29] The data were imputed 40 times using the *mice* package for R, and imputed data were used for all regression models.[30] As a sensitivity analysis, we fit models on the non-imputed data, resulting in similar point estimates (except for a stronger association among transgender girls) and larger standard errors due to the deletion of partial cases (see Supplemental Information). Data analysis was conducted in R 3.4.4.[31]

RESULTS

Participants represented every U.S. state, and a plurality (35.4%) lived in the South (Table 1). The mean age was 15.4 years (*SD*=1.3). Most (90.0%) participants were assigned female at birth (AFAB) with the remaining 10.0% assigned male at birth (AMAB); 58.9% of AFAB participants and 56.9% of AMAB participants had a non-binary gender identity.

Non-restricted youth lived in states with higher average same-sex marriage approval (0.62, *SD*=0.08) compared to restricted youth (0.60, *SD*=0.08, *P*<.001; Table 2). Restricted youth were less likely to have a GSA at their school (57.3% compared to 66.8%, *P*<.001) and gave poorer mean ratings for teacher LGBTQ attitudes (1.34, *SD*=0.64, compared to 1.53, *SD*=0.63, *P*<.001).

The prevalence of sexual assault in the past 12 months was 25.9% (95% CI 24.4, 27.3; Table 3). The prevalence was highest among non-binary AFAB youth at 27.0% (95% CI 25.0, 29.0) and transgender boys at 26.5% (95% CI 24.0, 28.6). Youth subject to restroom/locker room restrictions had an overall sexual assault prevalence of 36.0% (95% CI 31.6, 40.3).

After adjustment for potential confounders, in three of the four gender groups, youth who experienced restroom/locker room restrictions were significantly more likely to experience sexual assault than those whose facility use was not restricted (Table 4). Specifically, restricted transgender boys had 1.26 (95% CI 1.02, 1.52; *P*=.042) times the adjusted sexual assault risk compared to non-restricted transgender boys, restricted non-binary AFAB youth had 1.42 (95% CI 1.10, 1.78; *P*=.012) times the adjusted risk compared to non-binary

AFAB youth without restrictions, and restricted transgender girls had 2.49 (95% CI 1.11, 4.28; *P*=.027) times the adjusted risk compared to non-restricted transgender girls. For non-binary AMAB participants, restroom/locker room restrictions were not associated with sexual assault risk (*P*=.673).

Significant indirect effects were present for all four mediating variables tested (Table 5). Sexual harassment fully mediated the association between restroom/locker room restrictions and sexual assault victimization. There was partial mediation by feeling safe in restrooms/locker rooms (23.7% mediated), feeling safe elsewhere in school (19.0% mediated), and classmate knowledge of gender minority status (6.8% mediated).

DISCUSSION

In our sample of transgender and non-binary U.S. adolescents, the 12-month prevalence of sexual assault was 25.9%, substantially higher than national rates of 15% among cisgender high school girls and 4% among cisgender boys.[32] After adjusting for potential confounders, compared to non-restricted youth of the same gender identity and sex assigned at birth, school restrooms/locker room restrictions were associated with 1.26 times the risk of sexual assault for transgender boys, 1.42 times the risk for non-binary youth assigned female at birth, and 2.49 times the risk for transgender girls; we found no association between restroom/locker room restrictions and sexual assault risk in non-binary youth assigned male at birth. To our knowledge, the present study is the first to determine rates of sexual assault in a large middle- and high-school gender minority sample and the first to assess the association between school restroom/locker room policies and sexual assault victimization.

We found that sexual harassment fully mediated the association between restroom/locker room restrictions and sexual assault risk. One explanation for this finding is that restroom/locker room restrictions increase gender minority students' risk of sexual harassment, which can escalate to sexual assault. It is also possible that the students who experience restroom/locker room restrictions are more likely to experience sexual harassment and assault for other reasons (i.e., confounding), such as poor school disciplinary practices. Notably, our analysis controlled for both state-level and school-level indicators of attitudes towards LGBTQ people, reducing the likelihood that these attitudes confounded our results.

Our mediation results also suggested that restrictions are associated with student safety both in restrooms/locker rooms themselves and elsewhere at school, consistent with prior qualitative research indicating that restrictions increase both restroom/locker room victimization and peer hostility in general.[12] While the present study cannot determine whether the restrictions themselves affected safety, these results suggest that a single-person facility (e.g., a staff restroom) may not fully address the risks associated with restrictions. We found evidence for one potential mechanism for victimization outside restrooms/locker rooms—that restroom/locker room restrictions may put students at risk by "outing" them as transgender[12,33]—although classmates' awareness of students' gender minority status accounted for only a small proportion of the association between restrictions and sexual assault risk.

A major strength of the present study is the use of one of the largest samples of gender minority adolescents ever collected, including youth in every U.S. state. We controlled for key potential confounders, including school, family, and contextual factors. The study's limitations stem primarily from the use of cross-sectional, non-probability data. We cannot determine whether restroom/locker room restrictions caused the observed differences in sexual assault risk; furthermore, sexual assault prevalence estimates and other findings may not apply to the full population of U.S. transgender and non-binary adolescents. In particular, Black and Hispanic/Latino/a/x participants were underrepresented, which limited our ability to observe differences by race or ethnicity—a critical consideration in adolescent health research, particularly when restrictive or punitive practices (which often target Black and Latino/a/x youth) play a role. Similarly, the smaller number of students assigned male at birth limited the precision of effect estimates in this subgroup. Nonetheless, our sample had strong geographic and socioeconomic diversity, supporting our findings' generalizability to U.S. gender minority adolescents broadly.

CONCLUSION

Transgender and non-binary middle and high school youth in our sample experienced sexual assault at troubling rates well above those for non-transgender adolescents. Besides avoiding restrictive policies, schools should strongly consider designating "all-gender restrooms,"[12,33] along with additional adult supervision in locations where harassment is most likely to occur,[34] training staff to intervene in anti-LGBTQ bullying, and offering privacy options (e.g., curtains) in locker rooms.

Pediatricians should be aware of the high prevalence of sexual assault among transgender and non-binary youth, particularly those who have been subject to restrictive school policies, and should consider sexual victimization as a possible contributor to psychological distress and health risk behaviors in gender minority patients. Clinicians should routinely screen adolescents for a history of sexual assault,[35] keeping in mind that youth may not have previously disclosed the assault and may not volunteer the information unless asked directly.[36] Pediatricians can provide emotional support and mental health referrals;[35] gender minority youth should ideally be referred to providers who are experienced with gender minority populations. From a prevention perspective, pediatricians are key advocates for transgender and non-binary patients, and their role may include educating school officials and submitting letters confirming the patient's need to express their gender identity.[37] These communications can emphasize the importance of access to safe, identity-congruent restrooms and locker rooms.

Future research should identify the characteristics (e.g., perpetrators, settings) of sexual assault in transgender and non-binary K-12 youth, as well as any protective factors. Finally, it is not clear why restroom/locker room restrictions were not associated with sexual assault risk among non-binary youth assigned male at birth. Additional research should seek to better understand the school experiences and health risk profile of this understudied group.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Abbreviations:

AFAB	assigned female at birth
AMAB	assigned male at birth
HS	high school
GED	general equivalency diploma
SD	standard deviation
SSM	same-sex marriage
GSA	gender/sexuality alliance
LGBTQ	lesbian, gay, bisexual, transgender, and queer/questioning

REFERENCES

1. James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The Report of the 2015 U.S. Transgender Survey. Washington, D.C.: National Center for Transgender Equality; 2016. https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF. Published December 8 2016. Accessed June 1, 2018.
2. Garofalo R, Deleon J, Osmer E, Doll M, Harper GW. Overlooked, misunderstood and at-risk: Exploring the lives and HIV risk of ethnic minority male-to-female transgender youth. J Adolesc Health. 2006;38(3):230–236. DOI: 10.1016/j.jadohealth.2005.03.023 [PubMed: 16488820]
3. Sterzing PR, Gartner RE, Goldbach JT, McGeough BL, Ratliff GA, Johnson KC. Polyvictimization prevalence rates for sexual and gender minority adolescents: Breaking down the silos of victimization research. Psychology of Violence. 2017. DOI: 10.1037/vio0000123
4. Fernández-Rouco N, Fernández-Fuertes AA, Carcedo RJ, Lázaro-Visa S, Gómez-Pérez E. Sexual violence history and welfare in transgender people. J Interpers Violence. 2016;32(19):2885–2907. DOI: 10.1177/0886260516657911 [PubMed: 27386885]
5. Testa RJ, Sciacca LM, Wang F, et al. Effects of violence on transgender people. Prof Psychol Res Pr. 2012;43(5):452–459. DOI: 10.1037/a0029604
6. Coulter RWS, Blosnich JR, Bukowski LA, Herrick AL, Siconolfi DE, Stall RD. Differences in alcohol use and alcohol-related problems between transgender- and nontransgender-identified

young adults. Drug Alcohol Depend. 2015;154:251–259. DOI: 10.1016/j.drugalcdep.2015.07.006 [PubMed: 26210734]

7. Wyss SE. 'This was my hell': the violence experienced by gender non-conforming youth in US high schools. Int J Qual Stud Educ. 2004;17(5):709–730. DOI: 10.1080/0951839042000253676
8. Danielson CK, Holmes MM. Adolescent sexual assault: an update of the literature. Curr Opin Obstet Gynecol. 2004;16(5):383–388. DOI: 10.1097/00001703-200410000-00005 [PubMed: 15353946]
9. Hall W The effectiveness of policy interventions for school bullying: a systematic review. J Soc Social Work Res. 2017;8(1):45–69. DOI: 10.1086/690565 [PubMed: 28344750]
10. McGuire JK, Anderson CR, Toomey RB, Russell ST. School climate for transgender youth: a mixed method investigation of student experiences and school responses. J Youth Adolesc. 2010;39(10):1175–1188. DOI: 10.1007/s10964-010-9540-7 [PubMed: 20428933]
11. Kosciw JG, Greytak EA, Giga NM, Villenas C, Danischewski DJ. The 2015 National School Climate Survey: the experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools. New York: GLSEN; 2016. https://www.glsen.org/sites/default/files/2015%20National%20GLSEN%202015%20National%20School%20Climate%20Survey%20%28NSCS%29%20-%20Full%20Report_0.pdf. Published December 14, 2016. Accessed August 20, 2018.
12. Weinhardt LS, Stevens P, Xie H, et al. Transgender and gender nonconforming youths' public facilities use and psychological well-being: a mixed-method study. Transgend Health. 2017;2(1):140–150. DOI: 10.1089/trgh.2017.0020 [PubMed: 29159308]
13. Watson R, Wheldon C, Puhl R. Evidence of diverse identities in a large national sample of sexual and gender minority adolescents [published online ahead of print (February 13, 2019)]. J Res Adolesc. DOI: 10.1111/jora.12488
14. Centers for Disease Control and Prevention. Youth Risk Behavior Survey (YRBS) 2017 Standard Questionnaire Item Rationale. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/2017_standard_YRBS_item_rationale.pdf. Published 2016. Accessed July 3, 2018.
15. Reisner SL, Conron KJ, Tardiff LA, Jarvi S, Gordon AR, Austin SB. Monitoring the health of transgender and other gender minority populations: validity of natal sex and gender identity survey items in a U.S. national cohort of young adults. BMC Public Health. 2014;14(1):1224. DOI: 10.1186/1471-2458-14-1224 [PubMed: 25427573]
16. Eisenberg ME, Resnick MD. Suicidality among gay, lesbian and bisexual youth: the role of protective factors. J Adolesc Health. 2006;39(5):662–668. DOI: 10.1016/j.jadohealth.2006.04.024 [PubMed: 17046502]
17. Watson RJ, Veale JF, Saewyc EM. Disordered eating behaviors among transgender youth: probability profiles from risk and protective factors. Int J Eat Disord. 2016;50(5):515–522. DOI: 10.1002/eat.22627 [PubMed: 27862124]
18. Norton AT, Herek GM. Heterosexuals' attitudes toward transgender people: findings from a national probability sample of U.S. adults. Sex Roles. 2013;68(11):738–753. DOI: 10.1007/s11199-011-0110-6
19. Hatzenbuehler M L, Flores A R, Gates G J Social attitudes regarding same-sex marriage and LGBT health disparities: results from a national probability sample. J Soc Issues. 2017;73(3):508–528. DOI: 10.1111/josi.12229
20. Ansolabehere S, Schaffner BF. Cooperative Congressional Election Study, 2016: Common Content. Cambridge, MA: Harvard University; 2017.
21. Konishi C, Saewyc E, Homma Y, Poon C. Population-level evaluation of school-based interventions to prevent problem substance use among gay, lesbian and bisexual adolescents in Canada. Preventive Medicine. 2013;57(6):929–933. DOI: 10.1016/j.ypmed.2013.06.031 [PubMed: 23850517]
22. Hill C, Kearl H. Crossing the line: Sexual harassment at school. Washington, D.C.: American Association of University Women. https://www.aauw.org/files/2013/02/Crossing-the-Line-Sexual-Harassment-at-School.pdf. 2011. Accessed

23. Champion HLO, Foley KL, Durant RH, Hensberry R, Altman D, Wolfson M. Adolescent sexual victimization, use of alcohol and other substances, and other health risk behaviors. J Adolesc Health. 2004;35(4):321–328. DOI: 10.1016/j.jadohealth.2003.09.023 [PubMed: 15450546]
24. Tillyer MS, Wilcox P, Gialopsos BM. Adolescent school-based sexual victimization: exploring the role of opportunity in a gender-specific multilevel analysis. J Crim Justice. 2010;38(5):1071–1081. DOI: 10.1016/j.jcrimjus.2010.07.010
25. Butler AC. Child sexual assault: risk factors for girls. Child Abuse Negl. 2013;37(9):643–652. DOI: 10.1016/j.chiabu.2013.06.009 [PubMed: 23899536]
26. Russell ST, Toomey RB, Ryan C, Diaz RM. Being out at school: the implications for school victimization and young adult adjustment. Am J Orthopsychiatry. 2014;84(6):635–643. DOI: 10.1037/ort0000037 [PubMed: 25545431]
27. Zhang J, Yu KF. What's the relative risk? A method of correcting the odds ratio in cohort studies of common outcomes. JAMA. 1998;280(19):1690–1691. DOI: 10.1001/jama.280.19.1690 [PubMed: 9832001]
28. Steen J, Loeys T, Moerkerke B, Vansteelandt S. medflex: An R Package for Flexible Mediation Analysis using Natural Effect Models. J Stat Soft. 2017;76(11). DOI: 10.18637/jss.v076.i11
29. Sterne JA, White IR, Carlin JB, et al. Multiple imputation for missing data in epidemiological and clinical research: potential and pitfalls. BMJ. 2009;338:b2393. DOI: 10.1136/bmj.b2393 [PubMed: 19564179]
30. van Buuren S, Groothuis-Oudshoorn K. mice: multivariate imputation by chained equations in R. J Stat Softw. 2010:1–68. DOI: 10.18637/jss.v045.i03
31. R: A Language and Environment for Statistical Computing [computer program]. Version 3.4.4. Vienna, Austria: R Foundation for Statistical Computing; 2017.
32. Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance—United States, 2017. MMWR Surveill Summ. 2018;67(SS-8):1–114. DOI: 10.15585/mmwr.ss6708a1
33. Porta CM, Gower AL, Mehus CJ, Yu X, Saewyc EM, Eisenberg ME. "Kicked out": LGBTQ youths' bathroom experiences and preferences. J Adolesc. 2017;56:107–112. DOI: 10.1016/j.adolescence.2017.02.005 [PubMed: 28212504]
34. Taylor BG, Stein ND, Mumford EA, Woods D. Shifting boundaries: an experimental evaluation of a dating violence prevention program in middle schools. Prev Sci. 2013;14(1):64–76. DOI: 10.1007/s11121-012-0293-2 [PubMed: 23076726]
35. Kaufman M Care of the adolescent sexual assault victim. Pediatrics. 2008;122(2):462. DOI: 10.1542/peds.107.6.1476 [PubMed: 18676568]
36. Lessing JE. Primary care provider interventions for the delayed disclosure of adolescent sexual assault. J Pediatr Health Care. 2005;19(1):17–24. DOI: 10.1016/j.pedhc.2004.06.010 [PubMed: 15662358]
37. Forcier M, Olson-Kennedy J. Gender development and clinical presentation of gender nonconformity in children and adolescents. In: Blake D, Brent D, Geffner ME, Torchia MM, eds. *UpToDate*. Waltham, MA: UpToDate; 2018: https://www.uptodate.com/contents/gender-development-and-clinical-presentation-of-gender-nonconformity-in-children-and-adolescents. Accessed July 13, 2018.

What's Known on This Subject:

Among transgender and gender non-binary adolescents, lacking access to safe, gender identity-congruent restrooms and locker rooms is associated with psychological distress and negative peer attention. Peer victimization, including sexual harassment, is prevalent in this population.

What This Study Adds:

Transgender and gender non-binary adolescents experience high rates of sexual assault victimization during middle and high school. Being denied access to gender identity-congruent school restrooms and locker rooms is associated with sexual assault risk.

TABLE 1.

Percent distribution of demographic, family, social, and behavioral covariates among U.S. transgender and non-binary youth in grades 7-12 participating in the LGBTQ Teen Study, by sex assigned at birth and gender identity (*N*=3673)

Variable	Total (*N*=3673), %	Assigned female at birth		Assigned male at birth	
		Transgender boys (*n*=1359), %	Non-binary youth (*n*=1947), %	Transgender girls (*n*=158), %	Non-binary youth (*n*=209), %
Total		37.0	53.0	4.3	5.7
Region					
Northeast	18.2	17.7	18.2	18.6	21.3
South	35.4	32.3	37.6	36.5	34.8
North Central	24.2	27.8	22.1	23.1	20.3
West	22.2	22.1	22.1	21.8	23.7
Race/ethnicity					
White	68.1	71.5	66.1	70.3	62.7
Black	3.0	2.3	3.3	4.4	4.3
Asian	3.0	2.2	3.3	5.7	3.3
Hispanic/Latino	8.2	7.1	9.0	5.7	10.0
Biracial/Multiracial	15.3	14.8	15.8	12.7	16.7
Another race	2.3	2.1	2.4	1.3	2.9
Caregiver education					
HS/GED or less	16.6	20.0	14.1	11.2	19.9
Some college	27.7	29.5	26.6	25.2	27.9
4-year degree	33.3	32.8	33.9	39.9	27.9
Graduate degree	22.3	17.7	25.3	23.8	24.4
Out to teachers					
None	48.2	28.3	60.7	45.6	63.1
A few	20.9	20.8	21.3	20.4	19.5
Some	9.4	13.4	7.3	6.2	5.6
Most	10.9	17.7	6.6	13.4	5.8
All	10.5	19.9	4.1	14.4	6.0
Alcohol use					
0 days	44.5	41.3	46.5	48.5	43.8
1 or 2 days	17.8	16.7	18.3	18.0	20.4
3 to 9 days	18.2	19.2	17.8	15.2	18.2
10 to 19 days	8.1	9.7	7.0	10.0	5.9
20 to 39 days	5.6	6.8	5.4	2.2	3.3
40 to 99 days	3.0	2.9	3.0	2.7	5.1
100 or more days	2.6	3.4	2.0	3.5	3.3
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**
Age (years)	15.40 (1.29)	15.45 (1.25)	15.31 (1.32)	15.74 (1.22)	15.77 (1.28)
Family connectedness	3.18 (1.00)	3.09 (1.04)	3.20 (0.97)	3.35 (1.05)	3.42 (1.00)

Variable	Total (*N*=3673), %	Assigned female at birth		Assigned male at birth	
		Transgender boys (*n*=1359), %	Non-binary youth (*n*=1947), %	Transgender girls (*n*=158), %	Non-binary youth (*n*=209), %
State SSM approval	0.62 (0.08)	0.62 (0.08)	0.62 (0.08)	0.62 (0.08)	0.61 (0.08)

Note. SD = standard deviation. HS = high school. GED = general equivalency diploma. SSM = same-sex marriage.

TABLE 2.

Percent distribution of demographic, family, social, and behavioral covariates in relation to restroom/locker room restrictions among U.S. transgender and non-binary youth in grades 7-12 participating in the LGBTQ Teen Study, by sex assigned at birth and gender identity (*N*=3673)

	All (*N*=3673)		Assigned female at birth				Assigned male at birth			
			Transgender boys (*n*=1359)		Non-binary youth (*n*=1947)		Transgender girls (*n*=158)		Non-binary youth (*n*=209)	
	Restricted (*n*=452), %	Not restricted (*n*=2868), %	Restricted (*n*=265), %	Not restricted (*n*=985), %	Restricted (*n*=145), %	Not restricted (*n*=1599), %	Restricted (*n*=23), %	Not restricted (*n*=121), %	Restricted (*n*=19), %	Not restricted (*n*=163), %
Total	13.6	86.4	21.2	78.8	8.4	91.6	15.7	84.3	11.4	88.6
Race/ethnicity										
White	65.8	68.4	72.7	71.9	56.9	70.0	64.3	66.5	49.9	62.2
Black	2.3	3.2	3.8	2.4	8.1	1.6	4.3	3.5	4.5	2.2
Asian	2.0	3.2	5.9	2.3	4.8	1.9	2.9	3.6	6.7	1.1
Hispanic/Latino	9.0	8.1	5.3	7.1	8.1	7.4	9.6	8.8	13.6	11.3
Bi/Multiracial	17.8	15.0	10.9	14.4	22.1	16.3	16.5	15.4	19.1	19.6
Another race	3.1	2.1	1.5	1.9	0.0	2.9	2.5	2.3	6.2	3.5
Caregiver education										
HS/GED or less	21.0	15.9	72.7	19.3	56.9	23.2	64.3	13.8	49.9	18.5
Some college	32.0	27.1	3.8	29.2	8.1	31.4	4.3	26.0	4.5	33.3
4-year degree	29.9	33.9	5.9	32.8	4.8	32.1	2.9	34.6	6.7	26.0
Graduate degree	17.1	23.1	5.3	18.7	8.1	13.3	9.6	25.6	13.6	22.2
Teachers know gender minority status										
None	31.0	50.9	46.7	30.2	39.8	21.1	64.2	62.3	54.7	43.7
A few	21.5	20.9	20.3	20.8	20.6	20.8	20.6	21.0	10.5	24.5
Some	13.2	8.8	5.5	12.8	10.2	15.4	4.6	7.1	13.2	9.6
Most	18.1	9.8	13.6	16.3	12.6	22.6	4.7	6.2	15.1	11.3
All	16.2	9.6	14.0	19.8	16.8	20.0	5.9	3.5	6.5	10.9
Alcohol use										
0 days	41.0	45.1	46.4	41.7	59.9	39.8	42.7	47.3	52.6	38.5
1 or 2 days	15.4	18.2	17.4	17.3	21.1	14.5	21.6	18.5	10.7	16.8
3 to 9 days	16.4	18.5	17.0	19.9	5.6	16.5	20.0	17.6	4.1	19.6

	All (*N*=3673)		Assigned female at birth				Assigned male at birth			
			Transgender boys (*n*=1359)		Non-binary youth (*n*=1947)		Transgender girls (*n*=158)		Non-binary youth (*n*=209)	
	Restricted (*n*=452), %	Not restricted (*n*=2868), %	Restricted (*n*=265), %	Not restricted (*n*=985), %	Restricted (*n*=145), %	Not restricted (*n*=1599), %	Restricted (*n*=23), %	Not restricted (*n*=121), %	Restricted (*n*=19), %	Not restricted (*n*=163), %
10 to 19 days	10.4	7.7	11.0	9.1	4.2	11.9	6.0	6.7	5.2	9.6
20 to 39 days	8.1	5.3	2.5	6.1	0.4	9.6	2.7	5.2	7.6	6.8
40 to 99 days	3.1	3.1	3.2	3.2	0.4	1.8	4.0	2.9	14.0	4.2
100 or more days	5.7	2.2	2.6	2.7	8.3	6.0	3.0	1.7	5.7	4.6
School has GSA										
Yes	57.3	66.8	62.1	71.5	49.6	64.9	42.9	59.8	66.7	62.5
No	42.7	33.2	37.9	28.5	50.4	35.1	57.1	40.2	33.3	37.5
	Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)	
Age, years	15.32 (1.34)	15.42 (1.29)	15.38 (1.30)	15.46 (1.24)	15.15 (1.39)	15.32 (1.31)	15.6 (1.44)	15.77 (1.17)	15.71 (1.24)	15.77 (1.28)
Family connectedness	2.89 (1.05)	3.22 (0.99)	2.92 (1.05)	3.14 (1.03)	2.82 (1.02)	3.23 (0.96)	2.84 (1.19)	3.44 (1.00)	3.15 (1.01)	3.46 (1.00)
State SSM approval	0.60 (0.08)	0.62 (0.08)	0.60 (0.08)	0.62 (0.08)	0.59 (0.09)	0.62 (0.08)	0.64 (0.09)	0.62 (0.08)	0.58 (0.08)	0.62 (0.08)
Teacher LGBTQ support	1.34 (0.64)	1.53 (0.63)	1.39 (0.64)	1.60 (0.61)	1.29 (0.62)	1.47 (0.63)	1.19 (0.75)	1.59 (0.70)	1.20 (0.56)	1.59 (0.58)

Note. HS = high school. GED = general equivalency diploma. SD = standard deviation. SSM = same-sex marriage. GSA = gender/sexuality alliance.

TABLE 3.

Prevalence of sexual assault in the past 12 months overall and by school restroom/locker room status among U.S. transgender and non-binary youth in grades 7-12 participating in the LGBTQ Teen Study, by sex assigned at birth and gender identity (*N*=3673)

		Assigned female at birth		Assigned male at birth	
	All (*N*=3673), % (95% CI)	**Transgender boys (*n*=1359), % (95% CI)**	**Non-binary youth (*n*=1947), % (95% CI)**	**Transgender girls (*n*=158), % (95% CI)**	**Non-binary youth (*n*=209), % (95% CI)**
Sexual assault in past 12 months					
All	25.9 (24.4, 27.3)	26.5 (24.0, 28.6)	27.0 (25.0, 29.0)	18.5 (12.4, 24.6)	17.6 (12.3, 22.8)
No restrictions	24.3 (22.8, 25.8)	24.5 (21.9, 27.1)	25.6 (23.5, 27.6)	14.9 (8.8, 20.9)	17.6 (12.0, 23.2)
Restroom/locker room use restricted	36.0 (31.6, 40.3)	33.8 (28.1, 39.5)	42.2 (34.3, 50.2)	37.9 (18.3, 57.6)	17.4 (0.7, 34.1)

Note. CI = confidence interval.

TABLE 4.

Adjusted risk ratios for the association between being restricted from using gender-appropriate restrooms and locker rooms at school and past 12 month sexual assault victimization among U.S. transgender and non-binary youth in grades 7-12 participating in the LGBTQ Teen Study, by sex assigned at birth and gender identity (*N*=3673)

	Adjusted risk ratio for past 12 month sexual assault victimization (95% CI)
Assigned female at birth	
Transgender boys (*n*=1359)	
No restrictions (reference)	1.00
Restroom/locker room use restricted	**1.26 (1.02, 1.52)**
Non-binary youth (*n*=1947)	
No restrictions (reference)	1.00
Restroom/locker room use restricted	**1.42 (1.10, 1.78)**
Assigned male at birth	
Transgender girls (*n*=158)	
No restrictions (reference)	1.00
Restroom/locker room use restricted	**2.49 (1.11, 4.28)**
Non-binary youth (*n*=209)	
No restrictions (reference)	1.00
Restroom/locker room use restricted	0.82 (0.27, 2.08)

Note. All estimates are adjusted for parental educational attainment, alcohol use, family connectedness, teachers' awareness of participant's gender minority status, state same-sex marriage approval rate, presence of gender/sexuality alliance, and teacher LGBTQ attitudes. Within each model, the effect of restroom/locker room restrictions was allowed to vary by sex assigned at birth and gender identity (boy/girl versus non-binary). Bolded values are statistically significant at $\alpha = 0.05$.

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TABLE 5.

Direct and indirect effects and proportion mediated by peer victimization variables for association between restroom/locker room restrictions and past 12 month sexual assault victimization among U.S. transgender and non-binary youth in grades 6-12 participating in the LGBTQ Teen Study (*N*=3673)

	Natural direct effect		Natural indirect effect		Proportion mediated
Mediating variable	**Risk ratio**	***P***	**Risk ratio**	***P***	
Feel safe in restrooms/locker rooms	1.24 (1.05, 1.44)	.013	1.07 (1.04, 1.10)	<.001	.237
Feel safe elsewhere at school	1.25 (1.06, 1.46)	.008	1.06 (1.03, 1.09)	<.001	.190
Classmates know gender minority status	1.29 (1.10, 1.50)	.002	1.02 (1.00, 1.04)	.030	.068
Sexual harassment	1.02 (0.87, 1.19)	.816	1.29 (1.19, 1.40)	<.001	.935

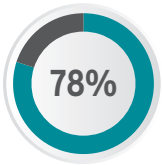
SEXUAL VIOLENCE & TRANSGENDER/ NON-BINARY COMMUNITIES

47%

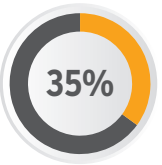
Almost half of all transgender people have been sexually assaulted at some point in their lives, and these rates are even higher for trans people of color and those who have done sex work, been homeless, or have (or had) a disability.[1]

Lifetime sexual victimization was much more prevalent among trans respondents who:[1]

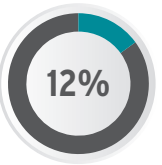
- **65%** Are American Indian
- **59%** Are Multiracial
- **58%** Are Middle Eastern
- **53%** Are Black
- **72%** Had Done Sex Work
- **65%** Had Been Homeless
- **61%** Had Lived with Disabilities



Harassment



Physical Assault



Sexual Violence

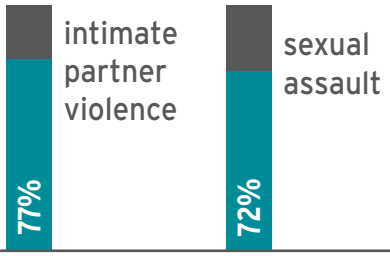
Trans or non-binary students in grades K-12 reported significant rates of harassment, physical assault, and sexual violence. Of the respondents who were harassed or physically/sexually assaulted due to their gender expression, over half have attempted suicide.[2]

57% of trans and non-binary people said they feel uncomfortable asking the police for help.

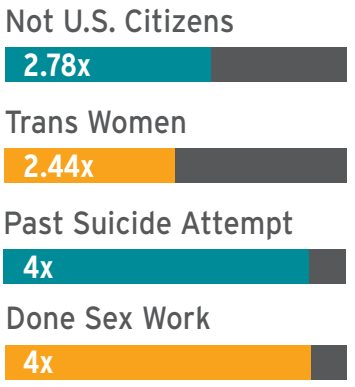
58% who interacted with law enforcement in the past year experienced mistreatment, such as verbal harassment, repeated misgendering, physical assault, or sexual assault.[1]

Uncomfortable asking the police for help

Mistreatment from law enforcement



Those who have done income-based sex work were also more likely to have experienced violence.[1]



While overall rates of trans and non-binary people receiving unequal treatment at rape crisis centers are low (4.9%), trans women were 2.44 times more likely to have experienced unequal treatment. Those who engaged in sex work were four times more likely.[3]

About This Infographic

This infographic highlights some of the ways sexual violence specifically impacts transgender and non-binary people. While the information in this infographic comes from research, it is important to keep in mind that trans and non-binary people both contributed to the creation of this infographic and are part of our collective movement to end sexual violence.

Now What?

Because we know that sexual violence happens at higher rates for some communities than others based on factors such as race, sexual orientation, gender identity, economic status, disability status, and immigration status, it is vital that we make our services inclusive. To increase access for trans and non-binary survivors, organizations can work with their local LGBT center and can complete organizational self-assessments to identify opportunities to increase access (see Resources). For more information, including resources on understanding sexual violence in various communities, go to www.nsvrc.org/publications.

Definitions[1]

Transgender: This term, sometimes shortened to trans, is often used to describe people whose gender identity or expression differs from what is associated with the gender they were assigned at birth.

Non-Binary: This term is used by some to describe people whose gender is not exclusively male or female, including those who identify as having no gender, as a gender other than male or female, or as more than one gender.

Cisgender: This term, sometimes shortened to cis, is used by some to describe people whose gender identity and expression matches with the gender they were assigned at birth.

References

1. James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey.* Retrieved from the National Center for Transgender Equality: https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF

2. Grant, J. M., Mottet, L. A., Tanis, J., Harrison, J., Herman, J. L., & Keisling, M. (2011). *Injustice at every turn: A report of the National Gender Discrimination Survey.* Retrieved from The National Center for Transgender Equality: https://transequality.org/sites/default/files/docs/resources/NTDS_Report.pdf

3. Seelman, K. L. (2015). Unequal treatment of transgender individuals in domestic violence and rape crisis programs. *Journal of Social Service Research, 41,* 307-325. doi:10.1080/01488376.2014.987943

Resources

Trans Lifeline
www.translifeline.org
1-877-565-8860

Demonstrate LGBTQ Access
www.demonstrateaccess.org

CenterLink: The Community of LGBT Centers
www.lgbtcenters.org

FORGE
www.forge-forward.org

Anti-Violence Project
www.avp.org

National Center for Transgender Equality
www.transequality.org

Transgender Law Center
www.transgenderlawcenter.org

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