Gender Minority Experiences of Medical Discrimination, Sta	ate Policy Protections, and
by	
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Abstract

Gender Minority Experiences of Healthcare Discrimination, State Policy Protections, and Care Avoidance

By Sean Luong

Background: Discrimination experiences of gender minority people likely contribute to their health and access to healthcare. *Objective*: To explore the associations between lifetime healthcare discrimination, state policy protections for gender minorities, and incidence of care avoidance among transferminine, transmasculine, and gender expansive groups. *Methods:* The Population Research in Identities and Disparities for Equality (PRIDE) study is an online, longitudinal study collecting health data from sexual and gender minority (SGM) people. Movement Advancement Project (MAP) is an organization that gathers data on LGBTQ policies and laws. This study was an ancillary analysis regarding reported healthcare discrimination and care avoidance from PRIDE study respondents in the 2018 annual survey. Participants were further identified as living in a state with overall harmful or protective policies. Logistic regression modelling explored relationships between lifetime healthcare discrimination and state policy to care avoidance in two separate models and then looked at both predictors to care avoidance in a third model. Results: Among the 309 transferminine participants, 580 transmasculine participants, and 1,675 gender expansive participants, all groups had higher odds of care avoidance after exposure to healthcare discrimination (OR: 7.81 CI: 3.35 - 17.15 in the transfeminine group, OR: 3.15 CI: 2.03 - 4.90 in the transmasculine group, and OR 4.31 CI: 3.34 -5.57 in the gender expansive group; P < 0.001 for all). Findings on state policy and care avoidance were not statistically significant. With both predictors in the model, odds of care

avoidance associated with experiencing lifetime healthcare discrimination were greater than the odds of care avoidance for participants living in a state with harmful healthcare policies (ORs(95% CIs): 8.29 (3.75-18.34) vs. 1.28 (0.67-2.44) in the transfeminine group, 3.15 (2.02-4.90) vs. 1.28 (0.83-1.98) in the transmasculine group, and 4.23 (3.28-5.47) vs. 1.21 (0.938-1.57) in the gender expansive group; P < 0.001 for lifetime healthcare discrimination predictors). *Conclusion:* Discrimination is associated with varying degrees of decreased access to care for gender minority people and potentially negative health impacts. Further research on intersectionality of gender minority people's identities may improve understanding regarding how to increase health equity for gender minority people.

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BACKGROUND

Transgender, also trans, describes a population of people with a range of diverse gender identities that do not exclusively align with one's sex assigned at birth. While transgender is an umbrella term, not every gender-diverse individual identifies as a transgender person. They may identify with a transfeminine identity (e.g. woman or trans woman), a transmasculine identity (e.g. man or trans man), or a gender expansive identity (e.g. gender nonconforming, gender fluid, agender) that is incongruent to their sex assigned at birth. Cisgender describes those whose gender identity are typically associated with their sex assigned at birth. Modern society has upheld a binary cisgender system, meaning everyone is assumed to be either male or female, based on their sex assigned at birth. Gender minority people are individuals who do not identify with a cisgender identity.

A substantial body of literature provides evidence that that trans people experience stigma related to gender identity₃₋₇. Stigma is defined as the social process of labeling, stereotyping, separation, status loss, and discrimination as a means of social control₈. Stigma is a social construct that comprises of these defined social processes, most tangibly discrimination, working at structural, interpersonal and individual levels of society. Structural oppression that results from stigma can affect access to critical resources, such as income, education, housing, and healthcare_{4,6,9-11}.

Discrimination related to gender identity impacts health outcomes both directly and indirectly. Transgender discrimination experiences are associated with negative psychological outcomes, including increased rates of depression, anxiety, and alcohol and substance use_{14,16-18}. Among transgender-identified adults, there is a 40% occurrence of lifetime suicide attempts,

compared to a 4.6% occurrence in the general population9,18,19. Transgender discrimination results in restriction of access to resources, such as education, income, and health insurance. This restriction can result in additional barriers to accessing health care and achieving optimal health9,12,15. In the 2015 US Transgender Survey, 25% of respondents experienced a problem with their health insurance due to being transgender, such as being denied coverage7. When seeing their health care provider, 33% of trans respondents reported mistreatment and only 65% of respondents received the gender affirming treatment they desired7. Barriers to accessing health care that arise from discrimination may prevent gender minority individuals from expressing their gender identity, further contributing to overall stigma.

Hatzenbuehler et. al. argue that stigma is a fundamental cause of, and a factor continually associated with, health inequalities4,22. Stigma is enacted through multiple social mechanisms that influence social determinants contributing to health inequality4,6,20. As social mechanisms such as laws and attitudes are formed, transgender stigma and health inequalities are perpetuated4,6. Discrimination is both a feature of stigma and a component in establishing stigma. Discrimination is characterized by actions or social conditions that exclude individuals or treat them unequally based on a perceived identity4,24. Discrimination operates at the structural, interpersonal and individual levels of society. Laws barring insurance coverage for gender affirming treatments reflect transgender discrimination at the structural level. Health care providers refusing to treat or mistreating trans patients reflects transgender discrimination at the interpersonal level. Trans people deciding not to seek out a health care provider for their health needs because they fear mistreatment or being disrespected reflects internalized transgender discrimination at the individual level. The modified social-ecological model of transgender stigma6 conceptualizes how discrimination may operate as social mechanisms of transgender

stigma (Figure 1). To understand stigma's role in transgender health inequality, a look into the relationship between structural, interpersonal, and individual levels of discrimination is required.

Previous studies have described care avoidance within the transgender population due to past experiences of discrimination from health care providers_{6,21}. The 2015 U.S. Transgender Survey found that 23% of respondents reported that they did not seek care due to fear of disrespect or mistreatment₇. A study of 452 trans people conducted in 2013 reported that experiences of healthcare discrimination were independently associated with a 2.43 higher likelihood of care avoidance for preventative care and a 3.41 higher likelihood of care avoidance when sick or injured 21. In addition to individual and interpersonal-level factors, recent studies on transgender discrimination have expanded to include structural-level variables. A study using data from the National Transgender Discrimination Survey sought to define individual and state-level factors that are associated with healthcare providers declining to treat transgender patients (i.e., care refusal) based on responses from 5,381 trans people₁₀. Multiple individual-level factors (i.e., age, race, income, care avoidance) and one state-level factor (i.e., percentage voting Republican) were positively associated with healthcare providers refusing to provide care to individuals who identify as transgender.

The purpose of this study was to assess relationships between structural-level discrimination (e.g. state healthcare policies) and interpersonal discrimination (e.g. healthcare discrimination) with individual-level internalized discrimination (e.g. care avoidance) amongst individuals who identify as transfeminine, transmasculine, or gender expansive. Previous studies have shown an association between mistreatment in healthcare and care avoidance but have not looked at correlation with structural stigma_{6,21}. Studies that have looked at structural stigma, simply

analyzed state-level demographics or noted the presence of one or two transgender protective lawss,10. Stratifying states by the amount of gender identity state policies on healthcare will potentially provide more nuanced interpretation of structural stigma data. We hypothesize that:

[1] Experiencing mistreatment or disrespect in healthcare settings previously will impact the likelihood of not seeing a healthcare provider when needed in the past year; [2] Living in a state with overall harmful healthcare policies related to gender identity is related to not seeing a healthcare provider when needed in the past year; [3] Care avoidance in the past year will have a stronger association with lifetime healthcare discrimination than living in a state with harmful healthcare policy for gender minority people. Associations between different mechanisms of transgender stigma can help us explore how stigma is linked to health inequity among transgender and gender expansive individuals

METHODS

This study analyzed data collected from the Population Research in Identities and Disparities for Equality (PRIDE) Study and the Movement Advancement Project (MAP). We included a subgroup of participants (n=2,574) from the PRIDE Study who identified with a transfeminine, transmasculine, or gender expansive identity and provided responses to survey questions about healthcare discrimination and care avoidance in 2018. The MAP database provided data on health policies related to gender equality for each state in the U.S for 2018. The Institutional Review Board at the University of California, San Francisco and Stanford University, as well as the Research Advisory Committee and Participant Advisory Committee for the PRIDE study approved this study.

The PRIDE Study

The PRIDE study is a national, online, longitudinal cohort study designed to collect demographic and health data about sexual and gender minority (SGM) people in order to understand their specific health needs and health inequity. The PRIDE Study applies a community engagement approach by involving participants to generate pertinent research questions and through dissemination of research findings. More comprehensive information on participant recruitment, enrollment, and engagement has been published previously23. Annual Questionnaires (AQ) are completed by participants to collect information on demographic characteristics and physical, mental, and social health. Topics in the AQ include health insurance coverage, diagnoses, surgeries and procedures, alcohol and substance use, lifestyle behaviors, sexual activity, social support, experiences of stigma and discrimination, and other identityrelated health topics23. Inclusion criteria for the PRIDE study included participants aged 18 years or older, identification as a sexual or gender minority, live in the United States, and the ability to read and understand English. From 7,327 responses of eligible participants who completed the 2018 AQ, 2,574 (35%) were categorized as gender minority individuals and were included in this study.

Demographics

Using the participant-reported gender identity and sex assigned at birth variables, participants were assigned to transfeminine, transmasculine, and gender expansive groups, which were the population in our study. Previous papers with the PRIDE Study have detailed how we have measured gender identity in detail32. Free text responses for gender identity were reviewed for feminine, masculine, and nonbinary language to ensure gender categorization fits with how

they identify. Participants' zip code was used to identify their state of residence and linked to the MAP database on level of healthcare policy protection. Additional covariates included in this study were age, sexual orientation, race/ethnicity, household income, education level, and insurance status (current insurance status and time uninsured in the past 12 months). Sex assigned at birth was included as a covariate for the gender expansive group.

Healthcare Discrimination

Participants were asked the following "yes"/"no" questions regarding healthcare discrimination: "Have you ever been denied or given lower quality medical care?" and "Have you ever been denied or given lower quality mental health care?" Participants who responded "yes" to either of these questions were coded as having experienced healthcare discrimination. Those who responded "yes" were asked if they experienced discrimination in the past year: "In the past year, have you been denied or given lower quality medical care?" and "In the past year, have you been denied or given lower quality mental health care?" Responses to having experienced discrimination recently was included as additional covariates in the analysis.

Care Avoidance

Participants were asked "Was there a time in the PAST YEAR when you needed to see a healthcare provider but did not because you thought you would be disrespected or mistreated?"

Those who answered "yes" were considered to be avoiding care.

Movement Advancement Project

MAP is a nonprofit organization that provides structural-level data collection about existing LGBTQ-related policies and laws for the purpose of advancing policy, resources, and awareness for the LGBTQ population. MAP indexes the number of policies that protect or harm individuals based on sexual or gender identity in every state. A policy tally score based on the policies in place in each state was calculated. Positive points are assigned to policies that are protective for the LGBT population and negative points are assigned to policies that are harmful to this population. Fractions of points can be assigned for policies or laws that are partially enacted or for local laws that provide some protection within the state. States are categorized as negative, low, medium, and high equality based on the policy tally.

State Healthcare Policy Tallies

State policy tallies for healthcare were determined by six types of policies related to health and safety and the potential points: "hate crimes laws covering LGBT people" (0 to 1 point), "private health insurance non-discrimination laws" (0 to 1 point), "health insurance providers banned from excluding coverage from transgender-specific care" (0 to 1 point), "state Medicaid policies related to coverage for transgender people" (-1 to 1 point), "transgender inclusive health benefits for state employees" (0 to 0.5 point), "state criminalizes exposure to and/or transmission of HIV" (-0.5 to 0 point). The total tally for gender identity policies ranges from -1.5 to 4.5 points. States are then categorized as having a harmful level of healthcare policy (-1.5 to 0 points) or protective level of health care policy (0.01 to 4.5 points).

DATA ANALYSIS

Descriptive statistics were used to describe demographics and frequency of having experienced health care discrimination and care avoidance. T-tests and Pearson's χ^2 tests were performed to determine two-way associations for healthcare discrimination and state healthcare policy tallies with covariates. Logistic regression models were used to identify the association between having experienced healthcare discrimination and care avoidance. Participant-reported location was used to link variables from the PRIDE Study database and the MAP database. Logistic regression models were used to identify associations between level of gender identity equality policies by state and care avoidance. Logistic regression models were used to compare the relationship between healthcare discrimination and care avoidance and the relationship between level of gender identity equality policies and care avoidance. Multivariable adjustment of the three models was used to control for relevant covariates (i.e. age, sexuality, race/ethnicity, household income and insurance status). All analyses were completed using Stata version 15 (College Station, TX).

RESULTS

There were a total of 2,574 participants across all three gender categories (n = 309 transfeminine people, n = 580 transmasculine people, n = 1,675 gender expansive people). Mean ages of each gender category were 40.9 years (SD = 14.7; Range = 18 - 76) for the transfeminine group, 29.8 years (SD = 10.4; Range = 18 - 76) for the transmasculine group, and 29.3 years (SD = 9.6; Range = 18 - 76) for the gender expansive group (Table 1). Approximately one third of each gender category reported having experienced discrimination in a healthcare setting in their

lifetime. Lifetime healthcare discrimination was reported by 31.1% of transferminine, 40.9% of transmasculine, and 36.3% of gender expansive groups.

Twenty-one states had state healthcare policy tallies of 0 or less (Figure 2). Across the gender groups, approximately 30 - 40% of participants from each gender category were living in a state with net neutral or negative level of policy protection for healthcare. Specifically, 117 transfeminine participants, 232 transmasculine participants, and 546 gender expansive participants were living in states that had more harmful than protective policies overall (Table 2).

Table 3 shows the odds ratios (ORs) and 95% confidence intervals (95% CIs) from the logistic regression models that were used to assess for associations between healthcare discrimination and state healthcare policies with care avoidance. Model 1 showed that all three gender identity groups had higher odds of care avoidance after exposure to healthcare discrimination (ORs (95% CIs): 7.81 (3.35 - 17.15) in the transfermining group, 3.15 (2.03 - 4.90) in the transmasculine group, and 4.31 (3.34 – 5.57) in the gender expansive group; P < 0.001 for all). Model 2 shows that the odds of experiencing care avoidance in the states with neutral or negative levels of healthcare policy protection among transfeminine (OR 1.42; 95% CI 0.7 – 2.89), transmasculine group (OR 0.85; 95% CI 0.55 - 1.30), and gender expansive (OR 1.13; 95% CI 0.88 – 1.47) groups. None of these results were statistically significant. Model 3 incorporated both predictors in the same logistic regression model. This model showed that, for all three gender identity groups, the odds of care avoidance associated with experiencing lifetime healthcare discrimination were greater than the odds of care avoidance for participants living in a state with harmful healthcare policies (ORs(95% CIs): 8.29 (3.75 –18.34) vs. 1.28 (0.67 – 2.44) in the transferminine group, 3.15 (2.02 - 4.90) vs. 1.28 (0.83 - 1.98) in the transmasculine group,

and 4.23 (3.28 - 5.47) vs. 1.21 (0.938 - 1.57) in the gender expansive group; P < 0.001 for lifetime healthcare discrimination predictors).

DISCUSSION

This study explored whether discrimination experiences and social environments are associated with care avoidance among gender minorities. For transfeminine, transmasculine, and gender expansive groups, 30 - 40% reported having experienced healthcare discrimination in their lifetime. This is consistent with previous studies' characterization of the high occurrence of discrimination against transgender people in healthcare settings6,7,11,18. Despite growing visibility and acceptance of transgender or gender expansive people, discrimination remains highly prevalent.

Consistent with past studies10,21, our findings support that experiencing healthcare discrimination in the past is associated with increased odds of avoiding care among transgender people. Avoiding care is a form of individual-level discrimination, a response to anticipatory healthcare discrimination. Care avoidance may result in reduced capability for trans individuals to access a critical resource such as healthcare. Supporting transgender people in developing ways to cope with the fear of mistreatment has been hypothesized as an intervention to increase trans individuals' capacity in accessing care10,25. Addressing healthcare providers' education in transgender health and transphobia may also be a strategy to reduce the likelihood of discrimination and increase access to care14,26,27. Analyzing models for transfeminine, transmasculine, and gender expansive groups separately, we can compare relationships across gender categories. We found that the odds of care avoidance in transfeminine people who experienced healthcare discrimination in the past are 7.81, compared to odds of 3.15 in

transmasculine people, and 4.31 in gender expansive people. This finding is consistent with previous studies that show transfeminine people may experience the greatest severity of discrimination and therefore may require special consideration when it comes to providing resources to increase access to health care and address discrimination experiences_{7,10,28,29}.

Attitudes toward sexual and gender minorities vary by geographic location and is reflected in healthcare policies and how residents vote30,31. Prior studies have found states with more conservative voters have a higher prevalence of providers refusing care to transgender individuals, but have not found significant associations between protective policies for transgender individuals and lower instances of discrimination experiences 10. We have also not been able to find significant associations between overall state healthcare policies related to gender identity and care avoidance. It is possible that the MAP methods for scoring policies may not reflect the actual weight of each policy. Further studies should consider transgender policy protections beyond the realm of healthcare and other possible methods to measure structural-level discrimination. Regardless, structural-level discrimination in the form of healthcare policies is associated with restricted access to healthcare for transgender individuals and may negatively impact health outcomes7,16,18.

Comparing the associations between lifetime healthcare discrimination versus state healthcare policies with care avoidance, we found that experiencing healthcare discrimination remains statistically significant, while the policies do not. This suggests that, in our study, interpersonal-level factors have a stronger association to anticipated discrimination than structural-level factors. However, further studies that offer more nuanced assessment of structural factors are required. These findings may speak to how structural stigma is enacted

through the interpersonal level and associated with negative impacts to health in transgender individuals_{6,12}.

While this study provides insight into how discrimination experiences and political climate relate to anticipated discrimination behavior, the findings should be considered with some limitations. A cross-sectional study design does not allow for conclusions about cause and effect. Our study sample was predominately White, of higher education, and higher socioeconomic status based on household income (Table 1). Future studies with more diverse samples would allow for more detailed analysis of these relationships in other groups. Future studies also need to consider the unique challenges that transgender and gender expansive people with other health-related conditions (e.g., disabilities) may experience.

In conclusion, our study supports the hypothesis that discrimination is associated with decreased access to care for trans and gender expansive people and potentially negative health impacts. Interpersonal-level discrimination is more strongly associated with care avoidance than structural-level discrimination, although this could be due to difficulty in obtaining structural-level data. People who identify as transfeminine reported the greatest odds for care avoidance and may require additional consideration for support and resources. It should be recognized that transgender discrimination extends beyond the healthcare setting and is linked with accessing other resources critical to life. Identifying the association between discrimination and care avoidance prompts the need for continued research and establishing resources to address fears of mistreatment or disrespect in healthcare settings for transgender and gender expansive people.

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Figure 1. Modified social-ecological model of transgender stigma and application to healthcare discrimination experiences⁶

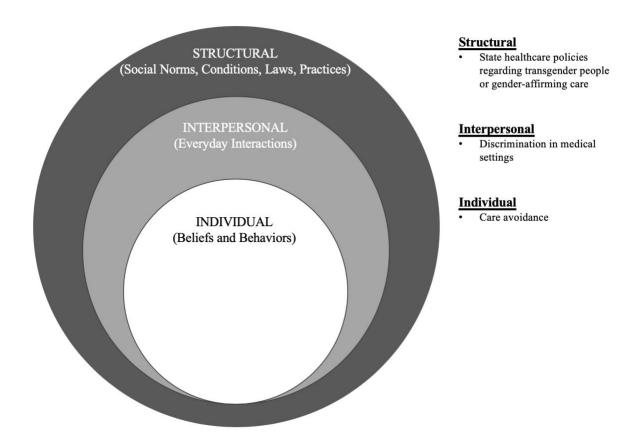


Figure 2. Map of states with harmful or protective healthcare policies regarding gender identity

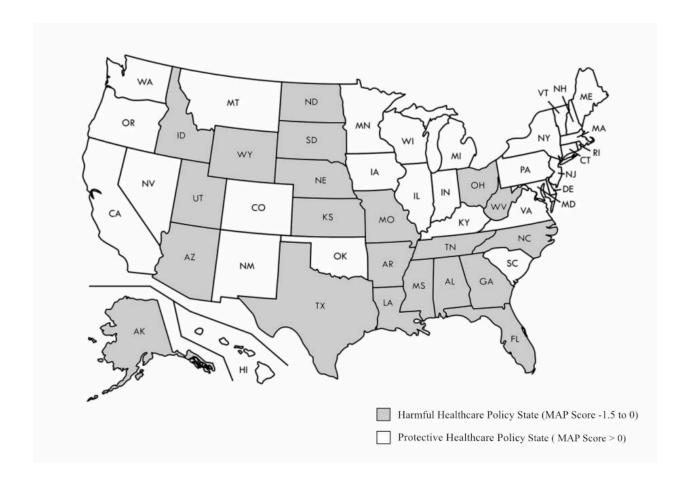


Table 1. Demographic characteristics and discrimination experiences of gender minority participants in the 2018 PRIDE study annual questionnaire

	Transfeminine	Transmasculine	Gender Expansive
n(%)	309(12)	580(22.5)	1685(65.5)
Age, mean <u>+_</u> SD	40.9 <u>+</u> 14.7	29.8 <u>+</u> 10.4	29.4 <u>+</u> 9.6
Race/Ethnicity(%)			
American Indian Alaskan Native	0(0)	2(0.34)	4(0.24)
Asian	2(0.65)	13(2.24)	52(3.09)
Black	3(0.97)	16(2.76)	17(1.01)
Latino	6(1.94)	13(2.23)	22(1.31)
Middle Eastern	2(0.65)	1(0.17)	5(0.30)
Pacific islander	0(0)	0(0)	0(0)
White	264(85.44)	471(81.21)	1341(79.58)
Other	7(2.27)	1(0.17)	14(0.83)
Multiracial	25(8.09)	63(10.86)	230(13.65)
Sexual Orientation (%)			
Asexual	12(3.93)	14(2.4)	54(3.23)
Bisexual	31(10.16)	54(9.6)	94(5.62)
Gay	2(0.66)	68(12.0)	35(2.09)
Lesbian	71(23.28)	2(0.35)	87(5.20)
Pansexual	38(12.46)	40(7.08)	70(4.19)
Queer	12(3.93)	94(16.64)	263(15.73)
Questioning	5(1.64)	4(0.71)	3(0.18)
Heterosexual	20(6.56)	57(10.09)	3(0.18)
Another SO	4(1.31)	2(0.35)	20(1.20)
More than one SO	110(36.07)	230(40.71)	1043(62.38)
Education level			
No high school degree	2	11	18
High school, technical school, some college	94	191	495
College degree, 2 or 4 year	120	183	580
Graduate degree	61	125	383
Household income			
< \$20,000	31	64	231
\$20,000 to \$39,999	64	104	340
\$40,000 to \$59,999	37	100	259
> \$60,000	139	229	606
Uninsured in the Past Year			
No	207	400	1156
Yes	42	62	218
Experienced Medical			
Discrimination in their Lifetime(%)			
No	213(68.9)	343(59.1)	1074(63.7)
Yes	96(31.1)	237(40.9)	611(36.3)

Table 2. Number of participants residing in states with overall harmful or protective state policies for gender minorities

Healthcare Policy Tally (%)	Transfeminine	Transmasculine	Gender Expansive
Living in Harmful State	117(37.9)	232(40.0)	546(32.4)
Living in Protective State	192(51.1)	348(60.0)	1139(57.6)

Table 3. Associations between healthcare discrimination and harmful state healthcare policy and care avoidance in transfeminine, transmasculine, and gender expansive groups.

		Transfeminine N=309	o o		Transmasculine N=587	ine	U	Gender Expansive N=1685	sive
	OR	12 %S6	Ь	OR	95% CI	Ь	OR	I) %56	Ь
Model 1									
Experienced medical discrimination in lifetime	7.81	7.81 3.55, 17.15 <0.001 3.15 2.03, 4.90 <0.001 4.31 3.34, 5.57 <0.001	<0.001	3.15	2.03, 4.90	<0.001	4.31	3.34, 5.57	<0.001
Model 2									
Harmful State Health Policies for Gender Identity 1.42	1.42	0.7, 2.89	0.33	0.85	0.33 0.85 0.55, 1.30 0.45 1.13 0.88, 1.47	0.45	1.13	0.88, 1.47	0.34
Model 3									
Experienced medical discrimination in lifetime	8.29	8.29 3.75, 18.34 <0.001 3.15 2.02, 4.90 <0.001 4.23 3.28, 5.47 <0.001	<0.001	3.15	2.02, 4.90	<0.001	4.23	3.28, 5.47	<0.001
Harmful State Policies for Gender Identity	1.28	1.28 0.67, 2.44 0.46 1.28 0.83, 1.98 0.27 1.21 0.94, 1.57 0.14	0.46	1.28	0.83, 1.98	0.27	1.21	0.94, 1.57	0.14

^{1.} Bolded P values significant at the <0.05 level 2. OR, odds ratio. 95% CI, 95% Confidence Interval

^{3.} Covariates used in analysis: age, sexual orientation, race/ethnicity, household income, education level, sex assigned at birth (for gender expansive group)

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