

Exploring the Relationship of State-Level Protections with Depression and Suicidality in Sexual Minority Youth

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Introduction

- Sexual minority status (e.g., gay, lesbian, bisexual, or otherwise non-heterosexual) is associated with poorer psychological outcomes in youth, including higher rates of depression and suicidality.¹
- Minority stress theory asserts that the prejudice sexual minority individuals face in environments which enforce heterosexuality as the norm, and which denigrate non-heterosexual behavior and identity, causes chronic stress, leading to higher rates of psychopathology.^{2,4}
- One potential protective factor is the existence of policies protecting sexual minority youth against bullying and/or discrimination. Policy may serve to decrease environmental prejudice, thus decreasing the prejudice faced by sexual minority individuals.
- Variance in sexual minority legal protections across states allows for a natural test of this hypothesis. We examined if the existence of such policies is related to depression and suicidality in sexual minority youth.

Hypotheses

- Sexual minority youth will be more likely than heterosexual youth to have felt depressed in the past two weeks, as well as considered, planned, and attempted suicide in the past year.
- The existence of state policies protecting sexual minority individuals against bullying and/or discrimination will moderate the relationship between sexual minority status and depression/suicidality in adolescence, as shown in Figure 1. We expect this effect will persist even when controlling for the states' political climates.
- In states with such policies, sexual minority youth will show lower rates of depressed mood, suicidal ideation, and suicidal planning, and will report fewer suicide attempts compared to sexual minority youth in states without such policies.

Method

- The Youth Behavior Risk Survey (YRBS) is a nationally-representative survey that evaluates the decisions, physical health, and mental health of 9th-12th grade students in the United States.
- Of the states that administered the 2017 YRBS, twenty-four states across the Northeast, South, Midwest and West collected information about respondents' sexual orientation.⁵
- We consolidated response options into a "sexual minority status" variable, with $n = 13,749$ youth reporting sexual minority status ("gay or lesbian"; "bisexual"; "unsure") and $n = 69,866$ reporting non-sexual minority status ("straight").
- These states administered items measuring depression and suicidal thoughts/behavior (see Table 1).
- To measure state-level protection status, we aggregated 2017 state-by-state data from the Movement Advancement Project. States with anti-bullying and/or nondiscrimination protections for sexual minority youth were categorized as "protected" and those without were categorized as "unprotected," as shown in Figure 2.⁶
- To control for political climate, each state's percent conservative rate was included in a follow-up covariate analysis, using 2017 state-by-state data from the Gallup Daily.⁷

Table 1: Description of YRBS depression and suicide items.

	Description	No. of States Assessing Item	Response Options	<i>n</i>
1	Depressed mood, hopelessness in the past 2 weeks.	24	No Yes	82,137
2	Seriously considered suicide in the past 12 months.	24	No Yes	81,845
3	Made a plan to attempt suicide in the past 12 months.	22	No Yes	59,612
4	Number of times suicide was attempted in the past 12 months.	24	0 times 1 time 2-3 times 4-5 times 6+ times	73,859

References

[1] Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A. R., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: a meta-analytic review. *The Journal of Adolescent Health*, 49(2), 115-123. <https://doi.org/10.1016/j.jadohealth.2011.02.005> [2] Williams, J. Hall (2018) Psychosocial Risk and Protective Factors for Depression Among Lesbian, Gay, Bisexual, and Queer Youth: A Systematic Review. *Journal of Homosexuality*, 65(3), 263-316. DOI: 10.1080/00918369.2017.1317467 [3] 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. <https://doi.org/10.1037/0033-2909.129.5.674> [4] Michael, R., Woodford, Megan S., Faculty, Alex Kulick & Jun Sung Hong (2015) The LGBTQ Social Climate Matters: Policies, Protections, and Placards and Psychological Well-Being Among LGBTQ Emerging Adults. *Journal of City & Lesbian Social Services*, 27(1), 116-141. DOI: 10.1080/10538720.2015.990334 [5] Centers for Disease Control and Prevention. (2017). 2017 Youth Risk Behavior Survey Data. Retrieved August 18, 2020, from <https://www.cdc.gov/healthyyouth/data/yrbbs/data.htm> [6] Equality maps: Safe schools laws. (n.d.). Movement Advancement Project. https://www.lgbtmap.org/equality-maps/school_laws.html [7] Americans' political ideology by state in 2017 (Table). Gallup Daily. [8] Martin Piboud & Pierre Tremblay (2015) Mental health of sexual minorities: A systematic review. *International Review of Psychiatry*, 27(5), 367-385. DOI: 10.3109/09638237.2015.1083943 [9] The Trevor Project. (2020). 2020 National Survey on LGBTQ Youth Mental Health: The Trevor Project. Retrieved August 18, 2020, from <https://www.thetrevorproject.org/research/2020-national-survey-on-lgbtq-youth-mental-health/> [10] Lefkowitz, G. T., Boyd-Rogers, C. C., Sprague, S. M., & Jents, R. A. (2019). Health disparities between genderqueer, transgender, and cisgender individuals: An extension of minority stress theory. *Journal of Counseling Psychology*, 66(4), 385-395. <http://dx.doi.org/10.1037/cou0000339> [11] McDowell, A., Rafterman, J., Proctor, A.M., Rose, S. Association of Nondiscrimination Policies With Mental Health Among Gender Minority Individuals. *JAMA Psychiatry*. Published online May 06, 2020. doi:10.1001/jamapsychiatry.2020.0770 [12] Rosenkrantz, D., Black, W., Abreu, R., Aleshire, W., & Falin-Bennett, K. (2017). Health and health care of rural sexual and gender minorities: A systematic review. *Stigma and Health*, 2(3), 229-243. <https://doi.org/10.1037/sah0000055>

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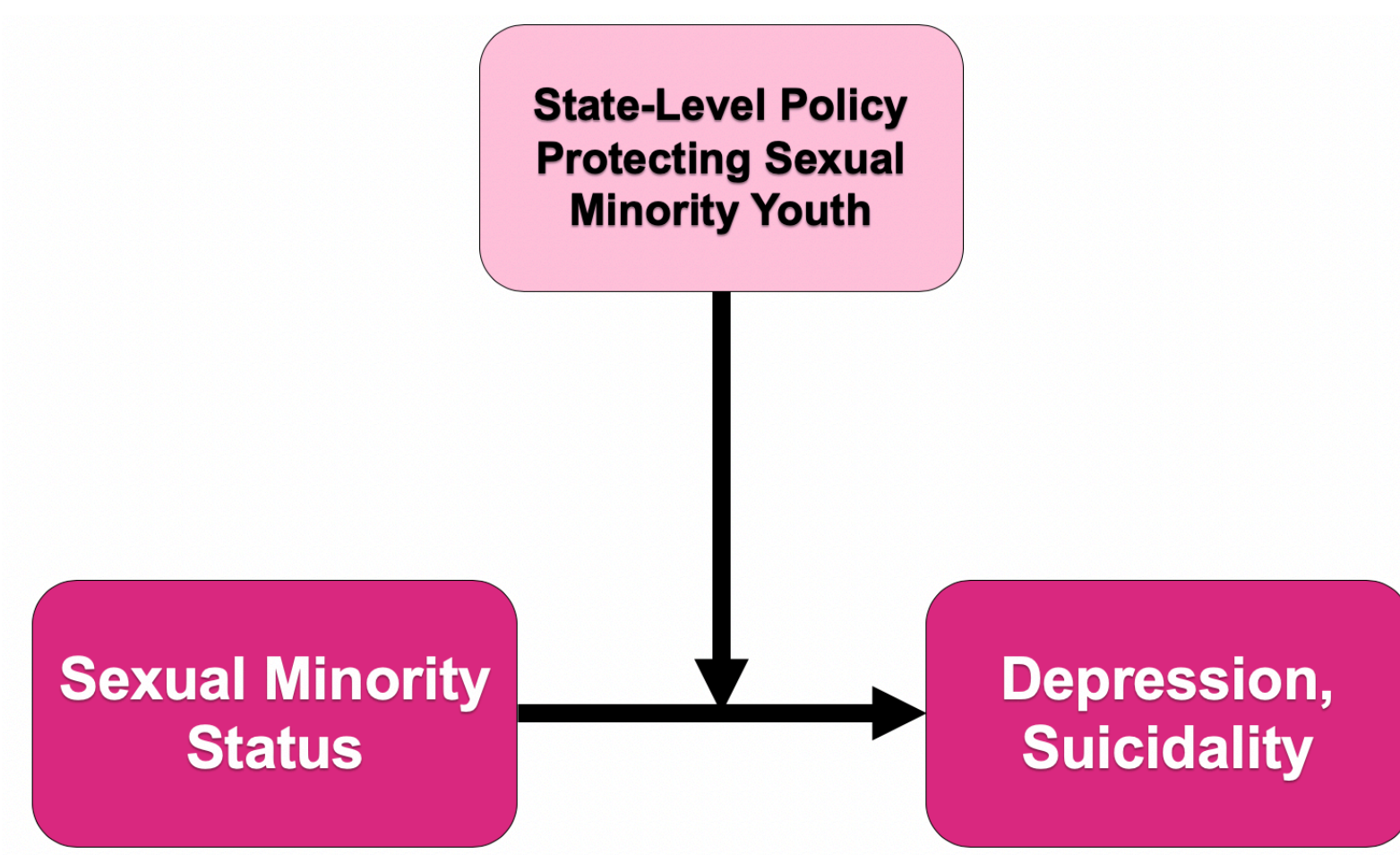


Figure 1: Proposed moderation model.

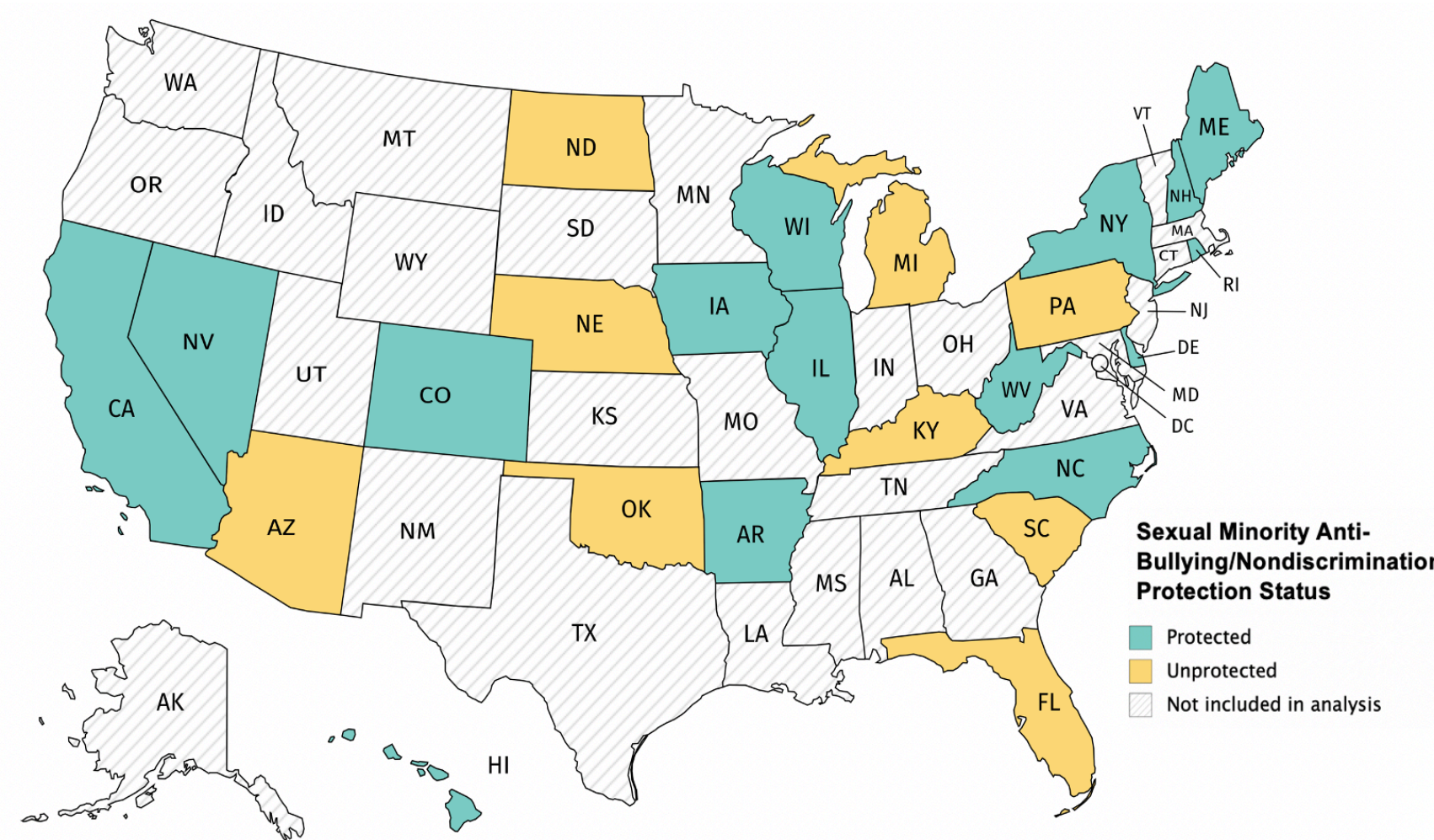


Figure 2: Existence of policies protecting sexual minority youth for states included in the analyses.

Results: Role of State-Level Protections

Table 2: Multiple regressions testing whether state-level anti-bullying and/or nondiscrimination protections interact with sexual minority status to moderate depression/suicidality outcomes

Outcome	β	<i>t</i>	<i>p</i>	ΔF
Depressed Mood, Hopelessness	0.03	2.76	0.006	7.62
Suicidal Ideation	0.04	4.66	<0.001	21.71
Planning Suicide	0.01	1.47	0.142	2.16
Attempting Suicide	0.04	3.19	0.001	10.16

Significant relationships remained unchanged when controlling for the political climate of states, all $t > 2.73$, all $p < .007$.

Interaction plots indicated that the presence of protections predicted lower rates of depression and suicidal ideation and fewer suicide attempts in sexual minority youth.

Discussion

- In states with sexual minority anti-bullying and/or nondiscrimination protections, sexual minority youth showed significantly lower rates of depressed mood, suicidal ideation, and suicide attempts compared with sexual minority youth in states without such policies. However, state-level protections were unrelated to rates of suicide planning.
- These results suggest that policy may play a role in reducing depression and suicidality in sexual minority youth, who are at special risk for adverse mental health outcomes.⁸ Policymakers might consider passing legislation that explicitly protects LGBTQ+ youth.
- Future research should investigate:
 - The specific mechanisms of how legal protections influence depression and suicidality rates in LGBTQ+ youth.^{9, 10} We expect legal protections to reduce environmental homophobia and transphobia¹¹, but this needs to be tested.
 - Other potential state-level differences besides political climate that may be driving the relationship between state-level protections and depression and suicidality in sexual minority youth, like population density.¹²
 - Which types/levels of legal LGBTQ+ protections are the most helpful for sexual and gender minority youth, and if these protections could serve as a template to reduce depression/suicidality in youth from other marginalized groups.