

# The Impacts of State-Level LGBTQ Policies on the Mental Health of Youth



Does related legislation affect mental health outcomes?

# The Team



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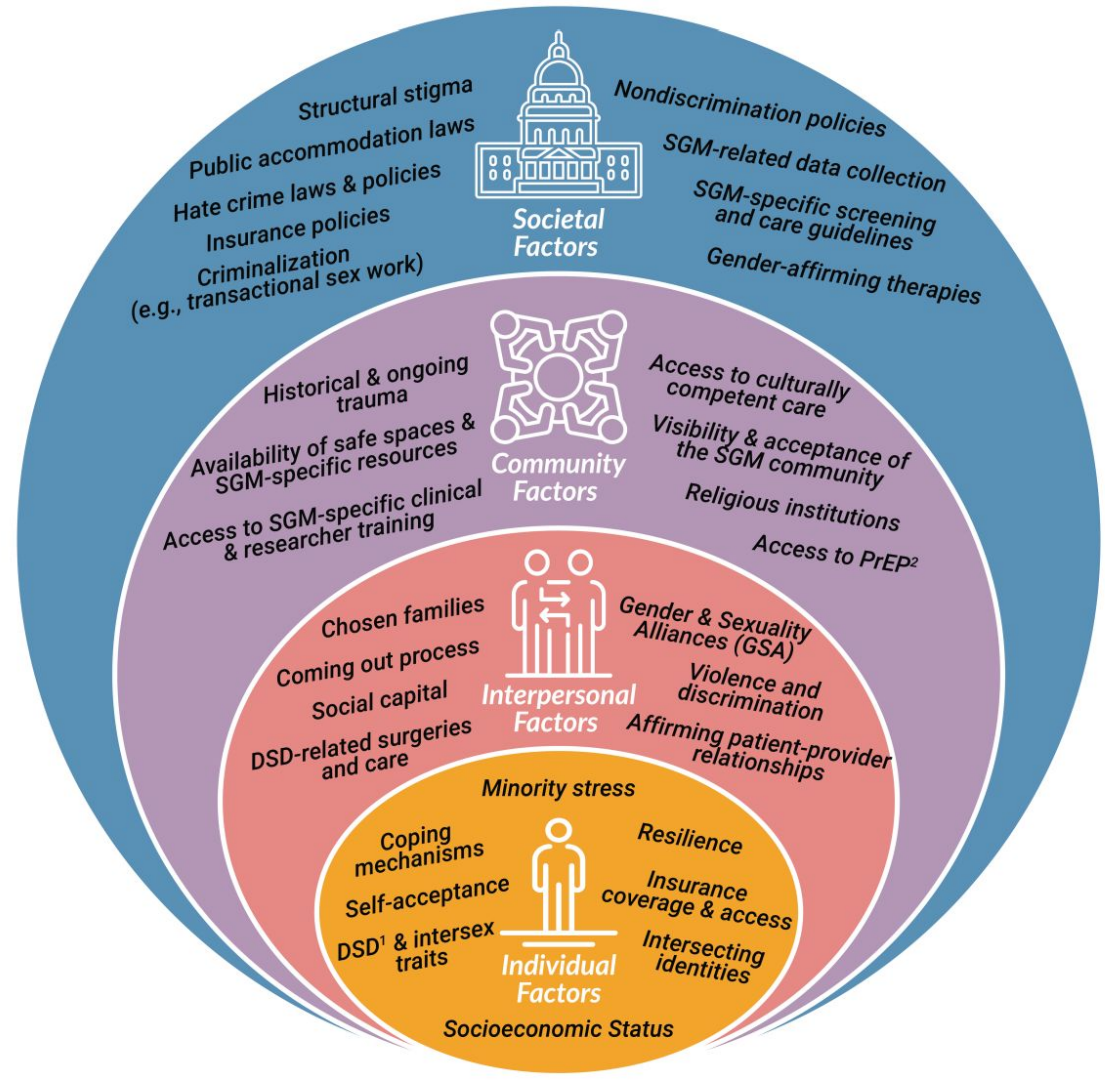


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# Project Overview

How do policies  
impact people?

Minority stress  
theory



# Significance

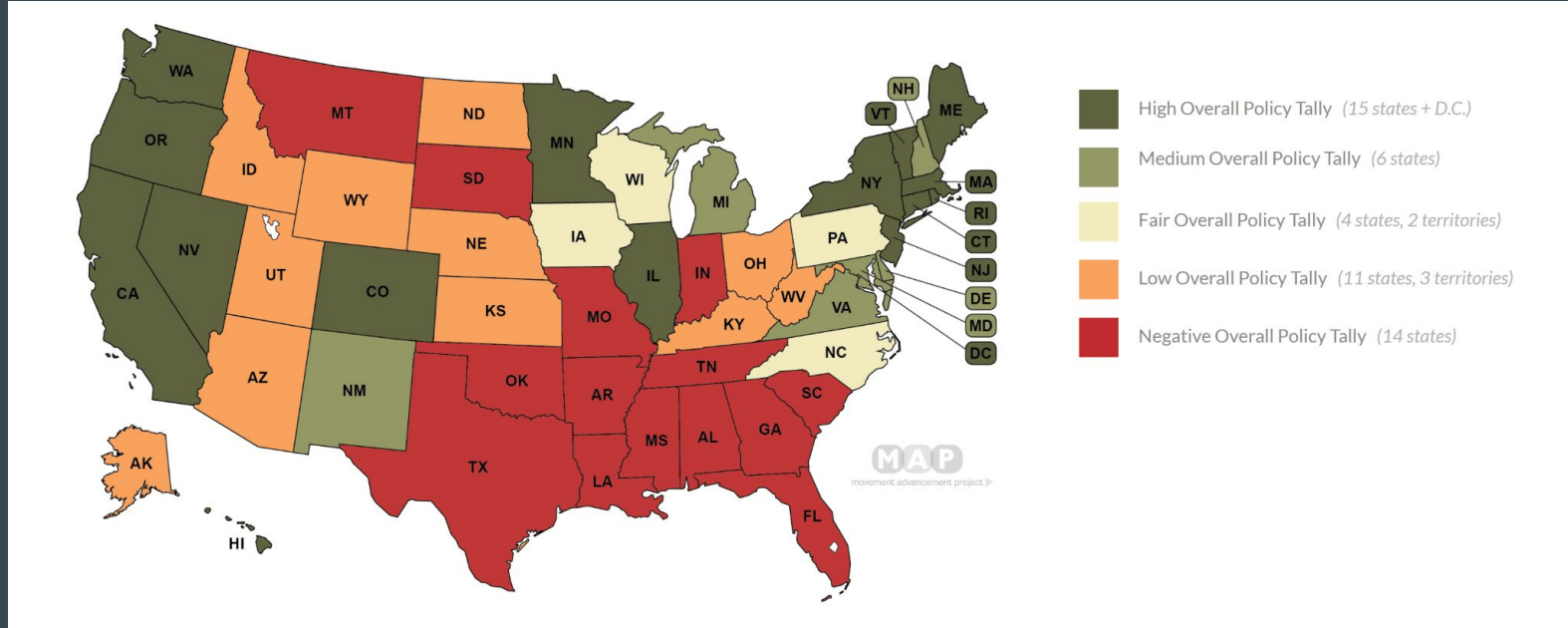
1. Highly politicized topic
2. Patchwork of laws
3. Lack of state-level policy research on LGBTQ youth
4. Existing Disparities
  - Suicide is the 3rd leading cause of death for high schoolers
  - Significantly higher odds of attempting suicide for LGBTQ youth compared to heterosexual youth

# Aims

1. To examine the relationship between state-level LGBTQ policy scores and outcomes of (1) mental health and (2) suicidality among adolescents in U.S.
2. To examine if the relationship between state-level LGBTQ policy scores and outcomes differs by sexual identity; race/ethnicity; and U.S. region.

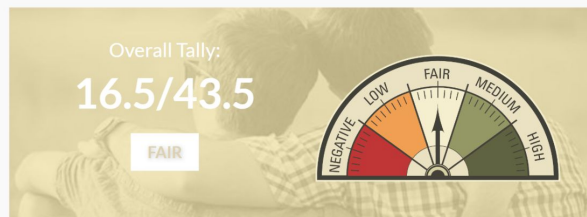
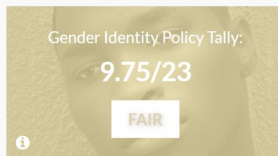
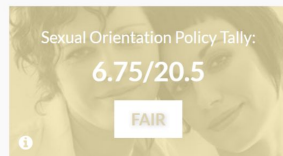
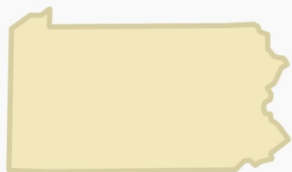
# Methods: Measures, Policy-Level

2020 state-level policy data from the Movement Advanced Project (MAP)



# MAP Methodology

## Pennsylvania's LGBTQ Policy Tally



## LGBTQ Youth

Anti-Bullying

Bans on Medical Care for Transgender Youth

Bans on Transgender Youth Sports Participation

Bans on Transgender Youth Using School Facilities

Conversion "Therapy" Bans

"Don't Say Gay or Trans" School Censorship Laws

Forced Outing of Transgender Youth in Schools

LGBTQ-Inclusive Curricular Standards

Parental Opt-Out of LGBTQ-Related Curricula

Preventing LGBTQ Protections in Schools

Protections for LGBTQ Youth in Child Welfare System

School Nondiscrimination

(Movement Advancement Project, 2023)

# Methods: Measures, Individual-Level

2021 state-level youth outcomes data from the Youth Risk Behaviour Survey (YRBS)

Collected by the CDC

Measures health-related behaviors and experiences that can lead to death and disability among youth and adults

Outcomes: Sad or hopeless, measures of suicidality





# Methods: Statistical Analyses

**Predictor-** state-level LGBTQ policy tally scores

**Outcomes-** feelings of sad or hopelessness and attempted suicide

Logistic regression to model each outcome as a binary Y/N variable

Control for appropriate covariates



# Findings

Due to lack of state-level 2021 YRBS data, instead chose to work with available past data

Only 2010 and 2020 MAP data available

2011 YRBS:

- N = 33,905 from 9 states
- 51% Female, 66% White, 70% from Northeast region
- 91% heterosexual, 9% sexual minority

## Relationship between attempting suicide in past 12 months and overall youth policy tallies

	Model 1				Model 2				Model 3			
	Odds ratio	95% lower bound	95% upper bound	p-value	Odds ratio	95% lower bound	95% upper bound	p-value	Odds ratio	95% lower bound	95% upper bound	p-value
Age												
14 or younger	1.00				1.00				1.00			
15	1.03	(0.77,	1.40)	0.82	1.03	(0.76,	1.39)	0.84	1.03	(0.76,	1.39)	0.84
16	1.00	(0.74,	1.36)	1.00	0.99	(0.73,	1.35)	0.97	1.00	(0.73,	1.36)	0.98
17	0.84	(0.63,	1.13)	0.26	0.84	(0.63,	1.13)	0.24	0.84	(0.63,	1.13)	0.25
18 or older	0.92	(0.64,	1.32)	0.65	0.91	(0.63,	1.31)	0.60	0.91	(0.63,	1.31)	0.61
Sex												
Female	1.00				1.00				1.00			
Male	<b>0.79</b>	<b>(0.66,</b>	<b>0.95)</b>	<b>0.01*</b>	<b>0.79</b>	<b>(0.66,</b>	<b>0.95)</b>	<b>0.01*</b>	<b>0.79</b>	<b>(0.66,</b>	<b>0.94)</b>	<b>0.01*</b>
Race/Ethnicity												
White	1.00				1.00				1.00			
Black or African American	<b>1.74</b>	<b>(1.33,</b>	<b>2.28)</b>	<b>0.00***</b>	<b>1.76</b>	<b>(1.35,</b>	<b>2.30)</b>	<b>0.00***</b>	<b>1.76</b>	<b>(1.35,</b>	<b>2.30)</b>	<b>0.00***</b>
Hispanic/Latino	<b>2.01</b>	<b>(1.67,</b>	<b>2.42)</b>	<b>0.00***</b>	<b>2.05</b>	<b>(1.70,</b>	<b>2.46)</b>	<b>0.00***</b>	<b>2.04</b>	<b>(1.70,</b>	<b>2.46)</b>	<b>0.00***</b>
Asian	0.91	(0.62,	1.33)	0.63	0.92	(0.63,	1.34)	0.66	0.92	(0.63,	1.34)	0.65
Multiple Race (Non-Hispanic)	<b>1.58</b>	<b>(1.13,</b>	<b>2.23)</b>	<b>0.01**</b>	<b>1.57</b>	<b>(1.12,</b>	<b>2.21)</b>	<b>0.01**</b>	<b>1.56</b>	<b>(1.11,</b>	<b>2.20)</b>	<b>0.01*</b>
Other	<b>1.96</b>	<b>(1.28,</b>	<b>3.01)</b>	<b>0.00**</b>	<b>1.92</b>	<b>(1.26,</b>	<b>2.93)</b>	<b>0.00**</b>	<b>1.92</b>	<b>(1.25,</b>	<b>2.95)</b>	<b>0.00**</b>
Region												
Northeast	1.00				1.00				1.00			
Midwest	1.15	(0.98,	1.36)	0.09	<b>1.19</b>	<b>(1.02,</b>	<b>1.39)</b>	<b>0.03*</b>	<b>1.20</b>	<b>(1.02,</b>	<b>1.40)</b>	<b>0.02*</b>
West	1.15	(0.86,	1.53)	0.35	1.06	(0.79,	1.43)	0.70	1.05	(0.78,	1.42)	0.74
Sexual Identity												
Heterosexual	1.00				1.00				1.00			
Sexual Minority	<b>4.42</b>	<b>(3.38,</b>	<b>5.77)</b>	<b>0.00***</b>	<b>4.42</b>	<b>(3.39,</b>	<b>5.78)</b>	<b>0.00***</b>	<b>5.54</b>	<b>(4.49,</b>	<b>6.84)</b>	<b>0.00***</b>
Overall youth tally					<b>0.85</b>	<b>(0.73,</b>	<b>1.00)</b>	<b>0.05*</b>	0.94	(0.78,	1.13)	0.52
Heterosexual x overall youth tally									1.00			
Sexual minority x overall youth tally									<b>0.63</b>	<b>(0.41,</b>	<b>0.97)</b>	<b>0.03*</b>
Constant	0.05	(0.04,	0.07)	0.00***	0.05	(0.04,	0.07)	0.00***	0.05	(0.04,	0.07)	0.00***

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Findings

- Only policy that was significant for both outcomes was SO anti-bullying policy
- Overall youth, youth SO, and youth SO non-discrimination were significant for attempted suicide
- Could be sad or hopeless due to several unrelated factors to sexual orientation
  - Family and friend environments
    - Stressful childhood events
    - Genetics and family history
- Attempting suicide could be more closely related to items found in LGBTQ youth policy tally more so than feeling sad or hopeless
- Non-significant interaction terms mean LGBTQ policies good for ALL youth
- Significant term for overall youth tally and attempting suicide is important to note
- Meaning that this is the only policy that worked “better” or “more” for sexual minorities vs. heterosexual youth

	Sad or Hopeless	Attempted Suicide
Overall Policy Tally	✘	✘
Overall Youth Tally	✘	SIGNIFICANT OR = .84 P = 0.05 <b>Interaction SIGNIFICANT</b> <b>OR = 0.63</b> <b>P = 0.03</b>
Youth Sexual Orientation Tally	✘	SIGNIFICANT OR = .72 P = 0.000 <i>Interaction non-sig</i>
Youth Sexual Orientation Non-Discrimination	✘	SIGNIFICANT OR = .85 P = 0.000 <i>Interaction non-sig</i>
Youth Sexual Orientation Anti-Bullying	SIGNIFICANT OR = .9175771 P = 0.003 <i>Interaction non-sig</i>	SIGNIFICANT OR = .84 P = 0.000 <i>Interaction non-sig</i>

# Limitations and Next Steps

## Limitations

- Cannot infer causality, just an association
- Missing data
- Old data

## Future Directions

- Analyze 2020 MAP data with 2021 YRBS data
  - Include transgender and gender diverse kids and gender identity policies

# My Role and Lessons Learned

Literature Review

Data analysis using STATA

Updated Policy Maps in Excel

Data management skills

# References

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# THANK YOU!

Questions?

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